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INDIAN ECONOMY

GAURAV DATT

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S. CHAND

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PART I

STRUCTURE OF THE INDIAN ECONOMY

- India as a Developing Economy
- Economic Transition in India
- National Income of India
- Human Resources and Economic Development
- Human Development in India
- Occupational Structure and Economic Development
- Natural Resources and Economic Development and Environmental Degradation
- Infrastructure in the Indian Economy

THE ECONOMIC FORCES AND SOCIETY

"There (runs) an economic struggle through every religious struggle. This animal called man has some religious influence, but he is guided by economy. You may preach a religion that may not be perfect in every detail, but if there is an economic background, and you have the most ardent champions to preach it, you can convince a whole country....."

"Man is guided by the stomach. He walks and the stomach goes first and the head afterwards. Have you not seen that? It will take ages for the head to go first".

—Swami Vivekananda

SELECTED INDICATORS OF THE INDIAN ECONOMY

		1950-51	1970-71	1990-91	2000-01	2010-11
1.	GDP at factor cost (₹ crores) at 1999-00 prices	2,23,899	4,70,254	10,67,694	18,41,755	71,57,412 (QE)
2.	Per capita NNP (₹) at 1999-00 prices	5,708	8,091	11,535	16,172	35,993 (QE)
3.	Index of Industrial production (Base 1993-94)	7.9	28.1	9.16	162.6	165.5*
4.	Index of Agricultural Production (Base : 3 Year ending 1981-82)	46.2	85.9	148.4	165.7	215.3
5.	Gross domestic capital formation at current market prices (as per cent of GDP)	8.7	15.4	26.3	24.0	35.1
6.	Gross domestic saving (as percent of GDP)	8.9	14.6	23.1	23.4	32.3
7.	Foodgrains (Million tonnes)	50.8	108.4	176.4	196.8	241.6
8.	Finished Steel (Million tonnes)	1.04	4.64	13.53	30.3	75.8(P)
9.	Cement (Million tonnes)	2.7	14.3	48.8	97.6	216.0
10.	Coal & Lignite (Million tonnes)	32.3	76.3	225.5	332.6	570.9
11.	Crude Oil (Million tonnes)	0.3	6.8	33.0	32.4	37.8
12.	Electricity generated (Utilities only) (Billion KWH)	5.1	55.8	264.3	499.5	811
13.	Wholesale price index (Base 1993-94)	6.8	14.3	73.7	155.7	143.3*
14.	Consumer price index (Base 1982)	17	38	193	444	179.8(IW)
15.	Foreign exchange reserves (US $ million)	1,914	584	2,236	39,554	2,74,580
16.	Exports (₹ crores)	606	1,535	32,553	203,571	11,42,649
17.	Imports (₹ crores)	608	1,634	43,198	230,873	16,83,467
18.	Population (Millions)	361.1	548.2	846.3	1,019	1210
19.	Birth rate (per 1000)	39.9	36.9	29.5	25.4	22.1
20.	Death rate (per 1000)	27.4	14.9	9.8	8.4	7.2
21.	Life expectancy at birth (in years)	32.1	45.6	58.7	62.5	63.5@
	a. Male	32.4	46.4	59.0	61.6	62.6@
	b. Female	31.7	44.7	58.7	63.3	64.2@
22.	Literacy rate (per cent)	18.3	34.5	52.2	64.8	74.0
	a. Male (per cent)	27.2	46.0	64.1	75.3	82.14
	b. Female (per cent)	8.9	22.0	39.3	53.7	65.5
23.	Registered Medical Practitioners (RMP) (000)	61.8	151.1		575.6	n.a
24.	RMP (per 10,000 population)	1.7	2.8	4.7	5.6	n.a
25.	Beds all types per 10,000	3.2	6.4	9.5	9.5	n.a

* 2004-05 Prices
P Provisional
IW CPI IW (Base 2000-01)
** Quick Estimates
+ As per 2001 Census
⊕ With 2001 as base
@ for the year 2006-07
@@ for the year 2005-06

Source : Government of India, *Economic Survey* (2010-2011).

*** Bax 2004-05

CONOMY

010-11
57,412
(QE)
35,993
(QE)
165.5*
215.3
35.1
32.3
241.6
75.8(P)
216.0
570.9
37.8
811
143.3*
.8(IW)
74,580
42,649
83,467
1210
22.1
7.2
63.5@
62.6@
64.2@
74.0
82.14
65.5
n.a
n.a
n.a

CHAPTER 1

INDIA AS A DEVELOPING ECONOMY

An underdeveloped economy is characterised, by the existence, in greater or less degree, of unutilised or underutilised manpower on the one hand and of unexploited natural resources on the other. This state of affairs may be due to stagnancy of techniques or to certain inhibiting socio-economic factors which prevent the more dynamic forces in economy from asserting themselves.

– The First Five-Year Plan

1. MEANING OF AN UNDERDEVELOPED ECONOMY

There is no doubt that the distinction between underdeveloped and developed countries is rather loose and also arbitrary to a certain extent. The United Nations group of experts states, "We have had some difficulty in interpreting the term 'underdeveloped countries'. We use it to mean countries in which per capita real income is low when compared with the per capita real incomes of the United States of America, Canada, Australia and Western Europe. In this sense, an adequate synonym would be poor countries".[1]

U.N. classification

The term 'underdeveloped countries' is relative. In general, those countries which have real per capita incomes less than a quarter of the per capita income of the United States, are underdeveloped countries. More recently, instead of referring to these economies as underdeveloped, the UN publications prefer to describe them as 'developing economies'. The term 'developing economies' signifies that though still underdeveloped, the process of development has been initiated in these countries. Thus, we have 'developing economies' and 'developed economies'.

The World Bank in its ***World Development Report*** (2010) classified the various countries on the basis of Gross National Income (GNI) per capita. (Table 1 on p. 4.)

Developing countries are divided into : (a) ***Low income countries*** with 2009 GNI per capita of $ 936 and below; and ***Middle income countries*** with GNI per capita ranging between $ 936 and $ 11,455. As against them, the ***High-income Countries*** which are mostly members of the Organisation for Economic Co-operation and Development (OECD) and some others have GNI per capita of $ 11,456 or more.

Two sub-categories of middle income countries are lower-middle income with per capita income in the range of $ 906 to $ 3,705 and upper middle income countries with per capita income $ 3,706 to $ 11,455.

From the data given in table 1, it may be noted that in 2010 low income countries comprise nearly 11.6 per cent of the world population (796 million), but account for only 0.67 per cent of total world GNI. The middle income countries, which are less developed than the highly developed countries, but comparatively speaking, more developed than the low

1. United Nations, ***Measures for the Economic Development of Underdeveloped Countries***, 1951, p. 3.

Table 1: Distribution of World Population and World GNI among Various Groups of Countries (2010)

Country/Group	Population		GNI Exchange Rate Basis		GNI PPP Basis		Per Capita GNI	
	Million	%	Billion US $	%	Billion US $	%	Exchange Rate basis $	PPP basis US $
1. Low Income	796	11.6	421	.67	1,039	1.4	529	1,305
2. Middle Income	4,970	72.1	18,529	29.6	33,656	44.1	3,726	6,750
(a) Lower Middle Income	2,518	36.5	4,087	6.53	9,160	12.0	1,622	3,637
(b) Upper Middle Income	2,452	35.6	14,433	23.0	24,496	32.1	5,886	9,971
3. High Income	1,127	16.3	43,683	69.8	42,073	55.1	38,745	37,318
4. World	**6,894**	**100.0**	**62,541**	**100.0**	**76,313**	**100.0**	**9,071**	**11,068**
China	**1,338**	**19.4**	**5,720**	**9.1**	**10,221**	**13.4**	**4,270**	**7,640**
India	**1,170**	**17.0**	**1,553**	**2.5**	**4,159**	**5.5**	**1,270**	**3,400**

World Total GNI figures do not add upto the various components. GNI is the same as GNP (Gross National Product) used earlier by World Bank.

Source: World Bank (2011), *World Development Report (2011).*

income countries comprise 72.1 per cent of world population but account for 29.6 per cent of world GNI. Taking these two groups which are popularly described as developing economies, it may be stated that they comprise about 83.7 per cent of the world population but account for about 30.3 per cent of the world GNI. Most countries of Asia, Africa, Latin America and some countries of Europe are included in them.

As against them, High Income economies which comprise only about 16.3 per cent of world population account for 69.7 per cent of world GNI. In other words, bulk of the poor people reside in the low income and middle income developing countries. They, to quote A.K. Cairncross, constitute the slums of the world economy.

India with its population of 1,170 million in 2010 and with its per capita income of 1180 is among the poorest of the economies of the world. It had a share of 17.0 per cent in world population, but accounts for only 2.5 per cent of World GNI on exchange rate basis.

The figures quoted above are on exchange rate basis. The use of official exchange rates to convert national currency figures to the US dollars does not attempt to measure the relative domestic purchasing power of currencies. Following the Work I.B. Kravis and others International Comparisons of Real Product and Purchasing Power (1978), the United Nations International Comparison Program (ICP) has developed measures of real GDP and GNP (or GNI) on an internationally comparable scale using purchasing power parities (PPPs) instead of exchange rates as coversion factors.

Table 1 provides data on exchange rate as well as PPP basis. Using PPP basis, low income countries comprising about 11.6 per cent of population accounted for about 1.4 percent of world income; middle income countries with 72.1 per cent of world population accounted for about 38.7 per cent of world income and the high income countries with about 16.3 per cent of world population accounted for about 55.1 per cent of world income: Obviously, glaring differences between these three groups of countries on exchange rate basis get moderated with PPP basis and the situation does not appear to be so gloomy. Even on PPP basis, India with a per capita GNI of $ 4,159 continues to be in the group of lower middle income economies, but with an acceleration in its growth rate of GDP to an average of 8.0 per cent during 2000 and 2010, India will very soon enter the group of upper middle income countries. China, however, has entered the upper middle income group.

Table 2: Growth Rates of GDP among different groups of Economies

	Average Annual Growth Rate of GDP	
	1990-2000	2000-08
Low Income	**4.8**	**5.8**
Middle Income	**3.8**	**6.4**
(a) Lower middle income	5.3	8.3
(b) Upper middle income	2.1	4.6
High Income	**2.7**	**2.3**
China	**10.6**	**10.4**
India	**6.0**	**7.9**

Source: World Bank, *World Development Indicators (2010)*

Three observations may be made here regarding the U.N. classification of developed and developing countries on the basis of per capita income. First, there is

gross inequality of incomes between the rich and the poor countries. Second, during the last 19 years (1990 to 2009), the rates of growth of GDP in low income economies were higher than those in high income economies. As a natural consequence, the sustained increase of GDP in low income economies, has reduced the gap between low income and high income economics. (Refer Table 2) China provides an illustration which is unique in the sense, that its growth rate of GDP during 1990-2000 averaged 10.6 per cent and during 2000-2005 averaged 9.6 per cent. India also shows a high growth rate of 6.0 per cent during 1990-2000 and 8.0 per cent during 2000-08. This implies that the two Asian giants are marching forward on the road to development at a higher rate than the high income countries. China has already entered the upper middle income group and India will follow soon if the GDP growth rate which has reached a level of 9 per cent in 2000-08 is further raised to 10 per cent by 2010. More recently, the growth rate among low-income countries has also shown an increase and if this is sustained, the gap may show a decline over a period. Third, all the high income countries are not necessarily developed countries. For instance, the oil-exporting countries have high per capita income but this is mainly due to their exports of oil; really speaking, they are not developed economies.

(a) Developing economies are distinguished from the developed economies on the basis of their low per capita income. Though per capita income is not the only indicator, it is the most significant single measure of comparison for different economies.

(b) The central problem of developing economies is the prevalence of 'mass poverty' which is the cause as well as consequence of their low level of development.

(c) 'Mass poverty' is the result of low resource base of the poor who own a very small portion of the total assets in the form of land, capital, house property, etc. The low resource base of the poor also inhibits them from giving education and training to their children. As a result, the children of the poor are, by and large, either engaged in unskilled occupations or some semi-skilled occupations. This enables them to earn very low and meagre wages and thus perpetuate poverty. In other words, inequality in the distribution of assets is the principal cause of unequal distribution of income on the one hand and unequal distribution of opportunities on the other.

(d) Mass poverty in developing economics is not due to poor natural resources, but due to inadequate development of these resources and exploitative social structure.

2. BASIC CHARACTERISTICS OF THE INDIAN ECONOMY AS DEVELOPING ECONOMY

India is a low income developing economy. There is no doubt that nearly one-fourth of its population lives in conditions of misery. Poverty is not only acute but is also a chronic malady in India. At the same time, there exist unutilised natural resources. It is, therefore, quite important to understand the basic characteristics of the Indian economy, treating it as one of the poor but developing economies of the world.

(1) *Low per capita income.* Developing economies are marked by the existence of low per capita income. The per capita income of an Indian in 2010 was $ 1270. Barring a few countries, the per capita income of the Indian people is the lowest in the world. During 1960-80, developed economies grew at a faster rate than the Indian economy, but during 1990-2010, Indian economy has grown at a faster rate than the developed economies. Even then the difference in per capita income between India and the developed economies is quite large. (Refer table 2).

TABLE 3. Per Capita GNI at Market Prices

(In US Dollars)

	2010	
	Exchange Rate Basis	*Purchasing Power Parity Basis*
Switzerland	71,520	49,960
USA	47,340	47,310
Japan	41,850	34,610
Germany	43,070	38,100
U.K.	38,200	35,840
India	1,270	3,400
China	4,770	7,640

SOURCE : The world Bank, *World Development Indicators*, (2011).

It may be noted that in 2010 the average per capita GNI of USA at official exchange rates was 37 times that of India, while at the purchasing power parity rates, it was 13.9 times only. In other words, per capita income at official exchange rates exaggerated the disparities, while the purchasing power parity figures corrected the position. Even after this adjustment, though the per capita income differences got narrowed down, still the difference between the level of living of the an average American and an Indian was quite large and significant.

(2) *Occupational pattern : primary producing.* One of the basic characteristics of an underdeveloped

my is that it is primary producing. A very proportion of working population is engaged in lture, which contributes a very large share in tional income. In India, in 2010, about 58 per f the working population was engaged in agriculture s contribution to national income was 18.9 per n Asia, Africa and Middle East countries from irds to more than four-fifths of the population eir livelihood from agriculture, and in most Latin can countries from two-thirds to three-fourths of tion are dependent on agriculture. From table 3 vident that the proportion of population engaged iculture in developed countries is much less than portion of population engaged in agriculture in leveloped countries.

LE 4. Percentage of Active Population gaged in Agriculture and Industrial Origin of GDP in 2010.

y	Active population engaged in agriculture*	Industrial origin of GDP Percentage Distribution		
		Agri.	Industry	Services
	1	0.7	21.6	77.6
*	4	1.0	20.0	78.9
	5	1.4	26.6	71.9
d	45	12.3	44.6	42.9
n	52	21.1	25.4	53.3
	47	10.1	46.7	43.1
	58	18.9	26.3	54.7

: World Bank, *World Development Indicators*, 2011, (*2009)

From the point of view of occupational pattern, dian economy is primary producing because ture contributes 18 per cent of national income 58 per cent of the labour force is engaged in ture. Yet one cannot easily escape the con- that agriculture continues to be a depressed y as the productivity per person engaged in it y low.

3) *Heavy Population pressure.* The main prob- India is the high level of birth rates coupled falling level of death rates. The rate of growth ulation which was about 1.31 per cent per an- ring 1941-50 has risen to 1.93 per cent during 001. The annual average rate of growth of ion during 2001-11 has further declined to ercent. The chief cause of this rapid spurt to ion growth is the steep fall in death rate from thousand during 1911-20 to 7.4 per thousand 3 as compared to this, the birth rate has de- from about 49 per thousand during 1911-20 to r thousand in 2010.

he fast rate of growth of population necessi- higher rate of economic growth in order to n the same standard of living of the population. To maintain a rapidly growing population, the requirements of food, clothing, shelter, medicine, schooling, etc. all rise. Thus, a rising population imposes greater economic burdens and, consequently, society has to make a much greater effort to initiate the process of growth. Moreover, a rising population leads to an increase in the labour force. According to the Tenth Plan, between 2002 and 2007 alone, labour force is expected to increase by about 35 million i.e., at an annual average rate of 1.8 per cent. This rapid growth of labour force creates a higher supply of labour than its demand leading to unemployment.

(4) *Prevalence of chronic unemployment and underemployment.* In India labour is an abundant factor and, consequently, it is very difficult to provide gainful employment to the entire working population. In developed countries, unemployment is of a cyclical nature and occurs due to lack of effective demand. In India unemployment is structural and is the result of a deficiency of capital. The Indian economy does not find sufficient capital to expand its industries to such an extent that the entire labour force is absorbed.

Moreover, in the agricultural sector of the Indian economy, a much larger number of labourers are engaged in production than are really needed. Accordingly, the marginal product of labour in agriculture is often negligible; it may be zero or may even be negative. Thus, there exists 'disguised' or 'concealed' unemployment in agriculture. Even if the surplus population is siphoned off, the total output from agriculture will not fall because those persons who were working below capacity, begin to be utilised to the full. Disguised unemployment in rural areas is the result of heavy pressure of population on land and the absence of alternative employment opportunities in our villages.

Though there is no doubt that unemployment exists in a greater degree in the urban areas, the rural areas too suffer from the problem of unemployment and underemployment. On this point the Third Five-Year Plan stated : "In the rural areas both unemployment and underemployment exist side by side; the distinction between them is by no means sharp. In the villages unemployment ordinarily takes the form of underemployment. Urban and rural unemployment in fact constitute an indivisible problem."[5] The Planning Commission on the basis of the NSS data has estimated that during 2004-05, the rate of unemployment has risen to 8.36% as against 7.32% in 1999-00. The Eleventh Plan (2007-12) will have a backlog of 37 million unemployed. The revised estimates of the Planning Commission reveal that 45 million are likely to be the new entrants to the labour force during the Eleventh Plan. Thus, the total job requirements of the 11th Plan workout to be 82 million (37 million backlog ***plus*** 45

5. *Planning Commission, Third Five-Year Plan*, p. 154.

million new entrants) Thus, ment to those suffering from under-employment becomes ing process in India.

(5) *Steadily improvi* ent. During the fifties an century, basic characteristic was the existence of cap reflected in two ways—first per head available was lo of capital formation was als cator of low capital per h veloped countries is the co ures given in table 5 clearly consumption of energy in compared to the advanced

TABLE 5 : Energy U Equiva

U.S.A.	
U.K.	
Japan	
China	
India	

SOURCE : *World Development* *2009

Table 6 reveals that mation in India is higher t countries. Professor Colin in order to maintain the same requires an additional inve annum, if its population inc cent per annum. In a cou rate of population growth 2000-05), about 6.4 per to offset the additional burd population. Thus, India re cent level of gross capital f

Table 6: Gross Capital Domestic Saving as Domestic

Country	Gross Form 1990
U.S.A.	18
UK	20
Japan	33
Germany	24
China	35
India (2007)	24

SOURCE : World Bank, *World De* *2009

million new entrants) Thus, the provision of employment to those suffering from open unemployment and under-employment becomes a major task of the planning process in India.

(5) *Steadily improving rate of capital formation.* During the fifties and the sixties of the 20th century, basic characteristic of the Indian economy was the existence of capital deficiency which is reflected in two ways—firstly, the amount of capital per head available was low; and secondly, the rate of capital formation was also low. An important indicator of low capital per head available in underdeveloped countries is the consumption of energy. Figures given in table 5 clearly indicate that per capita consumption of energy in India is extremely low as compared to the advanced countries.

Table 5 : Energy Use (Kilogram Oil Equivalent)

	Energy use (Kg of oil equivalent Per capita) (2010)
U.S.A.	7,225
U.K.	3,282
Japan	3,883
China	1,695*
India	560*

Source : *World Development Indicators (2010).*
*2009

Table 6 reveals that rate of gross capital formation in India is higher than that of developed countries. Professor Colin Clark has estimated that in order to maintain the same level of living a country requires an additional investment of 4 per cent per annum, if its population increases at the rate of 1 per cent per annum. In a country like India where the rate of population growth is 1.6 per cent (during 2000-05), about 6.4 per cent investment is needed to offset the additional burdens imposed by a rising population. Thus, India requires as high as 14 per cent level of gross capital formation so that she may cover depreciation and maintain the same level of living. A higher rate of gross capital formation alone can pave the way for economic growth to improve living standard of the population. It is gratifying to note that India has reached a saving rate of 22 per cent in 2003 which is sufficiently high. More recently, Gross Domestic Saving in 2010 has reached a high level of 31.5 per cent and Gross capital formation was high at 36.4 per cent. This is a welcome development.

Table 6: Gross Capital Formation and Gross Domestic Saving as per cent of Gross Domestic Product

Country	*Gross Capital Formation*		*Gross Domestic Saving*	
	1990	*2010*	*1990*	*2010*
U.S.A.	18	15	16	11.5
UK	20	15.4	18	12.9
Japan	33	20.2	34	21.3
Germany	24	17.3	24	22.8
China	35	47.7	38	51.7
India (2007)	24	36.4*	23	31.5

Source : World Bank, *World Development Indicators*, 2011

(6) *Maldistribution of Wealth/Assets* - RBI Survey of assets of rural and urban households for the period July 1991 to June 1992 brings out the existence of sharp inequalities in asset distribution. In rural areas 27 per cent of households owning less than ₹ 20,000 worth of assets accounted for 2.4 per cent of total assets. Similarly, about 24 per cent of households in the asset range of ₹ 20,000 - 50,000 owned barely 7.5 per cent of total assets. This implies that nearly 51 per cent of the bottom households owned just 10 per cent of the total assets. As against it, 9.6 per cent of the rich households owning assets worth ₹ 2.5 lakhs and above accounted for nearly 49 per cent of total assets.

Table 7: Percentage Distribution of Households and Assets in India (1991-92)

Asset Group	*Rural (%)*		*Urban (%)*	
	Households	*Assets*	*Households*	*Assets*
Less than ₹ 20,000	27.0	2.4	33.5	1.4
₹ 20,000 - 50,000	23.8	7.5	17.2	3.9
₹ 50,000 - 1,00,000	20.9	14.0	16.0	8.0
₹ 1,00,000 - 2,50,000	18.8	27.3	19.0	20.8
₹ 2,50,000 & above	9.6	48.8	14.2	65.8
All Classes	**100.0**	**100.0**	**100.0**	**100.0**

Source: Reserve Bank of India, All-India Debt and Investment Survey, 1991-92, *RBI Bulletin, May 1999.*

However, the situation in urban areas was much worse. 50.7 per cent of the urban households owning less than ₹ 50,000 worth of assets accounted for barely 5.3 per cent of total assets. As against them, nearly 66 per cent of the total assets of all urban households were held by 14.2 per cent of the households, each owning ₹ 2.5 lakhs of above. This implies that urban households indicated much worse asset distribution than rural households.

Inequality in asset distribution is the principal cause of unequal distribution of income in the rural areas. It also signifies that the resource base of 50 per cent of the households is so weak that it can hardly provide them anything above the subsistence level of income. This finding of the Reserve Bank is also supported by the National Sample Survey which reveals that 60 per cent of the poor rural households

only 14 per cent of cattle heads and just 10 per cent of wooden ploughs.

(7) Poor quality of human capital. A glaring feature of an underdeveloped economy is the poor quality of human capital. Most of the underdeveloped countries suffer from mass illiteracy. Illiteracy retards growth. A minimum level of education is necessary to acquire skills as also to comprehend social problems. Rural areas where illiteracy is a rule, are the back-waters of civilization and the centres of superstition, social taboos and conservatism. Fatalism and acceptance of misery as a part of life and belief in a pre-destined order are all accompanied by mass illiteracy.

But if we enlarge the definition of capital formation to include the use of any resource that enhances productive capacity, then besides physical capital the knowledge and training of the population will also form a part of capital. As a result, the expenditure on education, skill formation, research and improvements in health are included in human capital. The Indian public expenditure on primary to higher education and research and development in 2002–04 was a 3.3 per cent of GDP. The corresponding figure for the USA. was 5.9 per cent of GDP. Public expenditure on health in India was miserably low at 1.1% of GDP in 2007.

Under the United Nations Development Programme (UNDP), countries have been ranked on the basis of Human Development Index (HDI). This index is based on life expectancy, adult literacy, combined enrolment ratio – first, second and third level and real GDP per capita (Purchasing Power Parity basis) in US Dollars . It is very distressing to note that India has been ranked at No. 134 on the basis of HDI in 2007 while China stands at No. 92. Obviously, India has still to go a long way before it reaches the levels of developed countries in terms of human devleopment index.

TABLE 8: Human Development Index (2007)

Country	*Life Expectancy 2007*	*Adult Literacy (%) 2007*	*Combined Enrolment Ratio (%) 2007*	*Per capita real GDP $ (PPP) 2007*	*HDI Rank*
Canada	80.6	99.0*	99.3	35,812	4
USA	79.1	99.0*	92.4	45,592	13
Japan	82.7	99.0*	86.6	33,632	10
France	81.0	99.0*	95.4	33,674	8
UK	79.3	99.0*	89.2	35,130	21
China	**72.9**	**93.3**	**68.7**	**5,383**	**92**
India	**63.4**	**66.0**	**61.0**	**2,753**	**134**

Source: UNDP, *Human Development Report (2009)* ***2004**

(8) Prevalence of low level of technology. In a developing economy like India, the most modern technique exists side by side with the most primitive in the same industry, but there is no gainsaying the fact that the majority of the productive units and a major part of the output is produced with the help of techniques which can be described as inferior judged by modern scientific standards. The sharp differences in productivity between developed and underdeveloped nations can be traced to a considerable degree to the application of superior techniques by the former.

Since new techniques are expensive and require a considerable degree of skill for their application in production, the twin requirements for the absorption of new technology are the availability of capital and training of an adequate number of personnel. It is necessary to have a basic minimum level of education among the actual producers in order that the economy can absorb new technology. Deficiency of capital hinders the process of scrapping off the old techniques and the installation of the up-to-date and modern techniques. Illiteracy and the absence of a skilled labour force are the other major hurdles in the spread of technology in the economy.

The Indian economy suffers from this basic weakness. The low productivity per hectare in Indian agriculture and the low level of productivity per worker in agriculture and industry are largely a consequence of technological backwardness. In India, the vast majority of farmers are too poor to buy even the essential inputs, such as improved seeds, fertilisers and insecticides, not to speak of affording the more expensive producers' goods like harvesters, tractors, sowing machines, etc. In manufacture also, the vast majority of the enterprises in India are run either on an individual or on a partnership basis; and it is beyond the means of small enterprises to employ modern and more productive techniques. However, with the liberalisation of the economy, new technology is being adopted by a large number of enterprises for their survival.

(9) Low level of living of the average Indian. Failure to secure a balanced diet manifests in India in the low calorie intake and low level of consumption of protein. In 1999 the average calorie intake of food is only 2,496 as compared to over 3,400 calories per day in most of the developed countries. This is, slightly above the minimum intake for sustaining life estimated at 2,100 calories. Since nearly 28 per cent of the population in India lived below the poverty line in 2004-05, it is very doubtful whether the poor get a minimum intake of even 2,100 calories. Another factor that has an important bearing on the health of the people is that in India cereals predominate, but

In contrast the diet in the advanced countries is rich in content because it includes fruits, fish, meat, butter and sugar. The protein intake is nearly less than half of the level prevalent in advanced countries.

According to World Development Indicators, 46 per cent of the child population in India suffers from malnutrition. The average protein content of the Indian diet is only 59 grams per day as against more than double the level in developed countries. The per capita availability of milk which was 48 kgs. in 1960 has gone up to 83 kgs. in 2003-04, though it is still much lower than that in developed countries per annum. Nearly 60 per cent of the mothers are malnourished. According to the census of 2001, only 36 per cent of the households had access to safe drinking water, implying tap water. This results in developing less strength to fight diseases and is also partly responsible for the low level of efficiency of the Indian workers.

The picture regarding housing is equally bleak. According to the Census of India (2001), only about 52 per cent of the households were living in permanent houses, about 30 per cent were living in semi-permanent houses and 18 per cent were living in temporary houses. The condition in the rural areas was much worse where only 41 per cent of the population lived in permanent houses and 59 per cent lived in semi-permanent or temporary houses. Comparatively, the situation in urban areas was much better where 79 per cent households resided in permanent houses, 15 per cent in semi-permanent and only 5 per cent in temporary houses.

Table 8 : Distribution of Households by Type of Houses (2001)

(In million)

	Total	*Rural*	*Urban*
1. Permanent	99.4 (51.8)	56.8 (41.1)	42.6 (79.3)
2. Semi-permanent	57.7 (30.0)	49.4 (35.7)	8.3 (15.4)
3. Temporary	34.9 (18.1)	32.1 (23.2)	2.8 (5.2)
Total	**192.0 (100.0)**	**138.3 (100.0)**	**53.7 (100.0)**

Notes: Figures in brackets are percentages of total houses in respective column.
Permanent houses are those whose walls and roof are made of permanent materials like galvanized iron sheets, burnt bricks, tiles, slates, stones or concrete.
Semi-permanent houses in which either the wall or the roof may be made of permanent material and the other of temporary material.
Temporary houses in which both walls and roof are made of materials, which have to be replaced frequently. These materials include grass, thatch, bamboo, plastic, polythene, mud, unburnt bricks or wood.

Source: Compiled and computed from Census of India (2001), *Tables on Households, Household Amenities and Assets.*

It is implies that 92 million houses need upgradation—81 million in the rural areas and 11 million in the urban areas.

The Working Group on Housing for the Tenth Plan has observed that around 90 per cent of the housing shortage pertains to weaker sections. The Government should, therefore, come in a big way to make a programme for housing for the weaker sections. 34.8 million households occupying temporary houses almost entirely belong to the weaker sections of the society who require urgent attention by the Government.

The Working Group of the Tenth Plan on Housing has estimated a shortage of 22.44 million houses during the Tenth Plan period, out of which 8.89 million is the shortage of urban housing and 13.55 million of rural housing. This appears to be an under-estimate if we consider 34.8 million temporary houses, especially 12.7 million temporary unserviceable houses to be built afresh.

Another very revealing feature of the Census (2001) is that 34.5 per cent of household did not own any of the specified assets, i.e., radio, transistor, television, telephone, bicycle, scooter, motor cycle or moped.

(10) *Demographic characteristics of an underdeveloped country*. Among the demographic characteristics associated with underdevelopment are high density of population. Besides this, the average expectation of life is low and infant mortality rates are high. It would be proper to examine these characteristics.

The density of population in India in 2006 was 373 per sq. km. As compared with this the average density of population in the world is 50 per sq. km. in 2005. However, in U.S.A., the density of population is 33, in Canada and Australia, it is barely 3-4 per sq. km. Even in China, density is 141 per sq. km. Obviously, a higher density imposes greater burdens on land and other natural resources.

According to 2001 census, 33.5 per cent of the total population is in the age group 0--14, 61.5 per cent is in the working age group, i.e., 15--64 and only 5.0 per cent in the age group 65 and above. In other words, the proportion of children is higher in India than in the advanced countries. Obviously,

this situation increases the dependency load, because the proportion and size of the non-productive population is higher. Such a situation persists during a period of high population growth rate but will alter in favour of productive population as the rate of population growth slows down. The existence of a greater proportion of the population in the lower age group acts against production, but favours a higher level of consumption. The higher dependency load of the population is a typical characteristic of underdevelopment.

However, demographic change is taking place in India. The percentage of children (Below 15 years) which was 35.5% of in 2001 has declined to 32.1% in 2006 and is likely to decline further to 23.3% by 2026. Consequently, the population in the working age group (15 to 64 years) is expected to increase from about 63% in 2006 to 68.4% by 2026. Demographers expect a decline in the dependency load of the population. As a consequence of the likely increase in the working age group, India will experience a demographic dividend during the next three decade. The major problem for India is to harness the growing working age population in emerging areas of the economy, both in industry and services. This will require the development of new skills among the youth to enable them to take part in occupations requiring better skills and training. The is referred to as the challenge of demographic dividend facing the Indian economy.

(11) ***The Socio-economic indicators of consumption are characteristic of underdeveloped economy in India.*** Underdevelopment also finds expression through several socio-economic indicators, such as per capita intake of calories, fats and proteins, population per TV set and physician. In Table 8, figures for a few selected countries indicate that India is far behind the developed countries so far as these indicators of standard of living are concerned. Illiteracy rate is also very high in India—35% in 2001, as against less than 5 per cent in developed countries.

TABLE 9. Socio-economic Indicators of Standard of Living (1999)

Country	*Per capita daily intake*			*Per 1000 persons*	
	Fats (gms)	*Protein (gms)*	*Calories*	*TV Sets*	*Physician (1998)*
India	45	59	2,496	69	0.4
China	71	77	2,897	272	2.0
Japan	83	96	2,932	707	7.3
USA	143	112	3,699	847	2.5
UK	141	93	3,276	645	1.5

SOURCE : Tata Services Ltd., *Statistical Outline of India*, (1999-2000).

As a developing economy, during the last over five decades of development, India has been able to improve its GDP growth rate which was only 3.5 per cent during 1950-51 to 1970-71 to a level of nearly 7 per cent during 2000-01 to 2004-05. It has been able to reduce poverty from a level of about 54 per cent in 1960-61 to a level of 26 per cent in 1999-00. It has been able to improve literacy from a level of 17 per cent in 1951 to about 65 per cent in 2001. It has been able to raise the rate of capital formation from about 10 per cent of GDP in 1960-61 to 30 percent in 2004-05. Its life expectancy has improved from 32 years in 1951 to 63.3 years in 2003. However, there are glaring failures on many fronts. According to Human Development Report (2005), India ranks at No. 127 in the world. Its record in terms of removing malnutrition is poor, as 46 per cent of the child population suffers from it. According to 2001 census, only 52 per cent of the population has permanent houses and only 36 per cent population has access to safe drinking water. Although poverty has been reduced to a level of 26 per cent, but still 260 million persons are still poor and the burden of poverty is quite massive. The rate of unemployment at a level of 9.2 per cent in 2001-02 is very high. To sum up, Indian economy has made commendable progress on many fronts, but it has miles t o go to remove poverty, malnutrition and providing shelter and drinking water to its entire population.

3. MAJOR ISSUES OF DEVELOPMENT

India is an underdeveloped though a developing economy. Bulk of the population lives in conditions of misery. Poverty is not only acute but also chronic. At the same time, there exist unutilised natural resources. The co-existence of the vicious circle of poverty with the vicious circle of affluence perpetuates misery and foils all attempts at removal of poverty. It is in this context that an understanding of the major issues of development should be made. The following are the major development issues in India.

(1) ***Low per capita income and low rate of economic growth.*** Barring a few countries in the world, the per capita income of the Indian people is the lowest in the world. During 1990-2005, Indian economy has growth at the rate of over 6% per annum in GDP. This is helping India to reduce the gap of per capita GDP with developed countries.

(2) ***High proportion of people below the poverty line.*** A major development issue is the removal of mass poverty. Indian economy indicates a very high proportion of people below the poverty line. Dandekar and Rath showed that 40 per cent of rural population and 50 per cent of the urban population lived below the poverty line in 1967-68. Taken together 215 million persons constituted the poor,

accounting for 41 per cent of the total population in 1967-68. Defining poverty line on the basis of norms of nutritional requirements, i.e., 2,400 calories per person per day for the rural areas and 2,100 calories for the urban areas, the Sixth Plan (1980-85) estimated the total number of persons living below the poverty line as 317 million for 1979-80, that is, 48 per cent of the total population. According to the Planning Commission, in 2004-05 nearly 302 million people (27.5 per cent of total population) were living below the poverty line—221 million in rural areas and 81 million in urban areas. The burden of poverty is very massive. Rapid reduction and eventually the elimination of poverty is, therefore, the most important issue of development.

(3) ***Low level of productive efficiency due to inadequate nutrition and malnutrition.*** Nutrition influences economic development via raising the level of productivity, efficiency and intelligence of the community. The National Sample Survey has estimated that about 56 per cent of the urban population and about 49 per cent of the rural population suffer from inadequate nutrition as they do not get a calorie intake of 2,400 per day considered as a reasonable level of nutrition. The level of malnutrition in all expenditure groups was higher in the urban areas than in the rural areas. This is partly due to the relatively lower prices of food products and their relatively easy availability in the rural areas.

Amitabh Kundu has highlighted the deterioration in basic food availability : "It is important that the per capita consumption of cereals has gone down from 15.4 kgs to 14.4 kgs per month during 1970-89 in rural areas, as per the NSS data. The corresponding figures for urban areas are 11.4 and 11.0 respectively. The average calorie intake per consumer unit in rural areas has also declined from 2,858 to 2,784 during 1973-83. The information from the National Nutrition Monitoring Bureau (NNMB) also confirms this trend."

A relatively more detailed examination of food requirement and actual consumption reveals that (i) in India, a high proportion of calorie intake is derived from cereals which indicates a low level of living. As against the requirements of 400 calories per day per adult, actual consumption of cereals is of the order of 470 calories. (ii) As against this, actual consumption of non-cereal such as vegetables, fruits, milk and milk products, sugar, fish, meat and eggs and vegetable oils is far short of their requirements. This only underlines the unbalanced nature of the diet of an average Indian.

The foregoing analysis brings out the clear need for an integrated policy with regard to prices, production and distribution of various foodgrains, coupled with a programme for raising the output of such non-cereals as milk products, poultry, fish, meat, pulses, vegetables and fruits. The highest priority has, however, to be given to raising the output of pulses without necessarily diverting the land from cereal production.

(4) ***Imbalance between population size, resources and capital .*** A very important problem which affects economic development is the rapid growth of population. As mentioned already, the rate of growth of population 1.5 per cent per annum by during 2000-05 which is still high. A rising population imposes greater economic burdens and, consequently, society has to make a much greater effort to initiate the process of growth. Moreover, with a rising population, per capita availability of land and such other resources fixed in supply, declines. Consequently, society has to make greater efforts to eke out more output per unit of land. Similarly, a significant proportion of the capital formation is utilized to provide basic facilities to the additional population at the present level of living. Obviously, checking the fast growth of population has a close relationship with economic development.

(5) ***Problem of unemployment*** : A major development issue in India is to eliminate unemployment and provide gainful employment to millions of people without work. In 2001-02, India had an incidence of unemployment under-employment of the order of 9.2 per cent. In other words, the development plans in India failed to absorb even the normal increase in labour force during this period, not to speak of reducing the backlog of unemployment.

Economic development in the sense of rise in real GNP and per capita real income is by itself of not much significance in India unless we remove unemployment and underemployment also. The employment strategy of planned development will have to be directed (a) to adopt an employment-intensive sectoral planning, (b) to regulate technological change to protect and enhance employment, and (c) to promote area planning for full employment. The focus should be to expand employment through labour-absorbing technologies.

The expansion of infrastructure and social services i.e., road construction, rural electrification, water supply, rural schools and community health schemes, besides, irrigation, power and housing programmes will help to generate massive employment through expansion in construction activity and their secondary and tertiary effects in raising agricultural productivity and income of the poor.

(6) ***Instability of output of agriculture and related sectors*** : One of the major problems of Indian economy is the uncertainty of agricultural production, since agriculture is still a gamble in the monsoons. Since Independence, there has been considerable increase in the production of the agricultural sector. For example, between 1950-51 and 2003-04 production of foodgrains increased from 54 million tonnes to 213 million tonnes. Between 1961 and 2003-04,

production of wheat has increased spectacularly from 11 million tonnes to 72 million tonnes. In spite of this spectacular growth, foodgrains output has been fluctuating from year to year. This is also true of oilseeds, sugarcane, cotton and jute—the major commercial crops. Instability of output of agriculture also results in causing instability in the related sectors. For instance, a fall in the production of sugarcane or jute leads to a small availability of raw material for the sugar and textile industry. Similarly a cut-back in agricultural production also results in reduction of employment in agriculture and this in turn, reduces aggregate demand in the economy as the purchasing power of the peasants falls. Thus, a major development issue for the Indian economy is to devise a strategy of agricultural development which can promise a steady growth of agricultural output.

(7) ***Imbalance between heavy industry and wage goods*** : During the British period, as a matter of policy, the alien government did not encourage the growth of heavy industry. But in the post-independence period, as a matter of deliberate policy, the Government decided to give a boost to heavy industry so as to build the industrial base of the economy. On account of the Chinese invasion in 1962 India realised her weakness in defence preparedness and thus switched over to investment in favour of defence industries which was largely in the nature of heavy industries.

As a result of the stepping up of investment in the heavy industry sector, as was rightly done, it was quite natural that the share of wage goods sector in total investment fell from 41 per cent in 1950-51 to 31 per cent in 1974-75. An analysis of the Indian economy during 1963-76 made by Professor P.R. Brahmananda revealed that supply of wage goods rose at smaller pace than the supply of non-wage goods, the growth rate of supply of wage goods sector was just 2 per cent per annum as against over 4 per cent in the non-wage goods sector. This resulted in a sharp increase in the prices of wage goods at the annual rate of 8 per cent per annum. Thus, the increase in real wages of workers that had taken place during the early phase of planning was wiped out by the increase in the prices of wage goods during 1963-76.

But then in the ultimate analysis, the impact of economic development has to be judged by an increase in the availability of wage goods to the masses. Two things are essential. Firstly, the supply of wage goods should grow at a faster rate than that of non-wage goods; and, secondly, the price of wage goods should be stabilised.

Now that the economy has been able to build a reasonable industrial base, it is imperative that the imbalance between the heavy industry and wage goods sector be corrected by shifting investment polices in-favour of wage goods. This is not to say that the country has reached the goal of self-reliance in heavy industry, but to emphasise that simultaneous development of heavy industry and wage goods sector can bring about balanced development of the economy. This path of growth will help to improve the level of living of the masses.

(8) ***Imbalance in distribution and growing inequalities*** : There have been growing inequalities of income and wealth in India during the last five decades of planned economic development, redistribution of income in favour of the less privileged classes has not taken place. On the other hand, concentration of income and wealth has increased. Various studies and surveys have clearly indicated that even the small gains of development over the years have not been equitably distributed. The condition of the bottom 20 per cent of the population has definitely deteriorated and the next 20 per cent of the population has remained stagnant. A leading issue of economic development is to assure continued growth with justice through better distribution of national wealth produced in the country.

We have mentioned the major issues of development in the Indian economy. All these can be resolved in terms of three leading issues viz., poverty, unemployment and inequality. Some of the issues are in the nature of strategies to find a solution to the basic problem of poverty and inequality.

The Research Study of the World Bank about eight high performing Asian Economies (HPAEs): Japan, the "Four Tigers" - Hong Kong, the Republic of Korea, Singapore and Taiwan (China) and the three newly industrialising economies (NIEs) of South-east Asia, Indonesia, Malaysia and Thailand has recorded that these economies grew faster than all other regions of the world. "In large measure the HPAEs achieved high growth by getting the basics right. Private domestic investment and rapidly growing human capital were the principal engines of growth. And some of these economies also got a head start because they had a better-educated labour force and a more effective system of public administration. In this sense, there is little that is "miraculous" about the HPAEs' superior record of growth; it is largely due to superior accumulation of physical and human capital."

"But these fundamentals do not tell the entire story. In most of these economies; in one form or another, the government intervened — systematically and through multiple channels — to foster development and in some cases the development of specific industries."[7]

To sum up, it is quite possible that mere emphasis on G.N.P. approach to development may result in increases of national income by the manipulation of capital-output ratios but in the process, the economy may be faced with the problem of massive unemployment. It is, therefore, of vital importance that the pattern of investment should be so designed that certain areas such as defence equipment, engineering and metallurgical industries, heavy industries, shipping, etc., may be permitted to use sophisticated capital-intensive technology but bulk of the consumer goods industries and various programmes of agricultural development should emphasize labour-absorbing technologies with low doses of capital. Such a course is vitally necessary in the early phase of development in which population pressures are heavy on account of a fast decline in death rate. The harmonization of the objective of expanding production with that of securing full employment is a logical necessity in India.

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7. World Bank (1993), ***The East Asian Miracle — Economic Growth and Public Policy***, p. 5.

CHAPTER

2

INDIAN ECONOMY ON THE EVE OF INDEPENDENCE

"Indeed some kind of chart might be drawn up to indicate the close connection between length of British rule and progressive growth of poverty. That rule began with outright plunder, and a land revenue system which extracted the uttermost farthing not only from the living but also from the dead cultivators. It was pure loot".

–Jawaharlal Nehru

1. INDIAN ECONOMY IN THE PRE-BRITISH PERIOD

The Indian economy in the pre-British period consisted of isolated and self-sustaining villages on the one hand, and towns, which were the seats of administration, pilgrimage, commerce and handicrafts, on the other. Means of transport and communication were highly underdeveloped and so the size of the market was very small. To understand pre-British India, it is essential to study the structure of the village community, the character of towns, the character of internal and foreign trade, the state of the means of transport and communications.

(a) The structure and organisation of villages

The village community was based on a simple division of labour. The farmers cultivated the soil and tended cattle. Similarly, there existed classes of people called weavers, goldsmiths, carpenters, potters, oil pressers, washermen, cobblers, barber-surgeons, etc. All these occupations were hereditary and passed by tradition from father to son. These craftsmen were paid a stipend out of the crops at the harvest time in lieu of the services performed.

Most of the food produced in the village was consumed by the village population itself. The raw materials produced from primary industries were the feed for the handicrafts. Thus the interdependence of agriculture and hand industry provided the basis of the small village republics to function independently of the outside world. Sir Charles Metcalfe writes in this connection: "The village communities are little republics having nearly everything they want within themselves; and almost independent of foreign relations. They seem to last where nothing lasts. This union of the village communities, each one forming a separate little state by itself... is in a high degree conducive to their happiness, and to the enjoyment of a great portion of freedom and independence."[1] The villages did acknowledge some outside authority, may be that of a local princeling, who in turn may be under a Muslim Nawab or a Hindu king, by paying a portion of the agricultural produce varying between one-sixth to one-third or even in some periods one-half as land revenue. The land revenue sustained the government.

1. Quoted by Jawaharlal Nehru, *Discovery of India*, (1947). p. 302.

There were three distinct classes in village India: (i) the agriculturists, (ii) the village artisans and menials, and (iii) the village officials. The agriculturists could be further divided into the land-owning and the tenants. Labour and capital needed was either supplied by the producers themselves out of their savings or by the village landlord or by the village moneylender. These credit agencies supplied finance at exorbitant rates of interest but since the moneylender and the landlord were the only sources of credit, the peasants and even the artisans were forced to depend on them. The village artisans and menials were the servants of the village. Most of the villages had their *panchayats* or bodies of village elders to settle local disputes. The panchayats were the courts of justice.

The villages of India were isolated and self-sufficient units which formed an enduring organisation. But this should not lead us to the conclusion that they were unaffected by wars or political upheavals. They did suffer the aggressors and were forced to submit to exactions, plunder and extortion, but the absence of the means of transport and communications and a centralized government helped their survival.

The structure and character of the towns

Towns had come into being principally on account of the following three reasons :

(1) Towns were the places of pilgrimage or sacred religious centres. Important examples of such towns were Allahabad, Banaras, Gaya, Puri, Nasik etc.

(2) Towns were the seat of a court or the capital of a province. In this category may be included Delhi, Lahore, Poona, Lucknow, Tanjore, etc. These towns lost their importance as the prop of the court was withdrawn.

(3) Towns were trading or commercial centres. These towns existed on important trade routes. Mirzapur, Bangalore, Hubli, etc. are examples of this category.

Towns had a life much different from the villages. There existed a large variety of occupations and trades in towns. They catered to wider markets.

Industries and handicrafts in pre-British India

The popular belief that India had never been an industrial country, is incorrect. It was true that agriculture was the dominant occupation of her people but the products of Indian industries enjoyed a worldwide reputation. The muslin of Dacca, the calicos of Bengal, the sarees of Banaras and other cotton fabrics were known to the foreigners. Egyptian mummies dating back to 2000 B.C. were wrapped in Indian muslin. Similarly, the muslin of Dacca was known to the Greeks under the name Gangetika.

The chief industry spread over the whole country was textile handicrafts. The high artistic skill of the Indian artisans can be visualised from this account given by T.N. Mukherjee : "A piece of the muslin 20 yards long and one yard wide could be made to pass through a finger ring and required six months to manufacture."[2] Besides the muslins, the textile handicrafts included chintzes of Lucknow, dhotis and dopattas of Ahmedabad, silk, bordered cloth of Nagpur and Murshidabad. In addition to cotton fabrics, the shawls of Kashmir, Amritsar and Ludhiana were very famous.

Not only that India was also quite well-known for her artistic industries like marble-work, stone-carving, jewellery, brass, copper and bell-metal wares, wood-carving, etc. The cast-iron pillar near Delhi is a testament to the high level of metallurgy that existed in India.

The Indian industries "not only supplied all local wants but also enabled India to export its finished products to foreign countries."[3] Thus, Indian exports consisted chiefly of manufactures like cotton and silk fabrics, calicos, artistic wares, silk and woollen cloth. Besides, there were other articles of commerce like pepper, cinnamon, opium, indigo, etc. In this way, Europe was a customer of Indian manufactures during the 17th and 18th centuries. It was this superior industrial status of India in the pre-British period that prompted the Industrial Commission (1918) to record : ***"At a time when the West of Europe, the birth place of modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations."***[4]

2. ECONOMIC CONSEQUENCES OF BRITISH CONQUEST

India had been conquered before the British too but the invaders settled in India. The difference of the British conquest lies in the fact that it led to the emergence of a new political and economic system whose interests were rooted in a foreign soil and whose policies were guided solely by those interests. Whereas the early invaders Indianized themselves, the British

2. Quoted by D.R. Gadgil, ***The Industrial Evolution of India***, p. 34.
3. Ranade, ***Essays on Indian Economics***, p. 171.
4. ***Industrial Commission Report***, p. 1.

tried to keep a distance between them and the Indian people and thus created the distinction erstwhile not known to Indian history--the foreign rulers and the Indian subjects.

The British rule can be divided into two epochs, first the rule of the East India Company ranging from 1757 to 1858, and second, the rule of the British Government in India from 1858 to 1947. The establishment of the British rule itself was a slow and lengthy process, extending over more than a hundred years. The British conquest which started in 1757 with the Battle of Plassey was completed only by 1858. During this period England was passing through the period of changes in the techniques of production which revolutionised manufacturing. The coming of Industrial Revolution which synchronised with the period of British conquest helped the British to sell machine-made goods in India in competition with Indian handicrafts. The British conquest led to the disintegration of the village community partly by the introduction of the new land revenue system and partly by the process of commercialisation of agriculture. The new land system and the commercial agriculture meant untold exploitation of the Indian peasantry and the country was consequently plagued by frequent famines. The British were not interested in developing India as such. The growth of railways or the spread of irrigation or the expansion of education or the creation of revenue settlements were all initiated with one supreme goal, i.e., to accelerate the process of economic drain from India. To understand the economic consequences of the British conquest, it would be convenient to study them under the following heads : (1) Decline of Indian handicrafts and progressive ruralization of the Indian economy; (2) growth of the new land system and the commercialisation of Indian agriculture; and (3) the process of industrial transition in India.

3. DECLINE OF INDIAN HANDICRAFTS AND PROGRESSIVE RURALISATION OF THE INDIAN ECONOMY

Before the beginning of Industrial Revolution in England, the East India Company concentrated on the export of Indian manufactured goods, textiles, spices, etc., to Europe where these articles were in great demand. The Industrial Revolution reversed the character of India's foreign trade. Tremendous expansion of productive capacity of manufactures resulted in increased demand of raw materials for British industry and the need to capture foreign markets. As a first step, attempts were made to restrict and crush Indian manufactures. On the other hand, efforts were made to commercialise agriculture so as to step up the export of raw materials. The Indian textile handicrafts were the first to be hit. The decline of this industry started a chain reaction leading to the speedy decline of other handicrafts. The process of decline of handicrafts was accelerated by the development of means of transport. The principal causes that led to the decay of handicrafts were as follows :-

(a) Disappearance of Princely courts. The growth of quite a number of industries and towns was possible owing to the patronage of nawabs, princes, rajas and emperors who ruled in India. The British rule meant the disappearance of this patronage enjoyed by the handicrafts. Cotton and silk manufactures suffered especially. Besides, the artisans who manufactured specially designed articles for display and decoration of courts also suffered because of a decline in the demand for works of art.

(b) Hostile policy of the East India Company and the British Parliament. The British were always guided by their own interests and never bothered to consider the effects of their policies on the people of India in terms of unemployment, human suffering, famines, etc. They formulated certain policies, and propagated them but when conditions changed in England they were quick to reverse or suitably alter them. The British economists always tried to provide the theoretical basis of these policies and behind the theoretical formulations were the British interests. For instance, in the first half of the 18th century, the British used tariff with the object of protecting their woollen and silk manufactures on the one hand and of raising additional revenues to finance continental wars, on the other. The period 1882 to 1894 was one of complete free trade. By this time, England had developed industrially to such an extent that unrestricted competition of British manufactures with Indian handicrafts led to their decline. It was only when England rose to the position of industrial supremacy that free trade was advocated by the British economists and administrators. Thus, the British manufacturers employed the arm of political injustice in order to exploit the Indian market. The selfish policy of the British imperialists crippled Indian industries and helped the process of industrialisation in Britain.

(c) Competition of machine-made goods. The large-scale production that grew as a result of Industrial Revolution meant a heavy reduction in costs. It also created a gigantic industrial organisation and, consequently, the machine-made goods began to compete with the products of Indian industries and handicrafts. This led to the decline of textile handicrafts--the largest industry of India. Whereas the British emphasized the free import of machine-made manufactured goods they did not allow the import of machinery as such. The decline of Indian handicrafts created a vacuum which could be filled by the import of British manufactures only. Thus, India became a classic example of a colonial country supplying her imperialist rulers raw materials

and foodstuffs and providing markets for the manufactures of her rulers. The development of roads, railways and telegraphs, intensified the competition between indigenous and foreign goods and hastened the process of the decline of handicrafts. The opening of the Suez Canal in 1869 reduced transport costs and thus made the exploitation of the Indian market easier.

d). The development of new forms and patterns of demand as a result of foreign influence. With the spread of education, a new class grew in India which was keen to imitate western dress, manners, fashions and customs so as to identify itself with the British officials. This led to a change in the pattern of demand. Indigenous goods went out of fashion and the demand for European commodities got a fillip. Besides, there was a loss of demand resulting from the disappearance of princely courts and nobility. Thus, the British rule, silently but surely alienated the Indians not only from Indian culture but also diverted in its favour their form and pattern of demand for goods.

The destruction of Indian handicrafts had far-reaching economic consequences. It led to unemployment on a vast scale. Since textile industry was the worst sufferer in this process, the weavers were hit the most. Lord William Bentinck reported in 1834 : "the misery hardly finds a parallel in the history of commerce. The bones of cotton weavers are bleaching the plains of India."

Another consequence of the decline of handicrafts was the compulsory back-to-the-land movement. The British destroyed the institution of Indian handicrafts but did not care to provide an alternative source of employment. The unemployed craftsmen and artisans shifted to agriculture and increased the proportion of population dependent on land. This trend of the growing proportion of the working force on agriculture is described as 'progressive ruralization' or 'deindustrialization of India'. In the middle of the nineteenth century, about 55 per cent of the population was dependent on agriculture, in 1901 it was about 68 per cent, the proportion went up to about 72 per cent in 1931. Thus, the increased pressure of population on land was responsible for progressive sub-division and fragmentation of holdings. It led to an increase in land-rents charged from tenants. It meant an increase in the number of landless labourers. Thus, the crisis in handicrafts and industries seriously crippled Indian agriculture.

4. THE LAND - SYSTEM DURING 1793 - 1850

Another important impact of the British rule is the growth of a new land system in India. In the early period of the East India Company rule, the Company directors were keen on securing the largest possible revenue. This policy was marked by excessive exactions from peasants not realising that in the process the British were killing the goose that laid the golden egg. But land revenue was a principal source of finance for Company administration in India as also of satisfying the Company directors in England with larger returns every year from their conquest of India.

In order to bring about stability in agriculture the British introduced land settlement in 1793. In Bengal and neighbouring areas 'permanent settlement' was introduced. The settlement raised the status of revenue collectors to that of private landlords. It fixed land revenue in perpetuity. This was called the Zamindari system and the zamindar was required to deposit an enhanced land revenue to the state. Later the British extended the settlement to other states and created zamindars there too but they changed over to 'temporary settlement' under which land revenue could be reassessed after a period ranging between 25-40 years in different states.

Another and a totally different land system was evolved for large parts of Bombay and Madras and subsequently extended to north-eastern and north-western India. According to this system, called the ryotwari settlement, each peasant holding a plot of land was recognised as the landlord and made directly responsible to the state for the annual payment of land revenue.

It may be pointed out that in both cases, the land rents fixed were excessive and both the system were instrumental in the destruction of the organic village community based on custom and tradition. Daniel and Alice Thorner write : "Whereas the zamindari system made the landlords masters of the village communities, the ryotwari system cut through the heart of the village communities by making separate arrangements between each peasant cultivator and the state."[5] Through the introduction of zamindari system, the British were able to create a class of people whose interests were directly tied to British rule in India. But the system helped to create a class of absentee landlords who were more interested in squeezing higher land rents than in real agricultural progress. Excessive pressure of population resulting in a high demand for land helped the zamindars to charge exorbitant rent and numerous other exactions from the tenant-cultivators. The result of the whole change in the land system led to the emergence of subsistence agriculture. Even the ryotwari-system lost its original form and the rigorous, prompt and inelastic demands of high revenue forced peasant-cultivators to sell land to absentee landlords or moneylenders. The British land system introduced by Lord Cornwallis, thus helped the concentration of economic power in the hands of absentee landlords and moneylenders in rural India. It depressed agriculture and the peasantry.

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5. Daniel and Alice Thorner, *Land and Labour in India* (1962). p. 53.

5. COMMERCIALISATION OF AGRICULTURE (1850-1947)

Another noteworthy change in Indian agriculture was its commercialisation that spread between 1850-1947. ***Commercialisation of agriculture implies production of crops for sale rather than for family consumption***. At every stage of the economic history of the nation, a part of the agricultural output is produced for the market. Then, what distinguished commercial agriculture from normal sales of marketable surplus ? It was a deliberate policy worked up under pressure from British industries. By the middle of the nineteenth century, Industrial Revolution had been completed in England. There was a tremendous demand for raw materials, especially cotton, jute, sugarcane, groundnuts for the British industries. By offering a higher bait of market price, the peasants were induced to substitute commercial crops for the food crops as the former were more paying than the latter. Consequently, the peasants shifted to industrial crops and in some districts, the movement for commercial agriculture became so strong that the peasants started buying foodstuffs from the ***mandis*** for their domestic needs. This led to a fall in the production of food and, consequently this period is marked by the occurrence of most terrible famines in the economic history of India. Commercial agriculture was also, to some extent, the result of the mounting demands of the land revenue by the state and excessive rents by the landlords from the peasantry.

The process of commercial agriculture necessitated by the Industrial Revolution was intensified by the development of an elaborate network of railway in India after 1850. Railways linked the interior of the country with ports and harbours, urban marketing centres and thus Indian agriculture began to produce for world markets. Large quantities of wheat from Punjab, jute from Bengal and cotton from Bombay poured in for export to England. The same railways which carried commercial crops from the various parts of the country, brought back the foreign machine-made manufactures to India. Thus, railways and link-roads connecting the hinter-land of country with commercial and trading centres were instrumental in intensifying commercial agriculture on the one hand and sharpening competition of machine-made goods with Indian handicrafts, on the other. These factors led to the ruin of Indian industries.

6. FAMINES AND FAMINE RELIEF IN INDIA

The new land system and commercialisation of Indian agriculture produced very adverse economic consequences on the Indian economy. These influences retarded, nay halted, the process of industrialisation of the Indian economy, created "built-in depressors" in agriculture and were responsible for the occurrence of famines in India.

Frequence of famines in the British period

During 1765 and 1858, (the period of company rule) twelve famines and four major scarcities occurred. After the transfer of power to the Crown, contrary to expectations, the frequency of famines increased. Between 1860 and 1908, 20 famines occurred in a period of 49 years. Between 1908 and 1942, no major famine occurred in India, although some scarcities were experienced. There was a comfortable feeling that famines were something of the past but the Bengal famine of 1943 was a tragedy of an unprecedented magnitude. The Famine Enquiry Commission estimated that the death toll due to famine and disease was of the order of 1.5 million persons. Unofficial estimates, however, put the number of deaths on account of this famine to 3.5 million.

The nature of famines in India

Before the advent of modern means of transport, especially railways, the famines in India were localised scarcities of food in those regions where the crops had shrunk on account of bad rains. Both the construction of railways and the growth of trade after 1860 brought about a radical change in the nature of famines. Previously a famine meant extreme hunger and the population had to undergo suffering on account of lack of food because there were no means of transporting the surplus foodgrain even if it was available in other parts of the country. The position after 1860 was that the rapid means of transport made it possible to carry food from one region to the other without much loss of time. But periods of famine were invariably periods of high food prices and extensive agricultural unemployment. Therefore, the mass of the poor people found it impossible to purchase food. Consequently, the earlier famines were described as food famines but later ones are more appropriately described as purchasing power famines. The Famine Commission (1898) made it abundantly clear when it emphasized that food was "always purchasable in the market though at high and in some remote places at excessively high prices."[6] Two factors were responsible for pushing up food prices : First, an impending shortage of food meant hoarding and speculation which helped to push up the price level very fast. Secondly, government did not allow any decrease in the export of foodgrains even in the lean years. Consequently, the speculator and the Government both accentuated the gravity of the problem.

6. *Famine Commission (1898). Report*, p. 585.

Causes of famines

There is no doubt that the immediate cause of famines was the failure or the unseasonableness of rains. It is common knowledge that the means of irrigation were undeveloped and rainfall played a crucial role in agricultural production. Famines were a common occurrence in the dry regions and areas with a rainfall varying between 15 and 60 inches. The areas affected most by famines were Bihar, West Bengal, Orissa, Rajasthan, Tamil Nadu, Maharashtra, Andhra Pradesh and Karnataka. Failure of rains caused an absolute deficiency which resulted in great famines, but unseasonableness of rainfall also proved destructive to crops and, therefore, created food scarcity. In a country wholly or mainly depending on rainfall, considered as the most dominant factor determining agricultural production was the behaviour of monsoons.

To understand the real factors which led to the occurrence of famines again and again in India--while they were banished after 1850 from Europe--it is quite desirable to understand the economic and sociological transformation that took place during the British rule. These factors can be discerned in the Indian agricultural society during the British period :

(1) *The destruction of Indian handicrafts.* Fierce competition from British manufactures resulted in the destruction of Indian handicrafts. It stripped the artisan, the weaver and the handicraftsman of his means of livelihood. Under the circumstances, the unemployed increased the pressure of population dependent on land. This led to excessive sub-division and fragmentation of land, the creation of a class of landless labourers and an increase in the rent of land. Whereas in 1842, Sir Thomas Munro did not deem it necessary to statistically measure the number of landless labourers because they formed a too insignificant portion of Indian agricultural population, in 1872 the Census Commission counted agricultural labourers as 18 per cent of agricultural working force. This sudden increase of the agricultural proletariat in the 30-year period exposed the most vulnerable section of the population in Indian rural society to the uncertainties of weather.

(2) *The new land system.* The British created a class of landlords so as to affix responsibility for land revenue, but the British left the process of rent fixation to the free market mechanism. The increasing demand for land for a growing agricultural population led to an exorbitant increase in rents. Land was transformed in this process to an attractive capital asset. Thus, there was a great desire among the moneylending classes to acquire land. The rise in prices of land enhanced the value of the security in the form of land against which peasants could borrow. This led to increase in agricultural debt of the Indian peasantry repeatedly exposed to uncertainties. The high rates of interest charged by the moneylending classes made it impossible for the peasants to repay their debts. Gradually lands passed on to the moneylending classes. The dispossession of the peasantry by the moneylenders added to the process of pauperisation of the cultivating classes.

Thus, the new land relations which embodied the creation of a class of land owners and a class of cultivators (whether on a tenancy basis or a daily wage) separated ownership from cultivation. The landlords were interested in extracting high rents leaving a pittance with the cultivators. The investment on land fell sharply because the cultivators had to part off with a major portion of the produce in the form of rent to the landlords and interest to the moneylenders. This created in Indian agriculture a built-in-depressor. Thus, the new agrarian relations were disincentive-ridden and therefore, retarded the process of agricultural development.

(3) *The impact of colonial rule.* Colonialism also had a deep impact on the repeated occurrence of famines in India. The destruction of the Indian handicrafts increased unemployment in the rural areas. Whereas in England, surplus labour from rural areas was quickly absorbed in new industries created in the process of industrialisation, nothing of this kind happened in India. The industrialisation of the Indian economy would have deprived England of a ready market for its goods and so the colonial interests were opposed to the development of industries in India. Thus, labour thrown out of employment in traditional industries imposed additional burden on a subsistence agriculture.

But the burden of colonialism was to be borne by agriculture. The cost of extravagant and lavish British administration, the cost of imperial wars in Burma and Afghanistan, the depreciation of the value of the Indian currency since 1873 and the growing burden of home charges were to be paid by the Indian people. The major taxes were land revenue, excise, salt tax, stamps and opium. Income tax which was levied in 1886 was withdrawn because its yield was too poor. Apart from opium, all other taxes fell on the rural classes. Land revenue was the chief fiscal engine and this increased the burden on the peasantry.

On account of these factors, India was forced to keep a favourable balance of trade with England. But her principal exports were mainly food and agricultural raw materials. Thus, even in the famine years exports of foodgrains had to be maintained in order to create an export surplus on merchandise account. There is evidence that after 1870, foodgrains exports increased because the railways became a convenient vehicle of mobilisation of the food surplus. Thus, the compulsions of colonialism in maintaining an export surplus, burdening the peasantry with higher taxes and the swelling up of an agricultural population led to the impoverishment of the rural classes.

With unlimited supplies of labour available in the countryside, wages in agriculture remained highly depressed while prices of food rose in times of scarcity. The agricultural labourers were, therefore, the most

hard-hit class. Thus, it is quite reasonable to trace the basic causes of famines in the destruction of the Indian handicrafts, the growth of an agricultural proletariat, the creation of disincentive-ridden new land system, rising prices of foodgrains and stationary wage levels and the increasing burdens on the rural population by the colonial government. Failure of rains only served as an immediate cause. The government did provide some relief, but nothing was done to remove the basic causes of agricultural stagnation and so famines continued to occur again and again and caused untold misery and suffering.

7. PROCESS OF INDUSTRIAL TRANSITION IN INDIA

The process of industrial transition in the British period is broadly divided into industrial growth during the 19th century and industrial progress during the 20th century. It was mainly the private sector--whether indigenous or foreign -- that carried industrialisation forward. Only after the First World War some protection was granted to Indian industries otherwise Indian industry had to weather all storms and face world competition on its own strength. This explains the slow growth of industrialisation.

(A) Private enterprise and industrial growth in the 19th century

The outstanding industrial events of the 19th century were the decline of indigenous industries and the rise of large-scale modern industries. This change was brought about by private enterprise. The rise of large-scale industries was slow in the beginning but by the close of the 19th century, the movement was more rapid.

The period 1850-55 saw the establishment of the first cotton mill, first jute mill and the first coal mine. In the same period, the first railway line was laid in India. In a period of 25 years, that is, by the last quarter of the 19th century, there were 51 cotton mills and 18 jute mills. During the same period, India produced one million tonnes of coal per annum and the Indian railways had a mileage of 8,000. By the end of the 19th century there were 194 cotton mills and 36 jute mills, and coal production had risen to over 6 million tonnes per annum. In spite of the very rapid increase in industrialisation and the fact that the foundations for the development of modern industries for the utilisation of coal and iron resources were laid by the end of the 19th century, India was being gradually converted into an agricultural colony of the British. By 1900, India had become a great exporter of rice, wheat, cotton, jute, oilseeds, tea, etc. and an importer of British manufactures. In this way India had become an appendage of the British colonial system.

During the 19th century, it was but natural that British business should pioneer industrial enterprise in India. The Britishers had experience of running industries at home. British enterprise received maximum state-support. Besides, much of the business developed in India was related either to the Government or interests in some way connected with Britain. Though industrialisation was started by the British in the 19th century, the Britishers were more interested in their profit and not in accelerating the economic growth of India.

Apart from the British, the Parsis, the Jews and the Americans were also prominent first as merchants and later as industrialists. They were close-knit and highly progressive communities. The Parsis were particularly progressive to rapidly adopt European business methods.

Within the Indian community, conditions were not favourable for the emergence of industrial leaders, partly because of the peculiar way in which factory industry came to India, as compared to its development in England. In the West two principal groups were ready to set up factories : the merchants and the master craftsmen. The merchants had capital, marketing ability and capacity to manage labour. The master craftsmen did not have capital but had understood the materials and their proper handling. Because of certain peculiar features, neither Indian merchants nor Indian craftsmen took interest in the factory system. Most Indian merchants belonged to the *Baniya* or moneylending community. They possessed capital and were always eager for its security and profits. But when the factory system was introduced in India by the British, the merchant class found greater opportunities for trade. The development of shipping and the building of railways resulted in larger trade, both external and internal. Besides, there were more opportunities for lending money. Thus, the merchants found greater scope for profits in their traditional occupations and hence did not give them up and take to the factory industries.

At the same time, Indian craftsmen too did not play the part played by their western counter-parts in the field of industrialisation because they did not possess large capital. Besides, they were without proper training and education.

However, Indians joined the ranks of industrialists early in the middle of the 19th century and their role grew throughout the period, continuously and steadily. They used the same managing agency system as the Britishers. They were becoming increasingly important members of companies established by the Britishers. Those indigenous business groups who gave up traditional occupations and who took to industrial ventures were the Parsis, the Gujaratis, the Marwaris, the Jains and the Chettiars.

(B) Private enterprise and industrial growth in the first half of the 20th century

In 1905, the Swadeshi movement was started. It stimulated Indian industries and there was a slow but steady growth in the field of existing industries as well as the establishment of new industries between 1890 and the outbreak of the war of 1914. Over 70 cotton mills and nearly 30 jute mills were set up in the country. Coal production was more than doubled. Extension of railways continued at the rate of about 800 miles per annum. The foundation of iron and steel industry was finally laid during this period.

The war of 1914-18 created enormous demand for military goods in India. Imports from England and other foreign countries fell substantially. Besides, the government demand for war-purposes increased considerably. As a result, great stimulus was given to the production of iron and steel, jute, leather goods, cotton and woollen textiles. Indian mills and factories increased their production and were working to full capacity. But on account of the absence of heavy industries and also of the machine tools industry, they could not develop fast enough.

Tariff protection to Indian industries. In 1923 the Government of India accepted the recommendations of the First Fiscal Commission and gave protection to infant Indian industries against foreign competition. Between 1924 and 1939 several major industries were given protection by the Government, prominent among them being iron and steel industry, cotton textiles, jute, sugar, paper and pulp industry, matches, etc. Indian industrialists took advantage of the policy of protection provided by the Government and developed the protected industries rapidly. They were able to capture the entire Indian market and eliminate foreign competition altogether in important fields.

The outbreak of the war in 1939 created very larger demand for manufactured goods. The imports from foreign countries declined while the government demand for them increased. Naturally the existing industries expanded rapidly. Many new industries which came to be known as war babies were started. But as during the First World War, the Indian industries suffered again for want of replacements, stores and technical knowledge. The increase in industrial output between 1939 and 1945 was about 20 per cent. But the conditions created by the war led to the maximum utilisation of existing capacity. The conditions of shortage created by the Second World War continued in the post-war period, but the overall index of output went up by only 5 per cent between 1945 and 1947.

Decline in the share of foreign enterprise. By the beginning of the First World War the British controlled at least half the production in India's major industries. But this control steadily declined. According to one estimate, the British controlled 43 per cent of gross assets in 1914, 10 per cent in 1935 and only 3.6 per cent in 1948.

(C) Causes of slow growth of private enterprise in India's industrialisation (1850-1957)

It is important to find out the reasons why Indian industry did not expand significantly relative to the rest of the economy over the hundred years before Independence. They were :

(a) Unimaginative private enterprise. One important reason frequently mentioned is the inadequacy of entrepreneurial ability. Indians were reluctant to enter the industrial field because of the comparatively easier and secure scope for profit which existed in trading and moneylending. The Britishers who pioneered industrial change in India were not really interested in industrialisation of the country as such. But then Indian industrialists too were so short-sighted, they rarely bothered about the future and cared very little for replacement and for renovation of machinery. They were influenced by nepotism rather than ability in their choice of personnel. They were also influenced by their trading background viz., high price and high profit margin rather than low prices and larger sales. They emphasized sales than production. To a certain extent, therefore, unimaginative private enterprise was responsible for the slow growth of industrialisation in this country.

(b) Problem of capital and private enterprise : In the 19th and 20th centuries, Indian industrialists had suffered from lack of adequate capital. Just as British enterprise was prominent, so also British Capital was significant in India's industrialisation. A larger part of the total invested capital in modern enterprises in India was imported from Britain. Capital was scarce not only because the resources of the country were underdeveloped but also because the avenues for the investment of surplus wealth were few. There were no Government loans or company stocks and debentures. Accordingly, people held their wealth in the form of gold and silver.

There was complete absence of financial institutions to help the transfer of savings to industrial investment. The indigenous financial institutions concerned themselves with rural moneylending and financing of internal trade. Institutions which concerned themselves with rural savings for a comparatively long period, were altogether neglected. In the early days of industrialisation, people were generally hesitant to entrust their savings to the company promoters.

Banking was not highly developed in India and was more concerned with commerce rather than with industry. The Industrial Commission wrote in 1918 : "The lack of financial facilities is at present one of the

most serious difficulties in the way of extension of Indian industries." By 1870 there were only two joint stock banks of more than ₹ 5 lakhs capital each in the country. Even in the beginning of the 20th century, there were only 9 such banks. The swadeshi movement gave a fillip to the starting of banks but the number of bank failures in this period was so great as to cancel any good effect from banking expansion. The private bankers and joint stock banks did provide funds for industrial enterprises but this aid was limited to well-established concerns only.

It is interesting to note that Indian factory-owners followed closely the British system as regards capital resources. In the beginning funds for investment came from surpluses earned in rural moneylending and trading. But in course of time new resources were also tapped. For instance rulers and princes, those who amassed wealth from opium trade and in the cotton boom during the civil war in America, wealthy professional people like doctors and lawyers, Government officials, etc.--these people were induced to part with their wealth and savings for investment in industrial enterprises. The textile mills of Ahmedabad and to a small extent those of Bombay and Sholapur attracted deposits from the public. It is true that shortage of capital did affect industrialisation in India but too much importance should not be given to this factor alone.

(c) Private enterprise and the role of the Government. One of the important reasons and according to some authorities, the most important reason for the slow growth of Indian industries was the lack of support from the Government. In the 19th century, the Government did provide certain overhead investments which helped private enterprise. Examples were the railways and communications. But the Government did not provide the other conditions essential for private enterprise. The important fact to remember is that in the critical years of growth (between 1850 and 1947) Indian enterprise was operating under a foreign government which was extremely unsympathetic to native private enterprise.

The tariff policy in India reflected the needs of business interests in Great Britain. The British interests advocated free access to the Indian market. Till 1924 the Government refused to impose custom duties on the import of foreign goods. Even when they imposed low duties on some goods for purposes of collecting revenue, they sought to neutralise their effects by imposing equivalent excise duties on goods of local origin. When the Government ultimately adopted a policy of protection, it did not give protection to all industries but only to a few selected industries which fulfilled certain specified conditions.

It may be mentioned here that the British Government in India leaned heavily on industry in Britain for its large purchases of equipment for public utility in health and education, railway and military supplies, etc. Even simple machines and standard supplies were imported. Those orders could have served to stimulate expansion in Indian industry.

In spite of these difficulties, we must admire the achievements of India's indigenous business communities since 1850. At the same time, we can readily understand why industrial effort was not sufficient to accomplish a transition to industrialisation, to spark modernisation of agriculture and industrial activities comparable to those achieved in sovereign independents nations.

8. COLONIAL EXPLOITATION : FORMS AND CONSEQUENCES

The major form through which the exploitation of India was done was trade. Later, the British started making investments in Indian industries and the process of economic drain started through investment income in the form of dividends and profits. In addition to this, India had to pay the costs of British administration, in the form of home charges. They included salaries of British officers (both civil and military), payment of pensions, furloughs and other benefits, as also interest payments on sterling debt.

The main forms of colonial exploition were :

(i) Trade policies aimed at developing a colonial pattern of trade in which India would become an exporter of foodstuffs and raw materials and an importer of manufactures; (ii) encouragement of British capital to take up direct investment in Indian consumer goods industries; (iii) encouragement of finance capital, through the managing agency system, to appropriate a major portion of the profits through various malpractices; and (iv) to force India to pay the costs of British administration as well as to finance the wars and expeditions undertaken by the British Government.

(a) Exploitation through Trade Policies

Trade policies were used against India by the East India Company and later by the British Government to drain away wealth from India to feed the expanding British industry with raw materials and also to encourage the trend towards commercialisation of agriculture so that the Indian economy could be transformed as an appendage of the British colonial system. Thus, trade policies were a very convenient, but a potent source of exploitation.

1. *Exploitation of cultivators to boost indigo-export* – East India Company wanted to encourage indigo export. Some (500 to 1000) European planters were settled in Bengal. They were given land at a very nominal price. They forced the cultivators on their land to cultivate and sell the indigo plant at a very low price. Even other zamindars were compelled to allocate

portion of their land for indigo cultivation. Once an agreement was signed with a zamindar or a ryot accepted the advance for cultivation he had to suffer the ruthless exploitation of the indigo planters who made fabulous profits from its export.

2. *Exploitation of artisans through Company agents to deliver cotton and silk fabrics much below the market price* — During the 18th century, the East India Company wanted to benefit from the export of Indian cotton and silk fabrics which enjoyed a world-wide reputation. For this purpose, the Company made use of agents called as *Gomastas*. The *gomastas* who were Indians in the employment of the Company, would go to the village and force the artisans to sign a bond to deliver a certain quantity of goods at a price to be fixed by the *gomasta*. The price fixed was at least 15 per cent and in extreme cases, even 40 per cent lower than the market price. In case, an artisan refused to accept the advance offered by the Company's *gomasta*, he was punished by flogging and in certain cases, by imprisonment. In this way, through the Company's gomastas, the East India company was able to procure cotton and silk fabrics at very low prices. Thus, the poor artisan was squeezed so that the East India Company made huge profits through the export of these fabrics. The ruthlessness of the Company was so inhuman that the artisans worked like bonded labour and this explains their growing pauperisation.

3. *Exploitation through the manipulation of import and export duties.*--Though Great Britain professed to be a follower of free trade, but her trade policies towards Indian goods only revealed that she never followed the policy of free trade. During the 18th century, Indian goods, specially cotton and silk fabrics, enjoyed a lead over the British goods. The aim of British trade policies was to destroy the supremacy of the Indian goods, protect the interests of British industries and ultimately succeed in penetrating the Indian market by the machine-made goods. To achieve this end, several measures were undertaken :

a. After 1700, imports of Indian printed cotton fabrics in England were banned. The purpose of this measure was to eliminate the Indian competitor from the British market. The craze for Indian goods was so strong that some smuggling did take place. A case was reported that an English lady who possessed an Indian handkerchief was fined £ 15.

b. Heavy import duties were imposed on Indian goods, other than foodstuffs and raw materials imported from India and very nominal duty on the imports of British manufactures into India. The declared policy of the East India Company was to encourage the production of raw cotton, raw jute, sugarcane, groundnuts, raw silk and other raw materials and to discourage the production of manufactures in India. This policy of unequal trade was forced on India and since India had been subjugated, she could not retaliate but accept this wanton attack on the industry. Ramesh Chandra Dutt citing the famous historian H.H. Wilson mentions :

"Had this not been the case, had not such prohibitory duties and decrees existed, the mills of Paisley and Manchester would have been stopped in their outset, and could scarcely have been again set in motion, even by the power of the steam. They were created by the sacrifices of the Indian manufacturer. Had India been independent, she would have retaliated, would have proposed prohibitive duties upon British goods, and would thus have preserved her own productive industry from annihilation. This act of self-defence was not permitted to her, she was at the mercy of the stranger. British goods were forced upon her without paying any duty, and the foreign manufacturer employed the arm of political injustice to keep down and ultimately strangle a competitor with whom he could not have contended on equal terms."[7]

c. Discriminating protection whittled down by the clause of imperial preference -- Towards the beginning of the 20th century, there was a strong demand by the Indian national movement to protect the interests of Indian industries. The British Government decided to grant discriminating protection. During the process of implementation, only such industries were granted protection in which the Indian industry had to face competition with some other country and not Great Britain. Since Sweden happened to be the competitor, match industry was granted protection. But the woollen industry was not granted protection because the interests of the British came in clash with those of Indian industry. Similarly, cement industry was another example in which protection was denied. But in this case, the only serious competitor was U.K. Another example was that of heavy chemicals, an industry of national importance, in which protection was denied because there was a clash between British and Indian interest.

Within the framework of the policy of discriminating protection, Great Britain got the clause of Imperial Preference introduced. The sum and substance of this policy was that imports from Great Britain and exports to Great Britain should enjoy the most favoured nation treatment. This could be done by charging much lower import duties or no duties at all on goods imported from Britain. Similar preference to Great Britain was to be shown in exports vis-a-vis other nations. Thus, the British Government took away by the left hand what it gave in the form of discriminating protection by the right hand. In other words, the policy of imperial preference was used to eliminate competitors from the Indian market so that Great Britain could have full control to exploit it through its trade policies.

Indian public opinion consistently opposed the

7. Cited in Romesh Chander Dutt, *The Economic History of India*, Vol. I, pp. 180-81.

duction of imperial preference. Lord Curzon's government in 1903 definitely pronounced against the y of Imperial preference on the following grounds:

(i) About 3/4th of India's imports came from the sh Empire while the remaining 1/4th was of a kind h British Empire either did not produce or was not favourable position to supply.

(ii) In the decision of fiscal policy concerning , powerful sections of the British people always ed their influence and there was the danger that might be forced to shape her policy not in rdance with her own needs but in accordance with eeds of other members of the Empire.

(iii) That the Government would lose a large ion of the revenue it received from British and nial imports and it would be left with no alternative o make up the deficit by enhanced duties on foreign ds.

(iv) If the matter was thought from the economic t of view, Lord Curzon's government thought, India something but not perhaps very much to offer to the pire. She had very little to gain but a great deal to lose.

All these arguments produced no effect on the ish. The matter was referred to the Indian Fiscal nmission (1923) and the majority of the Commis- expressed themselves in favour of Imperial ference. Obviously, the British were more concerned ut retaining their hold on the Indian market. Though y were great advocates of free trade in theory, in ctice they used every device to protect their interests inst the entry of other nations, especially Japan, into Indian market. This would break their monopoly of oloitation which as rulers they were totally unwilling compromise. The main purpose of protection was not help Indian business to undertake investments in lia, but to help the British capital find safe and secure enues of investment. Writing in 1912, Alfred Chetterton his work *"Industrial Evolution of India"* in a very thright comment explained : "Protection would at- ct capital from abroad, and with the capitalist would me the technical expert and the trained organiser of odern industrial undertakings. Success would un- ubtedly attend their efforts, and India would contrib- e labour and raw materials. The educated Indian would ay but a small part; and he would in the course of time alise that the protective duties mainly served to enable uropeans to exploit the country .... India does not want protective tariff to enable an artificial industrial system be created, the masters of which will be able to take toll f the earnings of the country, and establish a drain on s resources which will in the long run retard progress". rophetic though it may appear, later developments owed that the policy of discriminating protection upported by Imperial preference produced precisely e same results.

(b) Exploitation through export of British Capital to India

In the early phase of colonialism, the chief instrument of exploitation was trade but later the British thought of encouraging investment in India. There were three principal purposes of these investments. Firstly, after the first war of Indian Independence (1857), which the British described as the Mutiny, it was realised by the Government that for the effective control and administration of the country, it was essential that an efficient system of transport and communication should be developed. Secondly, in order to effectively exploit the natural resources of India, it was essential to develop public utilities like generation of electricity and water works. Thirdly, to promote foreign trade so that food and raw materials collected in various *mandis* are quickly transported abroad and the manufactures imported in India are quickly distributed in various markets, the British thought it necessary to link railways with major ports on the one hand and the marketing centres (*mandis*) on the other. This explains why railway development in India was planned in such a manner that it served the colonial interests. Thus, the major fields of direct foreign investments were as under:

Fields of direct foreign investments

(1) Economic overheads and infrastructure like railways, ports, shipping, generation of electric energy, water works, roads and communications; (2) for promoting mining of coal, gold and petroleum and metallurgical industries; (3) for promoting commercial agriculture, investments in tea, coffee and rubber plantations; (4) to undertake investments in consumer goods industries like cotton and jute textiles, matches, woollen textiles, paper, tobacco, sugar, etc; (5) investments in banking, insurance and trade; and (6) some investments were made in machine building, engineering industries and chemicals.

All these investments were undertaken by the British multi-nationals operating through their subsidiaries. Some of these investments took the form of loans to the British Government in India in the form of sterling debts.

Two major forms of investment

(i) Direct private foreign investment in India was made in coal, mining companies, in jute mills, tea, coffee, rubber plantations and in sugar.

(ii) Sterling loans given to the British Government in India and public and semi-public organisations to undertake investments in railways, ports, electricity undertakings and other public utilities. These loans represented sterling debt.

Estimate of foreign capital

Various estimates of foreign capital were made, but most of these estimates suffer from limitations. The British investments were in so many diverse fields that a complete statement of assets and liabilities could not be attempted. Secondly, the same British Company had investments in a number of colonial countries. For instance, Findlay Shirras questioned the validity of the estimate of Paish on the ground that it included companies doing business in other countries as well as in India.

These estimates show that British capital has been growing during the period. The estimates by Findlay Shirras (1929) and the British Associated Chamber of Commerce (1933) can be considered fairly reliable. The estimate of the British Associated Chamber of Commerce further revealed that nearly 38 per cent of the foreign investments were in the form of Sterling debt of the Government, 50 per cent in Companies registered outside but operating in India; and only 12 per cent in companies registered in India and the rest. The analysis underlines the fact that British multinationals were the chief instruments of exploitation and it were they who drained out in the form of interest, dividend and profits the wealth of India. It was estimated that total pre-war British foreign investments were of the order of £4,000 million and thus one-fifth or 20 per cent of these investments were made in India. This was a measure of the importance of India in the British Empire.

Table 1. Estimate of Foreign Capital in India

Source	*Reference Year*	*Amount (£ million)*
Paish	1911	365
Findlay Shirras	1929	500
British Associated Chamber of Commerce	1933	1,000

During the Second World War, India was forced to export more to Britain than the latter could pay back via exports to India. This resulted in payment of the sterling debt and a sterling balance emerged in the Indian account. But during the war, the natural umbrella of protection was available to Indian businessmen and industrialists and they prospered by undertaking investments in industry. The huge profits earned by Indian businessmen enabled them to buy foreign business investments in India. Consequently, there was a decline in the magnitude of foreign business investments.

The Reserve Bank of India made an estimate of foreign investments and published its first Census of India's foreign liabilities and assets as on 30th June 1948. The RBI Survey revealed that total foreign business investments aggregated to ₹ 302 crores, out of which British investments were ₹ 230 crores i.e., 72 per cent of total.

The growth of British investments in India in the pre-independence period reveals that the British were interested in creating economic infrastructure so that they could administer the country properly and with its help trade could be promoted. Secondly, the British foreign investments mainly went in consumer goods industries and those concerned with the processing of primary produce meant for export. The British took care that no basic and heavy industries were built in India. This would have made the country industrially independent, which the rulers did not want. Lastly, the ownership and management of the industries were also in British hands. Thus, Indians had to content themselves with low-level jobs.

(c) Exploitation through finance capital via the Managing agency system

Indian business did not possess any experience of the organisation of modern industry by setting up joint stock companies. The British merchants who had earlier set up trading firms acted as pioneers and promoters in several industries like jute, tea and coal. These persons were called as managing agents.

The managing agency firms may be described as partnerships of companies formed by a group of individuals with strong financial resources and business experience. The managing agency firm is entitled to the management of the whole affairs of the Company unless otherwise provided in the agreement.

The principal functions of the managing agents were as follows : (i) to do the pioneering work of floating new concerns; (ii) to provide their own funds and also to arrange for finance by acting as the guarantors; (iii) to act as agents for the purchase of raw materials, stores, equipments and machinery; (iv) to act as agents for marketing of the produce; and (v) to manage the affairs of the business.

The most important function of the managing agents was that they provided finance and as such, they were the financiers of the concerns. It would be, therefore, appropriate to describe these groups of financiers as finance-capitalists.

Among the pioneering managing agents were such famous business houses as Messers. Andrew Yule & Co., Martin Burns, Bird & Co., Duncan Brothers and Williamson Mager. Those European Managing Agents were the real pioneers of Indian industry. When India did not have a developed banking system, these managing agents supplied finance to set up jute mills and tea plantations.

Since there was no alternative system of finance, the Managing Agency System had to be accepted. These managing agents received a commission on certain jobs like purchase of raw materials, stores, equipment and machinery as also sale of output. They were paid heavy

office allowances for managing the affairs of the Company. They were also entitled to a share in the profits of the concern. In course of time, various malpractices developed in this system. Dr. P.S. Loknathan summed up the situation in the following words : "Finance, instead of being the servant of industry, has become its master." The managing agents became so powerful that the zeal of the pioneer was replaced by the exploitative tendency to charge a high commission and share of profits. Besides, instead of expanding Indian industry, the managing agents started exploitation of Indian natural resources for export. They floated a large number of concerns and got themselves appointed as their managing agents. In this way, they were not able to devote personal attention to the affairs of each one of them. The system, therefore, degenerated and became inefficient.

Although, in theory, the managing agents were to work under the control of the Board of Directors, but in practice, being financiers, they began to call the tune and the Board of Directors became mere puppets in their hands. This, set in motion, a process of fleecing the company. The managing agents, therefore, forced the companies to pay a minimum remuneration, even if the managed company suffered a loss. Commissions for purchase of stores, equipment, raw materials and machinery, and commissions for sale of output were demanded. Then they demanded a high percentage ranging between 12 to 14 per cent of profits for managing the affairs of the company. In case, the directors of the managed company refused or even indicated any disinclination, the managing agents would withdraw their finance and the company would go into liquidation. Thus the managing agents dictated and the directors dittoed. The Taxation Enquiry Commission rightly pointed out that during 1946 and 1953, the managing agents appropriated about one-half of what accrued to the shareholders. In other words, to charge 50 per cent of the gross profits as managing agency remuneration was considered very excessive. Herein lay the exploitative character of the managing agency system.

(d) Exploitation through payments for the costs of British administration

The British employed a large number of British officers for the military and civil administration of the country. The British officers in the army were given a separate cadre and were paid much higher salaries and allowances than their Indian counterparts. All the top ranking positions were monopolised by the British officers.

Similar situation prevailed in the civil administration. All the key positions and top ranks were manned by British officers. They were also paid fabulous salaries and allowances. Besides this, they were provided other benefits for the maintenance of their children. These officers had immense administrative powers. They could award contracts for supplies and stores and thus the contractors paid them commissions for the favours. These unauthorised earnings had also become a part of the system. These officers after a certain specified period of service could seek retirement and thus were entitled to benefits of pension. The payments which were remitted to England out of the savings of the officers living in India and also on account of pension and other benefits were called as family remittances. These payments were a heavy drain on our resources. Besides, India had also to pay interest on sterling loans raised for the construction of railway and irrigation works. Payments accruing on account of interest on debts incurred by India and those connected with civil departments in India, such as pensions, gratuities, furlough allowances, and payments for stores purchased in India — all taken together were called Home Charges. In 1931, the payments accruing to Britain on account of home charges amounted to ₹ 43 crores.

Not only that, India was forced to pay for the various wars of the East India Company like the Mysore and Maratha Wars, the Afghan and Burmese Wars. The British forced the Indian people to pay through their nose for their expeditions to Prussia, Africa etc. The entire cost of the telegraph line from England to India was charged from India.

During the two World Wars, India exported more to Britain than it imported. Against this positive balance of trade, Britain authorised the Government of India to issue more currency on the backing of the Sterling Balance held in England. India exported more and imported less. The Sterling Balances, therefore, represented the sweat, the tears and the toil of the millions of the poor people of India. But Great Britain by its policy only exported inflation to India. This accounted for a much larger rise of the price level in India during the war. It imposed a heavy burden on the Indian people.

The consequences of the various forms of exploitation were that :

(i) India remained primarily an agricultural country and its agriculture became commercialised to serve the interests of Great Britain by exporting tea, coffee, spices, oilseeds, sugarcane and other foodstuffs, besides other raw materials.

(ii) India which was an industrially advanced country during the 16th and 17th century was not permitted to modernize her industrial structure during the 18th and 19th century. Her handicrafts were destroyed and she became an importer of manufactured goods.

(iii) The British employed the policy of discriminating protection along with imperial preference to have complete control over the Indian market. This also helped to provide safe and secure avenues for the British investors in India.

(iv) The British developed the economic infrastructure in the form of railways and irrigation and electricity works with a view to promote foreign trade and exploit India's natural resources to their advantage. Direct British investment was made in consumer goods industries like tea, coffee and rubber plantations, but no effort was made to develop heavy and basic industries.

(v) The Managing Agency System did help to promote consumer goods industries in the initial phase, but became exploitative in character later. It appropriated nearly 50 per cent of the gross profits as managerial remuneration.

(vi) The British exploited India through the economic drain via home charges. India was also forced to pay for several wars like Afghan and Burmese Wars. This was indicative of the highly exploitative character of the British rule.

The net result of the British policies was poverty and stagnation of the Indian economy.

Poverty of the Masses and the Economic Drain

Dadabhai Naoroji, a distinguished Indian economist, in his classic paper on the 'Poverty of India' (1876), emphasized that the drain of wealth and capital from the country which started after 1757 was responsible for absence of development of India. According to Dadabhai Naoroji, "The drain consists of two elements-first, that arising from the remittances by European officials of their savings, and for their expenditure in England for their various wants both there and in India: from pensions and salaries paid in England; and second that arising from remittances by non-official Europeans."[9] This implies that India had to export much more than she imported in order to meet the requirements of the economic drain. During the period of the East India Company, an outright plunder in the form of gift transfers and tributes was carried out. Dadabhai Naoroji, V.S. Pandit and S.B. Saul have estimated the annual drain for various periods. Taking the estimates based on the balance of payments alone, Saul's figure for 1880 amounts to 4.14% of the Indian national income. Irfan Habib, therefore, writes : "The fact that India had to have a rate of saving of 4% of its national income just to pay the Tribute must be borne in mind when economists speak of the lack of internal capacities for development, of the low per capita income base, from which the British could not lift the Indians, however, much they tried."[9]

The economic drain of wealth prevented the process of capital creation in India but the British brought back the drained out capital and set up industrial concerns in India owned by British nationals. The government protected their interests and thus the British could secure almost a monopoly of all trade and principal industries. The British component of industries established in India further drained off Indian wealth in the form of remittances of profits and interest. Thus, the economic drain which commenced right from the inception of the British rule acted as a drag on economic development till 1947.

9. COLONIALISM AND MODERNIZATION

The British economists have always upheld that the backwardness of the Indian economy and its failure to modernize itself was largely due to the value system, i.e., spiritualism, asceticism, the caste system, joint family, etc. Similarly, the British economists have always argued that Indian capital was proverbially shy, it always sought safe avenues of investment and thus lacked the basic quality of adventure, which is an essential condition for dynamic entrepreneurship. Dr. Bipan Chandra who has examined the impact of colonial rule in modernizing India rejects both these arguments for absence of modernization as mere shibboleths. He writes : "It is a historical fallacy to assume that India under British rule did not undergo a fundamental transformation, or that it remained basically traditional."[10] But the modernization of India was brought within the political parameters of a colonial economy. Thus, the colonial links between India and Britain resulted in the progress of the Industrial Revolution in Britain while it meant the modernization of those sectors of the Indian economy which strengthened the process of integration of the Indian economy with British capitalism. "It was, therefore, not an accident nor was it historically exceptional that India was integrated into world capitalism without enjoying any of the benefits of capitalism, without taking part in the industrial revolution. It was modernized and underdeveloped at the same time."[11]

A close look at the economic development of India during the British period reveals that whenever India's colonial economic links in terms of foreign trade and inflow of foreign capital were disrupted, Indian economy made strides in industrial development. During the 20th century, the colonial economic links were interrupted thrice : first, during the First World War (1914-18), second, at the time of the Great Depression (1929-34) and third during the Second World War (1939-45). In other words, free flow of foreign trade and capital meant economic stagnation in India, while their absence (partial or total) provided an opportunity for Indian capital to open up avenues of industrial growth in areas choked off by imports.

9. Dadabhai Naoroji, *Poverty and un-British Rule in India*, p. 34.

9. Habib, Irfan, Processes of Accumulation in Precolonial and Colonial India, Mimeo.

10. Bipan Chandra, *Colonialism and Modernization*, Presid-ential Address, Section II, Indian History Congress (1970), p. 3.

11. Ibid., p. 6.

It is also not correct to argue that British capital owed a spirit of adventure. The British developed the ways in India under the Guarantee System which ured a minimum return on whatever capital they ested. Similarly, the development of tea and coffee ntations or investment in jute industry was dertaken only when the British investor felt attracted high profits available in these areas. Not only that, entire policy of protection was aimed at protecting tish industrial and commercial interests. The intro-ction of the clause of 'most favoured nation treatment' ther made it clear that alongwith profit maximization, British used the arm of the state to obtain security ximization. There is, therefore, no basis for the ertion that British capital was more adventurous than lian capital.

The British rule was a long story of the systematic exploitation by an imperialistic government of a people whom they had enslaved by their policy of divide and rule. The benefits of British rule were only incidental, if any. The main motive of all British policies was to serve the interests of England. Thus, in 1947 when the British transferred power to India, we inherited a crippled economy with a stagnant agriculture and a peasantry steeped in poverty. As Jawaharlal Nehru put it: "India was under an industrial capitalist regime, but here economy was largely that of the procapitalist period, minus many of the wealth-producing elements of that pre-capitalist economy. She became a passive agent of modern industrial capitalism suffering all its ills and with hardly any of its advantages."[12]

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12. Jawaharlal Nehru, ***Discovery of India***, p. 299.

CHAPTER 3

NATIONAL INCOME OF INDIA

"National Income statistics provide a wide view of the country's entire economy, as well as of the various groups in the population who participate as producers and income receivers, and that, if available over a substantial period, they reveal clearly the basic changes in the country's economy in the past and suggest, if not fully reveal, trends for the future".

– National Income Committee (1951)

1. NATIONAL INCOME ESTIMATES IN INDIA

According to the National Income Committee, "A national income estimate measures the volume of commodities and services turned out during a given period, counted without duplication."[1] Thus, a total of national income measures the flow of goods and services in an economy. National Income is a flow and not a stock. As contrasted with national wealth which measures the stock of commodities held by the nationals of a country at a point of time, national income measures the productive power of an economy in a given period to turn out goods and services for the satisfaction of human wants.

Pre-Independence Period Estimates

Several estimates of national income were prepared in the British period. Notable among the estimators were: Dadabhai Naoroji (1868), William Digby (1899), Findlay Shirras (1911, 1922 and 1931), Shah and Khambatta (1921), V.K.R.V. Rao (1925-29 and 1931-32) and R.C. Desai (1931-40).

In the pre-independence estimates, Dadabhai Naoroji, Shah and Khambatta, Findlay Shirras, Wadia and Joshi estimated the value of the output of the agricultural sector and then added a certain percentage as the income of the non-agricultural sector. The assumptions of most of these estimators were arbitrary and hence devoid of any scientific basis. Dr. V.K.R.V. Rao made use of a combination of census of output and census of income methods. He divided the economy of India into two categories. In the first category were included agriculture, pastures, mines, forests, fishing and hunting. Output method was to be used to evaluate the product derived from these sectors. In the second category were included industry, trade, transport, public services and administration, professions, liberal arts and domestic service. For these occupations, census of income method was used. To these two sub-totals was added the income from house property and other items which could not be covered under the above categories. From the gross aggregate income so obtained were excluded the values of goods and services consumed in the process of production. By adding the net income earned from abroad, an estimate of national income was computed.

Most of these estimates were the results of the efforts of individuals and as such they suffered from serious

1. Government of India, *First Report of the National Income Committee*, April 1951, p. 6.

limitations. The arbitrary assumptions of the authors undermined the reliability of the estimates. Besides, these estimates were based on statistics from the agricultural sector which were highly undependable.

J.R. Hicks, M. Mukherjee and S.K. Ghosh calculated the rates of growth of per capita income for the period 1860-1945 at 1970-71 prices. Their findings are as under :

TABLE 1. Growth Rates of Per Capita Income during 1860-1950

Time period	*Rate of growth*
1860–1885	1.1
1885–1905	–0.3
1905–1925	1.3
1925–1950	–0.1
1860–1945	0.5

Obviously the Indian economy during the British rule presents a picture of near stagnation over a long period with a growth rate of 0.5 per cent for 1860-1945. Hicks and others conclude : "The low growth rate during the pre-independence years seems to owe its origin to the decline in per capita income between 1885 and 1905 and between 1925 and 1950. Occasional periods of stagnation are noticeable, for instance, the periods 1860 to 1865 and 1930 to 1935, and 1945 to 1951. etc."[2]

Post-Independence Period Estimates

Soon after Independence, the Government of India appointed the National Income Committee in August, 1949, so as to compile authoritative estimates of national income. The Committee consisted of Professor P.C. Mahalanobis, Professor D.R. Gadgil and Professor V.K.R.V. Rao. The final report of the National Income Committee appeared in 1954. The report was a landmark in the history of this country because for the first time, it provided comprehensive data of national income for the whole of India. The principal features of the National Income Committee report were as under :

1. During 1950-51, agriculture which also included animal husbandry, forestry and fisheries contributed nearly half of the national income.

2. Mining, manufacturing and hand trades contributed about one-sixth of the total income.

3. Commerce, transport and communications accounted for a little more than one-sixth of the total national income.

4. Other services such as professions and liberal arts, administrative services, domestic services, house property accounted for about 15 per cent of national income.

5. The share of commodity production was about two-third of the national income. The term commodity production includes material production derived from agriculture, mining, factory establishments, hand trades, etc.

6. Services accounted for about one-third of total national income. Services sector includes commerce, transport and communications, administrative services, liberal arts, domestic services etc.

7. The share of the government sector in net domestic product was 7.6 per cent in 1950-51. Along with it, the share of the government in national expenditure was 8.2 per cent.

8. The margin of error in the calculation of national income estimates worked out at about 10 per cent.

National Income Committee and C.S.O. Estimates

For the post-independence period, we have five series in national income estimates.

(1) *Conventional Series* provided national income data at current prices and at 1948-49 prices for the period 1948-49 to 1964-65.

The conventional series divided the economy into 13 sectors. Income from six sectors i.e., agriculture, animal husbandry, forestry, fishery, mining and factory establishments is calculated by the output method and income from the remaining seven sectors, i.e., small enterprises, organised banking and insurance, commerce and transport, professions, liberal arts and domestic service, public authorities, house property and rest of the world is computed by census of income method.

Net Output Method. In agriculture, the output of each crop is estimated by multiplying the area sown by the yield per hectare. For obtaining the average yield crop cutting experiments were conducted. From the gross value of output so obtained, deductions for the cost of seed, manures and fertilisers, market charges, repairs and depreciation are made so as to derive net value of the product from agriculture.

For animal husbandry, forestry, fishery, mining and factory establishments, estimates of production are multiplied with market price so as to obtain the gross value of the output. From the gross value of output deductions are made for cost of materials used in the process of production and depreciation charges etc. to obtain net value added of each sector.

Net Income Method. In order to obtain the contribution of small enterprises an estimate for the total number of workers employed in different occupations classified under small enterprises is prepared. On the basis of sample surveys, the average earnings per head are obtained. By multiplying the total number of persons

2. J.R. Hicks, M. Mukherjee and S.K. Ghosh, (1984) *The Framework of Indian Economy* p. 217.

employed with the average earnings per head, the contribution of small enterprises is estimated. To provide for factor payments other than wages and salaries, an addition of 20 per cent to the money earnings is made.

For Banking and Insurance the balance sheets of the firms provide the requisite information. Wages, salaries, directors' fees and dividends (distributed and undistributed) are all added to get the net contribution of the sector.

For commerce and transport and for professions, liberal arts and domestic services, the procedure is the same as for small enterprises.

For public sector, wages, salaries, pensions, other benefits, dividends or surplus, etc., are added up to arrive at the contribution of the public sector. To this is added the contribution of government construction and this gives the total contribution of the public sector.

The contribution of house property to national income is worked by estimating the imputed net rental of all houses—urban and rural.

An examination of the sector-wise estimates indicates that only about 60 per cent of the estimate of GDP for a particular year depends on direct information relating to that year, the estimate for the remaining 40 per cent is obtained, according to late Professor VKRV Rao, through indirect approaches, involving intrapolation of benchmark information.

By adding up the contribution of all sectors to national income, an estimate of the net domestic product at factor cost is obtained. To this is added the net income from abroad and net indirect taxes to arrive at the estimate of net national income at current prices. This estimate is deflated at the prices of base year chosen to obtain a series of national income at constant prices.

(2) *National Income Series at 1960-61 prices.* This series provided national income data at current prices and at 1960-61 prices for the period 1960-61 to 1975-76.

Another series was started with 1970-71 as base year instead of 1960-61.

Estimates based on different base years indicate differences in magnitudes, even when they are deflated at constant prices either at 1948-49 or 1960-61 or 1970-71 prices. This is due to the differences in weights used for the series.

The Central Statistical Organisation (CSO) brought out another Series on national income with 1980-81 as base year in place of the series with 1970-71 as the base year.

2. CSO REVISED NATIONAL INCOME SERIES WITH 1999-00 AS BASE YEAR

The Central Statistical Organisation (CSO) has revised the existing series of national accounts with 1993-94 as the base year with a new series with 1999-00 as the base year. Besides shifting the base year, the New Series incorporates improvements in terms of coverage and to the extent possible, the recommendations of the United Nations System of National Accounts, 1993 (1993 UNSNA) have been incorporated.

The improvements in terms of coverage are the following:

(*a*) Inclusion of production of salt through sea water evaporation and the production of betel leaf, toddy, goat, buffalo and camel milk, duck eggs and meat production from unregistered slaughtering.

(b) Expenditure made on few tree crops during the gestation period and setting up of wind energy systems are included in the estimates of output of construction sector.

(*c*) A new category of 'valuables' has been included in the gross capital formation, in line with the recommendations of 1993 UNSNA.

(d) Economic activities of other communication, renting of machinery and other equipment without operator, computer related activities in unorganized segment, coaching centres, social work with accommodation, recreational and cultural activities have been included.

Table 2 : GDP at Constant 1999-00 Prices

(₹ crores)

Year	*New Series (Base Year 1999-00)*	*Old Series (Base year 1993-94)*	*Growth Rates*	
			New Series	*Old Series*
1999-00	17,92,292	11,48,367	–	
2000-01	18,70,387	11,98,592	4.4	4.4
2001-02	19,78,055	12,67,945	5.8	5.8
2002-03	20,52,586	13,18,362	3.8	4.0
2003-04	22,26,041	14,30,548	8.5	8.5
2004-05	23,93,671	15,29,408	7.5	6.9

As a consequence of the widening coverage, the increase in the levels of GDP estimates ranges form zero to 0.6 percent during 1999-2000 to 2004-05.

From the data provided in table 2, it becomes obvious that there is very little change in growth rates between new series and old series. Change is due to coverage and procedural changes which justifies a revision.

Table 3 provides information about Gross Domestic Product by industrial origin. It may be noted that share of agriculture including mining in GDP which was 27.3 per cent in 1999-00 declined to 16.6 per cent in 2010-11. But the share of secondary sector (Manufacturing, Electricity, gas and water supply and Construction) has indicated a marginal increase from 23.0 per cent to 25.6 per cent during the 11-years. But the share of services has gone up form 49.7 per cent in 1999-00 to 57.8 per cent in 2010-11. This implies that the service sector is the principal driver of GDP.

Another feature that needs special attention is that the share of manufacturing has practically remained static around 15-16 per cent. This is considered as the main weakness of our growth process. India, without going through the process of industrialization, has jumped to the post-industrial stage. Several economists are of the view that the growth process should pay special attention to manufacturing so that it reaches a level of 20-25 per cent in about a decade.

3. TRENDS IN NATIONAL INCOME GROWTH AND STRUCTURE

In order to understand the impact of planning in India, a study of trends in national income is necessary. It would be, therefore, better if the trend in national income and changes in the structure of national product are analysed over the last 57 years of planning.

(i) Trends in net national product and per capita income

Figures of national and per capita income are collected at current prices. But figures of national income at current prices do not give a correct picture about the growth of the economy, for the increase in national income at current prices reflects the combined influence of two factors viz., (a) the increase in the production of real goods and services and (b) the rise in prices. If the increase in national income is due to the first factor, it is an indicator of real growth because it implies that more goods and services become available to the people. If it is due to the second factor, it represents an unreal inflation of national income in money terms. Consequently, national income figures are deflated at constant prices to eliminate the effect of any change of price level during the period. National income figures at constant prices, therefore, become comparable, but they conceal the population effect. To eliminate the effect of growth of population, per capita

Table 3 : Gross Domestic Product by Industry

₹ crores at 1999-00 prices

Sector	*1999-00*	*2003-04*	*2006-07*	*2007-08*	*2008-09*	*2009-10*(QE)*	*2010-11*(QE)*
1. Agricultural, forestry & fishing, Mining and quarrying	488,109 (27.3)	5,31,302 (23.9)	5,91,353 (20.6)	6,19,121 (19.8)	6,30,289 (18.9)	7,60,974 (16.9)	8,10,399 (16.6)
2. Manufacturing, Construction, electricity, gas and water supply	4,10,646 (23.0)	5,19,322 (23.4)	7,06,280 (24.6)	7,66,358 (24.5)	7,96,215 (23.8)	11,58,000 (25.8)	12,51,254 (25.6)
3. Trade, hotels, transport and communications	3,87,514 (21.7)	5,56,370 (25.0)	7,78,896 (27.1)	8,75,398 (28.0)	9,54,589 (28.6)	11,93,282 (26.6)	13,15,656 (27.0)
4. Financing, insurance, Real estate and business services	2,33,550 (13.1)	2,97,250 (13.4)	4,09,472 (14.3)	4,57,584 (14.6)	4,93,356 (14.8)	7,71,763 (17.2)	8,48,103 (17.4)
5. Public administration & defence and other services	2,66,707 (14.9)	3,18,514 (14.3)	3,85,118 (13.4)	4,11.256 (13.1)	4,64,926 (13.9)	6,09,724 (13.5)	6,52,431 (13.4)
6. Gross Domestic Product at factor cost	17,86,525 (100.0)	22,22,758 (100.0)	28,71,120 (100.00)	31,29,717 (100.0)	33,39,375 (100)	44,93,743 (100.0)	48,77,842 (100.0)

Note: Figures in brackets are percentage of total GDP for the respective year.
Source: Central Statistical Organisation
* Base 2004-05, QE (Quick Estimates), RE (Revised Estimates)

national product or per capita income is calculated. Whether the growth of the net national product at constant prices is an index of the total productive effort on the part of the community and indicates the rate of growth of goods and services in the economy, the growth of per capita income at constant prices is an indicator of the change in the standard of living of the people.

CSO has provided a series of national income data at 1999-00 from 1950-51 to 2007-08. Although this indicates slightly different growth rates for different period, but this was inevitable because of coverage and exchange a procedure.

From the data given in Table 4, it is revealed that during the 30-year period (1950-51 to 1980-81), the annual rate of growth of national income (1999-00 = 100) was of the order of 3.5 per cent and that of per capita income was merely 1.4 per cent. Calculated at current prices the annual rate of growth of net national product was of the order of 9.0 per cent and that of per capita income was 6.7 per cent. But much of this increase in NNP at current prices is only illusory because it indicates a monetary increase consequent upon a sharp increase in prices, more especially during the period following the Third Plan.

A further break-up of the data into three periods reveals that during the first 10 years of planning (1950-51 to 1960-61), net national product increased at the annual rate of 4.2 per cent and the performance of the economy has been on the decline thereafter. During 1960-61 and 1970-71, the rate of growth of NNP came down to 3.5 per cent and that of per capita NNP to 1.2 per cent per annum. In the subsequent 10-year period (1970-71 to 1980-81), the rate of growth of NNP was 2.9 per cent and that of per capita NNP slumped to 0.6 per cent per annum.

There was a very perceptible improvement in growth rate during the eighties. During 1980-81 and 1990-91, net national product showed a growth rate of 5.2 per cent per annum and the per capita NNP (at 1999-00 prices) improved on an average by 3.0 per cent per annum. This is a very healthy development because the economy was able to cross the barrier of the Hindu rate of growth, to use the phrase of late Professor Raj Krishna. During 1990-91 to 2000-01, the annual average rate of growth of net national product (at 1999-00 prices) was just of the order of 5.5 per cent per annum and that of NNP per capita was 3.4 per cent. During the last two decades (1980-81 and 2000-01), the average annual growth of NNP was 5.6 per cent and that of per capita NNP was 3.2 per cent. It implies that the economy has performed better during these two decades as compared with the earlier three decades.

During 2000-01 and 2004-05, NNP growth rate accelerated to 6.4 per cent and per capita NNP grew at the rate of 4.7 per cent per annum (at 1999-00 prices). During 2004-05 and 2011-12 we find further acceleration in the NNP growth rate to 8.2 percent and that of per capita income to 6.7 percent.(at 2004-05 prices). This implies a further acceleration in the growth of national income at a higher level. This is a very healthy development.

Table 4 : Net National Product at Factor Cost and Per Capita NNP

	NNP (₹ *crores*)	*Per capita NNP* (₹)	*NNP* (₹ *crores*)	*Per Capita NNP* (₹)
	At 1999-00 prices		**At Current Prices**	
1950-51	204,924	5,708	9,152	255
1960-61	3,09,045	7,121	15,593	359
1970-71	4,37,719	8,091	40,135	742
1980-81	5,83,548	8,594	1,21,129	1,784
1990-91	9,67,773	11,535	4,56,409	5,440
2000-01	16,47,903	16,172	17,00,467	16,688
2001-02	17,43,466	16,764	18,49,360	17,782
2004-05	21,04,520	19,325	25,26,408	23,199
	At 2004-05 prices		**At Current Prices**	
2004-05	26,23,995	24,095	26,23,995	24,095
2005-06	28,72,212	25,969	30,06,469	27,133
2006-07	31,49,912	28,074	34,87,172	31,080
2007-08	34,49,970	30,316	40,31,881	35,430
2008-09	36,69,890	31,801	46,85,873	40,605
2009-10	39,59,653	33,843	53,95,688	46,117
2010-11(RE)	42,68,715	35,993	63,25,039	53,331
2011-12(QE)	45,49,652	37,851	72,84,523	60,603
Rates of Growth				
1950-51 to 1960-61	4.2	2.3	5.5	3.2
1960-61 to 1970-71	3.5	1.2	9.9	7.5
1970-71 to 1980-81	2.9	0.6	11.7	9.2
1980-81 to 1990-91	5.2	3.0	14.2	11.8
1990-91 to 2000-01	5.5	3.4	14.0	11.9
2000-01 to 2004-05	7.5	5.9	12.4	10.7
1950-51 to 1980-81	3.5	1.4	9.0	6.7
1980-81 to 2000-01	5.6	3.2	14.1	11.8
2000-01 to 2004-05	6.4	4.7	10.5	3.6
2004-05 to 2011-12	8.2	6.7	15.7	14.1

Source : Compiled and computed from data given in *Economic Survey* (2011-12), CSO National Accounts Statistics, 2011

* Quick Estimate, RE Revised Estimates

(ii) Annual Growth Rates during the plans

During the First Plan, annual average growth rate of NNP was 4.4 per cent (at 1999-00 prices), which to declined 3.8 per cent during the Second Plan. However, during the Third Plan, annual average increase in national income slumped down to 2.6 per cent which was just sufficient to neutralize the growth of population. This is indicated by the fact that there was 0.4 rate of growth of per capita income during the Third Plan. This was largely the consequence of a serious drought in 1965-66 and thus the growth rate got depressed. This was followed by another drought year as also a business recession. After 1967-68 the economy started picking up and the growth rate showed signs of improvement. During the Fourth Plan (1969-74) period, the average annual rate of growth of national income declined to 3.1 per cent and that of real per capita income to 0.8 per cent

per annum. The sharp increase in prices during 1972-73 and 1973-74 and the shortfalls in production on account of lower utilisation of capacity were the principal factors responsible for a lower growth rate during the Fourth Plan.

During the Fifth Plan (1974-79) the average annual increase in national income was of the order of 4.9 per cent and that of per capita income was barely 2.6 per cent. On the whole, the performance of the economy during the Fifth Plan can be considered very satisfactory.

India's national income registered a growth rate of 5.4 per cent during the Sixth Plan (1980-85) with a per capita income growth rate of 3.1 per cent.

During the Seventh Plan (1985-90), India's NNP grew on the average at the rate of 5.5 % per annum and the annual growth of per capita NNP was 3.3 %. Obviously, Seventh Plan achieved its objective of 5 per cent growth rate of NNP along with 3 % targetted growth rate of per capita NNP. This was a welcome development.

Table 5 : Annual Average Growth Rate in Various Plans

At 1999-00 prices

	NNP at factor cost	*Per Capita NNP*
First Plan (1951-56)	4.4	2.6
Second Plan (1956-61)	3.8	1.7
Third Plan (1961-66)	2.6	0.4
Annual Plans (1966-69)	3.9	1.6
Fourth Plan (1969-74)	3.1	0.8
Fifth Plan (1974-79)	4.9	2.6
Annual Plan (1979-80)	-6.0	-8.2
Sixth Plan (1980-85)	5.4	3.1
Seventh Plan (1985-90)	5.5	3.3
Two Annual Plan (1990-92)	5.5	3.3
Eighth Plan (1992-97)	6.7	4.5
Ninth Plan (1997-2002)	5.3	3.3
Tenth Plan (2002-07)	7.8	6.1

Source: CSO, *National Accounts Statistics*, and *Economic Survey* (2009-10)

During the Eighth Plan (1992-97) NNP growth rate of the order of 6.7 per cent has been achieved with a per capita growth of about 4.5 per cent. This healthy trend needs to be sustained. During the Tenth Plan (2002-07), NNP growth rate was 7.8 per cent per and the per capita NNP growth was 6.1 percent – the highest recorded so far.

(iii) Trends in distribution of national income by industrial origin

The following broad trends in the changing composition of the domestic production are revealed: (Refer table 6).

Table 6: Share of Gross Domestic Product by industry of Origin (1999-00 series)

Percentage Distribution

	1950-51	1980-81	2011-12
I. Agriculture & Allied Services	**55.4**	**38.0**	**14.0**
II. Industry	**15.0**	**24.0**	**27.1**
(a) Mining & quarrying	1.4	2.0	2.1
(b) Manufacturing	8.9	13.8	15.3
(c) Electricity, gas & water supply	0.3	1.6	1.9
(d) Construction	4.4	6.6	7.8
III. Services	**29.6**	**38.0**	**58.9**
(e) Trade, Transport and communications	11.3	17.4	28.0
(f) Finance, Insurance, Real Estate etc.	7.7	7.5	17.9
(g) Community, social and personal services	10.6	13.1	13.0
A. Commodity Sector (I+II)	**70.4**	**62.0**	**41.1**
B. Services (III)	**29.6**	**38.0**	**58.9**
	100.0	**100.0**	**100.0**

Source: Calculated from the data provided by Reserve Bank of India, *Handbook of Statistics of the Indian Economy (2011-12)* and CSO Press Note, 31st May 2011

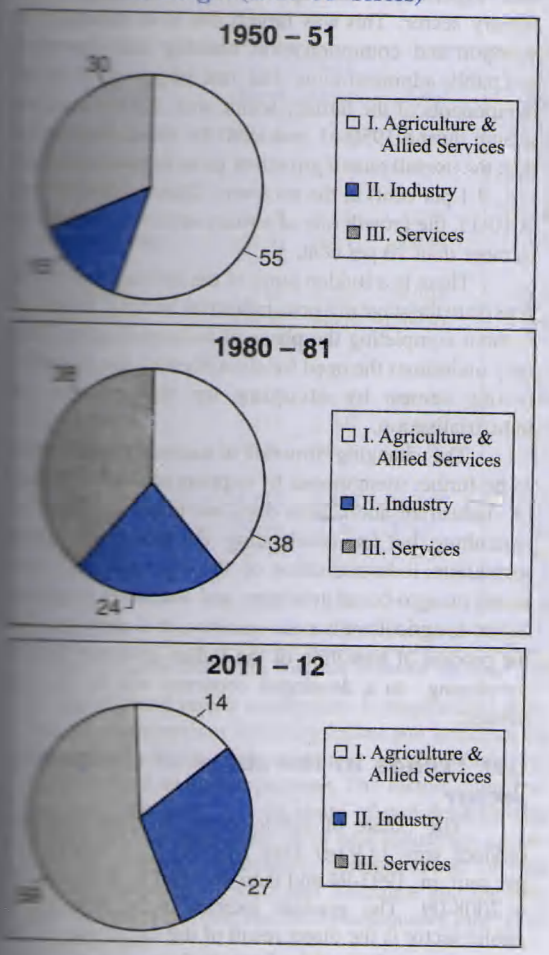
(1) The share of the primary sector which includes, agriculture, forestry and fishery has gone down from 55.4 percent of GDP in 1950-51 to 38 percent in 1980-81 and further declined to 14.0 per cent in 2011-12. The main cause of the decline is a rapid fall in the share of agriculture alone. There is also a contraction in the share of forestry from about 6 percent in 1950-51 to nearly 0.7 per cent in 2011-12. The share of fishery has remained more or less constant around 1 percent throughout the period.

(2) The share of industry which includes mining, manufacturing, electricity, gas & water supply and construction has shown a steady increase from 15 per cent in 1950-51 to 24 percent in 1980-81 and 27.1 per cent in 2011-12.

Two major components of industry are manufacturing and construction. The share of manufacturing increased form 8.9 per cent in 1950-51 to 15.3 per cent in 2011-12. Similarly, the share of construction improved from 4.4 per cent in 1950-51 to 7.8 per cent in 2011-12.

(3) The share of the service sector has three components; (a) Trade, Transport, Storage and Communication, (b) Finance, Insurance, Real Estate and Business Services and (c) Community, Social and Personal

Share of Gross Domestic Product by industry of Origin (1999-00 series)



Services. The share of the service sector indicated a sharp improvement from 29.6 percent in 1950-51 to about 58.9 percent in 2011-12. There was a significant increase in the share of trade, transport and communications from only 11.3 percent in 1950-51 to 28.0 percent in 2011-12. The expansion of transport, especially road transport and communications, during the last decade of mobile revolution has been the major contributor to this increase.

The share of finance, insurance, real estate and business services marginally declined form 7.7 percent in 1950-51 to 7.5 percent in 1980-81 and thereafter improved to 17.9 percent in 2011-12.

The process of economic development involves a rapid expansion of public administration especially a rapid expansion of economic and welfare services such as education, health and family welfare. Taking community and personal services a group, there was an improvement in its share from 10.6 percent in 1950-51 to 13.0 percent in 2011-12.

The structural change in the composition of national income by industrial origin is the consequence of the process of economic growth initiated during the plans. Since the growth process involved a rapid expansion of manufacturing in the organised sector, the share of manufacturing was bound to indicate a relatively sharp increase. However, agriculture did not indicate a fast rate of growth. As is evident from table 7, the rate of growth of agriculture showed a decline from 3 per cent during 1950-51 and 1960-61 to 1.5 per cent during 1970-71 and 1980-81 and thereafter, it picked up to 3.4 per cent during 1980-81 and 1990-91. However, it declined to 2.6 per cent during 1990-9 and 2000-01 and then improved to 3.79 percent between 2004-05 and 2010-11.

Similarly, the rate of growth of transport, storage and communications was in the range of 5 to 6 per cent during 1950-51 and 1990-91, but sharply increased to

TABLE 7: Compound Annual Growth of GDP by Economic Activity

	1950-51 and 1960-61	*1960-61 and 1970-71*	*1970-71 and 1980-81*	*1980-81 and 1990-91*	*1990-91 and 2000-01*	*1999- 00 and 2007-08*	*2004-05 and 2010-11*
1. Agriculture, forestry & fishing	3.0	2.3	1.5	3.4	2.6	2.8	3.79
2. Mining & Quarrying	5.6	3.9	4.9	8.4	3.9	5.1	4.5
3. Manufacturing	6.0	5.2	4.0	7.6	5.9	7.6	9.3
4. Electricity, Gas and Water supply	10.3	11.1	6.8	9.1	6.5	4.6	7.1
5. Construction	6.3	5.5	2.9	4.6	5.1	10.5	9.0
6. Trade, Hotels & Restaurants	5.3	4.8	4.2	5.9	7.2	8.8	10.4
7. Transport, Storage & Communications	5.7	5.5	6.1	5.6	8.0	13.8	10.4
8. Finance, Insurance & Real Estate	3.0	3.4	4.0	9.9	8.4	8.8	11.7
9. Community & Personal Services	4.1	5.3	4.4	6.1	6.7	5.6	7.8
10. Total Services (6+7+8+9)	4.3	4.8	4.4	6.7	7.5	7.9	10.1
11. GDP at factor cost	3.9	3.7	3.1	5.6	5.6	7.3	8.6

Source: Computed from the data *National Accounts Statistics of India, 1950-51 to 2010-11*, EPW Research Foundation (2002) and CSO, Press Note 30th May, 2011, and Economic Advisory Council Estimates for 2007-08 at 1999-2000 prices.

8.0 per cent in the post-reform period. (i.e, 1990-91 to 2000-01). It further accelerated to 10 percent during 2004-05 and 2009-10. The growth of the service sector which was around 4.5 per cent during 1950-51 to 1980-81, showed a sharp increase to about 6.4 per cent during 1980-81 and 1990-91 and further increased to7.9 per cent during 1999-00 and 2007-08. If we look at new series between 2004-05 and 2010-11 it shows an increase to 10.4 percent. The growth rate of the manufacturing sector which was 6.4 per cent during 1950-51 and 1960-61 improved to 7.6 per cent during 1980-81 and 1990-91, and to 9.3 per cent during 2004-05 and 2010-11. The overall GDP growth of the economy declined from 3.9 per cent in 1950-51 and 1960-61 to 3.1 per cent during 1970-71 and 1980-81, but improved to 5.6 per cent during 1980-81 and 1990-91 and remained at the same level of 5.6 per cent during 1990-91 and 2000-01. The overall GDP growth further improved to 8.6 percent during 2004-05 and 2010-11. The slow growth of agricultural and manufacturing sector has been a major road block for growth. It is only the fast growth of service sector – the principal driver of the economy, which has raised GDP growth to over 7.0 per cent in the post-reform period. We find an overall acceleration in the rate of growth of GDP to 8.6 percent between 2004-05 and 2010-11 and also in all sectors including agriculture, manufacting, services etc. except mining and warrying.

Mr. C. Rangaraj, former Chairman of the Economic Advisory Council of the Prime Minister said : "There is a slow down in agriculture, industry and services and the global environment is not very conducive to growth. The will affect the Indian economy as well" During 2008-09, GDP growth was expected to be 7.1% as against 9% during 2007-08. whereas actual realisation was only 6.7 per cent. Three factors have been held responsible for this : (*a*) Sharp increase in global commodity inflation, especially food and oil; (*b*) tightening in credit and equity markets and (c) global slowdown in growth. As a consequent, the achievement of 10% GDP growth target is likely to recede.

The theory of economic growth also supports the structural change in the composition of national product. The distribution of gross domestic product in developed countries indicates a much higher share of industry and services and a relatively lower share for agriculture. The disparity in per capita incomes between developed and underdeveloped countries is largely a reflection of the disparity in the structure of their economies.

As industrialisation spreads it brings about an improvement in the share of industry and services. Indian economy is passing through this process of transition from an agricultural economy to an industrialized one. In this process, a structural change in the composition of national income is inevitable. This structural change is taking place, though at a slow pace. The main reason for the slow rate of structural change in domestic output is the slow rate of growth of the manufacturing output.

As is expected during the process of growth, India also experienced an improvement in the share of the tertiary sector. This was largely due to an expansion in transport and communication, banking and insurance and public administration. The rate of growth in all the components of the tertiary sector was 4.9 per cent per annum during 1950-51 and 1990-91 which was higher than the overall rate of growth of gross domestic product (i.e., 4.1 per cent) in the economy. During 2004-05 and 2010-11, the growth rate of tertiary sector has picked up to more than 10 per cent.

There is a sudden jump of the Indian economy to pass on to the stage of a post-industrial 'service' economy without completing the phase of industrialisation. This only underlines the need for strengthening the manufacturing sector by stepping up the process of industrialisation.

The changing structure of national income needs to be further strengthened by stepping up the programme of industrialisation. This does not imply a neglect of agriculture, but for accelerating the growth process in agriculture, industrialisation of the economy with emphasis on agro-based industries and industries supplying inputs to agriculture is a *sine qua non*. It is only then that the process of transition of the Indian economy from a developing to a developed economy will be accomplished.

(iv) Trends in the share of the public sector

The share of public sector in gross domestic product was 14.9 per cent in 1970-71, it rose to 25.9 per cent in 1993-94 and then declined to 20.8 per cent in 2008-09. The gradual increase in the share of the public sector is the direct result of the expansion of the economic activities of the State, both on side of enlarging administrative services and of increasing productive activities in public enterprises during the first four decades of development. Thereafter, economic reforms intiated in 1991 stressed the need for restricting the area

Table 8. Share of Public Sector in Gross Domestic Product at Current Prices

		1970-71	*1993-94*	*2008-2009*
	Gross doemstic product of public sector	14.9	25.9	20.8
(i)	Government administration	6.5	8.7	8.7
(ii)	Departmental enterprises	4.1	3.7	2.4
(iii)	Non-departmental enterprises	4.4	13.5	8.8
(iv)	Autonomous Institutions			0.9*

Source : CSO, *National Accounts Statistics*, 1986 and (2010)

* Data for autonomous institution available from 2008-09.

TABLE 9 : Break-up of Rural-Urban Incomes (Net Domestic Product)

(₹ crores at current prices)

	1970-71			1993-94			1999-2000		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
[illegible]	16,600	650	17,250	215,920	13,939	229,019	402,094	29,137	431,231
	(96.2)	(3.8)	(100.0)	(93.9)	(6.1)	(100.0)	(93.2)	(6.8)	(100.0)
[illegible]	2,423	5,174	7,597	61,548	104,691	166,239	154,297	209,791	364,088
	(31.9)	(68.1)	(100.0)	(37.0)	(63.0)	(100.0)	(42.4)	(57.6)	(100.0)
[illegible]	914	3,791	4,705	42,357	91,991	134,348	98,055	255,620	353,675
	(19.4)	(80.6)	(100.0)	(31.5)	(68.5)	(100.0)	(27.7)	(72.3)	(100.0)
[illegible]	1,541	2,028	3,569	22,695	57,846	80,541	50,189	162,461	212,650
	(43.2)	(56.8)	(100.0)	(28.2)	(71.8)	(100.0)	(23.6)	(76.4)	(100.0)
[illegible]	1,459	2,207	3,666	36,301	50,734	87,305	70,966	173,033	243,999
	(39.8)	(60.2)	(100.0)	(41.7)	(58.3)	(100.0)	(29.1)	(70.9)	(100.0)
[illegible]	22,937	13,850	36,787	378,791	319,201	697,992	775,601	830,042	1,605,643
	(62.4)	(37.6)	(100.0)	(54.3)	(45.7)	(100.0)	(48.3)	(51.7)	(100.0)
[illegible]	43.4	10.7	54.0	65.5	23.6	89.1	72.6	27.5	100.1
[illegible]	529	1,294	680	5,783	13,525	7,834	10,683	30,183	16,040

Source: Compiled from CSO, *National Accounts Statistics* (1999) and (2006)

[illegible] of public enterprises. It emphasized phasing out of enterprises incurring losses and withdrawing from such sectors like consumer goods, hotels etc. which served no social purpose. The factors contributing to the increase in the share of non-departmental enterprises are the setting up of new industries, expansion of existing enterprises, nationalisation of coal mining companies, banks and insurance and the like, and merger of private electricity companies into electricity boards.

[illegible] Urban and Rural Income Break-up

National Accounts Statistics (1999) and (2006) [illegible] give a break-up of the net domestic product for the rural and urban sectors separately. The data reveal that as against 62.4 per cent of the total NDP being contributed by the rural sector in 1970-71, its share in NDP declined to 54.3 per cent in 1993-94. Consequently, during the 23 year period, the share of the urban sector in NDP improved from 37.6 per cent per cent to 45.7 per cent. The per capita NDP for the rural sector was ₹ 529 in 1970-71 and that of the urban sector was ₹ 1,294. Thus urban-rural disparity ratio in per capita NDP was 2.45. However, this ratio declined marginally to 2.34 in 1993-94 since per capita NDP for urban sector as ₹ 13,525 as against ₹ 5,783 for the rural sector. (Refer table 9).

However, between 1993-94 and 1999-00, the first phase after the introduction of economic reforms, witnessed a further decline in the share of rural sector to NDP to about 48 per cent. Not only this, per capita NDP in 1999-00 for rural areas was ₹ 10,683 and for urban areas stood at ₹ 30,183. The urban-rural disparity ratio increased to 2.82 in 1999-00 as against 2.34 in 1993-94. This is not a healthy trend.

(vi) Changing Structure of Rural GDP

Dr. Rajesh Shukla and K.A. Siddiqui of the National Council of applied Economic Research (NCAER) have studied the changing structure of Rural GDP. The main findings of the study are:

1. Average annual growth rate of rural GDP which was 2.3 percent during 1970-80 improved to 4.8 percent during 1980-93. It rose further to 5.0 percent in 2007-08 and declined to 4.3 percent in 2008-09 - a year in which recession adversely affected the growth rate.

TABLE 10: Average Annual Growth Rate: Rural GDP

Year	Agriculture	Industry	Services	Total
1970-80	1.2	5.0	4.8	2.3
1980-93	3.8	5.5	7.4	4.8
1999-00	-0.5	9.0	2.1	2.1
2007-08	3.8	7.4	4.5	5.0
2008-09	3.4	6.3	3.4	4.3

Note: 2008-09 GDP growth estimated at 6.7 percent; Analysis based on trend line of CSO's sectoral break-up of GDP for 1999-00, 1993-94, 1980-81 and 1970-71.

Source: Rajesh Shukla and K A Siddiqui, NCAER.

2. Break-up of the sectoral shares of rural GDP reveals that whereas the share of agriculture in 1970-71 was 73.8 percent and the combined share of industry and services was 26.2 percent in rural GDP, there is a continuous decline in the share of agriculture and it came down to 42 percent in 2007-08. As against it, the share of both industry and services indicated a continuous increase and their combined share was 58 percent in 2007-08.

TABLE 11: Sectoral share of Rural GDP (percent)

Year	*Agriculture*	*Industry*	*Services*
1970-71	73.8	11.3	14.9
1980-81	66.2	14.7	19.2
1993-94	58.0	15.8	26.2
1999-00	51.4	20.0	28.6
2007-08	42.0	29.6	28.4

Source: Rajesh Shukla and K A Siddiqui, NCAER.

These trends reveal that a structural transformation of the rural economy is taking place and the non-farm sector is emerging as the major contributor to rural GDP. This is also borne out by the CSO's Economic Census 2005, according to which, about a fifth of non-farm rural workforce is employed in agricultural establishments, while four-fifth worked in non-agricultural establishments.

Such a transformation is a trend in the right direction and is very desirable because about 60 percent of India's population cannot live on the 19 percent share of India's GDP in agriculture.

(vii) Share of Organised and Unorganised Sector in NDP

Organised enterprises are defined by the CSO as all enterprises which are either registered or come under the purview of any of the Acts and/or maintain annual accounts and balance sheets. Among the Unorganised enterprises are included all unincorporated enterprises and household industries other than the Organised ones which are regulated by any of the Acts and which do not maintain annual accounts and balance sheets.

From the data given in Table 10, it is evident that the share of the organised sector has risen from 30 per cent in 1980-81 to 42.9 per cent in 2007-08. Consequently, the share of the unorganised sector declined from 70 per cent to 57.1 per cent during the same period. It may also be noted that the share of the organised sector in mining, manufacturing etc. improved from 56.8 per cent to 70.2 per cent and that in the services sector improved from about 40 per cent in 1980-81 to 46 per cent in 2007-08. On the other hand, in agriculture, forestry and fishing, the contribution of the unorganised sector slightly declined 95.2 per cent in 1980-81 to 91.2 per cent in 2007-08. The shift in the composition of NDP from the unorganised to the organised sector is a consequence of the process of development.

TABLE : 12 Percentage Share in Net Domestic Product by Organised and Unorganised Sectors

	1980-81		*2007-08*	
	Organised	*Unorganised*	*Organised*	*Unorganised*
1. Agriculture, Forestry and fishing	4.8	95.2	8.8	91.2
2. Mining manufacturing, etc.	56.8	43.2	70.2	29.8
3. Services	39.9	60.1	46.0	54.0
4. Total	**30.0**	**70.0**	**42.9**	**57.1**

Source : CSO, *National Accounts Statistics* (2007)

4. LIMITATIONS OF NATIONAL INCOME ESTIMATION IN INDIA

"National income is nothing more than a simple linear aggregation of income accruing to the factors of production supplied by the normal residents of the country in question."[4] Thus, while making an estimate of national income millions of economic quantities have to be added up. For this purpose, some basic judgements and social criteria based on the mores and traditions of a society are to be kept in mind. "Incidentally, in the literature on the System of Material Production (SMP) used to be employed by the erstwhile centrally-planned economies, the services were divided into two parts — material (or productive) and non-material (or unproductive) services. Material or productive services comprised transport and communication and commerce covering wholesale and retail activities, including restaurants. Essentially all other personal and most public services were excluded from the concept of material production in the SMP, whereas in the System of National Accounts (SNA), no such distinction is made and all services are said to render production activities."[5] National Accounts Statistics in India include all services unlike the System of Material Production (SMP) followed in erstwhile socialist countries like Hungary and Soviet Russia.Similar controversy exists regarding the inclusion of Government administrative services. There is a difficult question for an estimator to answer : "which part of the government's general administration is service to business firms, enters into the value of its product and hence should not be counted and which part is service to the people as individuals and consumers and should be counted . . . Likewise, in considering what is consumption in the process of production and what is net product, the estimator merely, follows the judgement of

4. V.K.R.V. Rao, *India's National Income*, 1950-1980, p. 1.
5. EPW Research Foundation, (2002), *National Accounts Statistics of India, 1950-51 & 2000-01, 4th Ed., p.16.*

—which views net product as what is available either for consumption of individuals, personally or collectively or for additions to capital stock."[6]

Besides these conceptual problems, there are a number of limitations of national income estimation which have a particular relevance in India.

(a) The output of the non-monetised sector : While calculating national output, the assumption normally made is that the bulk of the commodities and services produced are exchanged for money. India, where agriculture is carried on a subsistence basis, a considerable portion of the output does not come to the market for sale but is either consumed by the producers themselves or is bartered away with other producers in exchange for other goods and services. To ignore this portion of the output in agriculture would reduce the national output considerably. At present, there is no objective method of finding out the total output of food crops and the amount consumed at home. Hence, the difficulty that arises in India is to find out the imputed value of the produce of the non-monetised sector and add it to the value of the monetised sector.

(b) Non-availability of data about the income of small producers or household enterprises : Another limitation in India is that a very large number of producers carry on production at a family level, or run household enterprises on a very small scale. Most of these small producers or entrepreneurs are so illiterate that they have either no idea of maintaining accounts or they do not feel the necessity of keeping regular accounts. Commenting on this the National Income Committee wrote : "An element of guess-work, therefore, invariably enters into the assessment of output, especially in the large sectors of the economy which are dominated by the small producer or the household enterprise."

"As is obvious, the estimates of domestic product are partly based on direct current data and partly on residuals estimates projected on the basis of specific indicators for subsequent years. ... Working out a weighted proportion of the estimates for domestic product, the CSO has claimed that in 1985-86, about 62.2 per cent of GDP was based on direct current data (wherein data from the basic sources become available for the year to which the estimation pertains). With data provided by crop cutting experiments on the output of agriculture, as much as 85.1 per cent of the value added was based on such direct current data; in agricultural inputs, however, it was 50.6 per cent. In some of the unorganised sectors like trade, hotels and real estate and business services, very low proportions of GDP such as zero to 24 per cent are based on direct data."[7] Consequently, the margin of error increases as a result of the relatively high proportion of the economy being in the unorganised sector.

Emphasizing this point, V.K.R.V. Rao mentions "The more the economy is organised in corporate, or incorporate but otherwise organised units, the greater will be the coverage of the census and the less the error, excepting for deliberate or involuntary mistakes in returns."

(c) Absence of data on income distribution. The National Accounts Statistics do not generate any data on income distribution of households or persons. For this purpose, instead of making inquiries about household income or related variables, the National Sample Survey Organisation (NSSO) have used data on consumer expenditure and collected through a pilot survey on distribution of income, consumption and savings during 1983-84 in 5 selected states and 4 metropolitan cities. Although these surveys were questioned on the basis of the small size of their samples, it was found that household incomes (Y) based on direct enquiries were lower by 30-40 per cent than those derived indirectly as the sum of consumption and saving (C+S). Conceding that the experience was disappointing, the NSSO has suggested full-scale pilot surveys on household income, saving and consumption. There is a strong need to compile data on income distribution so that the spread effects of the growth process on low income households can be properly analysed.

(d) Unreported illegal income : Studies about black economy pertaining to India have shown that a significant part of the economy operates as hidden or subterranean economy and the income generated in it goes as unreported income. According to a study by Dr. Arun Kumar, black economy accounted for about 40 percent of total income generated (Gross National Product) in 2000-01. Obviously, national income estimates to that extent are under-estimates. It is also a fact that the size of the black economy has been growing over time and as such the magnitude of error on account of this factor alone has been becoming larger and larger.

Data gaps still to be covered

The estimates of crop acreage are now available for over 80 per cent of the country whereas in 1948-49, they covered around 47 per cent of the geographical area. Nearly 5 lakh crop-cutting experiments covering 63 crops all over the country have resulted in the collection of fairly reliable data on foodgrains, fibers, and other commercial crops. Efforts are being made to improve regular reporting of the production of fruits and vegetables.

Besides, there has been deterioration in the crop acreage statistics, more especially in Tamil Nadu, Andhra Pradesh, Karnataka, and Bihar. Consequently, almost 40 per cent of the geographical area of the country today is without the benefit of crop acreage statistics by crop season.

In industry, in Annual Survey of Industries, non-response has been increasing over time from around 0.6

6. Your Report of *National Income Committee*, p. 8-9.

7. EPW Research Foundation, *(2002) op. cit.*, p. 5.

per cent in 1980-81 to 2.12 per cent in 1984-85 and 9.76 per cent in 1987-88. As a consequence, there is considerable subjectivity in adjustment made for non-reporting units.

In services, there is considerable under-estimation of value addition in education, health sector, sanitation services etc. which needs remedial action. Teachers, doctors, lawyers, chartered accountants never want to reveal their income/earnings. However, parents are more than ready to reveal the expenses on their children's private tuition. Patients have no interest in concealing consultation fees paid to doctors or expenses incurred on purchase of medicines from chemists. Similarly, households are willing to reveal the legal expenses incurred. Clients are willing to reveal the payments made to chartered accountants, tax consultants etc. It would be more desirable that the estimates of consumer expenditure on health and education by households are supplemented by expenditures made by institutions to develop more reliable estimates.

Despite all the improvements, it takes about four years to finalise national income figures for a particular year. We have advance estimate, quick estimate, revised estimate and final estimate. Obviously, despite six decades of planning, data reporting techniques with a very small time lag are still in an underdeveloped state in India.

Recommendations of the National Statistical Commission

The National Statistical Commission headed by Mr. C Rangarajan, former Governor of the Reserve Bank of India has drawn attention to major gaps in the Indian Statistical System due to the absence of certain key datasets at the state level. These include cost of cultivation studies for most crops, Index of Industrial Production (IIP), Wholesale Price Index (WPI) and Consumer Price Index (CPI).

The Commission pointed out that while there is an IIP at the national level, the corresponding absence of IIP at the state level is a major data gap, which needs to be filled up. Most of the states do not have a database on the industrial production and the Annual Survey of Industries (ASI) is the only source of industrial activity in the state. The ASI is compiled annually and released with a time lag of two years.

Similarly, the Commission has called for suitable WPI and CPI at the state level and benchmark surveys of enterprises of the corporate sector.

For most of the service sector, the Commission noted that the GDP estimates are derived separately for the corporate sector on the basis of the RBI's company finance statistics. The same source is also used for generating domestic product estimates for the corporate sector at the state level. However, the size of the sample is considered too small at the national level to generate reliable estimates. At the national level, the estimates are not considered scientific even at aggregate level, not to speak of their reliability at the state level. If the states use the framework available with the Regional Registrar of Companies, even once in five years, the quality of State Domestic Product by the corporate sector would considerably improve.

The Commission noted that the states of Karnataka and Rajasthan have recently constituted expert groups to develop State Domestic Product and to bring about improvement in the compilation of these estimates. Other states should also undertake similar exercises.

The Commission has, therefore, underlined the need for developing SDP estimates at the state level so that these can be used as a crosscheck for the national level estimates. For the development of a more robust Indian Statistical System at the state level, corresponding surveys at the state level are essential.

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CHAPTER

4

HUMAN RESOURCES AND ECONOMIC DEVELOPMENT

"We do not believe in anarchy in material production, and we do not believe in anarchy in human reproduction. Man must control nature and he must also control his numbers".

— Population Policy in Communist China

The study of human resources is vital from the point of view of economic welfare. It is particularly important because human beings are not only instruments of production but also ends in themselves. It is necessary to know in quantitative terms the number of people living in a country at a particular time, the rate at which they are growing and the composition and distribution of population.

1. THE THEORY OF DEMOGRAPHIC TRANSITION

The theory of "demographic transition" postulates a three stage sequence of birth and death rate as typically associated with economic development.

First Stage of Demographic Transition. According to this theory, death rates are high in the first stage of an agrarian economy on account of poor diets, primitive sanitation and absence of effective medical aid. Birth rates are also high in this stage as a consequence of widespread prevalence of illiteracy, absence of knowledge about family planning techniques, early age of marriage and, last but not the least, as a consequence of deep-rooted social beliefs and customs about the size of the family, attitude towards children, etc. Moreover, in a primitive society there are economic advantages of a large family size. "Children contribute at an early age . . . and are the traditional source of security in the old age of parents. The prevalent high death rates, especially in infancy, imply that such security can be attained only when many children are born."[1] In such a society the actual rate of growth of population is not high since high birth rate is balanced by high death rate. It is a stage of high growth potential but of low actual growth.

Second Stage of Demographic Transition. Rise in income levels enables the people to improve their diet. Economic development also brings about all-round improvement including the improvement in transport which makes the supply of food regular. All these factors tend to reduce death rate. Thus in the second stage, birth rate remains high but death rate begins to decline rapidly. This accelerates the growth of population. High growth potential of the first stage is realized in the high actual growth in the second stage as a consequence of decline in death rate. High birth rate and falling death rate contribute to the growth of the average size of the family in the second stage.

1. Coale, A. J. and Hoover, E. M., *Population Growth and Economic Development in Low-Income Countries*, Oxford University Press, 1959, p. 10.

The Third Stage of Demographic Transition. Economic development further changes the character of the economy from an agrarian to a partially industrialized one. With the growth of industrialization, population tends to shift away from rural areas towards industrial and commercial centres. Growth of urban population, "with the development of economic roles for women outside the home, tends to increase the possibility of economic ability that can better be achieved with small families, and tends to decrease the economic advantage of a large family. One of the features of economic development is typically increasing urbanization, and children are usually more of a burden and less of an asset in an urban setting than in a rural."[2] The consciousness to maintain reasonable standard of living tends to reduce the size of family in an industrialized economy; since the death rate is already low, this is possible only if birth rate falls. Thus, the characteristics of the third stage are low birth rate, low death rate, small family size and low growth rate of population. This is the stage of incipient decline of population.

These three stages reveal the transformation of a primitive high birth and high death rate economy into a low birth and low death rate economy. When an economy shifts from the first stage to the second stage of demographic transition, an imbalance is created in the economy as a result of falling death rate but rela-tively stable birth rate. Historically it has been observed that death rate can be controlled more easily because the measures to reduce death rate are exogenous[3] in nature and hence readily acceptable to the people. But the reduction of birth rate can be brought about by operating on endogenous factors, like changing social attitudes and customs, beliefs and dogmas about the size of the family, about marriage, etc. This requires a much longer time than the fall of death rate. Consequently, birth rate tend to fall after a time lag. The second stage of demographic evolution has, therefore, been termed as the stage of population explosion. This stage is the most hazardous period for a developing economy. The decline in death rate in the second stage, therefore, creates an imbalance which requires a period of transition for adjustment. Thus, the theory is termed as the theory of demographic transition. During the period of transition the demographic factors get out of harmony. A new constellation of demographic forces is brought about which changes the character of society; birth and death rates become balanced at a lower level as a result of which growth rate of population also declines.

2. *Ibid.*, p. 11.

3. Exogenous factors refer to the factors controlling diseases, improving nutrition levels, sanitation which can be operated from without. Endogenous factors refer to social attitudes, habits, family relations, attitude towards women, children, contraceptives, etc., which are intimately related to social behaviour of men and women and cannot be easily operated from without.

2. SIZE AND GROWTH RATE OF POPULATION IN INDIA

India today possesses about 2.4 per cent of the total land area of the world but she has to support about 17 per cent of the world population. At the beginning of this century India's population was 236 million and according to 2001 census, the population of India is 1,027 million. A study of the growth rate of India's population can be made from the table 1.

A Study of growth rate of India's population falls into four phases:

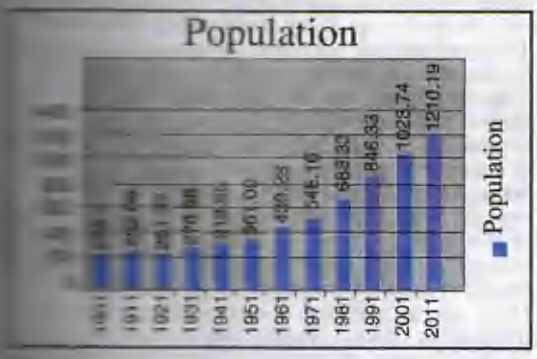
1891-1921: Stagnant population
1921-1951: Steady growth
1951-1981: Rapid high growth
1981-2011: High growth with definite signs of slowing down

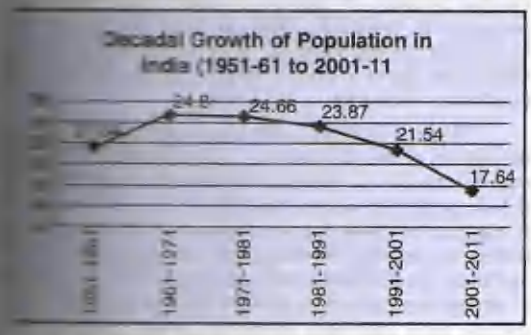
During the first phase of 30 years (1891 to 1921), the population of India grew from 236 million in 1891 to 251 million in 1921 i.e., just by 15 million. The compound annual growth rate was negligible i.e., 0.19 per cent per annum for the period. The growth of population was held in check by the prevalence of a high death rate against a high birth rate. Birth and death rates were more or less equal during this period. India was in the first stage of demographic transition in this period marked by stagnant population.

Table 1. Growth of Population in India (1891-2008)

Census Year	*Population in millions*	*Increase or decrease (in millions)*	*Percentage increase or decrease*
1891	236		
1901	236	0.0	0.0
1911	252	+16	+5.7
1921	251	--1	--0.3
(1891--1921)		+15	+0.19
1931	279	+28	+11.0
1941	319	+40	+14.2
1951	361	+42	+13.3
(1921--1951)		+110	+1.22
1961	439	+78	+21.6
1971	548	+109	+24.8
1981	683	+135	+24.7
(1951--1981)		+322	+2.14
1991	846	+161	+23.9
2001	1,029	+183	+21.5
2011	1,210	+181	17.64
(1981--2011)			
Compound annual growth rate of population			
1891--1921		0.19	
1921--1951		1.22	
1951--1981		2.15	
1981--1991		2.11	
1991--2001		1.93	
2001-2011		1.64	

Source : *Census of India 2001, Series 1, Paper 1 of 2001, Provisional Population Totals. Economic Survey, 2009-10, Census 2011 (Provisional Population Totals)*





During the second phase of 30 years (1921 to [illegible]) the population of India grew from 251 million [illegible] to 361 million in 1951 i.e., by 110 million. The compound growth rate of population was 1.22 per cent per annum which can be considered as moderate. The main reason for the increase in population growth rate was a decline in death from about 49 per thousand to 27 per thousand, but compared with this, there was a very little increase in birth rate. The fall in death rate was largely due to the control of widespread epidemics like plague, small pox, cholera etc. which took a heavy tool of human lives. India had started its entry into the second phase of demographic transition during this period which marked a steady but low growth rate of population.

During the third phase of 30 years (1951 to 1981), the population of India grew from 361 million in 1951 to [illegible] million in 1981. In other words, there was a record growth of population by 322 million in a period of 30 years. This gives a compound annual growth rate of 2.14 per cent which is nearly double the growth rate of the previous phase. With the advent of planning, the extension of hospitals and medical facilities was undertaken on a big scale and these measures of death control resulted in a further and sharp decline of death rate to a level of 15 per thousand, but the birth rate fell very [illegible] 40 to 37 per thousand during this period. As a consequence, there was a population explosion during this period.

During 1981 to 2011, India entered the fourth stage of high population growth with definite signs of slowing down. Total population increased from 683 million in 1981 to 1,210 million in 2011 indicating an increase of 77.2 per cent during the 30 year period. The annual average rate of growth of population during 1981-2011 was of the order 1.84 per cent.

During the decade (1991-2001), population grew from 844 million to 1,027 million — an increase of 183 million. The annual average rate of growth registered a decline to 1.61 per cent. There is further decline in population growth to 1.61 per cent during 2001-11. This is a welcome trend which should be strengthened.

In the figure as given above we note that since 1971 decadal growth rate of population has been consequently declining and has come down from 24.8 in 1961-71 to only 17.64 during 2001-2011.

Rate of growth of population is a function of birth rate and death rate. Consequently, variations in birth and death rates can provide an explanation of the acceleration of the population growth experienced in India. The birth and death-rates for India are given in Table 2.

Table 2. Average Annual Birth and Death Rates in India

Decade	*Births per* 1,000	*Deaths per* 1,000
1891–1900	45.8	44.4
1901–1910	48.1	42.6
1911–20	49.2	48.6
1921–30	46.4	36.3
1931–40	45.2	31.2
1941–50	39.9	27.4
1951–60	40.0	18.0
1961–70	41.2	19.2
1971–80	37.2	15.0
1985–86	32.6	11.1
2010–10	22.1	7.2

SOURCE : *Census of India*, 1971, Age and Life Tables and *Census of India* 1981, *Series I, India, Paper 1 of* 1984, and *Office of Registrar General, and Ministry of Health and Family Welfare, Annual Report (2000-01) and Economic Survey (2009-10)*

Table 2 clearly reveals that the growth of population was held in check by the high birth and high death rates prevalent in India before 1921. Birth rate during 1901–1921 fluctuated between 46 and 49 per thousand and the death rate between 42 and 48. Correspondingly, the growth of population was little or negligible. But after 1921, a clear fall in death rate is noticeable. Death rate which stood at 48.6 per thousand in 1911-20 came down to 18.9 during 1961-70. As against it, the birth rate showed a slight decline. As a consequence of the family planning drive birth rate also registered a decline to 22.1 per thousand in 2010. Death rate has further fallen to a level of 7.2 per thousand. Consequently, the gap between high birth and falling death rates widened with the passage of time and this was reflected in a high survival rate. Thus, the high growth rate of population can be explained in terms of a persistently high birth rate but a relatively fast declining death rate.

Prior to 1921, India was in the first stage of

demographic transition. But from 1921 onwards it has entered into the second stage of demographic transition in which the high growth potential of the population was realised as a high actual growth of population. It is expected that shortly India will enter the third stage.

Table 3. Birth and Death Rates (2010) for 15 major States of India

State	Birth Rate	Death Rate	IMR	Mean age* at marriage (Females)
1. Kerala	14.8	7.0	13	22.3
2. Tamil Nadu	15.9	7.6	24	20.2
3. Andhra Pradesh	17.9	7.6	46	17.8
4. Maharashtra	17.1	6.5	28	19.1
5. Karnataka	19.2	7.1	38	19.4
6. West Bengal	16.8	6.0	31	19.5
7. Punjab	16.6	7.0	34	20.3
8. Orissa	20.5	8.6	61	19.5
9. Gujarat	21.8	6.7	44	20.4
10. Haryana	22.3	6.6	48	19.2
11. Assam	23.2	8.2	58	
12. Bihar	28.1	6.8	48	18.6
13. Madhya Pradesh	27.3	8.3	62	18.8
14. Rajasthan	26.7	6.7	55	18.4
15. Uttar Pradesh	28.3	8.1	61	19.3
All India	22.1	7.2	47	19.4

* 2001

Source :Office of the Registrar General, India and *Economic Survey* (2011-12)

Statewise analysis of data pertaining to birth and death rates reveals that Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Karnataka, Maharashtra and Punjab have achieved a birth rate below 20 per thousand. In this sense, they have entered the third stage of demographic transition. Ironically, Haryana and Gujarat which occupies a high place in India in terms of per capita income, are also far behind in reducing birth rate. As against it, Uttar Pradesh and Rajasthan, Bihar, and Madhya Pradesh have a very high birth rate in the range of 25-31 per thousand. All these states are still in the second stage of demographic transition, but taken together they account for 44 per cent of the total Indian population. Unless an impact is made by the family planning programmes in these states, India as a whole will not be able to enter the third stage of demographic transition.

Birth Rate

Fertility depends on (i) age at which females marry, (ii) duration of the period of fertile union, and (iii) the rapidity with which they build their families.

In India, mean age at marriage has been low as compared to other countries of the world. (Refer table 4). However, it has been slowly rising between 1891 and 1981. The passing of the Child Marriage Restraint Act (popularly known as Sharda Act) in 1929 did have some effect and child marriages declined. This is evidenced by the fact that whereas 27 per cent of girls below the age of 14 were married during 1891-1901 decade, only 6.6 per cent in the age group 10-14 were married in 1991. This is a healthy development. Mean age at marriage for females was 13.7 years in 1921, it improved to 15.8 in 1961. During the last 30 years, there has been slight improvement and mean age at marriage of females improved to 18.3 years in 2001. As against it, mean age at marriage of males has improved to 22.6 years in 2001. Social awareness and spread of education can help to raise the mean age at marriage in future. Raising the age of marriage is, however, likely to be more difficult because in many rural areas, there is a feeling of insecurity about an unmarried girl of marriageable age. Mean age at marriage is highest among Christians, followed by Sikhs, Muslims and Hindus. Among the Hindus, females of depressed castes have the lowest mean age at marriage. Next in order are Brahmins, Kshatriyas and the Vaishyas. It is common knowledge that higher age at marriage tends to reduce fertility and this lowers birth rate.

With an increase in the mean age at marriage and the impact of family planning programmes, there is an over-all decline in general fertility rate from 171 per thousand married women in 1988 to about 154 in 1993. It may also be noted that the decline is in all age groups, though the decline was sharper in the age groups 30-34 and above, as compared with age group 15-19. There was a strong need to reduce fertility rates in the lower age groups, more especially 15-29, 20-24 and 25-29 so that general fertility rate registers a sharp decline. We witness a sharp declined in fetility rates across all age groups. Sharpest decline is registered in age group 15-19, 40-44, 35-39 and 30-34.

Table 4. Mean age at marriage in Selected Countries

		Males	Females
Norway		28.0	24.4
East Germany		27.4	24.7
France		26.0	22.6
Japan		25.8	23.0
India	(1921)	20.7	13.7
	(1961)	21.6	15.8
	(2001)	22.6	18.3

Table 5 : Age-Specific Fertility Rates in India

Age Group (years)	1988	1993	2007	Percentage 1993-2007
15-19	259.0	236.1	41.1	82.6
20-24	319.8	307.9	213.9	30.5
25-29	227.9	207.6	158.3	23.7
30-34	138.5	121.3	75.2	38.0
35-39	81.2	65.7	31.7	51.8
40-44	38.9	31.8	12.3	61.3
TFR	5.4	4.9	2.68	45.3
GFR	170.7	153.7		

Notes : TFR = Total Fertility Rate

GFR = General Fertility Rate

Fertility seems to have a strong correlation with the educational level of the mother. *Census of India*

[illegible] reveals that the total fertility of illiterate women [illegible] is 4.2. It declines to 3.7 for women with [illegible] but less than middle school, it [illegible] 3.3 for middle but not matric and is the [illegible] women with educational level graduate [illegible] and above. Fertility in every category was [illegible] than in urban areas. Data published [illegible] further decline in overall fertility. [illegible] among educated women. This under- [illegible] girls to achieve our objective of [illegible]

[illegible] Total Fertility by Women's Educational Level in India (1998-99)

[illegible]	Total No. of Children Born (15-49)		
	2005-06	2001	1991
[illegible]	3.55	4.2	4.4
[illegible]	–	3.3	3.8
[illegible] middle	2.51	3.7	4.3
[illegible] matric	2.23	3.3	3.8
[illegible] graduate	2.08	2.7	3.0
[illegible] and above	–	2.1	2.3
[illegible]	2.68	3.8	4.3

[illegible] (2001), Fertility Tables; *Government* [illegible] *Socio -Economic Statistics*, [illegible]

According to Census Commissioner (2001), there [illegible] between population growth rate [illegible] population in the age group 0-6. In India, [illegible] of children in the age group 0-6 declined [illegible] per cent in 1991 to 15.93 per cent in 2001 and [illegible] in 2011. A fall in the proportion of children in [illegible] is indicative of a fall in fertility. In [illegible], Andhra Pradesh, Karnataka, Gujarat, [illegible] the percentage of population in the age [illegible] is below the national average while in states [illegible], Rajasthan, Uttar Pradesh, Bihar, [illegible] and Madhya Pradesh, it is much higher than [illegible]

[illegible] Percentage of the child population in [illegible] to total population in selected states

	1991	2001	2011
[illegible]	13.19	12.51	9.95
[illegible]	13.33	11.86	9.56
[illegible]	16.49	13.46	10.21
[illegible]	16.63	13.72	11.21
[illegible]	16.48	15.16	12.41
[illegible]	17.11	14.18	11.43
[illegible]	17.94	15.93	13.12
[illegible]	18.98	16.14	13.01
[illegible]	19.94	17.75	14.53
[illegible]	20.13	18.97	15.31
[illegible]	20.70	20.25	17.9
[illegible]	20.17	18.16	15.89
[illegible]	20.38	18.85	14.9
[illegible]	22.18	20.18	18.75

[illegible] *Series I, India, Provisional* [illegible] *Census of India 2011, Provisional* [illegible]

Death Rate

In the advanced countries of the world in the beginning of the 19th century, death rate ranged between 35-50 per thousand. It has now come down to 7-8 per thousand. This steep fall in death rate is the result of provision of better diet, pure drinking water, improved hospital facilities, better sanitation and last but not least, the control by wonder medicines of several epidemic and other diseases which took a heavy toll of human life. (Refer table 7)

During the 1891-1901 and 1911-21 decades, the growth of population was insignificant. This can be attributed to widespread famines and the influenza epidemic of 1918 which killed about a million persons. The death rate during this particular year rose to an astonishing figure of 63 per thousand, though in the preceding and succeeding year, it was 33 and 36 respectively.

Another important factor contributing to low death rate is the decline in infant mortality. The infant mortality rate which stood at 218 per thousand in 1916-20 had come down in 1981 to 110 per thousand and further to 68 in 2000 and to 60 in 2003. The principal causes of infant mortality are : malnutrition, pneumonia, diarrhoea, infectious and parasitic diseases. Infant mortality shows a tendency to increase when maternity takes place repeatedly and in quick succession. All these causes are being remedied.

Besides this, mortality among females of reproductive ages is also high. It ranges between 300-400 per 1,000 women of ages 15-45. Inadequate pre-natal and post-natal care which is the result of poverty and absence of hospital facilities is largely responsible for this. With improvements in diet, hospital and midwifery facilities, it is reasonable to expect that infant and maternal mortalities will register a further decline.

Fevers (including malaria) cholera, small-pox, plague, dysentery and diarrhoea, respiratory diseases, etc., also account for a large number of deaths. Out of these small-pox, plague and cholera have been, by and large, eradicated. With the growth of medical facilities and improvement in living standards, it is hoped that crude death rate will decline considerably.

Thus, over the last 5 decades, both birth and death rates have been declining, but the death rate declined at a faster rate. Death rate has already reached a very low ebb and whatever the level of health facilities, it cannot fall below 7-8 per thousand. The future growth of India's population shall, therefore, be mainly dependent on the level of the birth rate.

TABLE 8. Crude Birth and Death Rates for Selected Countries (2008)

Country	*Birth Rate*	*Death Rate*	*Infant mortality Rate*
Germany	8.3	10.3	4
U.K.	12.9	9.4	5
U.S.A.	14.3	8.1	7
Canada	11.3	7.2	6
France	12.9	8.6	3
Australia	13.8	6.7	5
Japan	8.7	9.1	3
China	12.1	7.1	18
India	22.8	7.4	52

SOURCE : *World Development Indicators (2010)*

It may be noted that states which have achieved death rates below a level of 8 per thousand are incidentally also the states which are moving towards a lower birth rate. The reason being that medical facilities in terms of hospitals, primary health care dispensaries have been established in them. Once the people are assured of the survival of their children, the chances of pursuading them to go in for sterilisation also improve. Moreover, the family planning staff can be more effective at the primary health centres in introducing couples to the use of contraceptives and discuss with them the effectivity of the various contraceptive devices as also to get feedback from them about the problems faced by the users. The co-efficient of correlation between death rate and birth rate was as high as +0.67 for the 15 states listed in Table 3.

Correlation co-efficient between infant mortality rates and birth rate for 15 major states of India was very high. This underlines the fact that high infant mortality induces couples, more especially among the poor, to have larger family size. Consequently, birth rate are higher in states which have higher infant mortality rates. The analysis underlines the need for enlargement of health facilities so as to reduce infant mortality rates and over-all death rates as a positive measure both of family planning and family welfare.

Rural-Urban Differentials in Birth and Death Rates

Data provided in Table 9 reveal that death rate in urban India declined from 9.7 per thousand in 1971 to barely 6.3 in 2000, but as against it, death rate in rural India declined from 16.4 per thousand in 1971 to 9.3 in 2000. There is no doubt that the urban areas are the forerunners in the development of medical facilities and control of epidemics and diseases, but these facilities have

TABLE 9: Birth and Death Rate: Rural an Urban Trend

	Rural	*Urban*	*Combined*
Birth Rate			
1971	38.9	30.1	36.9
1981	35.6	27.0	33.9
1991	30.9	24.3	29.5
2000	27.6	20.7	25.8
Death Rate			
1971	16.4	9.7	14.9
1981	13.7	7.8	12.5
1991	10.6	7.1	9.8
2000	9.3	6.3	8.5
Infant Mortality Rate			
1971	138	82	129
1981	119	62	110
1991	87	53	80
2000	74	44	68

SOURCE: Registrar General of India on the basis of Sampl Registration Data, Tata Services Ltd., *Statistica Outline of India (2003-04)*.

also been extended to rural areas. Consequently th urban rural differentials have got reduced from 6.7 i 1971 to just 3.0 in 2000. This is a very healthy developmen

However, the situation in infant mortality ra (IMR) is not so optimistic. There has been a shar decline in urban IMR from 82 per 1,000 live births i 1971 to 44 in 2000. But as against it, the rural IM declined from 138 to 74. The IMR gap between rural an urban areas was 56 in 1971 and it came down to 32 i 2000. It is still quite large. This is due to the prevalen of high poverty ratios in rural areas as against those i than in urban areas.

So far as birth rates are concerned, they hav shown a decline from 30.1 per thousand in 1971 to 20. in urban areas, but in rural areas, they have declined fro 38.9 to 27.6. The rural and urban birth rate gap has g reduced from 8.8 in 1971 to just 6.9 in 2000. Obviousl family planning programmes have to target the rur areas in a much more effective manner so that birth ra in rural areas can be brought down at an accelerated pac

3. QUANTITATIVE POPU LATION GROWTH DIFF ERENTIALS IN DIF FERENT COUNTRIES

Population growth rates are different in differe parts of the world. Taking the world as a whole, the to population on this planet was 3,696 million in 1970, rose to 4,426 million in 1980 and stood at 6,893 milli in 2010. The annual compound rate of growth durin

TABLE 10. World Population Growth by Groups

[illegible]	*Population (millions)*		*Per cent of total*		*Average annual Growth Rate (%)*	
	1980	*2010*	*1980*	*2009*	*1980-90*	*2000-09*
[illegible] economies	1,384	796	31.3	11.5	2.4	2.10
[illegible] economies	2,217	4,970	50.0	72.1	1.6	1.12
[illegible] economies	825	1,127	18.6	16.3	0.7	0.63
[illegible]	4,426	6,893	100.0	100.0	1.7	1.15
[illegible]	687	1,210	15.5	17.6	2.1	1.38
[illegible]	981	1,338	22.2	19.4	1.5	.51

[illegible] compiled and computed from *World Development Report (2010), * Census of India 2011.*

[illegible] of the order of 1.7 per cent. It shows that the [illegible] as a whole was passing through a stage of high [illegible] during 1980-90, but the growth rate [illegible] thereafter, and was of the order of 1.15 [illegible] in 2009-10.

From Table 10, it is obvious that the low income [illegible] and the middle income economies which [illegible] about 84 per cent of the world population, [illegible] growth potential. During 1980-90, the growth [illegible] income economies was relatively higher at 2.4 [illegible] that in middle income economies was [illegible] per cent. This is explained by the fact [illegible] death rates in low income economies were [illegible] birth rates were also high. Most of the [illegible] Asia, Africa and Latin America were falling [illegible] of low income groups, where poverty, [illegible] and sub-nutrition are widespread. As against [illegible] in middle income economies which were [illegible] the stage of population explosion due to [illegible] of high birth rates and declining rates [illegible] decade, experienced a decline of birth [illegible] and consequently, growth rate of [illegible] in middle income economies got further [illegible] per cent during 1980-90 to 1.1 per cent [illegible]

[illegible] them, the growth rate of population in [illegible] countries remained almost unaltered during [illegible] and 2000-09 at 0.6 per cent. Most of the [illegible] of Europe, North America and Japan are in[illegible] them. In these regions, death rates have [illegible] the lowest possible levels and an improvement [illegible] measures will not reduce death rates. The [illegible] have also come down as a result of the [illegible] and urbanisation.

China and India, which account for nearly 37 per [illegible] the world population show a population growth [illegible] per annum during 1970-80. It may, [illegible] that in China, population growth rate [illegible] to 0.5 per cent during 2000-10, whereas in [illegible] at 1.65 percent (2001 - 2011). Efforts [illegible] have begun to yield some results and [illegible] be intensified, and more especially in [illegible] countries.

4. THE SEX COMPOSITION OF POPULATION

A disturbing revelation of the 1991 census is the decline in the ratio of females per 1,000 males. The sex ratio declined from 934 in 1981 to 929 in 1991. However, the over-all trend of sex ratio in the country since 1901 also shows a continuous trend towards a decline in sex ratio, barring a marginal improvement in 1981. In 2011, there is a slight improvement in the proportion of females to 940.

TABLE 11. Sex Ratio in India

Year	*Females per 1000 males*
1901	972
1911	964
1921	955
1931	950
1941	945
1951	946
1961	941
1971	930
1981	934
1991	927
2001	933
2011	940

Despite our loud professions of the success of Mother and Child Health (MCH) Programme during the previous decade and the care of the girl child, the scenario as presented by the Census indicates the failure of these programmes.

Among the various states of India, Kerala alone shows a higher proportion of females 1,084 per 1,000 males in 2011. In Himachal Pradesh, there is a distinct improvementt over 1981 level and the sex ratio has

improved from 973 in 1981 to 996 in 1991 but there is a decline later and in 2011 it stood at 974. The states which are lower than the national average are Rajasthan, Bihar, Uttar Pradesh, Gujrat, Maharashtra, Madhya Pradesh, Punjab and Haryana. There is a sharp deterioration of sex ratio in Bihar from 946 in 1981 to 916 in 2011. In Punjab, UP and Haryana females account for between 877 to 908 per 1,000 males.

Table 12 : Trends of Sex Ratio in Tan Most Populous Countries (2001 - 2011)

Sl. No.	*Country*	*2001*	*2011*
	World	**986**	**984**
1	China	944	926
2	India	933	940
3	U.S.A.	1,029	1,025
4	Indonesia	1,004	988
5	Brazil	1,025	1,042
6	Pakistan	938	943
7	Russian Fed.	1,140	1,167
8	Bangladesh	958	978
9	Japan	1,041	1,055
10	Nigeria	1,016	987

Source : 1. 2001- World Population Prospects mid year estimates 1998

2. 2011 – World Population Prospects 2008 revision UN.

Rates have been worked out for India based on the provisional Census 2011 and those of Indonesia and Brazil on 2010 round of Census.

From Table 12 we find that aggregate sex ratio has declined in the world from 986 to 984. But India, Brazil, Russia, Bangladesh, Japan and ever Pakistan have shown an improvement in the sex ratio.

There is no doubt that the female foetus has been proved to be biologically stronger than the male foetus. *There is every likelihood of the women to live longer than* men. This is evidenced by the fact that in the advanced western countries, the proportion of women in total population is higher than that of males. In India, 108 females are born per 100 males, but the loss of more females due to insufficient attention and care to them after birth, a relatively higher proportion of deaths among females at the time of puberty due to functional derangement and a high death rate among women in the reproductive age bracket 11-19 on account of early marriage explains to a sufficient degree the fact the biologically superior female is not in a position to maintain the trend of excess of females at birth on account of the prevalence of social and economic factors which work against its species. As a consequence females per 1,000 males were only 940 at the time of 2011 census in India, while in Russia, it was 1,140, in Japan 1,041 and in USA 1,029.

Table 13 : Sex Ratio (females per 1,000 males) in major states of India arranged in descending order on the basis of 1991 and 2001 Census

State	*Sex Ratio*					
	2011	*2001*	*1991*	*1981*	*1961*	*1931*
Kerala	1084	1058	1040	1032	1022	1022
Tamil Nadu	995	986	972	977	992	1027
Andhra Pradesh	992	978	972	975	981	987
Orissa	978	972	972	981	1001	1067
Himachal Pradesh	974	970	996	973	938	897
Karnataka	968	964	960	963	959	965
West Bengal	947	934	917	911	878	89[illegible]
Assam	935	932	925	910	869	87[illegible]
Madhya Pradesh	930	920	932	941	953	973
Rajasthan	926	922	913	919	908	907
Maharashtra	925	922	936	937	936	947
Gujarat	918	921	936	942	940	945
Bihar	916	921	912	946	994	994
Uttar Pradesh	908	898	882	885	909	904
Punjab	893	874	888	879	854	815
Haryana	877	861	874	870	868	844
India	**940**	**933**	**927**	**934**	**941**	**95[illegible]**

SOURCE : *Census of India 2001, Series 1, Paper 1 of 20[illegible] Provisional Population Totals. Census of India 2011, Provisional population, Totals.*

Many explanations have been given about the masculine character of our population. The British Census Commissioners had been repeating *ad nauseam* the geographical and sociological factors like climate, race, season of gestation, food habits and consanguineous marriages and polyandry as affecting sex ratio, but the statistical evidence could not support their a priori reasoning. Sociological factors like female infanticide have no relevance today. To emphasize the sociological factors only helped the Brithish rulers to screen off the economic factor.

Poverty-The main factor determining Sex Ratio

In fact, the explanation for a declining sex ratio lies in the poverty of the Indian people. In a country where even in 2004-05 nearly 28 per cent of the population lives below the poverty line, high infant mortality, poor medical facilities, extremely unhygienic conditions of living and absence of pre-natal and post-natal care, high death rate among women are all manifestations of the abjectly low level of living of the people. The preference for providing good food to the bread winner is again the manifestation of the much sought after modicum of economic security that the breadwinner provides. *In the absence of old age social security schemes, the son is considered to be the insurance against old age.* This also reinforces preference in allotment of good diet and medical care in favour of males. Consequently, differential mortality rates among the females provide the most important explanation for higher proportion of males in

[illegible] mortality rates, more especially among [illegible] below 1 year of age were 65 in the [illegible] against 55 per thousand in the case of [illegible] like Punjab which has the highest [illegible] Regarding malnutrition, a study [illegible] CARE (Co-operative for American Relief [illegible] for pre-school children in Punjab showed [illegible] of male children suffered from severe [illegible] the proportion was as high as 71 per [illegible] in the case of females.

Besides this, high mortality rates among women [illegible] are also responsible for declining [illegible] among women in the reproductive [illegible] was about 30 per cent higher than that [illegible] revealed by National Sample Survey. [illegible] the pregnant women suffer from anaemia [illegible] consequence of malnutrition, more [illegible] among urban poor and much more among [illegible] women. As a consequence, malnutrition via [illegible] to nearly 40 per cent of the maternal [illegible] facilities of hospitalisation for delivery [illegible] and post-natal care especially among the [illegible] are conspicuous by their absence. This [illegible] more maternal deaths which tilts the [illegible] adversely in the total population.

[illegible] would be relevant to take up some sociological [illegible] recently begun to play a very important [illegible] the composition of the families. It [illegible] as a result of the spread of education [illegible] in the educational status of the [illegible] attitude towards dowry will undergo a [illegible] would be a perceptible decline in [illegible] unfortunately, dowry system has become [illegible] intensified. With expensive gadgetary like [illegible] Washing Machines, Scooters/Cars, the [illegible] to give dowry instead of declining, [illegible] Marriages are becoming much more [illegible] in middle class and lower middle class. [illegible] has resulted in a preference of male to [illegible] The recent legislation about Medical [illegible] of Pregnancy as embodied in 1971 Act [illegible] of pregnancies if it involves a risk to [illegible] physical or mental health, where the pregnancy [illegible] rape or failure of contraceptive device and [illegible] anguish to the woman. (Emphasis added). [illegible] therefore, permits considerable scope [illegible] abortions by distorting the provisions of [illegible] pretext or the other. The recent discovery [illegible] tests (amniocentesis) has made it [illegible] the female foetus before birth. A very [illegible] private nursing homes are coming up in [illegible] the country, more so in the urban areas, [illegible] big cities and metropolitan towns which [illegible] tests. Our system of reporting being very [illegible] possible to determine the exact influence [illegible] tests in influencing female births, [illegible] change in favour of male births and [illegible] female foetus is quite evident. Although [illegible] was considered to be irrelevant in [illegible] the post-independence period, but the [illegible] tests are a form of neo-female [illegible] introduced in our society which has a bias against female births. Big advertisements on sex-determination tests pose a choice between avoidance of birth of a daughter or impending liability of dowry payment in the slogan : "Better pay ₹ 500 now than ₹ 5 lakhs later." Female infanticide prior to birth seems to be getting legalized in Indian society and this is bound to exercise an influence on the sex ratio moving against females.

N. Krishnaji has examined the trends in sex ratio in India in the light of various explanations offered by demographers. Quoting Das Gupta and Bhat, he agrees with the explanation. "Pre-natal sex regulation may replace post-natal regulation as a method of controlling the sex composition of families, because the psychological burden of abortion is lower than that of neglecting a living child." Earlier, it was believed that there existed a north-south economic and cultural divide in India. The prevalence of endogamy in marriage which provided greater female autonomy in the south, resulted in relatively less preference for sons (than in north). On the other hand, exogamy was very common in the north and was associated with widespread prevalence of dowry system. Recent evidence about the cultural changes taking place in the south reveal that endogamy is disappearing in the south and the dowry system is becoming more universal. As a consequence, preference for sons is getting stronger and this is leading to female foeticide. The combined effect of these two factors has been observed by demographers in Kerala and Tamil Nadu. Thus, a kind of regional cultural convergence is taking place in India. Though this is an unfortunate development, but this is the stark reality. Krishnaji, therefore, concludes: "The preference for sons may turn out in the next few decades to be the major determinant of sex ratios. It may outweigh the demographic gains that may be expected. For example, improvements in maternal mortality may result from fewer births per women. Similarly, fewer children per family may mean better care for all children including girls. But, unless sex determination and female foeticide are halted, there is a distinct possibility for a further 'loss' of girls."[4]

In India, sex determination tests are used as a strategy to ensure desired family sex composition. It is commonly believed that sex selection is a preferable alternative to female infanticide or discriminatory ill-treatment of girls after birth. Sex selective abortions take place in the various states of India between 44 to 67 induced abortions per 1,000 couples, as revealed by Healthnet Survey, South Asia. These sex selective abortions are considered to be a substitute for pre-natal discrimination for post-natal discrimination. Women movements which are basically against sex selective abortions are caught in a contradiction of supporting on the one hand the woman's right to abortion, while opposing it on the other when women under social compulsions or their own preference for son undertake sex selective abortions. There is, however, strong evidence which supports the view that sex selective abortions have become a part of the strategy of having a desired family size and composition. They have made a definite impact on sex ratio in India during the last decade.

4. Krishnaji N (2000), Trends in Sex Ratio, *Economic and Political Weekly*, April 1-7.

Amartya Sen has highlighted the Indian divide resulting from the combined effect of sex-selective abortions and female disadvantage in the mortality of children, resulting in a decline in female-male ratios. Amartya Sen writes: " This dividing line produces a remarkable geographical split of the country. There are states in the north and west, led by Punjab, Haryana, Delhi and Gujarat, where the female-male ratio of children is substantially below the bench mark figure (with ratios between 79.3 and 87.8). Other states in these regions also have ratios significantly below the dividing line of 94.8 per 100 boys, such as Himachal Pradesh, Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra, Jammu & Kashmir and Bihar. On the other side of the divide, the states in the east and south of India tend to have female-male ratios that are above the benchmark line (that is, 94.8 girls for 100 boys, taken as our cut-off standard); with Kerala, Andhra Pradesh, West Bengal and Assam (each between 96.3 and 96.6 girls), and also Orissa, Karnataka and the north-eastern states to the east of Bangladesh (Meghalaya, Mizoram, Manipur, Nagaland, Arunachal Pradesh. The vast majority of the Indian states fall into two contiguous halves, classified broadly into north and west on one side and south and east on the other."[5] States in the north and west have strictly lower female-male ratios and states in the south and east of India have higher female-male ratios.

However, even in the eastern and southern states, female-male ratios are lower in the urban areas and relatively higher in rural areas. It only implies that virus of sex-determination tests is having a slow impact in the rural areas. Just as dowry system has started penetrating in the southern states, it is also possible that the virus of sex-determination may spread into the other states as well as the rural areas. The situation has to be watched carefully in the coming decade whether the virus of the west and northern states affects the southern and eastern states or whether the latter continue to keep their present cultural identity.

The removal of poverty in the western countries has helped the females to overcome the biological disadvantages associated with the life of women, both at the time of puberty and at the time of reproduction. A better health standard of the females, that is a consequence of the prevalence of higher income levels, also provides them internal resilience against disease. Low levels of living are accompanied by low levels of education, poor health, unhygienic living conditions, etc. In a country which is still not able to eradicate misery, not to speak of removing poverty, it would be futile to expect an improvement in the condition of women. Sociologically speaking, there is a time lag in improving the quality of the female population in every society. But for this purpose, society must break the vicious circle of poverty and female illiteracy. No doubt, in the initial period, the improvement in the condition of females will be slower than that of the males, but as economic development gathers momentum and female literacy levels and female labour force participation rates improve, gender bias against women is bound to indicate a decline. It is only when these agents of change will have a perceptible impact in India, sex ratio will improve.

[5]Amartya Sen (2005), *The Argumentative Indian*, pp.228-29

5. AGE COMPOSITION

The study of age composition is helpful in determining the proportion of the labour force in the total population. An estimate of the labour force in India is made in the 2001 census report. The working age of the population is considered as 15-60. On this basis, percentage distribution of India's population is shown in Table 14.

Table 14. Percentage Distribution of India's Population by Age Groups (1911–2001)

Year	*Age Group*		
	0–14	*15–60*	*60 and above*
1911	38.8	60.2	1.0
1921	39.2	59.6	1.2
1931	38.3	60.2	1.5
1961	41.0	53.3	5.7
1971	41.4	53.4	5.2
1981	39.7	54.1	6.2
1991	36.5	57.1	6.4
2001	35.6	58.2	6.3

Source : *IAMR, Fact Book on Manpower*, p. 12, an *Census of India*, 1981, Series-I, India, Paper 2 o 1983.

These figures indicate that the proportion of chil population in the 0--14 age group was 35.6 per cent 2001. This figure is lower than the figures of earlier fou decades. The principal reason for a higher child popu lation in India is the high birth rate. The recent declin in infant mortality has also added to our child popula tion. A high proportion of children only reflects a larg proportion of unproductive consumers. To reduce th percentage of non-productive consumers, it is essenti to bring down the birth rate. The decline in child popu lation in 2001 is a reflection of the decline in over all bir rate in India.

6. THE DENSITY O POPULATION

The term density of population implies th average number of persons living per sq. km. From small figure of 77 persons living per sq. km. in 190 the density of the population of India rose to 90 per km. in 1931 signifying an increase of only 17 per ce but during the next 30 years, density went up to 1 persons per sq. km. indicating a sharp increase of abo

[illegible] per cent. But during 1961-81, density jumped to 216 per sq. km. in 1981 indicating an unprecedented increase of [illegible] per cent during the last 20 years. In 1991, the density of population rose to 267 per sq. km. and further shot up to 382 per sq. sm. in 2011. However, density of population is very unevenly distributed. Table [illegible] shows the variation observed among the different states of India. Kerala, West Bengal, Bihar, Tamil Nadu and Uttar Pradesh are some of the highly densely populated states, but Madhya Pradesh, chathisgarh Rajasthan, Himachal Pradesh, Jammu and Kashmir and Nagaland are, on the other hand, such states which have low density of population.

Density of population figures indicate the manland ratio. Obviously, India does not either rank among countries with a very high man-land ratio or among those with a very low man-land ratio.

[illegible]: Density of Population in India according to 2011 Census

[illegible]	*Population in millions*	*Density per sq. km (1991)*	*Density per sq. km. (2001)*	*Density of per square km (2011)*
[illegible]	13.8	6,352	9,294	11297
[illegible]	0.9	5,632	7,903	9252
[illegible]	82.9	497	880	1102
[illegible]	80.2	767	904	1029
[illegible]	31.8	749	819	859
[illegible]	166.0	548	689	828
[illegible]	21.1	372	477	573
[illegible]	62.1	429	478	555
[illegible]	14.3	403	482	550
[illegible]	26.9	274	338	414
[illegible]	26.6	286	340	397
[illegible]	75.7	242	275	397
[illegible]	1,027.0	267	324	382
[illegible]	96.7	257	314	365
[illegible]	52.7	235	275	319
[illegible]	50.6	211	258	308
[illegible]	36.7	203	236	269
[illegible]	60.4	149	196	236
[illegible]	56.5	129	165	201
[illegible]	20.8	133	154	189
[illegible]	101	77	99	124
[illegible]	61	93	109	123

Source: Census of India, 2001, Series-I (India), Paper 1 of 2001, Provisional Population Totals.
Census of 2011, Provisional Population Totals.

Density of population that can be supported in any country depends upon the availability of natural resources and the extent of the use of technology to exploit the resources. In other words, natural resources coupled with the level of economic development determine the extent to which a higher density of population can be supported. For instance, Japan supports a higher density (350 year 2008 per sq. km.) and a higher standard of living. The main reason for this is that Japan has industrialised herself whereas 60 per cent of the population of India draws its livelihood from agriculture. However, the extremely high standard of living in U.S.A. is partly the result of a very favourable land-man ratio and natural endowments and partly due to the higher stage of economic development achieved. In short density of population cannot be treated as an index either of the poverty or of the prosperity of a country.

7. URBANISATION AND ECONOMIC GROWTH IN INDIA

Economic development is generally associated with the growth of urbanization. Some writers go so far as to assert that the acid test of development lies in the shift of population from the rural to the urban areas. During the first half of the 20th century, India passed through a period of economic stagnation. Consequently, the extent of urbanization was very limited. Urban population which accounted for 11 per cent of total population in 1901 lazily crept to the figure of 14 per cent in 1941. With a very liberal definition of the urban area adopted in 1951, urban population became 17.6 per cent of total. Much of the increase, therefore, was statistical. This explains why the adoption of a little more strict definition of the urban area in 1961 census resulted in recording a very small increase in the urban population and it was estimated at 18.3 per cent of total population. The 1981 census has also continued with the definition adopted in 1971.

An urban area has thus been defined as follows: (a) all places with a municipality, corporation, cantonment board or notified town area committee, (b) all other places which satisfy the following criteria : (i) a minimum population of 5,000; (ii) at least 75 per cent of male working population engaged in non-agricultural pursuits; and (iii) a density of population of at least 400 persons per sq. km.

The definition of the "Urban Area" though very strict as compared to definitions adopted in earlier censuses is still not comparable with the definition of urban area provided in other countries. For instance, in Japan, a place having 30,000 or more inhabitants is classified as Urban. Despite this, the percentage of urban population to total population in India which was 20 per cent in 1971 improved marginally to 27.8 per cent in 2001 (Refer table 15).

From the data provided in Table 14, it is evident that the process of industrialization, though initiated during the Second Plan could make little impact on the economy in terms of population-shift to urban areas till 1961. Although the Second and the Third Plans decided to have a big programme of industrialisation, the plans emphasized the development of heavy and basic industries. The employment potential of these industries being limited, their growth did not lead to an absorption of labour from the rural to urban areas to such an extent as to have a marked impact on the economy. One can, therefore, observe that the process of industrialisation,

Table 16. Relative Growth of Urban and Rural Population

	Population in millions			Percentage of total population		Percentage increase in urban population during the decade	Urban-Rural Ratio
	Total	Rural	Urban	Rural	Urban		
1901	232.9	207.3	25.6	89.0	11.0	..	1 : 8.1
1911	246.0	220.4	25.6	89.6	10.4	0.0	1 : 8.6
1921	244.3	216.6	27.7	88.7	11.3	+8.25	1 : 7.8
1931	270.8	237.8	33.0	87.8	12.2	+19.1	1 : 7.2
1941	309.0	265.5	43.5	85.9	14.1	+32.1	1 : 6.1
1951	361.1	298.7	62.4	82.7	17.3	+43.2	1 : 4.7
1961	439.2	360.3	78.9	82.0	18.0	+25.3	1 : 4.5
1971	548.2	439.1	109.1	80.1	19.9	+38.0	1 : 3.7
1981*	685.2	525.7	159.5	76.7	23.3	+46.8	1 : 3.3
1991**	844.3	627.1	217.2	74.3	25.7	+35.6	1 : 2.9
2001	1,027.0	742.0	285.0	72.2	27.8	+31.2	1 : 2.6
2011	1210.2	833.3	377.1	68.8	31.2	31.8	1 : 2.2

* Includes projected population of Assam.

** Includes population projection for Jammu & Kashmir.

Source : Registrar General, India.

though started during the sixties could not gather momentum. Urbanization could hardly absorb a little more than the natural increase in urban population. As a result, a serious dent in terms of the shift of population from rural to urban areas could not be made.

Urban population increased from about 26 million in 1901 to 62 million in 1951--an increase of only 36 million in 50 years. But, thereafter, the absolute increase during the next three decades was of the order of 94 millions (1951-81). This indicates that programmes of industrialisation did make an impact in terms of population absorption in urban areas, though this impact is not very discernible. During the decade (1981-1991) alone, urban population increased by 59.4 million which indicates a growing trend towards urbanisation. Urban population, in absolute terms reached the figure of 377 million accounting for 31.2 per cent of total population in 2011. (Refer table 15).

Degree of urbanisation in India–a comparison with some selected countries

A comparison of the level of urbanisation in India with the developed countries of the world reveals that India is far behind the high income countries. The proportion of urban population to total population in 2001 was 73 per cent in Russia, 77 per cent in USA, 79 per cent in Japan, 91 per cent in Australia and 89 per cent in U.K. Compared to them, the Indian percentage of 27.8 in 2001 was too low. Obviously, employment strategies should be planned so that they attract population to urban areas. It is only the pull exercised by economic development that can bring about the much desired change towards urbanisation.

A careful study of Table 16 reveals that the proportion of urban population in class I towns (with a population of over 1 lakh) has increased from 44.4 per cent in 1951 to 62.3 per cent in 2001. Obviously, there is a trend towards concentration of population in the bigger towns. The relative proportion of urban population in Class II and Class III towns taken together has remained practically constant i.e., around 25-27 per cent during 1951-2001. But in contrast, the relative proportion of population in Class IV, Class V and Class VI towns has come down sharply from 29.5 per cent in 195[illegible] to barely 10.9 per cent in 2001.

Class I towns have been the seats of administrative and general economic activity. Industry, transport, trade and commerce, administrative and liberal services have been concentrated in them. This explains the increasing concentration of urban population in this size class.

An analysis of the towns in various classes reveals that towns at the margin in Class II have been jumping into Class I. This is evidenced by the fact that whereas there were only 76 towns in Class I in 195[illegible] their number grew to 394 (nearly four times) in 2011. As a consequence, the total population of Class I towns increased from 278 lakhs in 1951 to 2,649 lakhs in 20[illegible] -- an increase of 953 per cent.

Class II and Class III towns are those in transitory stage. Their number as also their total population have increased in absolute terms. The total number of Class II towns increased from 91 in 1951 to 341 in 1991, and their total population from about [illegible]

TABLE 17. Trend of Urbanization in India

	Towns with different population size-classes						
	Class I 1,00,000 & above	*Class II (50,000 to 99,999)*	*Class III (20,000 to 49,999)*	*Class IV (10,000 to 19,999)*	*Class V (5,000 to 9,999)*	*Class VI (Less than 5,000)*	*All Classes*
Number of Urban Agglomerations/Towns							
[illegible]	76	91	327	608	1,124	569	2,795
[illegible]	102	129	437	719	711	172	2,270
[illegible]	148	173	558	827	623	147	2,476
[illegible]	216	270	738	1,053	739	229	3,245
[illegible]	296	341	927	1,135	725	185	3,609
[illegible]	394	NA	NA	NA	NA	NA	NA
[illegible]	468	NA	NA	NA	NA	NA	NA
Urban Population (Lakhs)							
[illegible]	278	61	97	84	80	19	620
[illegible]	405	87	132	99	54	6	783
[illegible]	619	121	171	119	48	5	1,082
[illegible]	959	182	216	145	54	8	1,564
[illegible]	1,401	236	287	171	57	6	2,158
[illegible]	1,767	344	420	223	77	8	2,836
[illegible]	2,649	NA	NA	NA	NA	NA	NA
Percentage Distribution of Urban Population							
[illegible]	44.4	9.8	15.6	13.5	12.9	3.1	100.0
[illegible]	51.7	11.1	16.9	12.6	6.9	0.8	100.0
[illegible]	57.2	11.2	15.8	11.0	4.4	0.5	100.0
[illegible]	61.3	11.6	13.8	10.9	3.5	0.5	100.0
[illegible]	64.9	10.9	13.3	7.8	2.6	0.3	100.0
[illegible]	62.3	12.0	14.8	7.9	2.7	0.3	100.0
[illegible]	70.0	NA	NA	NA	NA	NA	100.0

Note: Sikkim, Assam and Jammu & Kashmir; NA : Not Available

Source: Registrar General of India.

[illegible] 27 times—a four-fold increase. The number of [illegible] increased from 327 in 1951 to 927 in [illegible] and their total population increased from 97 lakhs [illegible] 27 lakhs in 1991— an increase of 190 per [illegible]

[illegible] of urban population in Class IV, Class [illegible] Class VI towns has shown a downward trend, [illegible] there is an increase in their [illegible] The number of Class IV towns [illegible] to 1,135 in 1991 and their [illegible] from 84 lakhs to 165 lakhs— [illegible] per cent. As against it, the number [illegible] declined from 1,124 in 1951 to 725 [illegible] and their total population declined from 80 [illegible] during 1951-91—a decline of about [illegible] the number of towns in Class [illegible] in 1951 to merely 185 in 1991. [illegible] of Class VI towns also suffered a [illegible] lakhs to 6 lakhs during 1951-91.

[illegible] of large cities with million-plus Population

[illegible] 23 large cities with a population of [illegible] in 1991 accounting for a total [illegible] million, as per 2001 census, there [illegible] large cities (or mega-cities) accounting for [illegible] million. The population of these are 35 [illegible] per cent of the total urban population. Greater Bombay ranked first with a population of 16.4 million, followed by Kolkata with a population of 13.3 million. The population of Delhi which was only 8.4 million in 1991 jumped to 12.8 million by 2001 showing an increase of 52.4 per cent during the decade. The overall decennial increase in population in 35 mega-cities was about 68 per cent during 1991-2001 decade. The highest growth rate of population was shown by Jaipur (53.3%), followed by Delhi (52.4%), Pune (48.0%), Bangalore (39%) and Lucknow (37.5%).

According to Census 2011 there were 53 cities with more than 1 million population, against 35 in 2001. Population of these 53 cities was 166.5 million, which was about 44.1 percent of total urban population. Ranking of the first 7 cities remained intact, with Greater Bombay topping the list

Urbanization and character of industrialisation in India

Obviously, India ranks quite low among the countries of the world in the degree of urbanization. Two reasons can be attributed to the increase of population in urban areas : (a) natural increase of urban population, and (b) net migration from the rural areas. As India is passing through a period of high population growth, the natural increase of population in the urban areas is also

TABLE 18. Population of large cities with a population of 1 million and above

	Population in 2001 (in millions)	*Population in 2011 (in millions)*
Greater Bombay	16.4	18.4
Delhi	12.8	16.3
Kolkata	13.2	14.1
Chennai	6.4	8.7
Bangalore	5.7	8.5
Hyderabad	5.5	7.7
Ahmadabad	4.5	6.4
Vadodara		6.3
Pune	3.7	5.0
Surat	2.8	4.6
Jaipur		3.0
Kanpur	2.7	2.9
Lucknow	2.2	2.9
Nagpur	2.1	2.5
Nashik		2.5
Ghaziabad		2.3
Indore		2.2
Jaipur	2.3	2.1
Kochi		2.1
Coimbatore		2.1
Patna		2.0
Kozhikode		2.0
Bhopal		1.9
Thrissur		1.8
Agra		1.7
GVMC		1.7
Malappuram		1.7
Thiruvananthapuram		1.7
Ludhiana		1.6
Vasal Virar City		1.6
Kannur		1.6
Vijaywada		1.5
Madurai		1.5
Faridabad		1.4
Varanasi		1.4
Meerut		1.4
Rajkot		1.4
Srinagar		1.3
Jamshedpur		1.3
Amritsar		1.2
Allahabad		1.2
Asansol		1.2
Aurangabad		1.2
Jodhpur		1.1
Dhanbad		1.1
Ranchi		1.1
Raipur		1.1
Gwalior		1.1
Kollam		1.1
Chandigarh		1.0
Kota		1.0
Durg-Bhilainagar		1.0
Tiruchirappalli		1.0

Source : Registrar General of India, Census 2011.

quite high. Since the process of urbanization started in India about a decade or so ago, it has not gathered enough momentum so as to enable it to absorb a significant chunk of the rural population. In fact, the impact of industrialization in fostering urbanization is only marginal. With a slowing down of the population growth rate in the coming decades and with an acceleration in the tempo of industrialization, it is expected that the extent of urbanization in India may show a significant change.

Urbanization and Economic Development

Economic development is expected to achieve three things : (i) a rise in per capita income so that level of living of the people improves; (ii) a reduction in the rate and magnitude of unemployment; and (iii) reduction of population below the poverty line. To understand the impact of urbanization on economic development, it would be appropriate to take a comprehensive view of development and not restrict its impact on only one variable i.e., per capita income. In table 18, state-wise data of the proportion of urban to total population in 2001, estimates of per capita income for 1996-97, rate of daily status unemployment (1999-00) and percentage of population below the poverty line have been juxtaposed. The analysis is based on cross-sectional data for 16 states of India. It is assumed that rates of unemployment and percentage of population below the poverty line are fairly stable variables and, therefore, they can be safely used to understand the impact of urbanization on them. The hypotheses tested are :

(I) Is urbanization associated with per capita income in a positive manner ?

(II) Does a higher degree of urbanization result in the lower degree of unemployment ?

(III) Does a higher degree of urbanization result in a reduction of the proportion of population below the poverty line ?

The co-efficient of correlation between the proportion of urban to total population and per capita income was +0.75 which is significant. This indicates that the degree of urbanisation is positively associated with per capita income and is significant.

Table 1: Degree of Urbanisation, Per Capita Income, Rates of Unemployment and Population below the Poverty Line

	Urban total population (2011) per cent	*Per capita net state domestic product 2004-05 prices (2010-11) ₹*	*Rate of unemployment current Daily Status, (2009-10)*	*% age of population below the poverty line (2009-10)*
	0	*1*	*2*	*3*
[illegible]	48.5	51,928	11.7	17.1
[illegible]	45.2	62,729	6.3	24.5
[illegible]	42.6	52,708	5.0	23.0
[illegible]	38.6	39,301	4.2	23.6
[illegible]	37.5	44,752	6.5	15.9
[illegible]	34.8	59,221	5.5	20.1
[illegible]	31.9	32,228	7.0	26.7
[illegible]	33.5	40,366	7.0	21.1
[illegible]	47.7	49,373	16.7	12.0
[illegible]	27.6	22,382	6.5	36.7
[illegible]	24.9	8,571	3.3	24.8
[illegible]	22.3	26,436	5.3	37.7
[illegible]	16.7	25,708	7.9	37.0
[illegible]	11.3	13,632	5.7	53.5
[illegible]	14.1	21,406	6.5	37.9
[illegible]	10.0	47,106	4.4	9.5
[illegible]	31.2	35,993	6.6	29.8

[illegible] a. Urbanisation percentage for Bihar has [illegible] to include Jharkhand and that for [illegible] to include Chattisgarh.

[illegible] have been arranged in the descending order [illegible] of degree of urbanisation.

[illegible] *Census of India* (2011)

[illegible] Note March, *2011 Planning Commission*

[illegible], correlation between the proportion of [illegible] and the rate of daily status unemploy- [illegible] which was negative though very mild. [illegible] negative correlation between urbanisa- [illegible] employment (through absorption of rural [illegible] did not get support from an analysis of [illegible] data.

[illegible] between the proportion of urban [illegible] and percentage of population below the [illegible] is -0.39. It indicates a negative but mild, [illegible]. Obviously, the pattern of urbanisation that [illegible] in India did not make a deep impact on [illegible] of poverty.

[illegible], it may be mentioned that whereas [illegible] and per capita income are positively [illegible] there is near absence of a correlation [illegible] and unemployment and, urban- [illegible] and reduction of population below the poverty [illegible] factors may be responsible for the situation. [illegible] neglect of slums in urban areas in our [illegible] strategies may be perpetuating poverty. For instance, the slum survey revealed that in Calcutta, 33 per cent of the population was living in slums. Secondly, whereas the organised sectors are able to improve their income levels by collective bargaining, the unorganised sectors are ruthlessly exploited by the capitalists, the landlords, the contractors and other owners of the instruments of production. Thirdly, the increasing use of capital-intensive technologies in urban areas results in increase in unemployment. Consequently, the absorptive capacity of the economy continues to be low and this explains to some extent the fact that urbanisation did not make a definite dent on the problem of unemployment. Last, but not the least, the benefits of growth may be unequally shared by various sections of the society and the resulting concentration of income and wealth may lead to an increase in per capita income without either improving the economic condition of the poor or enlarging employment at higher wage levels. In other words, the country may be experiencing an enclave type development whose spread effects are very limited.

Urbanisation: Emerging New Trends (Census 2011)

Though results of fifteenth Census of India 2011 are only preliminary, they indicate important changes in life of India. Census 2011 indicates that rate of growth of population has nosedived in two most populated cities of India, namely Delhi and Mumbai. Delhi's population grew by 44.3 lakhs during 1991-2001 and that of Mumbai (island city and sub -urban) by 20 lakhs. In terms of decadal growth rate, population of Delhi grew by 47 percent, while population of Mumbai grew by 20 percent in that decade. It is worth noting that during that decade 1991-2001, overall population of India grew by 21.5 percent. Now when in the next decade 2001-11, decadal growth of overall population has been recorded at 17.6 percent, there has been out of proportionate fall in population growth in Delhi and Mumbai. Delhi has recorded a growth rate of less than 21 percent during 2001-11, as compared to 47 years a decade earlier. Another metro city Mumbai has recorded a much lower growth in population, that is 4.2 percent. If we subdivide Mumbai into island city and sub-urban Mumbai, we find 5.75 percent negative growth in island Mumbai city, whereas sub-urban Mumbai population has recorded a positive but low growth by 8 percent. As such whereas Mumbai recorded an addition to population of 20 lakhs during 1991-01, during 2001-11 it could add hardly 5 lakh to its population and its population could hardly increase from 1.19 crores in 2001 to 1.24 crores in 2011. But it is also true that in terms of density, Mumbai still has highest density of population in the country. Amidst rising trend towards urbanisation in the country and the world, this statistics of slowing down of population growth in metros, forces us to think. Yet it is generally believed that people from other parts of the Country migrate to metropolitan cities and thus in-

creasing congestion in the metros makes life difficult for the people and there is pressure on existing infrastructure so also on the government to create additional infrastructure.

But the 2011 census figures indicate some different picture. Size of Delhi's population grew by 20.96 percent between 2001 and 2011, against the national average of 17.6 percent. It is generally believed that migration of population from other parts of India is the major cause of growth of population in Delhi. There was nothing wrong in this perception, as even during the decade 1991-2001, population of Delhi grew by 47 percent against national decadal rate of growth of population of 21.5 percent. Now that population of Delhi has grown just at just 21 percent against the national average of 17.5, very small number seems to have actually migrated to Delhi. Further if we look at the sex of migrating population we find mostly women have migrated to Delhi. This is proven by the fact that Delhi's sex ratio has improved from only 821 females in 2001 to 866 in 2011 per 1000 of males. National sex ratio is 940 females per thousand of males. This means that now those who migrated from rest of India to Delhi have started bringing their families which is causing increase in sex ratio, as well as increase in overall population of Delhi. Thus fresh migration to Delhi has been minimal.

However, due to the growth rate of 21 percent, primarily due to natural growth, density of population in Delhi, which was 9340 persons per km in 2001, increased to 11 297 in 2011. But we must note the fact that population growth rate has come down from 47 percent during 1991-2001, to only 21 percent in the last decade, has in fact given a big relief. Had this growth rate not decelerated this density could have gone to about 13700.

Department of Census tries to explain the cause of this trend. It says that removal of slums from various parts of city, including Yamuna Pushta, as a general drive and displacement of slum clusters due to preparation for Common Wealth Games have been mainly responsible for this trend. Some of these people previously living in slums could not be rehabilitated. Population of NDMC area itself has gone down due to removal of slums. Census report for NCT of Delhi says that it has no information about the status of population affected by the removal of slums. So it seems that a large number of people have migrated out of Delhi. It may be interesting to note that there has been differential rate of growth of population in different districts leading to differential increase in density of population. For instance North - East Delhi registered a huge increase (37 percent) in density during last decade, East Delhi registered 27 percent increase, Central, West and North Delhi registered 23 percent, 20 percent and 15 percent respectively. South Delhi, South West Delhi and New Delhi's density increased by only 11 percent, 5 percent and 4 percent respectively. Previously, due to availability of land it was easy to establish slums, but situation is not the same now. Due to fast development of Delhi in terms of building activity and other infrastructure projects, migration into Delhi and establishing slum dwellings is no longer an easy option. For migrated population, once displaced it is not easy to establish again due to prohibitive property prices in Delhi.

All this is happening when transport, electricity and water facilities etc. are much better than before. Delhi Metro has also revolutionised the living in Delhi. But despite all this Delhi's expensive cost of living is now preventing people from settling in Delhi. A new trend is emerging now and a number of people have moved out of city limits of Delhi and started settling in NCR and now taking advantage of transportation facilities in Delhi they daily come to Delhi for work from surrounding cities of Ghaziabad, Faridabad, Gurgaon, Bahadurgarh, Sonepat etc.

Demographic changes in Mumbai point to similar trends. Census 2011 show a very little increase in population in sub- urban Mumbai and decrease in population in Mumbai island city. Reasons for the trend are perhaps the same. Cost of living in Mumbai has also increased tremendously. Limited availability of land in Mumbai pushes the population out of Mumbai island city as well as sub-urban Mumbai.

8. THE QUALITY OF POPULATION

The quality of population can be judged from life expectancy, the level of literacy and the level of technical training attained by the people of a country. Upto 198[illegible] it was customary to exclude children in the age group 0-4 and then calculate the rate of literacy. However, the Census of 1991 has redefined the concept of literacy. It uses the term "literacy rate" related to population aged seven years and above.

Table 19 : Literacy rate in India

Year	*Persons*	*Males*	*Females*
1951*	18.3	27.2	8.9
1961*	28.3	40.4	15.3
1971*	34.5	46.0	22.0
1981*	41.4	53.4	28.5
	(43.7)	(56.5)	(29.5)
1991	52.2	64.1	39.3
2001	64.83	75.8	52.1
2011	74.04	82.14	65.5

Source : *Census of India 2001, Series 1 India, Paper 1 2001., Census of India 2011, Provisional population totals.*

Note : *Literacy rates for 1951, 1961 and 1971 relate to population aged 5 years and above. The literacy rates for the year 1981 and 1991 relate to the population aged 7 years and above. Literacy rates for the population aged 7 years and above in 1981 have been shown in brackets.

[illegible] the figures based on the earlier definition [illegible] with those based on the definition [illegible] Notwithstanding the revised definition, [illegible] improved from 43.7 % in 1981 to 52.2 % [illegible] literacy improved from 56.5 % to 64.1 % [illegible] literacy from 29.5 % to 39.3 % during the [illegible] There is no doubt that in 1991, 352 million [illegible] but simultaneously, there was a [illegible] 224 million illiterate persons. The growth [illegible] by 8.5 % during 1981-91 decade, marks [illegible] over the 1971-81 decade, during [illegible] improved by about 7 percentage points. [illegible] has improved from 52.2 per cent in 1991 [illegible] in 2001, and to 74.0 percent in 2011. [illegible] has improved from 64.1 percent in 1991 to [illegible] in 2001 and 82.14 percent in 2011. Simi- [illegible] literacy improved from 39.3 percent is 1991 [illegible] percent in 2001 and 65.5 percent in 2011.Im- [illegible] in literacy during the decade 2001-2011, has [illegible] recorded as compared to earlier de- [illegible] that literacy has thrown an improvement, [illegible] has also narrowed down.

Census 2011: Qualitative Changes in Population

The preliminary results about Census of India, [illegible] so far, have been released. According to [illegible] India's population is now 121 crores. Out [illegible] population 51.5 percent are males while 48.5 [illegible] females. If we leave period between 1911and [illegible] growth of population has shown receding [illegible] since the exercise of Census had [illegible] in the past also since 1971, rate of growth has [illegible] been falling with every successive Census. [illegible] primarily due to declining death rate and [illegible] declining birth rate. But this time, Census [illegible] show that there has been much less [illegible] population during 2001 and 2011, than [illegible] there has been a sharp decline in decadal [illegible] population. In the period between 1991 and [illegible] growth rate was 21.5 percent while [illegible] decade 2001-11 it fell down to only 17.6 [illegible] In the last decade 18.1 crore people were added [illegible] but in decade before this decade total [illegible] population was 18.3 crore. This means that [illegible] of growth of population was lower; less [illegible] number of people were added to population. [illegible] important thing is that out of total addition in [illegible] million, fewer men were added to [illegible] than women. In 2001 Census there were [illegible] which had population growth below 2 [illegible] now in Census 2011, 25 states/ UTs [illegible] population growth rate of less than 2 [illegible] states/UTs have shown population growth [illegible] than 1.5 percent. Apart from figures of [illegible] there are some qualitative changes [illegible] as indicated by Census 2011.

Improved Sex Ratio now

The preliminary results of Census 2011 indicate [illegible] picture of Indian economy and society. Although the proportion of girls in the 0-6 age group has gone down, which is definitely a cause of major concern, but we must realize that natural rate of growth of overall population has come down significantly for the first time. As such decline in the proportion of girls to boys in age group of 0-6 years is indicated by the preliminary results, improvement in overall sex ratio from 927 to 940 is giving a sigh of relief as it indicates at betterment of condition of women in the country. Today female male ratio is estimated to be highest after 1971 Census. There was a time when declining female male ratio was being witnessed in many states continuously. But now it is rising in most of the states.

Thus, this improved sex ratio is suggesting that the steps taken by the governments at the centre and the states for betterment of health facilities and efforts on the part of civil society in creating awareness against ill treatment and atrocities against women are fructifying now. We should be hopeful of reaching a balance between male and females in future.

India more literate than before

Although the results are very preliminary results, but figures of a huge increase in literacy rates is encouraging. It is well known that in India most people live in the age group of 15-35 and India is considered 'Youngistan', a country with highest number of youth. As such, the quality of the population would play an important role in the development of Country. India today is the world's third most powerful in economic terms. Improving the education facilities could go a long way in making our country even more powerful. Increase in the literacy ratio by 9 percent points is significant in this perspective. Growth would definitely get a boost with increase in literacy rate.

Better female literacy

Preliminary results of Census 2011 show better literacy rate for the entire population, both males and females. But it is significant to note that improvement in literacy rate is more in case of female population, which has improved from 53.7 percent in 2001 to 65.5 percent in 2011. In case of men it has improved from 75.3 percent to 82.1 percent during the same period. As such difference in the male female literacy ratio has narrowed down. This difference used to be 22.6 percent points, which has come down to 17.6 percent points. This needs to be further narrowed down.

Regional disparities also narrowed down

Though census results are very preliminary, but they definitely indicate reduction in regional disparities in human development as backward states show better results in terms of quality of population. Not only now 25 states have shown population growth of less than 2 percent backward states show better results. Six states/ UTs indicate improvement in sex ratio for population under 6 years of age. These 7 key states / UTs include most infamous states of Punjab and Haryana. Except 6 states/ UTs in 29 states/UTs overall sex ratio has im-

proved including states of Punjab and Haryana. In terms of literacy not so fortunate states like Bihar, Jharkhand, Rajasthan, Uttar Pradesh, and Orissa etc. have shown better performance than before. For example, in Bihar, where the literacy rate in 2001 was only 47 percent, in 2011 has risen to 64 percent and in Jharkhand literacy rate is up from 53.6 to 67.6 percent. Other province whose literacy rate was lower than the national average, has improved by 6 to 24 percent.

Major Cause of Concern

A major issue of concern highlighted by Census 2011 is that there are 50 lakh less children in age group 0-6 years in 2011 than 2001. This is obvious outcome of decline in rate of growth of population in the last decade as compared to a decade before. This also indicates that during the last decade birth rate has been much lower now. But in this age group (0-6) the major cause of concern is that in 2001, there were 927 girls for 1000 boys, which has now fell down to 914. Thus, except decline in sex ratio in 0-6 age group, other results of the Census 2011 are encouraging in terms of reduction in population growth, literacy rates, over all sex ratio, regional disparities in human development. About female population who are considered disadvantaged in terms of health and education, Census 2011 show a silver line.

Constitutional Directive of providing Compulsory Elementary Education

The Directive Principles of the Constitution enjoined upon the Government to provide free and compulsory education to all children up to the age of 14 by 1960. It is a sad commentary on the progress of elementary education that even after the lapse of over five decades, there is no hope of the fulfilment of this Constitutional Directive.

The situation in primary education as it obtains today is that the country has reached a gross enrolment level of 93.4 per cent at the primary level, but despite this, the rate of literacy achieved is only 65.4 per cent. In the case of rural females, the literacy rate is as low as 54.2 per cent. It is really shocking that in some states, female literacy is below even 50 per cent (Rasjasthan 44.3%), (Uttar Pradesh 43.0%), (Bihar 33.6%).

The paradox of rapid growth of population in the face of rising trend of enrolment can be explained in terms of high drop-out rates--out of every 100 students enrolled in Class I, only 40 reach class V and 23 reach class VIII. All these drop-outs add to the population of illiterates. Moreover, retention rates among the females are poorer and only 16 to 18 per cent of those enrolled in class I reach class VIII.

The principal reasons for high drop-out rates are:

(i) 35 per cent of the primary schools have a single teacher to teach 3 to 4 different classes.

(ii) 40 per cent of the schools have no pucca buildings. 39.7% have no black boards and 59.5% have no drinking water.

(iii) More than 90 per cent of the expenditure (in some states even more than 98 per cent) is spent on teacher salaries and administration. Practically nothing is available to buy a black-board and chalks, let alone charts, other inexpensive teaching aids, or even pitchers for drinking water.

(iv) There is hardly any effort on the part of the village or community leadership or at the block or district level to improve school environment.

(v) Provision for mid-day meals either does not exist or is badly mismanaged and this drives out a large number of school children, specially belonging to the scheduled castes and scheduled tribes, and those belonging to other weaker sections viz., landless labourers, marginal farmers and artisans.

The analysis of the data suggests the following

(*i*) Overall literacy level in India is 65 per cent which is far below the cent per cent level of literacy achieved in Australia, Canada, United Kingdom and the United States.

(*ii*) Whereas the difference between male and female literacy has narrowed down in the urban areas the gap is too wide in the rural areas.

(*iii*) In India, in 2001 the level of literacy was 76 per cent for males and 52 per cent for females as against nearly cent per cent in developed countries.

(*iv*) Number of persons enrolled in higher education as percentage of population in the age group 17--24 was barely 6 per cent in 2000. This figure is quite high among low income countries, but when compared with advanced countries, it is only one-third to one fourth.

Life Expectancy

In India life expectancy at birth was 46.4 years for the decade 1961-71– 47.1 years for the males, and 45.7 years for females. Compared to figures of earlier decades, the average expectation of life improved considerably. It was 54 years in 1981 and stands at 65.3 years in 2001.

Table 21. Life Expectancy at Birth in India (in years)

Period	*Males*	*Females*	*Overall*
1911-21	19.4	20.9	
1921-31	26.9	26.9	
1931-41	32.1	31.4	
1941-51	32.4	31.7	
1951-61	41.9	40.6	41.2
1961-71	47.1	45.6	46.4
1971-81	54.1	54.7	54.0
2001	63.9	66.9	65.3
2002-06	62.6	64.2	63.5

Source : *Census of India*, 1971, Age and Life Tables, *Census of India* 1981, *Series-I India, Paper* 1984 and *Census of India* (2011), Economic Survey (2011-12)

[illegible] factor depressing life expectancy [illegible] high level of infant mortality. During the last [illegible] infant mortality has shown a significant [illegible] per thousand in 1916 to 58 in 2005. [illegible] of an improvement of maternity [illegible] and better care of the children.

[illegible] care of women due to change in our [illegible] women has also contributed to higher [illegible] of the female population in India. While [illegible] of the Indian people is at the root of this [illegible] short life span, the discovery of wonder [illegible] to control epidemics like plague, cholera, [illegible] or small pox, the general improvement in [illegible] increase in the number of hospitals, [illegible] midwives and better control of diseases [illegible] save life. In recent years, the public [illegible] taken under the various plans have [illegible] death rate. Even then, the present level [illegible] in India does not compare favourably [illegible] in other countries of the world.

8. POPULATION GROWTH AS A FACTOR OF ECONOMIC DEVELOPMENT

[illegible] of economic development involves [illegible] of physical resources of a nation by the [illegible] country so that productive potential in [illegible]. In this effort of development there [illegible] the labour force of the country makes a [illegible], but it is equally true that rapidly [illegible] population retards the process of development. The impact of rising population acting as a drag on [illegible] resources is felt in a variety of ways. It would [illegible] to examine the problem in this setting.

1. Population and growth of national and per [illegible]. During 1980-81 and 2000-01, the annual [illegible] of net national product was 5.4 per cent [illegible] product (income) was 3.4 per cent. It is [illegible] population growth rate is likely to decline [illegible] the next three decades to 1.5 per cent per [illegible] the net increase in per capita in[illegible]. A high growth rate of population has been [illegible] factor in raising the levels of per capita [illegible].

2. Population and Food Supply. Ever since [illegible] celebrated *Essay on Population* [illegible] focused on the problem of population [illegible] supply. There is no doubt that per capita [illegible] is gradually on the decline in India. [illegible] and 2001, the cultivated area per capita [illegible] acres to 0.32 acres, indicating a fall of [illegible]. To compensate for this fall in cultivated [illegible] it is imperative that efforts be made to [illegible] productivity.

Table 21. Output of Food Grain and Per Capita Availability of Food Grains

Year	*Population in million*	*Output of Food grains (million tonne)*	*Per capita output of cereals and pulses (in grams)*	*Per capita availabilty of cereals and pulses (in grams)*
	1	2	3	4
1961	439	82.0	512	469
1971	543	108.4	547	469
1981	683	129.6	520	455
1991	846	176.4	571	510
2001	1029	196.8	524	419
2011	1210	235.0	532	NA

Note : Net availability includes net domestic production plus net imports plus change in government stocks. Net production has been taken as 87.5% of the gross production, 12.5% being provided for feed, seed requirements and wastage.

Source : Computed from Government of India, *Economic Survey*, 2008-2009

From table 21, it is clear that between 1961 and 2011, total output of food grains (cereals and pulses) increased from 82 million tones to 235 million tones, showing an increase of 187 per cent. But during the same period, population also increased from 439 million to 1210 million, showing an increase of 176 per cent. Consequently, though per capita output of food grains in grams did show an increase, but only marginally from 512 to 532 grams during this period. It may be noted here that actually it can not be considered as per capita availability of food grains for the people, net availability includes net domestic production plus net imports plus change in government stocks. Net production has been taken as 87.5 per cent of the gross production, 12.5 per cent being provided for feed, seed requirements and wastage.

Since a major part of the increase in population takes place in the rural areas, it also signifies that the share of family consumption in total food production will increase and much less will be left over as marketable surplus. These are gloomy forebodings which stress the necessity of family limitation.

3. Population and Unemployment. Rising population is accompanied by a rise in the labour force of the community. Hence, it makes the solution of the problem of unemployment more difficult. On the basis of NSS data (55th Round), it has been revealed that the number of unemployed has increased from 20.13 million in 1993-94 to 26.58 million in 1999-2000. As a prpportion of the labour force, the unemployment rate has increased from 6.0 per cent in 1993-94 to 7.32 per cent in 1999-2000. According to *Approach Paper of the 11th Plan*, the rate of unemployment further increased to 8.3 per cent in 2004-05. The increase in the unemployed both

in absolute and relative terms, indicates that during the last 55 years of planning, the five-year plans were not even able to absorb the net additions to the labour force, not to speak of clearing the backlog of unemployed. The problem of unemployment will become far more difficult in the future. Obviously, a significant proportion of the national resources will have to be used to expand employment opportunities to absorb the increasing labour force and the backlog of unemployed left over due to the continuous pressure of a rapidly growing population.

4. Population and the Burden of Education, Medical Care and Housing. Rising population increases the number of children and hence demands higher expenditure on education. There is no doubt that expenditure on education can be viewed as social investment in human beings that ultimately enhances the productivity of the labour force, but it may be emphasized that the time-lag in this respect is quite long and hence the direct effect in raising output per unit of investment is very low.

India's public expenditure on education was 3.7% GDP in 2005. This is considered to be low, because the Education Commission (1964-65) stipulated to increase it to 6% of GDP in 1984-85. Obviously, it impacts on creating educational institutions at the primary, secondary and tertiary level to meet the needs of the growing knowledge economy. The onset of the computer revolution also necessitates higher expenditures on skill and training so as take advantage of new and emerging technologies.

Moreover, India spent only 0.9% of its GDP on public health expenditure. This is much below the level required for achieving the goals of removing malnutrition and control of diseases. The poor are specially affected, because they cannot incur higher out-of-pocket private expenditure an health. The burden of raising public health expenditure to 2-3% of GDP indicates the need to improve medical facilities. Not only that, the burden of providing housing to additional population also requires additional resources.

6. Increase in Population and Capital Formation. It is quite necessary that national income should grow at the same rate at which population is growing so that the existing level of real per capita income is maintained. The present rate of growth of population in India is 1.5 per cent per annum. To maintain a constant per capita real income national income must rise at the rate of 1.5 per cent per annum. To achieve this, capital investment is necessary. The capital-output ratio the Indian economy at present has been estimated at which implies that about 4.1 units of capital are nee to bring about an increase of one unit of output. Thus, order to bring about an increase of national income at rate of 1.5 per cent, capital accumulation of the order 6.2 per cent is necessary. George C. Zaidan of London School of Economics has estimated the propo tion of G.N.P. that has to be invested in order to keep capita income at a constant level. Whereas in the deve oped countries, the proportion of GNP that is wasted this purpose is less than 5 per cent, in underdeveloped countries like India, Columbia, Morocco, Brazil, Gh and Tunisia, it is over 10 per cent.[7]

While several other factors such as an inegal tarian system of land ownership and other forms property, less emphasis on measures directed to help weaker sections of the community and slow pace economic growth in India during the period 1950-51 1993-94 are mainly responsible for it, populati growth is also an important factor in the situation.

10. POPULATION POLICY

The significance of the growth in population c be judged from the fact that during the decade 19 2001, there has been an increase of about 183 mill reaching a level of 1,027 million in 2001. The alarm rate at which population is growing calls forth the n for a positive population policy to restrict this ra growth of population.

Family Planning and Five-Year Plan

Although India has been recognised as the fi country in the world to officially adopt family plann programme in 1952, serious thinking about populat growth was reflected in the Third Plan in terms of " objective of stabilising the growth of population ove reasonable period." Subsequently, targets were set various policy documents. Table 23 briefly summari the targets specified and the actual achievement. T Third Plan for the first time set the population goal achieving the reduction of crude birth rate to 25 per 10 population by the year 1973, but achievement fell short of expectation. Similarly, in 1968, a new dem graphic goal to reduce birth rate to 23 by 1978-79 was but again the achievement was dismal.

7. Planning Commission, *Third Five-Year Plan*, p. 22

Table 2.1: Demographic Goals Set and Actual Achievement

Year	Specified Demographic Objective (CBR)	*Targeted Year for Achieving the Goal*	*Actual Achievement*
[illegible]	25	1973	34.6
[illegible]	25	1978-79	33.3
[illegible]	30	1979	33.7
[illegible]	30	1978-79	33.3
[illegible]	25	1983-84	33.7
[illegible]	30	1978-79	33.3
[illegible]	25	1983-84	33.7
[illegible]	30	1985	32.9
[illegible]	27	1990	29.9
[illegible]	29.1	1990	29.9
[illegible]	26.0	1997	27.4

Note: CBR = Crude Birth Rate.

Source: Planning Commission, *Eighth Five Year Plan* [illegible].

In 1981, on the recommendation a Working Group [illegible] Policy set up by the Planning Commission [illegible] National Health Policy (1983) set the goal of [illegible] Net Reproduction Rate (NRR) to 1 by 2000 [illegible] crude birth rate to 21, crude death rate [illegible] mortality rate to less than 60 per thousand and [illegible] the proportion of couples practising family [illegible] per cent. This was adopted as the demo[illegible] goal in the Sixth Plan for the year 1995. How[illegible] indicated that this goal would be reached [illegible] period 2006-2011. Thus every time, a demo[illegible] was fixed, due to lack of achievement it was [illegible] period. It was only in the Eighth Plan [illegible] of crude birth rate of 26 per thou[illegible] be close to the target set for the Plan.

To achieve the family planning goals, the follow[illegible] were adopted by the Government :

- [illegible] programme to spread the [illegible] of family planning. All mass [illegible] newspapers, radio, T.V. films etc.– [illegible] widely used to spread consciousness [illegible] family limitation.
- [illegible] of contraceptives to all sections of [illegible] and urban population.
- [illegible] incentives for family planning in [illegible] of cash awards for undergoing [illegible].
- [illegible] use of sterilisation of both males [illegible].

In India, the family planning programme did not [illegible] a single method but adopted what is [illegible] as "the cafeteria approach" i.e., [illegible] of all the scientifically approved contracep[illegible] family planning, the Government [illegible] some extent--education and economic [illegible] the growth of our population. Raising [illegible] of education of the people has a general [illegible] fertility. This is particularly so if the [illegible] is educated. "Studies in India have confirmed the relationship between fertility rates and education and economic status--the motivation for the small family and successful adoption of contraceptive methods being the stronger among those classes who are both educated and economically better off."

Impact of Family Planning Programmes on India's Population Growth

Family planning programmes, broadly speaking, use three methods : (i) Sterilization clearly gives full protection, (ii) I.U.D. insertion is supposed to give 95 per cent protection. (iii) Regular use of oral pills is also considered to give full protection, but regular use of conventional contraceptives provides 50 per cent protection.

Under the blanket umbrella of emergency, a ruthless sterilization drive was launched, which pushed sterilizations to a level of 8.26 million during 1976-77, but as a result of the defeat of the Congress Government in 1977 General Election, in which sterilization excesses were a major issue, the department of Family Planning developed cold feet and the sterilizations slumped to an abnormally low, a level of 0.95 million in 1977-78. The gradually increasing trend of sterilizations after 1978-79 from a level of 1.48 million in 1978-79 to 2.79 million in 1981-82 and further to 4.90 million in 1985-86 is an index of stability of the programme with increasing impact over time.

Besides this, percentage of couples effectively protected by various methods have also increased over time.

Non-family planning measures

The Census of 2001 highlighted the fact that the mean age at marriage of females which was estimated at 17.16 years during 1971 has increased to 18.3 in 2001.

It may be noted that States like Kerala, Gujarat and Punjab have been able to effectively raise the mean age at marriage. This is largely the consequence of high level of literacy achieved in these states. In case, the programmes of adult literacy and general literacy are strengthened, general fertility rate (GFR) will register a faster decline. There is no doubt that even in States like Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, the proportion of married females in the age group 15--19 which was above 70 per cent in 1971 declined to about a level below 65 per cent in 1981. In Anhdra Pradesh and Haryana this trend is even stronger. Social changes affecting mean age at marriage are taking place in all the States. This is also evidenced by the fact that the proportion of married females in age group 15--44 has declined from 85.75 per cent in 1961 to 80.48 per cent in 1981. The Census of 1981 assuming this trend to continue estimates that proportion of married females in the age group 15--44 will come down to 77.1 per cent in 1991 and further to 73.6 per cent in 2001. From this the Registrar General concludes : "It appears that roughly 12 per cent decline in fertility as measured by GFR may be anticipated in the next 20 years due to

increase in age at marriage which is a non-family planning measure. If, however, the pattern of growth in literacy accelerates, this may decline faster. This, therefore, has to be considered as lower limit."

TABLE 23. Proportion of married females to total females in the age group 15–44, India

Year	*Proportion married (%)*	*Change in Proportion (%)*
1951	82.94	..
1961	85.75	+ 2.81
1971	83.90	(—) 1.85
1981	80.48	(—) 3.42
1991*	77.06	(—) 3.42
2001*	73.64	(—) 3.42

* Projections

SOURCE : Census of India 1981--*Paper 1 of* 1984.

Steps Towards A Rational Population Policy

History of population growth in the world shows that high fertility and high infant mortality go together and motivation for low fertility gets strengthened to the extent to which infant mortality and morbidity are reduced. In advanced countries like USA, UK, Germany, France, Japan etc. infant mortality has been reduced to as low a figure as 10 to 15 per thousand births. In contrast, infant mortality in India is as high as 57 in 2006. Secondly, advanced societies have a well-developed social security system against the risks of unemployment, old age, sickness, accident etc. The well-to-do sections in Indian society living in urban areas are largely free from the worry of life risks due to schemes of social security like provident fund, gratuity, old age pension, life insurance etc. The rich and elite classes have a large command over property, and income from this property provides adequate security against life risks. So the motivation for small family exists among the well-to-do sections. As against it, *the poorer classes consider 'son' as the most important social security.* Consequently, the motivation to have one or two sons results in having a large family. It is vitally important that in order to induce the poor to have small family, employment guarantee schemes and old age security measures are strengthened. The National Rural Employment Guarantee Programme introduced in 2006 is a step in the right direction. A beginning has been made to introduce social security of senior citizens 65 years of age. The Government has planned to introduce Rashtriya Swasthya Bima Yojana (National Health Insurance Scheme) in 2008-09 to provide health cover of ₹ 30,000 for every worker in the unorganised sector falling below the poverty line category and his/her family.

Lastly, a school of thought among the demographers believes that our socio-economic policies must integrate population and development goals. For instance, V.P. Pethe argues : "The masses cannot be expected, rationally and morally, to undergo hardships that may result from a small family under the current environment, unless the educated and well off classes also effectively demonstrate that they are willing to make sacrifices (in terms of reducing conspicuous consumption, sharing income and property benefits, etc.) in the common commitment to economic development, social transformation and creating an egalitarian social order."[8] While development is the best contraceptive, but the question is : Given the present social and economic order, would it be desirable to wait ? B.K. Banerji in a sharp comment against Pethe's line of thinking states : "Egalitarian distribution of income is a good toy for the politicians and some of the economists to play with. But there is nothing visible even in the distant horizon that portends its actualisation in the foreseeable future."[9] He raises the question : So how long could we wait for the egalitarian society to come ?

This is not to deny the need for pressing forth programmes of development and egalitarian distribution, but to underline the fact that family planning programmes must go ahead independently of the programmes of development and egalitarian distribution. There is, however, no doubt that the two together reinforce the creation of a better social and economic order.

China which has a similar population problem like ours has successfully brought down the growth rate of population from 2.2 % per annum during 1965-80 to 0.7 % per annum during 2000-04. For achieving this target, the Chinese Government offered incentives such as increase in salary by 12.5 per cent, priority in housing, preference in school admissions and in jobs, adult ration for the child etc. Those who refuse to accept the one-child norm are taxed heavily.

The experience of Kerala indicates that without the use of compulsion, birth rate has been brought down to a level of 15 per thousand by 2006. Mainly the high literacy rate in Kerala coupled with an organisationally better programme of family planning and health can explain the social transformation. It would be, therefore, desirable that programmes of poverty alleviation should run along with those of family planning so that the poor develop greater credibility in the sincerity of the state. Only then will they accept the small family norm more willingly.

Family Planning and Maternity and Child Health (MCH) Strategies

The government has increasingly realised over time that family planning can succeed only if child survival rate in our country is enhanced. The Seventh Plan clearly mentioned : "recognising the close relationship that exists between high birth rate and high infant mortality, high priority will be given to the MCH (Maternity and Child Health) programme."[10] It further states : "For the achievement of the "two child" norm, a

8. Vasant P. Pethe, Population and Development, *Economic Times*, November 12, 1982.
9. B.K. Banerji, Population Development. A Critique of Pethe's thesis, *Economic Times*, January 3, 1983.
10. Planning Commission, *Seventh Five Year Plan*, Vol. II, p. 285.

[illegible] that the child survival rate in our country is [illegible]."

The Second major thrust of the Seventh Plan in [illegible] welfare programme was to reduce maternal [illegible].

The focus of the family planning programmes [illegible] been enlarged to be renamed as family [illegible] programme to take care of the problems of [illegible] and child health was in the right direction.

11. NATIONAL POPULATION POLICY (2000)

The NDA Government finally decided on 15th [illegible] 2000 to adopt the National Population Policy [illegible] with a view to encourage two-child norm and aim [illegible] the population by 2046 A. D. The main [illegible] National Population Policy are as under:

[illegible] the Government decided that the freeze [illegible] imposed as per the 42nd Constitutional [illegible] with 1971 census as the basis for deciding the [illegible] which is valid upto 2001, is being ex[illegible]. This is being done so that states like Tamil [illegible] which have followed the small family [illegible] should not be penalised and states like [illegible], Bihar, Madhya Pradesh and Rajasthan [illegible] be rewarded by granting more seats in Lok [illegible].

[illegible] National Population Policy listed the [illegible] to achieve a stable population by [illegible]

- [illegible] of infant mortality rate below 30 per [illegible] live births.
- [illegible] of maternal mortality rate to below [illegible] per 1,00,000 live births
- [illegible] immunisation
- [illegible] 80 per cent deliveries in regular [illegible], hospitals and medical institutions [illegible] trained staff.
- [illegible] information, containing AIDS, pre[illegible] and control of communicable diseases.
- [illegible] to adopt two-child small family norm [illegible] for safe abortions to be increased
- [illegible] enforcement of Child Marriage Restraint [illegible] and Pre-Natal Diagnostic Techniques Act,
- [illegible] the age of marriage girls not earlier than [illegible] preferably raising it to 20 years or more.
10. A special reward for women who marry after 21 and opt for a terminal method of contraception after the second child.
11. Health insurance cover for those below the poverty line who undergo sterilisation after having two children.

The Action Plan drawn for the next 10 crucial years included the following:

(a) Self-help groups at village panchayat levels comprising mostly of housewives will interact with healthcare workers and gram panchayats.

(b) Elementary education to be made free and compulsory

(c) Registration of marriage, pregnancy to be made compulsory along with births and deaths.

The Government hopes to achieve the objective of population stabilisation by 2046 A. D. Immediately to improve the infrastructure, an additional allocation of ₹ 3,000 crores is required so that the unmet needs of contraception can be taken care of.

Critics, however, feel that the new population policy puts the entire burden of family limitation on "women". Dr. Nina Puri, President, Family Planning Association of India criticising the Government stated: "The policy was "soft" on the male participation. The message the new policy sends across is that the women will bear the burden of population control with men being let off easily." The policy provides incentives only to women to accept terminal methods of contraception after the second child. It would have been far better, had the policy also provided similar incentives for "men" for sterilisation after the second child. There is much force in the argument and the government should suitably modify the incentives to place burden of population control equally on both the partners - male as well as female.

It is really a pity that vasectomy accounts for only 6 percent of current contraceptive use. In fact, Vasectomy is a much simple, safe and easier method compared with tubectomy performed on females which is a relatively more complex procedure than vasectomy. The working Group and Population Stabilisation for the Eleventh Plan (2007-12) constituted by the Planning Commission acknowledges that vasectomy has gone out of favour after the excesses committed during the emergency (1975-77). However, there is a need to undertake a big programme to re-educate males regarding the adoption of voluntary vasectomy. Some incentives may also be provided to promote voluntary vasectomy.

Table 24: Projected Population Characteristics on 31st March 2001-2026

All-India

	2001	*2006*	*2011*	*2016*	*2021*	*2026*
[illegible]	1,029	1,112	1,192	1,269	1,340	1,400
[illegible]	532	575	617	657	694	725
[illegible]	496	537	575	612	646	675
[illegible]	933	932	932	931	930	930
[illegible] (million)	286	321	358	395	433	468
[illegible] (sq km.)	313	338	363	386	408	426
[illegible] age group (%)						
[illegible]	35.5	32.1	29.1	26.8	25.1	23.3
[illegible]	60.1	62.9	65.4	67.1	67.8	68.4
[illegible] 65 years	4.4	5.0	5.5	6.1	7.1	8.3

[illegible] *the Technical Group on Population Projection for India and States 2001-2026*, Revised December 2006.

12. POPULATION PROJECTIONS (2001-26)

Report of the Technical Group on Population Projections constituted by the National Commission on Population pertaining to period 2001-2026 was submitted in May 2006. The Census of India has revised the projections in December 2006. The findings of this Report bring out the trend of population and its variables for 25-year period which has serious implications for policy-making in various spheres of national and regional planning.

The Report made the following assumptions:

1. Total fertility Rate decline observed during 1981-2000 will continue in the future years also.
2. Sex ratio at birth of all the states are assumed to remain constant during future years.
3. The increase in life expectancy becomes slower as it reaches higher levels.
4. Inter-state net migration during 1991-2001 has been assumed to remain constant throughout the projection period for all states.
5. Urban-rural growth differentials for the period 1991-2001 has been assumed to be same in future as well upto 2026.

The Report is conscious of the fact that "predicting of the future course of fertility and mortality is not an easy task, especially when looking beyond in time is bound to be influenced by medical and health intervention strategies, food production and its equitable availability, climatic variability, socio-cultural setting, politico-economic conditions and a host of other factors affecting the population dynamics." The findings should be viewed in the light of these limitations.

- The main findings are summarized in Table 24.
- The population of India is expected to increase from 1,029 million to 1,401 million during the period 2001-2026 - an increase of 36% in 25 years i.e. at the rate of 1.2% per year. Consequently, the density of population will increase from 323 to 426 persons per sq.km.
- The sex ratio (females per 1000 males) is likely to slightly decline from 933 to 930 during 2001-2026.
- Child population (Age group 0-14) is likely to decline from 35.3% to 23.3% of the total population during 2001-2026.
- Working age group population (15-64 years) is likely show an increase from 60.1% to 68.4% during the 25-years period.
- Urban population is likely to increase from 28[illegible] million to 468 million during 2001-2026. As a proportion of total population, it is expected to increase from 28% in 2001 to 33% in 2026.
- Youth population in the age group 15-24 years is expected to increase from 195 million in 2001 to 240 million in 2011 and then continue to decrease to 224 million in 2026. As percentage of total population, it is expected to fall from 19% in 2001 to 16% in 2026.

Demographic Indicators

- Population growth will continue to register a decline in growth rate from 1.6% during 2001-05 to 1.3% in 2111-15 and further to 0.9% during 2021-25.
- Crude birth rate will decline from 23.2% during 2001-05 to 16% during 2021-25 because of falling total fertility. In contrast, crude death rate is expected to fall marginally from 7.5% during 2001-05 to 7.2% during 2021-25.
- Infant mortality rate is estimated to decline from 61% in 2001-05 to 40% by the end of the period 2021-25.
- Total fertility rate (TFR) is expected to decline from 2.9 during 2001-05 to 2.0 during 2021-25. With this, the weighted TFR is projected to reach replacement level of 2.1 by 2015.

At the state level, as is evident from table 26, Four states, viz., Kerala, Tamil Nadu, Delhi have already achieved the TFR replacement level. The laggards in this regard are Jharkhand, Assam, Bihar Rajasthan, Uttaranchal, Chattisgarh, Madhya Pradesh and Uttar Pradesh.

Of the projected increase in population of 37[illegible] million in India, nearly 187 million is likely to take place in seven States of Bihar, Chattisgarh, Jharkhand, Madhya

Table 25 : Demographic Indicators in India (2001-2025)

Indicator	*2001-05*	*2006-10*	*2111-15*	*2116-20*	*2021-25*
Population growth rate	1.6	1.4	1.3	1.1	0.9
Crude Birth Rate (CBR)	23.2	21.3	19.6	18.0	16.0
Crude Death Rate (CDR)	7.5	7.3	7.2	7.1	7.2
Infant Mortality Rate (IMR)	61.3	54.3	49.2	44.0	40.2
Under 5 Mortality Rate	82.0	72.8	65.9	59.0	54.0
Total Fertility Rate (TFR)	2.9	2.6	2.3	2.2	2.0
Life expectancy of Males	63.8	65.8	67.3	68.8	69.8
Life Expectancy of Females	66.1	68.1	69.6	71.1	72.3

Source: *Report of the Technical Group on Population Projection for India and States 2001-2026*, Revised December 200[illegible]

Table 26: Year by which Total Fertility Rate (TFR) of 2.1 will be achieved

[illegible]	*TFR in 2010*	*Year by which projected TFR will be 2.1*
[illegible]	2.5	2015
[illegible]	1.8	Achieved in 1988
Tamil Nadu	1.8	Achieved in 2000
[illegible]	n.a	Achieved in 2001
[illegible] Pradesh	1.8	Achieved in 2002
[illegible] Pradesh	1.8	2002
West Bengal	1.8	2003
[illegible]	1.8	2005
[illegible]	1.8	2006
[illegible]	1.9	2009
[illegible]	2.0	2010
[illegible]	2.6	2012
[illegible]	2.4	2012
[illegible]	n.a	2018
[illegible]	2.6	2019
[illegible]	3.2	2021
[illegible]	3.7	2021
[illegible]	n.a	2022
[illegible]	n.a	2022
Madhya Pradesh	3.0	2025
Uttar Pradesh	3.9	2027

Note: Rearranged in the ascending order for year in which TFR is expected to be 2.1

Source: Census of India, *Population Projections for India and States 2001-2026.*

Pradesh, Rajasthan, Uttar Pradesh and Uttaranchal (termed as BIMARU states). This implies that 57% of India's population increase during the 25 years period will occur in these states. About 22% of the total population increase is to occur in Uttar Pradesh alone.

A study of state level population projection presented in table 27 divides the entire period of 2001-26 into two parts – 10-year period of 2000-11 and 15-year period of 2011-26. The study has also divided states into forward states and backward states on the basis of per capita GDP.

9 Forward states accounted for 48.2% of India's total population, but as the population growth rates slow down to 1.2% during 2001-11 and further to 0.8% during 2011-2026, the share of these states in total population is expected to decline to 45.4% in 2026. But for Haryana and Maharashtra in which population growth continued to be high at 1.4% and 1.3% respectively during 2011-2026, all other states indicate decline in growth rates to less than 1% and in Kerala and Tamil Nadu, population growth rate would be as low as 0.5% per annum during 2011-26.

Table 28 : Population Projections for 2001-2026 for India and Major states

	In million			*Percent Increase*		*Annual Average Rate of Growth*	
	2001	*2111*	*2026*	*2061-2111-*	*2111 2026*	*2001-2111-*	*2111 2026*
India	**1,029**	**1,193**	**1,400**	**15.9**	**17.3**	**1.5**	**1.1**
Forward States							
Punjab	24.4	27.8	31.3	13.9	12.6	1.3	0.8
Maharastra	96.9	112.7	133.3	16.3	22.7	1.5	1.3
Haryana	21.1	25.4	31.4	20.3	23.6	1.8	1.4
Gujarat	50.7	59.0	69.3	16.4	17.4	1.5	1.0
West Bengal	80.2	89.5	100.5	11.6	12.3	1.1	0.8
Karnataka	52.9	59.4	66.9	13.3	12.6	1.2	0.8
Kerala	31.8	34.6	37.3	8.8	7.8	0.9	0.5
Tamil Nadu	62.4	67.4	71.9	8.0	6.7	0.8	0.5
Andhra Pradesh	76.2	84.7	94.1	11.2	11.1	1.0	0.7
Sub-total	**496.6**	**560.0**	**636.0**	**12.9**	**13.5**	**1.2**	**0.8**
	(48.2)	**(47.0)**	**(45.4)**				
Backward States							
Chattisgarh	20.8	24.3	28.6	16.8	17.6	1.6	1.1
Madhya Pradesh	60.3	72.2	87.7	19.7	21.5	1.8	1.3
Assam	26.7	30.6	35.6	14.6	16.3	1.4	1.0
Uttar Pradesh	166.2	200.8	248.0	20.8	23.9	1.9	1.4
Rajasthan	56.5	67.8	81.5	12.0	20.2	1.1	1.2
Orissa	36.8	40.7	45.3	10.6	11.3	1.0	0.7
Bihar	83.0	97.7	113.8	17.7	16.4	1.7	1.0
Jharkhand	26.9	31.5	37.4	17.1	18.7	1.6	1.2
Sub-total	**477.2**	**565.6**	**678.7**	**18.5**	**19.9**	**1.7**	**1.2**
	(46.4)	**(47.4)**	**(48.4)**				

Note: Figures in brackets indicates the total in the group to All-India population

Source: Compiled and computed from *Census of India, Population Projection of India and States (2001-2026)*, December 2006

On the other hand, population of the 8 backward states which accounted for 46.4% of the total population in India in 2001 is expected to increase to 48.4% in 2026. In absolute terms, the population of 8 backward states will increase from 477 million in 2001 to 679 million in 2026 – a rise by 202 million in 25 years. In contrast, the population of 8 forward states will increase from 497 million in 2001 to 636 million in 2026 – a rise by 139 million. Although there is a slow down in population growth rates form 1.7% during 2001-11 to 1.2% during 2011-26 even in the backward states, yet the family planning programmes have to make strong impact on them to bring it to the replacement levels. The major culprits in this regard are Madhya Pradesh and Uttar Pradesh which still have relatively much higher growth rates of population even during 2011-26. The population of these two states is expected to be about 337 million in 2026, i.e. 24% of the total population of India.

13.DEMOGRAPHIC DIVIDEND

Traditionally, the population of the country has been considered as a liability on the natural resources, but looked at from another point of view, population becomes an asset. For this purpose, it would be desirable to consider the changes in the structure of population.

While studying the population, it is customary to classify the population into three age groups. Population in the age-group below 15 years is considered as child population. The working age pertains to 15-64 years – productive age group. Age group 65 & above comprises of old persons. Both the child population and old population is dependent on the productive age group for their maintenance and sustenance.

When birth rates are high, the share of children in total population is also quite high. As a result of family welfare measures, the educational level of the society and control of infant mortality, birth rates begin to fall. In the early stage of demographic transition, death rates fall at a faster rate than birth rates. But since death rates cannot fall beyond the level of 6-7 per thousand, the fall in birth rate has a decisive influence on the structure of population. The proportion of child population begins to decline. But as a consequence of development, extension of medical facilities, control of epidemics and better nourishment, the share of old population (65 and above age group) starts increasing. Consequently, there is a decline in the dependency load of the population and increase in the share of the productive age group. This structural change is likely to occur in India during the next 25 years (2001-2006).

According to the Technical group on population projections constituted by the National Population Commission, annual growth rate of population is expected to gradually decline from 1.6 percent in 2001 to 0.9 percent in 2026. Consequently, India's population which was 1,029 million in 2001 as per the 2001 census is expected to increase to 1,400 million by 2026.

But there is a structural change expected in the population. About 60 percent of the population was in the working age group in 2001, this is expected to increase gradually and will be 68.4 percent in 2026. *Demographic Dividend* is likely to manifest in the gradual increase in the working age group of 15-64 years. Consequently, the capacity of the economy to harness the growing working age population in productive activities will determine the actual realization of the demographic dividend. Since the production structure of the Indian economy is also undergoing a transformation from agriculture to industry and services, there would be a strong need to develop new skills so that the economy can absorb the growing working age group population in newly emerging areas of development.

The actual size of the working population, however, may be different from the projected population. This may be affected by child labour below 15 years of age who are engaged in some economic activity. Similarly, quite a good number of students in the age group 15-24 may be studying in schools, colleges, universities, management training, ITIs. The extent of population in the age-group 15-24 group engaged in education and training will have to be deducted from the total youth population in 15-24 age. With the gradual reduction of child labour, the actual number of dependents

Table 29 : Selected Health parameters: India and its Neighbours

Country	*Life expectancy at birth (years)* 2010	*Under five mortality rate (per 1000 live births)* (1990)	(2009)	*Maternal Mortality Rate (per lakh live births)* (2003-08)
China	73.5	49	19	45
India	**64.4**	**123**	**67**	**450**
Nepal	67.5	145	48	830
Pakistan	67.2	128	87	320
Sri Lanka	74.4	23	15	58
Bangladesh	66.9	144	52	570

Source: UNDP, *Human Development Report 2010, world development indicators 2010.*

[illegible] increase. Taking account of these [illegible] that the working age group [illegible] indicates the number of persons who [illegible] in productive economic activities. [illegible] 35.5 percent of the child population [illegible] persons, accounting for about 40 [illegible] population in 2001, constitute non-[illegible] By 2026, child population is ex-[illegible] 23.3 percent, but old persons are [illegible] 8.3 percent. This implies that the [illegible] will decline to 31.6 percent.

[illegible] calculate the dependency load of the [illegible] country with reference to the contribu-[illegible] of population compared with its [illegible] we calculate the consumption needs of [illegible] productive age i.e. 15-64 years as one, that [illegible] group (0-15) as one-half and of an [illegible] above) as one-half, in the case of [illegible] population is composed of 35.5 [illegible] percent adults and 4.4 percent [illegible] for every 100 adults of productive age [illegible] of 124 consumer units. By 2026, [illegible] adults will decline to 117.6 consump-[illegible] words, the dependency load of the [illegible] register a decline and move nearer to the [illegible] of the developed economies.

The actual realization of the demographic dividend will depend on improving health care levels as well as increasing human resource development, especially education.

To attain the goal of population stabilization, health care is important not only to reaping the benefits of demographic dividend in terms of a healthy workforce, but also reducing birth rate and promoting general welfare. Population stabilization can be achieved by taking care of infant mortality, safe motherhood and increasing contraception. The reduction of malnutrition, in the over-all population, especially among children and women can also contribute to the growth of a healthy and stable population. In this regard, wide disparities between rich and poor states, between urban-rural population, male-female population will require remedial action.

India's record on health parameters is not only way behind China, it does not compare favourably, even with respect to Sri Lanka. Not only that even Nepal and Bangladesh have a better record in some health parameters. There is a need to strengthen health care services in India so as to rapidly move to the goal of a healthy and stable population. This will also help in the realization of demographic dividend.

Table 28 : Population Projections in Millions

	2001	2006	2011	2016	2021	2026
[illegible]	1,029	1,112	1,193	1,269	1,340	1,400
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
[illegible]	365	357	347	340	337	327
	(35.5)	(32.1)	(29.1)	(26.8)	(25.1)	(23.3)
[illegible]	619	699	780	851	908	957
	(60.1)	(62.9)	(65.4)	(67.1)	(67.8)	(68.4)
[illegible]	45	56	66	78	95	116
	(4.4)	(5.0)	(5.5.)	(6.1)	(7.1)	(8.3)

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CHAPTER

5

HUMAN DEVELOPMENT IN INDIA

Economic growth contributes most to poverty reduction when it expands the employment, productivity and wages of poor people and when public resources are channelled to promoting human development. ... A virtuous cyle of economic growth and human development arises when growth is labour using and employment-generating and when human skills and health improve rapidly.

UNDP, *Human Development Report* (1997)

1. THE CONCEPT AN MEASURES OF HUMA DEVELOPMENT

Elucidating the concept of human developme UNDP *Human Development Report (1997)* describes it "the process of widening people's choices and the level well-being they achieve are at the core of the notion human development. Such theories are neither finite n static. But regardless of the level of development, the thr essential choices for people are to lead a long and healt life, to acquire knowledge and to have access to the sources needed for a decent standard of living. Hum development does not end there, however. Other choic highly valued by many people, range from political, ec nomic and social freedom to opportunities for being creati and productive and enjoying self-respect and guarantee human rights".[1]

Elucidating further, HDR (1997) states: "Incom clearly is only one option that people would like to hav though an important one. But it is not the sum total of th lives. Income is also a means, with human development t end".[2]

Ever since the publication of the *Human Develo ment Report 1990* under the guidance of Mahbul-ul-Ha efforts have been made to devise and further refine measu of human development. Three measures have been deve oped. They are Human Development Index (HDI), Gend related Development Index (GDI) and Human Pove Index (HPI).

A. HUMAN DEVELOPMENT INDEX (HD

HDI measures the average achievement in three ba dimensions of human development:

- A long and healthy life as measured by life expecta at birth.
- Knowledge as measured by the adult literacy rate (w two third weight) and the combined primary, second and tertiary gross enrolment ratio (with one third weig
- A decent standard of living as measured by GDP capita (PPP US$).

Before calculating HDI, an index for each of the th dimensions is created. For this purpose, maximum minimum values are chosen for each indicator.

1. UNDP, *Human Development Report* (1997), p.13-14

2. *Ibid*, p.14.

TABLE 1: Maximum and Minimum Values for Calculating HDI

Indicator	Maximum Value	Minimum Value
Life expectancy at birth	85	25
Adult literacy rate	100	0
Gross enrolment ratio	100	0
GDP per capita (PPP US$)	40,000	100

Performance in each dimension is expressed as a value between 0 and 1 by applying the following formula

$$\text{Dimension Index} = \frac{\text{Actual value} - \text{minimum value}}{\text{Maximum value} - \text{minimum value}}$$

The HDI is calculated as a simple average of the dimension indices.

In Table 2, we present Human Development Index for 2011 for selected countries as reported in HDR2011. Countries have been grouped under three categories: (*i*) Countries in the HDI range 0.8 and above are in the very High Human Development group; (*ii*) Countries in HDI range 0.7 to 0.8 are in the High Human Development group; (*iii*) Countries in the HDI range 0.5 to 0.7 are in the range of Medium Human Development group and (*iv*) Countries in the HDI range less than 0.5 are in the Low Human Development group.

The data has been collected for 187 countries. Among them 47 countries were in the Very High Human Development range, 47 countries were in High Human Development range, 47 countries were in Medium Hu-

TABLE 2 : Human Development Index (2011) for selected countries

World Rank	Country	Life Expectance at Birth (years) (2011)	Adult Literacy (age 15 and above) (%) (2001-10)	Gross Enrollment ratio (%) Primary	Secondary	Tertiary	GDP per capita (PPP US$ (2009)	Human Development Index 2011
	Very High Human Development (HDI 0.8 and above)							
1	Norway	81.1	99.0	98.7	110.4	73.5	56,214	0.943
4	United States	78.5	99.0	98.2	93.6	85.9	45,989	0.910
6	Canada	81.0	99.0	98.4	102.2	62.3	37,808	0.908
12	Japan	83.4	99.0	102.3	101.0	58.6	32,418	0.901
15	South Korea	80.6	99.0	104.3	97.2	100.0	27,100	0.897
31	United Kingdom	80.2	99.0	1.6.4	99.0	59.0	35,155	0.863
	High Human Development (HDI 0.7 to 0.8)							
56	Saudi Arabia	73.9	86.1	98.9	96.8	32.8	23,480	0.770
57	Mexico	77.0	93.4	116.6	90.2	27.9	14,258	0.770
61	Malaysia	74.2	92.5	94.6	68.7	36.5	14,012	0.761
66	Russian Federation	68.8	99.5	96.8	84.8	77.2	18,932	0.755
73	Venezuela	74.4	95.2	103.2	82.1	78.2	12,323	0.735
84	Brazil	73.5	90.0	127.5	100.8	34.4	10,367	0.718
88	Iran	73.0	85.0	102.8	83.1	36.5	11,558	0.707
	Medium Human Development (HDI 0.5 to 0.7)							
97	Sri Lanka	74.9	90.6	96.9	87.0	—	4,772	0.691
101	China	73.5	94.0	112.7	78.2	24.5	6,828	0.687
112	Philippines	68.7	95.4	110.1	82.5	28.7	3,542	0.644
113	Egypt	73.2	66.4	101.1	67.2	28.5	5,673	0.644
124	Indonesia	69.4	92.2	120.8	79.5	23.5	4,199	0.617
128	Vietnam	75.2	92.8	104.1	66.9	9.7	2,953	0.593
134	India	65.4	62.8	116.9	69.0	13.5	3,296	0.547
145	Pakistan	63.4	55.5	85.1	33.1	5.2	2,609	0.504
146	Bangladesh	68.9	55.9	95.1	42.3	7.9	1,416	0.500
	Low Human Development (HDI less than 0.5)							
156	Nigeria	59.3	60.8	89.5	30.5	10.1	2,203	0.459
186	Niger	54.7	28.7	66.6	13.3	1.4	690	0.295

Source: UNDP, *Human Development Report 2011.*

man Development range and 46 countries were in Low Human Development range. India which was at No. 138 in HDI in 1994 had improved its position to No. 128 in 2005, but in 2011 its position slipped to 134.

In Table 3, we present the HDI trends for selected countries. A close perusal of the data for the nearly three decades (1975 to 2011) reveals that all countries are making efforts in varying degrees to improve their human development indices. Among the high performers during 1980-2011 can be considered as Iran, China, South Korea, Egypt and India, and to a certain extent Pakistan and Bangladesh. If the trend is maintained, several medium HDI countries will enter the high HDI group and several low HDI countries will join the medium HDI range. This is a welcome development. India has improved its HDI index from 0.412 in 1980 to 0.612 in 2007. Due to change in methodology there is a fall in HDI for India in 2011, which should not be taken as downfall, as there is no downgrade in the ranking of India, which continues to be 134 in 2011. It is still a long way to go, before India would enter the high HDI group.

B. Human Development Report, 2010 : Refining the Human Development Index

UNDP has been publishing Human Development Report annually since 1990. Twenty years of experience of this by UNDP has been appreciated world over and [illegible] helped the governments to design suitable policies [illegible] the real uplifting of standard of living of the people [illegible] large. But at the same time the measurement of Human Development Index (HDI) has also been subject to [illegible] criticism with regard to its construction and composition. Suggestion with regard to inclusion [illegible] geneder equity, indicators in the farm of consumption [illegible] various items for the purpose of measurement have been common in this regard. Though UNDP has been publishing data about various variables, which have bearing on the human development of the nations, inclusion of the same in the measurement of HDI has been avoided by UNDP. HDR 2010 says in this regard "Many concerns are valid. But the objective is not to build an unassailable indicator of well-being – it is to redirect attention towards human-centered development and to promote debate over how we advance the progress of societies."

Human Development Index (HDI) has been an aggregate measure of progress in three dimensions – health, education and income. HDR 2010 though [illegible] all the three dimensions, but in modified manner. In [illegible] report UNDP has modified the indicators used to measure progress in education and income. The manner in which they are aggregated has also been changed. With regard to knowledge dimension earlier measurement was based on literacy and gross enrolment. This has

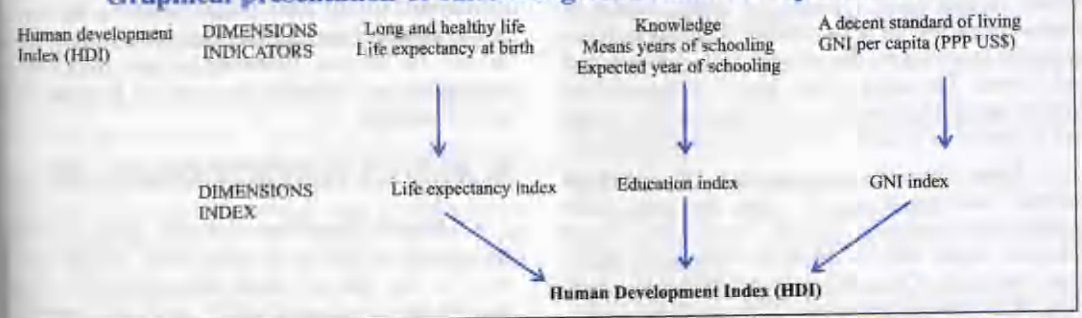
Table 3 :Human Development Index Trends for selected countries (1975–2011)

Averaged in the descending orders on the Basis of 2011

HDI Rank	1975	1985	1995	2004	2007	2011
Very High Human Development						
1. Norway	0.868	0.898	0.936	0.968	0.971	0.943
4. United States	0.867	0.901	0.929	0.951	0.956	0.910
6. Canada	0.869	0.909	0.934	0.961	0.966	0.908
12. Japan	0.857	0.895	0.925	0.953	0.960	0.901
15. South Korea	0.707	0.780	0.855	0.921	0.937	0.897
28. United Kingdom	0.845	0.863	0.921	0.946	0.947	0.863
High Human Development						
56. Saudi Arabia	0.603	0.673	0.741	0.812	0.829	0.770
57. Mexico	0.689	0.755	0.782	0.829	0.854	0.770
61. Malaysia	0.615	0.695	0.760	0.811	0.843	0.761
66. Russian Federation	...	...	0.770	0.802	0.817	0.755
73. Venezuela	0.718	0.740	0.767	0.792	0.844	0.735
84. Brazil	0.645	0.698	0.747	0.800	0.812	0.71
88. Iran	0.556	0.610	0.694	0.759	0.782	0.707
Medium Human Development						
97. Sri Lanka	0.607	0.681	0.727	0.743	0.759	0.691
101. China	0.525	0.594	0.683	0.777	0.772	0.687
112. Philippines	0.654	0.693	0.736	0.771	0.751	0.644
113. Egypt	0.439	0.540	0.611	0.708	0.703	0.644
124.Indonesia	0.468	0.583	0.663	0.728	0.734	0.617
128.Vietnam	...	0.581	0.660	0.733	0.725	0.593
134. India	**0.412**	**0.476**	**0.546**	**0.619**	**0.612**	0.547
145. Pakistan	0.363	0.419	0.492	0.551	0.572	0.504
146. Bangladesh	0.345	0.389	0.452	0.547	0.543	0.500
Low Human Development						
156. Nigeria	0.318	0.386	0.418	0.470	0.511	0.459
186. Niger	0.236	0.242	0.256	0.374	0.340	0.295

Source: Compiled and computed from UNDP, *Human Development Report 2011 and earlier issues.*

Graphical presentation of calculating the human develpment index.



en replaced by mean years of schooling and expected rs of schooling respectively. Expected years of ooling means the years of schooling that a child can pect to receive given current enrolment rates. Mean rs of schooling is estimated more frequently for re countries and can discriminate better among ntries, while expected years of schooling is consis- with the reframing of this dimension in terms of ns.

ble 3A : Human development index for selected counteries (Modified Measurement) (2010)

Rank	2010 (Modified Mesurement)
High Human Development	
Norway	0.938
United States	0.888
Canada	0.884
Japan	0.902
South Korea	0.849
United Kingdom	0.877
Human Development	
Saudi Arabia	0.750
Mexico	0.696
Malaysia	0.744
Russian Federation	0.752
Iran	0.719
Brazil	0.699
Venezeula	0.702
Human Development	
China	0.663
Srilanka	0.658
Philippines	0.638
Egypt	0.600
Indonesia	0.572
Vietnam	0.620
India	0.519
Pakistan	0.490
Human Development	
Bangladesh	0.468
Nigeria	0.423
Niger	0.261

Complied and computed from UNDP Human devel- Report 2010.

To measure the standard of living gross national income (GNI) per capita replaces the earlier variable namely gross domestic product (GDP) per capita. The argument of UNDP in this regard is "in a globalized world differences are often large between the income of a country's residents and its domestic production. Some of the income residents earn is sent abroad, some residents receive international remittances and some countries receive sizeable aid flows. For example, because of large remittances from abroad, GNI in the Philippines greatly exceeds GDP, and because of international aid, Timor-Leste's GNI is many times domestic output."

With regard to health, UNDP says that after investigating alternative measures of the ability to enjoy a healthy life, it found no viable and better alternative to life expectancy at birth. Thus as an indicator of health, life expectancy at birth has been retained.

UNDP has also changed the method to aggregate the three dimensions. Earlier a simple mean of three dimensions was taken to measure HDI. A key change in HDR 2010 is that of shift to a geometric mean (which measures the typical value of a set of numbers); thus in 2010 the HDI is the geometric mean of the three dimension indices. UNDP claims that, "poor performance in any dimension is now directly reflected in the HDI, and there is no longer perfect substitutability across dimensions. This method captures how well rounded a country's performance is across the three dimensions. As a basis for comparisons of achievement this method is also more respectful of the intrinsic differences in the dimensions than a simple average is. It recognizes that health, education and income are all important, but also that it is hard to compare these different dimensions of well-being and that we should not let changes in any of them go unnoticed."

The practice of using of log of incomes has been maintained as income is instrumental to human development but higher incomes have a declining contribution to human development. Table 3A presents human development index for selected countries and these countries have been arranged in a descending order of HDI. Further these countries have been categorised as high human development, medium human development and low human development.

C. GENDER INEQUALITY INDEX (GII)

The Gender Inequality Index (GII) is another newly introduced index in the 2010 Global Human

Development Report and outlines disadvantages for women in four areas: reproductive health, education, empowerment and the labour market. It highlights losses in human development due to inequalities between men and women. The index ranges from 0, indicating that women and men fare equally, to 1, indicating that women fare as poorly as possible in all measured dimensions.

Table 4 provides data both for HDI and GII for selected countries. It may be noted that near gender equality exists in Norway, Canada, United States, United Kingdom, Japan, Mexico, Malaysia, Venezuela, Philippines, Sri Lanka, China, Vietnam and Indonesia. Countries, which indicate gender inequality, are Saudi Arabia, Pakistan, Iran, India, Egypt and Nigeria.

Table 4 : Comparison of Human Development Indices (2011) Some Selected Countries

Rank Countries	*Human Develop-ment (HDI)*	*Gender Inequality Index*	*Multi Dimen-sional Poverty Index**	*Population below Income Poverty line PPP US$ 1.25 a day*
1 Norway	0.943	0.075	.....	0.0
4 United States	0.901	0.299	.....	0.0
6 Canada	0.908	0.140	.....	0.0
12 Japan	0.901	0.123	.....	0.0
15 South Korea	0.897	0.111	.....	0.0
28 United Kingdom	0.863	0.209	.....	0.0
57 Mexico	0.770	0.448	0.015	3.4
61 Malaysia	0.761	0.286	.....	0.0
73 Venezuela	0.735	0.447	.....	3.5
84 Brazil	0.718	0.449	0.011	3.8
88 Iran	0.707	0.485	.....	1.5
97 Sri Lanka	0.691	0.419	0.021	7.0
101 China	0.687	0.209	0.056	15.9
112 Philippines	0.644	0.427	0.064	22.6
113 Egypt	0.644	..	0.024	2.0
124 Indonesia	0.617	0.505	0.095	18.7
128 Vietnam	0.593	0.305	0.084	13.1
134 India	0.547	0.617	0.283	41.6
145 Pakistan	0.504	0.573	0.264	22.6
146 Bangladesh	0.500	0.550	0.292	49.6
156 Nigeria	0.459	..	0.310	64.4
186 Niger	0.295	0.724	0.642	43.1

* Multi Dimensional Poverty Index as indicated is calculated for different years

Source: Compiled from UNDP, *Human Development Report 2011*

However, there is a greater awareness in the world about gender inequality and efforts are being made to reduce gender inequality by promoting the education of females and giving them a better status in the family. Some countries have lagged behind due to cultural biases against the females. However, in them also, women movements are promoting the cause of bringing about gender equality.

D. HUMAN POVERTY INDEX (HPI)

Human Development Report 1997 introduced the concept of Human Poverty Index, which concentrates on deprivation in three essential elements of human life already reflected in HDI –longevity, knowledge and a decent living standard.

The first deprivation is vulnerability to death at a relatively early age and is represented in the HPI by the percentage of people expected to die before age 40.

The second deprivation is related to knowledge and is measured by the percentage of adults who are illiterate.

The third deprivation relates to a decent standard of living, in particular, overall provisioning. This is represented by a composite of three variables – the percentage of people with access to (a) health services, (b) to safe water, and (c) the percentage of malnourished children under five.

It would be relevant to understand why income does not figure in Human Poverty Index (HPI). According to the HDR (1997), the logic underlying the construction of economic provisioning is that the GNP included in the HPI is actually a combination of private and public facilities, since public services are paid out of aggregate national income.

One of the problems in assessing the prevalence of income poverty is that the use of the same poverty line in different countries can be very misleading because of the variation in "necessary" commodities. Depending upon the prevailing pattern of consumption – clothing, accommodation and such tools of communication and interaction as radios and telephones – many provisions are taken to be essential for social participation in one community without being treated as such in other communities. As a result, the minimum income needed to escape social estrangement can be quite different between communities.

For this purpose, the HPI decided to use the prevalence of malnutrition of children which is relatively easier to measure and for which data are more readily available, along with access to health services and safe water. Combining these three variables, it was thought would provide an adequate and broad picture about human poverty.

For selected OECD countries, a different human poverty index has been used. This includes four variables

(i) Probability at birth not surviving to age 60.

(ii) Percentage of adults lacking functional literacy

(iii) Percentage of people living below the poverty line US $ 11 a day (1994 PPP)

(iv) Long-term unemployment rate (12 months or more) as the determinant of social exclusion

HPI is the average of these four variables. A close scrutiny of Human Poverty Index for developing countries reveals the existence of high value of HPI in Niger (70.1%), Bangladesh (36.1%), Pakistan (33.4%). Even India which has a medium HDI, has a very high HPI (29.6%) and Egypt with HPI of 23.4%.

In Table 4, HPI and Income poverty index (measured by percentage of population below US $ 1.25 a day) have been juxtaposed. It may be noted that in the case of Niger, 64.4 per cent of the population suffers from income poverty, but HPI index is 36.2%. However, in the case of Bangladesh, the situation is totally reversed—HPI 36.1, but income-poor population is 49.6 per cent. In the case of India, proportion of population below international income poverty line is 41.6%, but Human Poverty Index is 28.0. Human Poverty Index is thus a more comprehensive measure which takes into account differences in degrees of deprivation measured by three variables listed above, while the income poverty line, though important, is based on only one variable.

Reviewing the progress of the world in achieving the goals of human development, the UNDP *Human Development Report (2001)* mentions: "At the United Nations Millennium Summit, world leaders agreed on a set of quantifiable and monitorable goals for development and poverty eradication to achieve by 2015. Progress the world has mad over the past 30 years shows that these goals are attainable. But many developing countries will not achieve them without much faster progress. While 66 countries are on track to reduce under five mortality rates by two-thirds, 93 countries with 62% of the world's people are lagging far behind or slipping. Similarly, while 50 countries are on track to achieve the safe water goal, 83 countries with 70% of the world's

UNITED NATIONS MILLENNIUM DECLARATION FOR 2015

- To halve the proportion of the world's people living on less than $ 1 a day
- To halve the proportion of world's people suffering from hunger
- To halve the proportion of world's people without access to safe drinking water
- To achieve universal completion of primary schooling
- To achieve gender equality in access to education
- To reduce maternal mortality ratios by three-quarters
- To reduce under-five mortality rates by two-thirds
- To halt and begin to reverse the spread of HIV/AIDS, malaria and other major diseases

HDI, HP-1, HPI-2 and GDI-SAME COMPONENTS, DIFFERENT MEASUREMENT

	Longevity	*Knowledge*	*Decent Standard of Living*	*Participation or*
HDI	Life expectancy at birth	1. Adult literacy rate 2. Combined enrolment ratio	GDP per capita (PPP US $)	...
HPI-1	Probability at birth of not surviving to age 40	Adult illiteracy rate	Deprivation in economic provisioning, measured by 1. Percentage of people not using improved water sources 2. Percentage of children under five who are underweight	....
HPI-2	Probability at birth of not surviving to age 60	Percentage of adults lacking functional literacy skills	Percentage of people below the income poverty line (50% of median disposable income)	Long-term unemployment rate (12 months or more)
GDI	Female and male life expectancy at birth	1. Female and male adult literacy rates 2. Female and male combined primary, secondary and tertiary enrolment ratios	Estimated female and male earned income, reflecting women's and men's command over resources	...

Source: UNDP, *Human Development Report 2001*

people are not. More than 40% of the world's people are living in countries on track to halve income poverty by 2015. Yet they are in just 11 countries that include China and India (with 38% of the worlds people), and 70 countries are far behind or slipping. Without China and India, only 9 countries with 5% of the world's people are on track to halve income poverty."[3]

2. HUMAN DEVELOPMENT INDEX FOR VARIOUS STATES IN INDIA

Many of India's states can be compared with medium-size countries. It would, therefore, be appropriate to construct human development index (HDI) for various states so as to understand the differences in HDI among them. The UNFPA published a report on human development in India in a book entitled ***"India: Towards Population and Development Goals"*** in 1997. Mahbub-ul-Haq, the main architect of UNDP Human Development Report in his book ***Human Development in South Asia, 1997*** also carried out a study of human development in the various states of India. The UNFPA in its study used three dimensions of Human Development: (i) The index of life expectancy, (ii) the index of per capita income i.e. per capita state domestic product, and (iii) the index of education based on literacy rate and school enrolment ratio. Mahul-ul-Haq also considered similar three dimensions of human development with a minor difference that he used only literacy rate in his index of education in the study while neglecting the indicator of school enrolment ratio.

Dr. Biswajeet Guha has questioned both these studies by asserting that they neglected many important aspects of human development. He made an attempt to overcome this inadequacy by including three additional dimensions of human development, such as, the quality of life, poverty eradication and urbanisation. Thus, on the basis of six dimensions, Dr. Guha constructed four indices of human development. All these indices pertained to the period 1988-94. Dr. Guha used the UNDP, Human Development Report methodology for the purpose.

The index of quality of life was constructed bas on the five indicators: (i) Access to safe drinking wat (ii) electricity connection, (iii) enjoyment of two squ meals a day throughout the year, (iv) residence in ***"pucc houses"*** and (v) availability of beds in public hospit to total population.

The index of poverty eradication has been p pared with respect to the eradication of poverty in t total population of the state. The index has been deve oped on the basis of proportion of population above t poverty line as outlined by the Expert Group of t Planning Commission.

The index of urbanisation for each state has be prepared on the basis of statewise data derived from t census of 1991. In diagram 1, we have indicated t different dimensions of human development used by D Biswajit Guha in his study as HDI_1, HDI_2, HDI_3, and HD

In table 6, we present the results of the thre studies, viz., UNFPA, Mahbub-ul-Haq and Guha developing HDI mainly based on UNDP, Human Deve opment Report methodology.

HDI data on the basis of these studies with min variations reveals Kerala, Maharashtra, Punjab, Ta Nadu and Haryana – five states at the top. By ignorin school enrolment ratio, Haq's study provides differe ranks to the states, but UNFPA study ranks the sta more or less in the same order. At the bottom are fi states, viz., Madhya Pradesh, Orissa, Rajasthan, Ut Pradesh and Bihar showing poor HDI values. In th middle range of HDI are five states, viz., Gujar Karnataka, West Bengal, Andhra Pradesh and Assam

The range of HDI values in UNFPA study var from 62.8 for the top most Kerala to 34.0 for Bihar. I Haq's study, the variation is from 59.7 in case of Ker to 34.1 for Madhya Pradesh and in Guha's study fro 74.3 in the case of Kerala to 41.1 in the case of Ut Pradesh.

Biswajit Guha, however, has developed four ind ces of HDI as HDI_1, HDI_2, HDI_3, and HDI_4. HDI_1 is base on UNDP methodology as given in HDR, but he h enlarged the scope of human development index b

Human Development Indices

(i) Life Expectancy (ii) Per capita state domestic product (iii) Literacy rate and gross enrolment ratio	HDI_1			
(iv) Quality of life		HDI_2	HDI_3	HDI_4
(v) Population above the Poverty line				
(vi) Urbanisation				

Diagram 1

3. UNDP, *Human Development Report* (2001), p.1

including three more dimensions: quality of life, poverty eradication and urbanisation. The results of Guha's study are summarised in table 7. The most comprehensive index of human development in Guha's study is HDI_4. Comparing the results of HDI_1 and HDI_4 reveals several sharp variations in these values. One unique feature, however, is that the top rank in all the four indices is with Kerala. But the bottom rank and other ranks for different states have shown divergences. For instance, as against rank No. 2 for Maharashtra in HDI_1, inclusion of poverty eradication and urbanisation dimensions shifts its rank to position No.5

However, opposite is the case with Andhra Pradesh whose rank stood at No. 9 in HDI_1 but improved to No. 6 in HDI_4. In case of Orissa it ranked at No. 11 in HDI_1 but shifted to the bottom most rank No. 15 in HDI_4.

There is no double that Dr. Guha in his study has enlarged the number of dimensions and has included some additional and very meaningful dimensions such as poverty eradication, extent of urbanisation, but still there is scope for including some more relevant dimensions which have a bearing on human development. Dr. Guha rightly mentions: "the non-availability of some important official statistical data, say, on sanitation, per capita availability of food, clothing, footwear, etc. of all the states separately could not represent the true picture of the quality of life of rural and urban population as well as that of the entire population of each state in the present study. On account of similar non-availability of official statistical data of all the states, it was not possible to consider the factors, like statewise growth of employment opportunities, progress of land reform etc... so, there are always some conceptual and practical limitations involved in this type of analysis. However, in spite of all these limitations, it can be stated that even if some factors are excluded from the analysis of human development, these will have some impact upon the per capita state domestic product. So per capita income will still act as an important index of development"[4] Similar views have also be expressed in Human Development Reports regarding the inclusion of dimensions and indicators of human development. According to *Human Development Report 2001*, the HDI is a summary, not a comprehensive measure of human development."[5] But, these indices do provide "an approximate picture", if not a complete and true picture. It is better to have an approximate picture than not to have any picture at all. Various countries, India being no exception, are continuously making efforts to improve and enlarge the scope of available statistical information, but this should not prevent researchers to develop indices of human development.

4. Guha, Biswajeet, *Human Development of India*—A Study of Inter-State Disparity, *Indian Economic Association Conference* Volume, 1998, p.125
5. UNDP, *Human Development Report (2001)*, p.14.

TABLE 6 : Major State-wise Alternative Studies of Human Development in India (HDI)

Value of HDI as studied by

Rank State	*UNFPA*	*Haq*	*Guha (1988-94)*
1. Kerala	62.79(1)	59.7(1)	74.33(1)
2. Maharashtra	55.49(2)	51.3(3)	59.24(2)
3. Punjab	54.86(3)	51.6(2)	57.36(4)
4. Tamil Nadu	51.11(4)	43.2(8)	57.53(3)
5. Haryana	50.56(5)	47.4(4)	53.75(5)
6. Gujarat	47.82 (6)	45.8(5)	52.48(6)
7. Karnataka	46.83(7)	44.2(7)	52.24(7)
8. West Bengal	45.37(8)	45.2(6)	51.33(8)
9. Andhra Pradesh	41.28(9)	39.3(9)	46.82(9)
10. Assam	39.48(10)	37.4(10)	44.25(10)
11. Madhya Pradesh	36.71(11)	34.1(15)	41.56(14)
12. Orissa	37.25(12)	36.8(11)	43.18(11)
13. Rajasthan	37.11(13)	35.03(13)	42.56(12)
14. Uttar Pradesh	35.51(14)	34.3(14)	41.06(15)
15. Bihar	34.05(15)	35.04(12)	42.14(13)

Note: 1. States have been arranged on the basis of UNFPA study in the descending order of HDI
2. Figures in brackets indicate respective statewise ranks

SOURCE: 1. UNFPA, India: *Towards Population and Development Goals*, OUP, 1997
2. Mahbub-ul-Haq, *Human Development in South Asia*, OUP, 1997
3. Biswajit Guha, Human Development in India-Study of Inter-state Disparity, Indian Economic Association, *Conference Volume* (1998)

TABLE 7 :Major State-wise Alternative Studies of Human Development in India

State	HDI_1	HDI_2	HDI_3	HDI_4
1. Kerala	74.33(1)	73.14(1)	74.47(1)	73.54(1)
2. Maharashtra	59.24(2)	59.67(3)	61.27(5)	60.02(5)
3. Punjab	57.36(4)	62.16(2)	70.29(2)	69.26(2)
4. Tamil Nadu	57.53(3)	57.99(4)	59.07(6)	57.99(7)
5. Haryana	53.75(5)	55.78(5)	65.78(3)	65.11(3)
6. Gujarat	52.48(6)	55.24(6)	63.30(4)	62.47(4)
7. Karnataka	52.24(7)	53.52(7)	55.79(9)	54.64(9)
8. West Bengal	51.33(8)	52.07(8)	56.84(8)	55.84(8)
9. Andhra Pradesh	46.82(9)	48.85(9)	58.51(7)	58.07(6)
10.Assam	44.25(10)	43.95(11)	54.71(10)	54.49(10)
11.Madhya Pradesh	41.56(14)	43.45(12)	46.74(12)	45.81(12)
12.Orissa	43.18(11)	42.92(14)	43.50(15)	42.77(15)
13.Rajasthan	42.56(12)	45.43(10)	54.08(11)	53.64(11)
14.Uttar Pradesh	41.06(15)	42.72(15)	45.91(13)	45.08(13)
15.Bihar	42.14(13)	43.24(13)	45.12(14)	44.61(14)

Note: States have been arranged on the basis of UNFPA study in the descending order of HDI.

SOURCE: Biswajit Guha, *Op. Cit.*, table 6

3. NATIONAL HUMAN DEVELOPMENT REPORT (2001)

Planning Commission brought out the *National Human Development Report (2001)* which has presented statewise as well as All-India Human Development Indices for 1981, 1991 and 2001. Due to limitations of data, HDI for 2001 has been calculated for 15 major states.

Although National Human Development Report (NHDR) also uses the same broad attainment dimensions as the UNDP, Human Development Report, viz., longevity, educational attainment and economic attainment, it has made departures from UNDP indicators. A synoptic view of the indicators used in NHDR is given below:

NHDR has assigned weights to various indicators while calculating the composite HDI. For instance, for health index, life expectancy has been given a weight of 65 per cent as against only 35 per cent for infant mortality rate. Similarly, for composite index of educational attainment, while literacy rate has been given a weight of 65 per cent, the indicator capturing intensity of form education (based on current enrolment rates in succe sive classes at school from I to XII) has been given weight of 35 per cent. In case of indicator on econom attainment, namely, inequality adjusted per capita co sumption expenditure, an adjustment for inflation o the period has been made to make it amenable for inte temporal and inter-state comparisons. The three indic of longevity, educational attainment and economic d velopment have been given equal weights in the fi calculation of Human Development Index on the patte of the UNDP methodology.

For developing the various indices, the NHD has laid down the following scaling norms : -

The scaling norms are such that they support inte temporal comparisons for a reasonable period of ti starting 1980. The scaling norms that have been selec would remain valid at least till about 2020 at a reasonab improved pace of human development, according NHDR (2001).

A unique feature of the Report is that it h calculated HDI for rural and urban areas separately 1981 and 1991, the periods for which data was availab Due to non-availability of data, HDI for selected m states for 2001 has been done.

TABLE 8 : HDI— Departures from UNDP Indicators

UNDP—Indicators	*Attainments*	*NHDR—INDICATORS*
Life Expectancy at Birth	Longevity	(i) Life Expectancy at Age 1, and (ii) Infant Mortality Rate
Adult Literacy Rate combined with Enrolment Ratio	Educational Attainment	(iii) Literacy rate for age 7 and above, and (iv) Intensity of Formal Education
Real GDP Per capita in PPP $	Economic Attainment	(v) Per capita real consumption expenditure adjusted for inequality

SOURCE: *National Human Development Report (2001), p. 23.*

TABLE 9: Scaling Norms for HDI

Indicator	*Minimum*	*Maximum*
Consumption Expenditure (per capita per month)	₹ 65	₹ 325
Literacy for 7+ years	0	100
Adjusted intensity of formal education (Estimated)	0	7
Life expectancy at age one	50 years	80 years
Infant mortality rate	20 per 1000	—

SOURCE: *National Human Development Report 2001,* p.133

Table 10: HDI for Rural and Urban Areas All India

	1981	1991	2001
[illegible]	0.263	0.340	—
[illegible]	0.442	0.511	—
[illegible]ed	0.302	0.381	0.472

Source: *National Human Development Report 2001.*

It may be noted that HDI for India has been [illegible]ing from 0.302 in 1981 to 0.381 in 1991 and [illegible] to 0.547 in 2011. Since HDI was less than 0.500 [illegible] 2001, India continued to be a low HDI country [illegible]d by international standards as late as 2001.

Table 11 for provides HDI values for 1981, 1991, [illegible] and 2008 for 15 major states of India, along with [illegible] ranks. NHDR has drawn the following conclusions [illegible] the data for HDI for the last two decades:

1. HDI varies between 0.790 for Kerala and 0.362 [illegible] Orissa in 2008 while Kerala can be ranked as a [illegible] HDI state, Orissa and Bihar presents a dismal [illegible] of HDI even among low HDI states.

2. Among the better-off states, Punjab, Tamil [illegible], Maharashtra, Haryana, Gujrat etc., had a HDI [illegible] of above 0.50. At the other end, Uttar Pradesh, [illegible]hya Pradesh, Bihar, Orissa etc., had values less [illegible] 0.400.

3. By and large, the states maintained their relative [illegible]ns between 1981 and 2008 with a few exceptions:

(a) Tamil Nadu improved its ranking by 3 posi[illegible] from 7 to 4.

(b) However, the position of Orissa deteriorated [illegible] 11 to 15.

(c) Bihar, Uttar Pradesh and Madhya Pradesh continued to be tail-enders in HDI race.

4. The economically better-off states are also the ones with relatively better performance on the HDI. Similarly, the economically poor states show poor performance on the HDI. However, the relationship between the HDI and the level of development does not show any correspondence among the middle income states in the country.

5. Inequality across states on the HDI is less than the income inequality as captured in the state domestic product. The ratio between the maximum and minimum per capita NSDP for 2007-08 works out to be 4.60, but between maximum and minimum HDI is 2.18. This only underlines the fact that though economic attainment represented by per capita NSDP or monthly per capita expenditure is an important variable, yet states can achieve other attainments in terms of longevity and education by pushing forth effective policies in these areas. This explains the highest rank for HDI in a state like Kerala which is middle income level state. It is also true that Maharashtra with Rank 1 in terms of NSDP was at Rank No. 3 in terms of HDI in 2008.

Rural-urban Differences in HDI

NHDR has drawn attention to the rural-urban disparity in HDI in India. At the All-India level in 1981, rural-HDI was 0.263 and urban was 0.442. Thus, the urban-rural ratio was 1.68. In 1991, rural-HDI to 0.340 and urban-HDI increased to 0.511. The urban-rural ratio was 1.50. This indicates that urban-rural disparity has

Table 11 : Human Development Index for India (Combined) —Selected States

[illegible]	1981 Value	1981 Rank	1991 Value	1991 Rank	2001 Value	2001 Rank	Per capita* NSDP 2010-11	2007-08 Value	2007-08 Rank
[illegible]	0.500	(1)	0.591	(1)	0.638	(1)	49,873	0.790	(1)
[illegible]jab	0.411	(2)	0.475	(2)	0.537	(2)	44,752	0.605	(2)
[illegible]il Nadu	0.343	(7)	0.466	(3)	0.531	(3)	51,928	0.570	(4)
[illegible]harashtra	0.363	(3)	0.452	(4)	0.523	(4)	62,729	0.572	(3)
[illegible]ryana	0.360	(5)	0.443	(5)	0.509	(5)	59,221	0.552	(5)
[illegible]jarat	0.360	(4)	0.431	(6)	0.479	(6)	52,708	0.527	(6)
[illegible]nataka	0.346	(6)	0.412	(7)	0.478	(7)	39,301	0.519	(7)
[illegible]t Bengal	0.305	(8)	0.404	(8)	0.472	(8)	32,228	0.492	(8)
[illegible]sthan	0.256	(12)	0.347	(11)	0.424	(9)	26,436	0.434	(11)
[illegible]dhra pradesh	0.298	(9)	0.377	(9)	0.416	(10)	40,366	0.473	(9)
[illegible]ssa	0.267	(11)	0.345	(12)	0.404	(11)	25,708	0.362	(15)
[illegible]dhya Pradesh	0.245	(14)	0.328	(13)	0.394	(12)	22,382	0.375	(13)
[illegible]r Pradesh	0.255	(13)	0.314	(14)	0.388	(13)	17,349	0.380	(12)
[illegible]am	0.272	(10)	0.348	(10)	0.386	(14)	21,406	0.444	(10)
[illegible]ar	0.237	(15)	0.308	(15)	0.367	(15)	13,632	0.367	(14)
[illegible] India	0.302		0.381		0.472		35,993	0.467	

Note: States have been rearranged in the descending order on the basis of HDI Value for 2001.
*CSO, 2012. (at 2004–05 prices)
Source: Planning Commission (2002), *National Human Development Report (2001)*

shown a decline from 1.68 to 1.50, which though not very sharp, is significant in the sense that rural areas are receiving relatively better attention. (Refer table 10).

However, at the level of the states, sharp variations were observed in terms of urban-rural disparity in HDI. If we classify states on the basis of urban-rural HDI ratio, then States/UTs which show low rural-urban disparity (i.e. less than 1.25) are Kerala, Goa, Pondicherry, Delhi, Andaman & Nicobar islands, Manipur and Lakshadweep. However, states with medium level urban-rural HDI disparity (Between 1.25 to 1.50) are Mizoram, Nagaland, Punjab, Tamil Nadu, Maharashtra, Haryana, Gujarat, Karnataka, West Bengal, Andhra Pradesh and Orissa. In contrast, states with high urban-rural HDI disparity (1.50 & above) were Himachal Pradesh, Sikkim, Jammu & Kashmir, Tripura, Meghalaya, Assam, Rajasthan, Arunachal Pradesh, Madhya Pradesh, Uttar Pradesh and Bihar.

4. PROGRESS OF HUMAN DEVELOPMENT IN INDIA

The basic purpose of planning in India is to widen people's choices and improve the well-being of the people. In this context, human development was the key issue so that people could lead a long and healthy life, they could acquire knowledge so as to have better vertical mobility in life and last, but not the least, to achieve a decent standard of living of all. It would be, therefore, appropriate to examine the progress of human development in India.

India has been categorised by the ***Human Development Report 2007/2008*** as a medium human development country. The Human Development Index has risen gradually from 0.406 in 1975 to 0.510 in 1990 and stands at 0.619 in 2005. In fact, it can take quite long for India to cross the mark of 0.8 in HDI to join the rank of high HDI countries.

A major impediment to progress in human development is the very fast growth of population experienced in India. India's population increased from 620.7 million in 1975 to 1,027 million in 2001 giving a growth rate of 2.0 per cent per annum during the period (1975-2001), which is fairly high. It is expected that the growth rate of population during 2000-2015 will come down to 1.3 per cent. This would provide a welcome relief to push forward the process of human development.

Urbanisation is considered to be a factor, which promotes human development. The share of urban population, which was 21.3 per cent in 1975, has reached a level of 27.8 per cent in 2001, but by 2015, urban population would reach the level of 32.2 per cent. In absolute terms, urban population was 285 million in 2001 and would reach a level of 407 million in 20 would certainly help to enlarge human deve because it has been observed that urban areas are looked after in terms of education and health fa

Another healthy feature of likely demo transition is the proportion of children or po under age 15, whose proportion stood at 33.7 per 2001 but is likely to decline to 27.7 per cent by 2 absolute terms, population under age 15 was 348 in 2001 and would get reduced to 345 million in This will imply decreasing population pressure below in future which would also help in re resources to improve human development.

It would be quite useful to consider factors with the education of the population that are promote human development. The most importan is adult literacy rate, which was 61.0% in 2005 implies an adult illiteracy rate of 39 per cent. In terms, 296 million adults were illiterates in 20 share of India in the world's illiterate population per cent. According the Human Development 2001, a total of 854 million persons were illiterate world in 1999 and nearly one-third of these were counted for in India. As compared with the total population, the share of India in world population 16.6 per cent. In other words, in the total world po tion, India's share is one-sixth, but among the illiterates, her share is one-third. This only underli need for strengthening literacy rate still further to adult illiteracy in India. Although evidence of subs increase in literacy during the decades of the nine become evident, still India has a long way to go. pared to China, which has improved its adult litera to 90.9 per cent in 2005, India lags behind conside at 61 per cent in this very important area of development.

Another important indicator is the combined (Primary, Secondary and Tertiary) Enrolment which was only 61.0 per cent in 2005 in India. China a gross enrolment ratio of 68.7 per cent in 2007 lagging behind at 61 per cent and has to catch up, no with reference to developed countries, but also reference to some developing countries like China.

Public expenditure on education as a perc GNP is considered as an indicator of state policy tow promoting education. This proportion remained changed between 1991 and 2002-05 3.8% of GNP was reported as 3.4% for 2006 as per UNDP. Acco to the Report of the Education Commission (196 this expenditure should have been raised to 6% of G Although it is nearly four decades now, but the targ by the Education Commission has yet to be realise

The proportion of education expenditure dev to pre-primary and primary education has margin increased from 35% in 1985-86 to 38.4% in 200

there is a strong need to enrich state-run schools at the primary level so as to bring about a decline in dropout rate. Since the children belonging to upper middle class and affluent sections are now going to the so-called public schools, it should be possible for the state to improve facilities both in terms of human and material resources deployed in state-run primary schools.

The Information Technology revolution has necessitated an increase in the proportion of tertiary students in science, math and engineering to be stepped up. Their proportion was only 20% during 1998-2003 in India. As against this, their proportion in China was 53%. The proportion was about 49 per cent in Russian Federation. India has to bring about a shift to meet the changing demands of the new economy.

So far as youth literacy rate is concerned, it is 76.4% in 2005, but ironically in a majority of medium human development countries, youth literacy rate is above 90 per cent. India has, therefore, to improve its literacy rate among the youth (i.e. population in the age group 15-24).

Health Indicators

Life expectancy at birth has shown a continuous improvement from 50.7 years during 1970-75 to 66.0 years in 2000-07. However, the probability at birth not surviving to age 40 is 15.5% in 2005-10. India has to improve health facilities as well as nutrition levels so that it can reduce the probability at birth not surviving to age 40. Several medium human development countries have much better survival rates. A few worth mentioning are Philippines, Thailand, Malaysia, Sri Lanka and China.

In this context, it would be relevant that 46% of children under five were underweight in 2000-06. In absolute terms, 178 million children under five were underweight. The country should support a programme of improving nutrition in poor families to reduce this massive number of underweight children.

Population not using improved water sources was 15% in 2006. This is a very healthy development, but in absolute terms 124 million persons are unable to make use of improved water sources and thus become victims of various kinds of water-borne diseases. Similarly, improved sanitation facilities were not available to 33% of the population in 2004. In absolute terms, 375 million persons were living under insanitary conditions.

It is really distressing that 49% of the Indian population did not have access to essential drugs in 1999. This implies that 527 million persons were without effective medical cover. This reduces the survival rate in India.

The proportion of under-nourished people in India in 2004 was 20%. This implies that 220 million people were under-nourished. This under-nourishment is primarily due to the existence of poverty. There is a need to strengthen poverty eradication strategies to reduce under-nourishment.

The survival rate has considerably improved in India. In 1970, infant mortality rate per 1,000 live births was 127; it has been brought down to 53 in 2007. These are healthy developments. Likewise, maternal mortality rate per 1,00,000 live births have been brought down to 254 during 1985-2007. Control of diseases and improvement in hospital facilities has contributed to improvements in survival rate.

Gender-Related Development Indicators

Life expectancy at birth of females in 2005 was 65.3 years, but for males, it was 62.3 years. Comparing with medium human development countries, Indian achievement, though good, is still much lower in relation to Mexico, Venezuela, Russian Federation, Thailand, Philippines, Sri Lanka, Iran, Vietnam, to name a few among them.

Although gap between life expectancy of females and males is very small, but in other gender-related development indicators, this gap is very wide. For instance, adult literacy of females was barely 54.5 per cent as against 76.9 per cent of males in 2007. Similarly, combined Gross Enrolment ratio of females was 57.4 per cent as against 64.3 per cent for males in 2007. Likewise, Estimated Earned Income of females was $ 1304 as compared with that of males to be $ 4102 in 2005. This implies that female income was just 32 per cent of male income. Obviously, either females suffered from gender discrimination in wage income or they did not have regular employment and a big proportion was employed as casual labourers or a large proportion of females worked part time. There may be many more factors, but it cannot be denied that females suffered gender bias both in education and employment. Incidentally 10 percent ministerial positions were held by women.

Economic Indicators

GDP per capita of India was $ 3,452 in 2005 (PPP US $). The average annual growth rate of GDP during 1980-90 was 5.8, it declined to 4.2 per cent during 1990-2005.

However, the measures of inequality of consumption revealed that the share of the poorest 10% in total consumption in 2007 was just 3.6 per cent and that of the richest 10% was 31.1 per cent. Thus, the ratio of consumption between the richest 10% to the poorest 10% was 8.6. Similarly, the poorest 20 per cent shared only 8.1 per cent in total consumption, but the richest 20 per cent shared 45.3 per cent. Thus, the ratio of consumption of the richest 20% to the poorest 20% was 5.6. Compared with medium human development countries,

India shows moderate inequality. A very large number of countries in this group show much higher inequality of income or consumption. However, there is a need to improve the condition of the poorest 10 per cent or 20 per cent of the population so that India is able to reduce inequality still further.

Data on priority in public expenditure on education reveals that it was 3.7% of GDP in 1990 and has slightly deteriorated to 3.5 per cent in 2007. But public expenditure on health was distressingly low at 1.1 % of GDP in 2007. There is, therefore, an urgent need to improve the proportion of public expenditure both on education and health so as to foster human development. This, however, should not mislead us to conclude that India is spending more on military expenditure or has to use a big proportion of GDP in total debt service. Data available on both the indicators reveals that military expenditure accounted for 2.7 per cent of GDP in 1990, and it was nearly of the same magnitude in 2005 i.e. 2.8% of GDP. Similarly total debt service payments were of the order of 2.6 per cent of GDP in 1990 but they have shown a increase to 3.0 per cent in 2005. Obviously, India is neither using a big proportion of its public spending on military expenditure nor on debt service payment. We have, therefore, to search for some other areas like general administration and subsidies, which may be appropriating a big proportion of public expenditure.

Lastly, we may consider fuel consumption as a proximate measure for industrialisation or modernisation of our economy. Data reveal that traditional fuel consumption in total energy use declined from 47.5% in 1990 to 29.4 % in 2004. This was natural and is in accordance with the process of development. However, it may be noted that per capita electricity consumption sharply improved from 173 KWH in 1990 to 618 KWH in 2004. This only underlines the fact that sources of energy other than electric energy, such as coal and oil, have contributed more to energy use. Energy is a basic constraint on development. India has become more dependent on non-renewable sources of energy like coal and oil and less on renewable sources like hydropower. It would be more desirable to tap hydro resources more effectively.

To sum up, the fact sheet on human development has many plus points. Population growth rate has begun to decline and would be 1.3 per cent per annum during 1999-2015. This will release quite a good proportion of resources being currently used for supporting a higher growth rate of population. Growth of urbanisation will strengthen the sinews of human development since urban areas are better looked after in terms of education and health. The proportion of child population in total population has already indicated a decline and the trend is likely to be strengthened.

Although India has shown a better record improving its literacy rate and gross enrolment ratio, y it lags behind considerably, even with reference to m dium human development countries, not to speak catching up with high human development countri Public expenditure on education has not made perce tible progress in reaching the goal of 6 per cent of GN set by the Education Commission (1964-65). The p portion of tertiary students in science, math and eng neering has been around 20, which is rather low. Sim larly, youth literacy at about 76 per cent is much low than the achievement of a majority of medium hum development countries around 90 per cent and above

Health indicators reveal a continuous improv ment in life expectancy, infant mortality rate and mate nal mortality rate, though our achievement is not co mensurate with the levels attained in several of th medium development countries. But our record abo the proportion of underweight children around 46% very dismal. Equally distressing is 51 per cent of t population did not have access to life saving drugs.

Gender related development indicators reveal the gap between male and female in adult literacy, gro enrolment ratio and earned income was too wide a indicated the existence of a strong gender bias.

The growth rate of the Indian economy has re mained about 6 per cent during the last two decades a can be considered as satisfactory. Similarly, India show moderate inequality of income/consumption, althou there is further scope for reducing inequality by pover eradication programmes targeted to the poorest 20 p cent of the population.

Public expenditure on health has been pitiabl low at 1.1 per cent of GDP. Military expenditure as percentage of GDP indicated a decline during the nin ties.

In nutshell, it may be stated that human develo ment index of India has improved from 0.406 in 1975 0.612 in 2007, but India still has miles to go before s can enter the group of high human development cou tries. But our process of development has to accelera the pace of human development so that India can fe proud to be a member of high human developme countries.

5. DIRECTIONS OF POLIC

Experience the world over and India is no exce tion, reveals that the structure and quality of grow demand more attention to human development, emplo ment generation, poverty reduction and long-ter sustainability. Pressures are developing in India, as other countries, to reduce the damage caused due to t development process which has not reduced problems conservation, pollution, inequality and unemployme The Human Development Report, (1996) therefore, mak

strong assertion: "*Development that perpetuates today's inequalities is neither sustainable nor worth sustaining*."[6]

As suggested by the Human Development Report (1996), India should follow a pattern of development which should promote (i) Employment generating growth, (ii) equitable growth, (iii) participatory growth, (iv) grassroot growth and (v) sustainable growth. If such a pattern of development is fostered, then it would be possible to avoid lopsided development. In this connection, the *Human Development Report (1996)* warns: "The record of economic growth and human development over the past 30 years shows that no country can follow a course of lopsided development for such a long time — where economic growth is not matched by advances in human development, or vice versa."[7]

Table 9 provides some interesting insight into the situation in different states of India. Kerala emerges as an example of a state which indicates lower economic growth with higher human development. The birth rate in Kerala reached a low of 14.8 per 1,000 in 2010 which compares favourably with developed countries. Female literacy touched a peak of 91.98 per cent with overall literacy reaching 94 per cent level. However, state domestic product grew by 8.7 per cent per annum during 2004-05 and 2009-10. On the other end of the spectrum, Haryana had per capita NSDP of ₹ 37,972 in 2010-11 (at 2004-2005 prices). However, its record on the human development front was poor, with a birth rate 22.3 price per 1,000 in 2008 and a literacy rate of about 76.6 per cent, with female literacy at a low level of about 66.8 per cent only. Another peculiar case is that of Rajasthan which showed a growth rate of 6.9 per cent in state domestic product, it has improved its position among the 14 major states from No. 10 to No. 8 in 2008. It has also been able to reduce population below the poverty line from 35.2% in 1978-88 to 24.8 per cent in 2009-10. However, its record on human development appears to be poor since the birth rate is 26.7 per 1,000 in 2008, infant mortality rate at 48 and miserably low female literacy at about 52.7 per cent and overall literacy at about 67.1 per cent. The state of Rajasthan is moving up on the road of economic growth, but is miserably lagging on the road to human development.

Table 12: Selected Indicators of Economic Growth and Human Development in India – Statewise

State	Annual Growth Rate of NSDP (2004-05 to 2009-10)	% of Population Below the Poverty Line 2009-10	Rate of Unemployment (2009-10)	Birth Rate 2010	Death Rate 2010	Infant Mortality 2010	Literacy (2011) Over-all	Literacy (2011) Female
Punjab	7.7	15.9	6.5	16.6	7.0	34	76.7	71.3
Maharashtra	11.5	24.5	6.3	17.1	6.5	28	82.9	75.5
Haryana	10.0	20.1	5.5	22.3	6.6	48	76.6	66.8
Gujarat	10.5	23.0	5.0	21.8	6.7	44	79.3	70.7
West Bengal	5.77	26.7	7.0	16.8	6.0	31	77.1	71.2
Karnataka	8.2	23.6	4.2	19.2	7.1	38	75.6	68.1
Kerala	8.7	12.0	16.7	14.8	7.0	13	93.9	91.98
Tamil Nadu	10.0	17.1	11.7	15.9	7.6	24	80.3	73.9
Andhra Pradesh	8.6	21.1	7.0	17.9	7.6	46	67.6	59.7
Madhya Pradesh	6.9	36.7	6.5	27.3	8.3	62	70.6	60.0
Assam	5.2	37.9	6.5	23.2	8.2	58	73.2	67.3
Uttar Pradesh	6.7	37.7	5.3	28.3	8.1	61	69.7	59.3
Orissa	7.9	37.0	7.9	20.5	8.6	61	73.4	64.4
Rajasthan	6.9	24.8	3.3	26.7	6.7	55	67.1	52.7
Bihar	10.0	53.5	5.7	28.1	6.8	48	63.8	53.3
All India	8.2	29.8	6.6	32.1	7.2	47	74.0	65.5

Source: 1. Complied and computed from RBI. Handbook of statistics on Indian Economy (2004-05) for the period 1993-94 to 2003-04; CSO, National Accounts Statistics (2011) Economic Survey 2011-12
2. *Planning Commission. Unemployment figures are on CDS basis*
3. *Census of India 2011. Provisional Population Totals, Paper 1 of 2011.*
4. *Ministry of Health and Family Welfare, Government of India*

6. UNDP, *Human Development Report (1996)* p. 4.

7. UNDP, *op.cit.*, p. 5.

In the Indian situation, we have striking contrasts and the states show wide variations. A few examples will illustrate :

1. Higher human development with relatively lower income — Kerala
2. Lower human development at higher income — Haryana
3. Fast economic growth and slow human development — Rajasthan
4. Mutually reinforcing growth and human development — Punjab, Gujarat, Tamil Nadu and Maharashtra and West Bengal.
6. Mutually depressing growth and human development — Madhya Pradesh, Uttar Pradesh, Orissa and Bihar.

The Indian scenario presents several striking contrasts and there are dangers inherent in several patterns. States with lopsided pattern of development tilted against human development, as Rajasthan, would be very soon in a dead end. The fast economic growth would also start slowing down after a decade or so, unless the state undertook a massive programme of improving human development. Similarly, Kerala has to undertake programmes of accelerating economic growth to match with human development growth so that it can reap the benefits of better human development in terms of higher productivity.

The laggards like Andhra Pradesh, Uttar Pradesh, Madhya Pradesh, Orissa and Bihar are caught in the vicious circle of low economic growth and low human development. They must break this vicious circle by fostering investment first to step up growth and later to take up human development or to move the other way, by stepping up human development which would later put pressure to accelerate economic growth. Andhra Pradesh has started breaking this vicious circle during the nineties.

The basic question is : Is there a conflict between growth and equity ? At one stage, Simon Kuznets argued that in the early stages of economic growth, inequality would rise, as workers left agriculture for industry and then fall as industrial production became more widespread. Similarly, Nicholas Kaldor argued that the savings needed for accelerating growth would have to com from the pockets of industrialists and thus more profits this class will have to be tolerated so that they cou provide savings for promoting higher levels of inve ment so as to accelerate the growth process.

Human Development Report (1996) makes very categorical assertion : "The traditional view th economic growth in early stages is inevitably associate with deteriorating income distribution has been prove false. The new insight is that an equitable distribution public and private resources can enhance the prospe for further growth."[8] In this context, there is a need move the objectives of growth, equity and democra together, since they are strongly linked to each othe

A World Bank study of 192 countries reveals t only 16% of growth is explained by physical capi (machinery, buildings and physical infrastructure), wh 20% comes from natural capital. But no less than 6 can be attributed to human and social capital.

In view of such convincing evidence, it wo not be desirable to wait for economic growth to trick down. The 'trickle down approach' should be replac by employment-generating growth, for which In must demonstrate its commitment to full employm Along with this, growth process should promote eq table growth with greater people's participation. T would require making heavy investments in the so sector, viz., health and education so that a better equipp labour force improves productivity and thus can cl legitimately a better share in the fruits of developme In other words, there is no conflict between r economic growth and rapid human development. h are mutually reinforcing and unless India brings a a balance between the two, the objectives of grow equity and democracy will not be achieved and devel ment would remain deficient for the vast mass of poor people.

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CHAPTER

6

OCCUPATIONAL STRUCTURE AND ECONOMIC DEVELOPMENT

"In every progressive economy, there has been a steady shift of employment and investment from the essential "primary" activities . . . . to secondary activities of all kinds and to a still greater extent into tertiary production."

– A.G.B. Fisher

1. ECONOMIC DEVELOPMENT AND OCCUPATIONAL DISTRIBUTION

Broadly we divide occupations into three types. Agriculture, animal husbandry, forestry, fishery, etc., are collectively known as "primary" activities or industries. They are primary because their products are essential or vital for human existence. They are carried on with the help of nature. Manufacturing industries, both small and largescale, are known as "secondary" activities. Mining is sometimes included under secondary activities, but properly speaking, it is a primary activity. Transport, communications, banking and finance and services are "tertiary" activities which help the primary and secondary activities in the country. The occupational structure of a country refers to the distribution or division of its population according to different occupations.

Colin Clark, in his work '*Conditions of Economic Progress*', argues that there is a close relationship between development of an economy on the one hand, and occupational structure on the other and economic progress is generally associated with certain distinct necessary and predictable changes in occupational structure. He writes: "A high average level of real income per head is always associated with a high proportion of the working population engaged in tertiary industries. . . low real income per head is always associated with a low proportion of the working population engaged in tertiary production and a high percentage in primary production."[1] A. G. B. Fisher also reaches the same conclusion : "We may say that in every progressive economy there has been a steady shift of employment and investment from the essential 'primary activities' . . . to secondary activities of all kinds and to a still greater extent into tertiary production."[2] While some economists have accepted the thesis of Colin Clark, about the relation between economic development and occupational structure as valid, yet others have refused to accept it. It would be of interest to consider the empirical evidence in this regard.

An examination of Table 1 reveals that higher per capita income is inversely correlated with the proportion of active population engaged in agriculture. The advanced countries like the U.S.A., the U.K., Germany and Japan

1. Colin Clark, *The Conditions of Economic Progress* (1940), p. 182.
2. *Economic Progress and Scoial Security* (1945), pp. 5-6. Quoted by N.A. Khan in *Problems of Growth of an Underdeveloped Economy*, p. 121.

with a low proportion of active population dependent on agriculture reveal a higher per capita income. As against them, an underdeveloped country like India with a higher proportion of active population engaged in agriculture has very low per capita income.

Secondly, as the level of per capita income improves over the years the proportion of labour force dependent on agriculture declines but that on industry and services increases. These figures support Colin Clark's thesis that with greater economic development and rise in national and per capita incomes, there is a shift in occupational pattern from primary to secondary and tertiary sectors.

Table 1 : Per Capita Income and Distribution of Labour Force in Selected Countries.

Country	*Year*	*Per capita income in*	*Percentage of labour force in*		
		US $	*Agri-culture*	*Industry*	*Services*
U.S.A.	1960	2,500	7	36	57
	2010	47,153	1.6	16.7	81.2
U.K	1960	1,200	4	48	48
	2010	36,343	1.2	19.1	78.9
Germany	1960	1,220	1.4	48	38
	2010	40,115	1.6	28.4	70.0
Japan	1960	420	33	30	37
	2010	42,830	3.7	25.3	69.7
India	1960	70	74	11	15
	2010	1410	51.1	22.4	26.5

*Data for Germany (taking together East Germany and West Germany).

SOURCE : *World Development Indicators* 2011

2. HISTORICAL EXPERIENCE OF STRUCTURAL CHANGE IN DEVELOPED ECONOMIES

Structural changes take place in economies as the process of economic development proceeds further and gathers momentum. These structural changes result in changes in the proportion of national product and of the labour force. The most common pattern of structural change follows a sequence of a shift from agriculture to industry and then to services. These structural changes are observed both in the relative shares of national product and in labour force.

According to economists like Colin Clark and AGB Fisher, the basic argument in support of structural changes in national product is that as income levels increase, the proportion of income spent on food shows a decline and that on non-food items (or manufactures) shows a relatively higher increase. At still higher level of income, there is a high proportion of income spent on services. In other words, low income elasticity of demand for agricultural products, tends to shift the pattern of production in favour of manufactures which have high income elasticity of demand. According to Fisher, there is a saturation level for the demand for manufactures. Clark argued that demand for manufactured goods saturates, setting at around 20 to 25 per cent, and, with continuing fall in the demand for agricultural products there is an increase in the demand of services.

Shift in demand pattern is thus the result of differences in elasticity of demand. Shift in the pattern of demand does impact on transfer of labour force from agriculture to industry and subsequently to services. But Baumol (1967,2001), however, argued that employment or shift in labour force is not the consequence of a change in final demand, but is the result of differential productivity growth. Increasing share of labour force employed in services has, however, been attributed by most economists to low productivity in services as compared to manufacturing.

Table 2 reveals great similarity in the pattern of output and employment shares among the seven selected countries. Firstly, share of agriculture in the GDP was between 1 and 2 percent indicating that agriculture accounts for a very small portion of total output. Similarly, the share of labour force in agriculture was below 5 percent. Secondly, the share of industry in GDP was in the range of 22 to 28 percent. Likewise, the share in employment by industry ranges between 20 to 30 per cent. Thirdly, the share of services in GDP ranged from 68 to 81 per cent.

Table 2 : Output and Employment Shares in Selected Developed Economies (2010)

Country	*Shares in Output (%)*			*Shares in Employment (%)*		
	Agriculture	*Industry*	*Services*	*Agriculture*	*Industry*	*Services*
United Kingdom	1	20*	78	1.2	19.1	78.9
United States	1	22	79*	1.6	16.7	81.2
France	2	19*	79*	2.9	22.2	74.5
Japan	1	27*	72*	3.7	25.3	69.1
Germany	1	28	71	1.6	28.4	70.0
Italy	2	25	73	3.8	28.8	67.5
Australia	2	20	78	3.3	21.9*	75.5*

*2009

Source: World Bank (2011), *World Development Indicators.*

Also it may be observed that the share of employment was in the range of 71 to 79 per cent. From this, the broad picture that emerges is a follows: With a shift of GDP from agriculture to industry, there was a nearly proportionate shift in employment. Similarly, a rise in the share of services in GDP was accompanied by a proportionate increase in employment.

3. GDP AND EMPLOYMENT SHARES IN SELECTED DEVELOPING COUNTRIES

Table 3 provides information regarding shares of GDP and Employment among agriculture, industry and services in selected developing countries. To indicate the relative levels of development, GDP per capita figures on purchasing power parity (PPP) basis have also been given so as to understand the pattern of demand propelling these shares. The data reveal wide variations in the output and employment pattern. The Republic of Korea shows GDP shares which are very close to those of a developed economy. The share of agriculture is just 3 per cent and that of services is 58 per cent. The share of industry was also quite high at 39 per cent. Indonesia, Thailand, Philippines, China and Malaysia indicated a nearly similar pattern of output in which the share of agriculture ranged between 10 to 15 per cent, that of industry between 32 to 47 per cent and that of services between 38 to 55 per cent. India and Pakistan share a very similar pattern of output with GDP shares in agriculture in the range of 19-21 per cent, in industry 25 to 26 per cent and in services around 53 per cent. But employment share of agriculture is 51.1 per cent in India, that of industry was 22.4 per cent and of services only 26.5 percent. In Pakistan, share of employment in agriculture was 44.7 per cent, that of industry 20.1 per cent and of services 35.2 per cent.

A very striking feature of the output pattern is that with an increase in GDP per capita (PPP), the share of agriculture showed a very strong inverse correlation, but this was not observed in the GDP share of industry and services. This implies that with an improvement in GDP (PPP), the share of industry and services depended on other factors and policies pursued by a country. For instance, China has increased its share of industry to a level of 46 percent and is described as the 'Manufacturing Hub 'of the world', while India seems to have specialized in IT Sector and thus has become a 'BPO Centre' of the world, resulting in a sharp increase in the share of the service sector.

However, the employment pattern provides a very different picture. A substantial reduction in the share of agriculture in total employment could be observed in the case of Korean Republic and Malaysia to a level of 10 per cent and 18 per cent respectively. These countries had a high share of employment in services in the range of 60 % and 76 % respectively. Obviously, there is a greater shift of employment in services than that of in industry. Philippines indicates that whereas the share in employment in agriculture declined from 52 per cent to 35.2 per cent between 1980 and 2010, its share in industry remained stagnant as about 15 per cent and the entire decline in the share of agricultural employment by 17 per cent was absorbed by an increase in services from 33 per cent to 50.3 per cent during this period.

India and Pakistan shared a high proportion of employment in agriculture, i.e. 51.1 per cent and 44.7 per cent respectively. In both countries, the share of employment in industry was at lower level of 20-22 per cent, but the service sector indicated 35.2 per cent share in Pakistan and merely 26.5 per cent in India.

Table 3 : GDP and Employment Shares in Selected Developing Countries (2007)

Country	GDP per capita (PPP) 2007	Shares in Output (%)[1]			Shares in Employment (%)[2]		
		Agriculture	Industry	Services	Agriculture	Industry	Services
1. Korea, Republic of	29,101	3	39	58	6.6	17.0	76.4
2. Malaysia	14,730	11	44	45	13.5**	27.0**	59.5**
3. Thailand	8,553	12	45	43	41.5**	19.5**	38.9**
4. China	7,599	10	47	43	39.6*	27.2*	33.2*
5. Philippines	3,969	12	32	55	35.2**	14.6**	50.3**
6. Indonesia	4,325	15	47	38	38.3	19.3	42.3
7. India	3,435	19	26	55	51.1	22.4	26.5
8. Pakistan	2,688	21	25	54	44.7*	20.1*	35.2*

1. Per capita GDP and GDP shares are for 2003. Per capita GDP figures are on PPP basis
2. Employment shares are for 2000
3. For India, employment shares are taken from IAMR, *Manpower Profile (2004) and are based on National Sample Survey, Report No. 481, Employment and Unemployment in India*, July 2001-June 2002, 57th Round.
4. Data for China pertains to 2004 as revised by *The Eleventh Five Year Plan (2006-10)*

Source: World Bank, *World Development Indicators* (2010-11)

* Data for Employment pertains to 2008.

** 2009

Even though the GDP share in services of India shot up to 55 per cent, yet the share in employment was merely 26.5 per cent. Obviously, output-employment ratio in India remained very high, indicating a capital-intensive pattern of growth in the service sector.

4. CHANGING PROFILE OF GDP AND EMPLOYMENT IN INDIA (1950-51 TO 2001-02)

Changing profile of GDP in India during 1950-51 to 2001-02 – over a period of 51 years is given in table 5. The data reveal that GDP from the primary sector (viz., agriculture and allied entities like forestry and fishing) declined form 59 per cent in 1950-51 to 46 per cent in 1970-71 and thereafter, sharply declined to 16.1 percent in 2011-12. This was partially neutralized by an increase in the share of the secondary sector from 13 per cent in 1950-51 to about 22 per cent in 1970-71 and further increase to about 24.3 per cent in 2011-12. But the biggest hike in GDP share occurred in case of services from about 27 per cent in 1950-51 to 32 per cent in 1970-71 to 59.0 per cent in 2011-12. The emerging structural change in GDP shares witnessed a big decline in the share of agriculture, coupled with a modest increase in the share of industry and a much sharper increase in the share of services which now account for nearly half of the total GDP.

Table 4 : GDP at Factor Cost by Industry of Origin (at 1993-94 prices) – All India

₹ crores

Year	Primary	Secondary	Tertiary	Total
1950-51*	83,154	18,670	38,642	1,40,466
	(59.2)	(13.3)	(27.5)	(100.0)
1960-61*	1,12,848	34,239	59,016	2,06,103
	(54.8)	(16.6)	(28.6)	(100.0)
1970-71	1,37,320	64,258	95,331	2,96,909
	(46.3)	(21.6)	(32.1)	(100.0)
1980-81	1,59,293	95,055	1,46,753	4,01,128
	(39.2)	(23.7)	(36.6)	(100.0)
1990-91	2,23,114	1,88,601	2,81,115	6,92,871
	(32.2)	(27.2)	(40.6)	(100.0)
2001-02	3,04,666	3,38,165	6,25,114	12,67,945
	(24.0)	(26.7)	(49.3)	(100.0)
2010-11**	8,18,524	12,49,305	28,18,155	48,85,954
	(16.7)	(25.6)	(57.7)	(100.0)
2011-12**	8,37,136	12,96,190	30,69,189	52,02,514
	(16.1)	(24.3)	(59.0)	(100.0)

* For 1950-51 and 1960-61, Primary Sector includes agriculture, forestry, fishing and mining & quarrying, but figures for 1970-71, 1980-81, 1990-91 and 2001-02 include mining & quarrying in the secondary sector, instead of the primary sector.

Source : Government of India, *Economic Survey (2011-12)* and Central Statistical Organization as reported in RBI, *Handbook of Statistics of the Indian Economy (2010-11)*

CSO, Press Release, May 31, 2012.

*** Base year 2004-05*

But the question arises: Did this structural shift in GDP share have an impact on the employment pattern or distribution of workforce in India? Data provided in table 6 based on the various rounds of the National Sample Survey reveals that the share of workforce deployed in agriculture declined from 74 per cent in 1972-73 to about 53.2 per cent in 2009-10. Along with this declines, the share of employment in industry increased from 11.2 per cent in 1972-73 to 14.9 per cent in 1993-94 and further to 21.5 per cent in 2009-10. Also the share of services in total employment increased from 14.6 percent in 1972-73 to 25.4 per cent in 2009-10.

Table 5 : Distribution of Working Force by Industry Division in India

Industry Division	Total			
	1972-73	1983	1993-94	2009-10
Agriculture				
Agriculture Forestry, Fishing and Hunting	74.0	68.1	63.9	53.2
Industry				
Mining and Quarrying	0.4	0.6	0.7	0.60
Manufacturing	8.8	10.7	10.6	11.0
Electricity, Gas and Water	0.2	0.3	0.4	0.30
Construction	1.8	2.3	3.2	9.6
Sub- total	11.2	13.9	14.9	21.5
Services				
Wholesale and Retail trade and Restaurants and Hotels	5.0	6.9	7.6	10.8
Transport, Storage and Communication	1.8	2.5	2.9	4.3
Other Services	7.8	8.8	10.7	10.3
Sub- total	14.6	18.2	21.2	25.4
Activities not Classified	0.2	0.4	-	-
Total	100.0	100.0	100.0	100.0

Figures relate to usual status of individuals.

Workforce covers those involved in gainful activity regularly + those involved in gainful activity occasionally.

Source: National Sample Survey Organization, 27th 32nd, 38th, 43rd, 46th, 48th and 50th Rounds with reclassification of Shares of agriculture, industry and services as given in IAMR, *Manpower Profile in India (2004), Planning Commission Eleventh Five Year Plan.*

The upshot of this analysis is that whereas GDP share of agriculture declined sharply, the corresponding decline in employment share did not take place in India. Meanwhile, GDP share of industry registered an increase of 5 per cent during the last four decades (1970-71 to 2009-10). But the corresponding increase in employment share was only 6 per cent during the same period. This only indicates that the process of industrialization failed to absorb excess labour in agriculture in the expansion of industry. Thirdly, share of services in GDP increased sharply to about 57 per cent, but they also failed to register a sharp increase in employment which was barely 15 per cent as against an 25 per

[illegible] increase in GDP during 1970-71 and 2009-10. From this it follows that Indian did not experience [illegible] in the growth of GDP and employment in [illegible] during the process of industrialization, but [illegible] to the post-industrialization phase of increasing its share of GDP as well as employment in services, though a relatively smaller increase in employment in the service sector took place. We may have to wait for some more time so that secondary and primary sector are able to absorb more labour force in step with their rising share in GDP.

5. GDP, EMPLOYMENT AND PRODUCTIVITY PER WORKER IN INDIA

In Table 7, we present data about GDP and employment growth in India for the period 1972-73 to 2001-02. From this, we have worked out productivity per worker at 1993-94 prices. Data reveals that there is an increase in the growth rate of productivity per worker by 1.7 % in Primary, 2.0 % in Secondary and 2.9 % in the Tertiary Sector during the 29-year period (1972-73 to 2001-02)

It may also be noted that disparity ratio in productivity per worker which was 1:3.1 between primary and secondary sector in 1972-73 increased slightly to 3.3 in 2001-02. But the disparity ratio between primary and tertiary sector increased from 3.8 in 1972-73 to 5.2 in 2001-02. These differentials in productivity explain why the absorption of workers in secondary and tertiary sectors has been lower in India. It also repudiates the commonly held belief by the economists that increasing share of labour force in services is due to low productivity in services as compared to manufacturing.

The question arises: How does one explain the growth of India becoming a post-industrial 'service economy', without passing though the major phase of industrialization, spearheaded by manufacturing? A very plausible explanation is: Technological changes during the last few decades have induced an increase in demand for services even at even relatively lower levels of per capita income. Moreover, development of communication technologies and reduction of the barriers to commodity flows and movement of people, specially skilled persons due to impact of globalization, have produced demonstration effects resulting in shifting the pattern of demand in developing countries in favour of those prevailing in developed countries much earlier than the historical experience would justify. As consequences, both the production and consumption of services have taken a quantum jump. Unfortunately, the pattern of production of services which is capital-intensive has failed to bring about a significant proportion of the workforce to services even. In an overall view, pattern of GDP growth did not bring about a shift in employment pattern to either industry (manufacturing) or services.

Table 6 : Gross Domestic Product, Employment and Productivity per worker in India

Gross Domestic Product (₹ crores at 1993-94 prices)

Year	Primary	Secondary	Tertiary	Total
1972-73	1,33,699	62,699	1,01,918	2,98,316
	(44.8)	(21.0)	(34.2)	(100.0)
1993-94	2,62,059	1,85,070	3,34,216	7,81,345
	(33.5)	(23.7)	(42.8)	(100.0)
2001-02	3,33,274	3,09,557	6,25,114	12,67,945
	(26.3)	(24.4)	(49.3)	(100.0)

Distribution of Employment (In million)

Year	Primary	Secondary	Tertiary	Total
1972-73	174.8	26.4	35.1	236.2
	(74.0)	(11.2)	(14.8)	(100.0)
1993-94	240.4	52.8	78.9	372.1
	(64.6)	(14.2)	(21.2)	(100.0)
2001-02	260.4	73.2	94.6	428.2
	(60.8)	(17.1)	(22.1)	(100.0)

Productivity per Worker (₹ at 1993-94 prices)

Year	Primary	Secondary	Tertiary	Total
1972-73	7,649	23,749	29,036	12,630
1993-94	10,901	35,051	42,359	20,998
2001-02	**12,798**	**42,289**	**66,080**	**29,611**
CAGR between 1972-73 and 2001-02	**1.7**	**2.0**	**2.9**	**3.0**

Disparity Ratios in Productivity per Worker

Year	Primary	Secondary	Tertiary
1972-73	1.0	3.1	3.8
1993-94	1.0	3.2	3.9
2001-02	1.0	3.3	5.2

Note : CAGR refers to the compound annual growth rate.

Source:

1. Data for sectoral distribution of GDP was taken from CSO as given in *Economic Survey (2004-05)*
2. Data for distribution of labour force was taken from IAMR, *Manpower Profile India (2004)*.
3. Productivity per worker is calculated by dividing GDP with the total number of workers in the respective sector.

6. RELATIVE SHIFT IN THE SHARES OF NSDP AND EMPLOYMENT IN AGRICULTURE, INDUSTRY AND SERVICES IN DIFFERENT STATES

Table 8 provides data about the percentage shares of NSDP for 2009-10 and employment for 2009-10 for agriculture, industry and services. From these figures, output employment ratios (O/L) have been derived. These ratios indicate productivity per unit of labour. The per capita NSDP for 2009-10 at 2004-05 prices as an indicator has been juxtaposed and the states have been arranged in a descending order on the basis of per capita NSDP.

It is expected that states with a higher per capita NSDP should be able to reduce their share of NSDP in agriculture and consequently raise their share in industry if they were passing through the phase of industrialization. This should also help to transfer labour from agriculture to industry. However, if the state has switched over to the post-industrial service economy before completing the process of industrialization, then a larger share of GDP should be derived form the service sector and a larger proportion of labour should also be absorbed in the service sector.

A close perusal of the data reveals that there does not exist a uniform pattern in India that abides by the experience of developed countries. Take for instance Punjab and Haryana – the two states which spearheaded the Green Revolution. In Punjab as against the share of 26.4 per cent in NSDP for agriculture in 2009-10, the corresponding share in employment was 44.2 per cent and similarly with 16.5 percent share in NSDP for agriculture of Haryana, agriculture supported about 44.4 percent of labour force. Both these states had high output employment ratio of 0.60 and 0.37 respectively in agriculture. In Punjab, the NSDP share in industry was 20.5 percent and employment share was 26.2 percent. In

Table: 7: Relative Shares of NSDP and Employment in Agriculture, Industry and Services

State	Per capita NSDP ₹ 2004-05 prices (2009-10)	Per centage share of NSDP at 2004-05 prices (2009-10)			Percentage share of Employment (2009-10)			Output Employment ratio in the sector relative to overall ratio for the state		
		Agriculture	Industry	Services	Agriculture	Industry	Services	Agriculture	Industry	Services
	1	2	3	4	5	6	7	8=2/5	9=3/6	10=4/7
1. Punjab	42,727	26.4	20.5	53.1	44.2	26.2	19.5	0.60	0.78	2.72
2. Maharashtra	57,458	8.6	21.0	70.4	52.4	17.1	30.5	0.16	1.23	2.31
3. Haryana	54,884	16.5	18.2	65.2	44.4	27.2	28.3	0.37	0.67	2.30
4. Tamil Nadu	46,692	8.8	17.1	73.8	44.6	27.9	27.6	0.20	0.61	2.67
5. Gujarat	48,511	13.0	27.9	59.1	53.4	19.5	27.0	0.24	1.43	2.19
6. Karnataka	38,646	15.4	17.5	67.1	55.8	18.3	26.9	0.28	0.96	2.49
7. Himachal Pradesh	43,305	19.3	11.8	68.9	59.7	20.7	19.6	0.32	0.57	3.52
8. Kerala	45,908	10.2	9.6	80.2	29.5	29.5	41.0	0.35	0.33	1.96
9. Andhra Pradesh	37,061	22.6	12.8	64.6	54.8	20.7	24.4	0.41	0.62	2.65
10. West Bengal	30,372	20.0	10.3	69.7	43.8	25.9	30.4	0.46	0.40	2.29
11. Rajasthan	24,166	19.4	16.5	62.9	52.8	27.1	20.1	0.37	0.61	3.13
12. Madhya Pradesh	21,095	26.5	15.9	57.6	68.8	15.5	15.6	0.39	1.03	3.69
13. Jammu and Kashmir	26,344	23.4	9.8	66.8	50.1	21.4	28.6	0.47	0.46	2.34
14. Assam	20,193	24.4	13.7	61.9	64.2	8.7	27.5	0.38	1.57	2.25
15. Orissa	24,275	21.0	17.3	61.7	60.8	20.1	19.0	0.35	0.86	3.25
16. Uttar Pradesh	16,374	25.0	14.7	60.3	56.1	23.0	20.9	0.45	0.64	2.89
17. Bihar	12,012	21.3	4.6	74.1	61.9	16.6	21.6	0.34	0.28	3.43
All India	33,843	14.7	20.2	65.1	53.2	21.5	25.4	0.27	0.93	2.56

Sources : 1. CSO Nation Accounts Statistics (2011)

2. NSSO 66th Round

Haryana, a nearly similar situation prevailed and the state indicated its percentage share in NSDP at 18.2 percent for industry with an employment share of 27.2 per cent. Consequently the share of the service sector in NSDP remained between 53-65 percent, but the employment share was only 19.5 percent in Punjab and 28.3 percent in Haryana.

But in contrast, Maharashtra which enjoyed a second place in terms of per capita NSDP in 2009-10, had a small proportion of NSDP being generated from agriculture viz., 8.6 per cent, but it carried a heavy burden of labour employed at around 52.4 per cent in agriculture. But with 21 percent share of industry in NSDP, its share in employment was barely 17.1 percent. In case of services, their proportion in NSDP was 70.4 percent with a labour absorption of around 30.5 per cent. This implies that output labour ratio in Maharashtra for agriculture was only 0.16 for agriculture, 1.23 for industry and 2.31 for services. O/L ratio indicates a low level of development in agriculture, a high O/L ratio for industry shows a capital intensive pattern of industrialization and much higher capital intensive pattern in post-industrial service sector. Maharashtra is an example of agricultural backwardness, accompanied by industrialization, and entry into post-industrial service economy, in other words, it has an asymmetry in the relative shares of agriculture, industry and services.

The pattern of development in Gujarat follows a more or less similar pattern to that of Maharashtra. Tamil Nadu, however, has been able to reduce its labour force employed in agriculture to 44.6 percent, though NSDP share stood at 8.8 per cent. Its NSDP share in industry was 17.1 percent with employment share of 27.9 percent, but its share of NSDP for services was quite high (73.8 %) with an employment share of 27.6 per cent. it is also a case of a state with a relatively less backward agricultural economy jumping on to become a post-industrial service economy.

Kerala showed a singularly different pattern with NSDP share derived from agriculture declining to 10.2 percent accompanied by low employment share of 29.5 percent. This was accompanied with 29.5 per cent share in employment in industry and 41.0 percent in services. There is no doubt that Kerala with NSDP share of 80.2 percent in services, has also entered the post-industrial service economy, but there is less disparity in labour force distribution as also in the output labour ratio in the three sectors.

West Bengal has also followed a more of less similar pattern like Kerala with the share of NSDP agriculture going down to 20.0 per cent with an employment share being brought down to 43.8 percent. Service sector continues to be the driver of NSDP in West Bengal with a share of 69.7 percent with about 30.4 percent share of labour absorbed in services. Industry has languished in West Bengal with 10.3 percent share of NSDP with 25.9 percent share of labour indicating a comparatively lower level of labour productivity. The flight of capital due to aggressive trade unionism accounted for the low NSDP share of industry. There is no doubt that labour productivity in agriculture has improved in West Bengal, but this is very low in comparison with green revolution states in India. The State Government is now making amends for its past mistakes.

Then there is a group of backward states, viz., Rajasthan, Madhya Pradesh, Jammu & Kashmir, Assam, Orissa, Uttar Pradesh and Bihar which have a very high proportion of labour force dependent on agriculture with Assam accounting for 64.2 per cent and Bihar and Madhya Pradesh account for 61.9 and 68.8 percent respectively. The share of the service sector in NSDP ranges from 61.9 percent in Assam to 66.8 percent in Jammu & Kashmir. As against it, the share of industry in NSDP ranges from as low as 9.8 percent in Jammu & Kashmir and 17.3 percent in Orissa to 16.5 per cent in Rajasthan. In view of high share in employment in agriculture, the shares of employment in industry and services together fluctuate between 31 percent to 50 percent in under develop states. Obviously, the situation in these states is a low level of equilibrium in both NSDP and employment. The low level of productivity in agriculture, failure to move towards industrial or post-industrial service economy has been experienced in these states. Some of these states are making efforts to boost productivity in foodgrains – Andhra Pradesh 2,294 kgs and Uttar Pradesh 2,236 kgs per hectare in 2009-10, all other states have been operating at much lower levels of productivity. Moreover, in these states, there is a pressing need to intensify the rate of growth in industry and services, but unless a second Green Revolution in agriculture is not achieved, progress towards industrialization and post-industrial economy will also be restrained.

The survey of NSDP and employment shares in various states reveals a wide disparity. In Punjab and Haryana, the high share of NSDP from agriculture was the result of high productivity in agriculture with a small reduction of employment share in agriculture. However, the relatively high shares of NSDP in agriculture in poor states like Andhra Pradesh, Rajasthan, Madhya Pradesh, Jammu & Kashmir, Uttar Pradesh and Bihar were due to backwardness of agriculture, low levels of development in industry and services but these states have a very high proportion of workforce dependent on agriculture, with very small proportions drawing their livelihood from industry and services. Kerala, Andhra Pradesh and West Bengal, though medium level states in per capita NSDP indicate relatively lower share of NSDP originating from agriculture (nearly 20 %) and over 65 percent from services and about 10 to 13 percent in industry.

There is a need to study the production and

employment pattern of every state and evolve suitable policies to strengthen agriculture in the first instance which provides livelihood or employment to nearly two-third to three-fourth of the labour. A break-through in agriculture will provide a push to industry and services as a consequence of the increase in labour and land productivity in agriculture. The industry sector (or more popularly manufacturing) has lagged behind the growth in services. This transition witnessed in most of the states to a post-industrial 'service economy' without passing through a process of industrialization has been noted as a major weakness of the outcome of the development process undertaken in the country during the last 60 years. State level analysis indicates the policy directions that should be pursued in future so that sectoral disparities in NSDP and employment pattern are reduced.

7. WORK FORCE PARTICIPATION RATES IN INDIA

Labour, being a primary factor of production, the size of labour force is of great importance for the level of economic activity in a country. In the determination of the size of the labour force, it is customary to exclude children below the age of 15 and old people above the age of 60, though in India, poverty forces people belonging to these groups also to work for bare subsistence. The work force participation rate in a country, i.e., proportion of working population to total population, depends upon such factors as age and sex composition, attitude to work, availability of work etc. All these factors differ in different countries and may differ even within the same country in different periods. In advanced countries like England, Japan and others, work participation rate often ranges between 45 to 50 per cent, while in India it has been around 33 per cent.

Table 8 shows that the work force participation rate had declined between 1901 and 1951 from 46 per cent to 39 per cent. Since 1951, however, there has been a contradictory trend. But it should be emphasised here that the work force participation figures given in Table 8 are not really comparable as the concept of "worker" or labour force has been changing in the different censuses. For instance, the pre-Independence censuses used the concept of "status" of workers and lumped together as part of the work force both principal workers along with unpaid family workers. Naturally, the work force participation rate was high in pre-Independence period. For the first time, the 1951 census adopted a strict definition of worker–as one gainfully employed or one working for a livelihood--and excluded unpaid family workers. The work force participation rate naturally came down in 1951 census. The position was, however, reversed in the 1961 census.

Table 8. Work force participation rate since 1901

(in percentage)

Year	*Persons*	*Males*	*Females*
1901	46	61	32
1951	39	54	23
1961	43	57	28
1971	33	53	12
1981	37	53	19
1991	38	52	23
2001	39	52	26

Source : *Census Reports.*

In the 1961 census, the basis of work was considered to be satisfied if a person in the case of seasonal work like cultivation, livestock, dairying, household industry, etc. had some regular work of more than one hour a day throughout the greater part of the working season. During 1961 census, many such persons whose main activity was not economic were classified as workers. This resulted in an exaggeration of the work force participation rate and thus it rose to 43 per cent in 1961.

A rigorous and more meaningful definition was again adopted in 1971 census. A worker, according to the 1971 census, is a person whose main activity is participation in any economically productive work by his physical or mental activity. Work involves not only actual work but effective supervision and direction of work. This implies that a man or woman who is engaged primarily in household activities such as cooking for own household or a boy or girl who is primarily a student attending an institution, even if such a person helps in the family economic activity but not as a full time worker, should not be treated as a worker for the main activity.

The census of 1981 carries forward the tradition of the Census of 1971 in making the definition of "worker" rigorous and more meaningful and has classified the workers into 'main workers' and 'marginal workers'. Main workers are those who have worked in some economic activity over a period of six months or more and marginal workers are those who have not worked for a major part of the year.

Table 8 reveals that as against the participation rate of 43 per cent of total population recorded in 1961 census, the proportion of working population returned in 1971 census came down to 33 per cent. This was mainly due to the fact that many of the housewives and students who were treated as workers on the basis of some marginal contribution in 1961 census were not included in 1971 census as workers. Consequently, the ratio of female workers in total female population got considerably reduced in 1971 census. Whereas in the 1961 census about 29 per cent of the females were returned as workers, in 1971 census, only 12 per cent were recorded as workers. There was no major change in the 1981 census.

Work Participation Rate According to 2001 Census

The adoption in 1991 and 2001 Census of almost the same definitions and concepts of workers (main and marginal) of 1981 census has rendered the direct comparison of the results possible.

Table 9 : Work Participation Rate in India (1981-2001)

Year	Category	Persons	Males	Females
1981	Total	36.7	52.6	19.7
	Rural	38.8	53.8	23.1
	Urban	30.0	49.1	8.3
1991	Total	37.7	51.6	22.7
	Rural	40.2	52.5	27.2
	Urban	30.4	49.0	9.7
2001	Total	39.2	51.9	25.7
	Rural	42.0	52.4	31.0
	Urban	32.2	50.9	11.6

Source : *Census of India 1991 Series-1, (India) Paper 3 of 1991, Provisional Population Tables : Workers and Their Distribution*

Main findings of the 2001 census are as under:

1. In general, the total work participation rate (WPR) has shown an increasing trend from 1981 onwards. WPR was 36.7 per cent in 1981, it improved to 37.7 per cent in 1991 and further improved to 39.2 per cent in 2001.

2. Increase in Work Participation Rate is more perceptible in rural than in urban areas. Work participation rate in rural areas was 42.0% in 2001 as against 40.2% in 1991 and that in urban areas was 32.2% in 2001 as against 30.4% in 1991.

Table 10 : Total Workers in India (2001) and Work Participation Rates

(In million)

		Persons	Males	Females
Total	Population	1025.2	530.4	494.8
	Workers	402.5	275.5	127.0
	% of workers	39.2	51.9	25.7
Rural	Population	740.2	380.4	359.8
	Workers	310.6	199.2	111.5
	% of workers	42.0	52.4	31.0
Urban	Population	285.0	150.0	135.0
	Workers	91.9	76.3	15.6
	% of workers	32.2	50.9	11.6

Source : Registrar General of India

3. In the case of males, WPR in rural areas was 52.4 per cent in 2001 which was also the level attained in 1991; however, there is a slight improvement in WPR in urban areas in the WPR rising to 50.9 per cent in 2001 as against 49.0 per cent in 1991.

4. The work participation rate for females in rural areas has increased from 27.2 per cent in 1991 to 31.0 per cent in 2001—an increase by 3.8 per cent, but in the case of urban areas, WPR increased from 9.7 per cent in 1991 to 11.6 per cent in 2001, an increase by merely 1.9 per cent. (Refer table 6).

Table 11: Main and Marginal Workers in India (2001)

		In Million			Percentage	
		Total	Main	Marginal	Main	Marginal
India	Persons	402.5	313.2	89.3	77.8	22.2
	Males	275.4	240.5	34.9	87.3	12.7
	Females	127.0	72.6	54.4	57.2	42.8
Rural	Persons	310.6	229.7	80.9	74.0	26.0
	Males	199.2	169.3	29.9	85.0	15.0
	Females	111.4	60.3	51.1	54.1	45.9
Urban	Persons	91.8	83.5	8.3	91.0	9.0
	Males	76.2	71.2	5.0	93.4	6.6
	Females	15.6	12.3	3.3	78.8	21.2

Source: *Registrar General of India*

5. Out of a total population of 1,025 million, 402.5 million persons were workers, of these 275.5 million are males and 127.0 million are females. In relative terms, the share of males in total work force was 68.4 per cent and that of females was 31.6 per cent.

6. Out of a total rural population of 740.2 million, workers accounted for 310.6 million with 199.2 million being males and 111.5 million being females. Among the rural workers, the share of males was of the order of 64.1 per cent and that of females was of the order of 35.9 per cent.

7. In the urban population, out of a total of 285.0 million, 91.9 million persons constituted the urban workforce. Among them, 76.3 million were males and 15.6 million were females. This implies that the share of males in rural workforce was 83 per cent and that of females was 17 per cent.

8. From the census data, the conclusion emerges that rural women are more burdened; not only they participate in larger numbers in economic activity, they have to return home from that activity to undertake domestic work like cooking, cleaning, tending of cattle, not to mention child bearing and child rearing.

As against them, vast majority of the urban women have withdrawn from economic activity outside the home and look after only domestic work.

9. The Census has defined the 'main workers' as those who have worked for 183 days or more in a year and marginal workers who work less than 183 days in a year. Out of a total workforce of 402.5 million, 313.2 million are main workers accounting for 77.8 per cent and 89.3 million are marginal workers accounting for 22.2 per cent. Among male workers, the proportion of main workers was 87.3 per cent and among female workers, it was 57.2 per cent. This implies that females account for a much larger proportion as marginal workers—nearly 43 per cent. In rural areas, proportion of main and marginal workers among female workforce was 54% and 46% respectively, but in urban areas, this proportion was 79 per cent and 21 per cent respectively.

10. Out of a total of 80.9 million marginal workers in rural areas, 29.9 million (37%) were males and 51.1 million (63%) were females. In other words, gender distribution of marginal workers in rural areas was more titled towards females. As against them, out of a total of 8.3 million marginal workers in urban areas, 5.0 million (60.2%) were males and 3.3 million (39.8%) were females. The share of females in urban gender distribution of workers was relatively higher as compared with that of rural areas.

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CHAPTER 7

NATURAL RESOURCES, ECONOMIC DEVELOPMENT AND ENVIRONMENTAL DEGRADATION

"Natural resources determine the course of development and constitute the challenge which may not be accepted by the human mind."

– W. Arthur Lewis

1. NATURAL RESOURCES IN THE PROCESS OF ECONOMIC DEVELOPMENT[1]

The existence or the absence of favourable natural resources can facilitate or retard the process of economic development. Professor W.A. Lewis writes : "The extent of a country's resources is quite obviously a limit on the amount and type of development which it can undergo."[2] Underdeveloped countries, embarking on programmes of economic development, "usually have to begin with and concentrate on the development of locally available natural resources as an initial condition for lifting local levels of living and purchasing power, for obtaining foreign exchange with which to purchase capital equipment, and for setting in motion the development process."[3]

Natural resources include land, water resources, fisheries, mineral resources, forests, marine resources, climate, rainfall and topography. Some of these resources are known to man. For example, the topography of a region, the size of land surface, the climate, the area under forests, and the discovered mines form a part of the natural wealth about which the people of a country possess knowledge. But nature possesses more in its bosom and in order to discover what it hides, man is required to develop techniques of knowing the undiscovered resources. Sometimes the discovery of the use of a resource can immediately increase its use-value. Monazite sand deposits on the beaches of Kerala and Tamil Nadu had been known for several decades, but recent advances in the science of nuclear energy have made these resources most valuable and the new use has earned the title of 'rare earths' for these sands. In short, when we talk about the natural resources of a country, we have obviously in mind the extent of the known or discovered natural resources with their present uses. With the growth of the knowledge about the unknown resources and their use, the natural endowment of a country is materially altered.

1. On the question of exploitation of India's natural resources and its effect on ecology and environment, this chapter relies heavily on the pioneering work of the *Centre for Science and Environment : The State of India's Environment*, 1982 and 1984-85.
2. Lewis, W. A., *The Theory of Economic Growth*, Allen and Unwin p. 52.
3. J.I. Fisher, *The Role of Natural Resources in Economic Development : Principles and Patterns* Eds. H. F. Williamson and J. A. Buttrick, 1964. p. 32.

While some natural resources such as land, water, fisheries and forests are renewable others like minerals and mineral oils are exhaustible and can be used only once. Consequently, careful use of the exhaustible resources and maintenance of the quality of renewable resources like land are a must in the process of development.

2. LAND RESOURCES

Table 1 describes the land utilisation pattern in India for the year, 1999-2000. The total geographical area of India is about 329 million hectares, but statistical information regarding land classification is available for only about 306 million hectares; this information is based partly on village papers and partly on estimates.

Barren land. 42 million hectares or 14 per cent of the total reporting area in India are classified as :

(a) barren land, such as mountains, deserts, etc. which cannot be brought under cultivation, and

(b) area under non-agricultural uses, that is, lands occupied by buildings, roads and railways, rivers and canals, and other lands put to uses other than agricultural.

Presently, 14 per cent of the total reporting area is not available for cultivation. With rapid increase in population and growing urbanisation, this percentage would increase over the years.

TABLE 1 : Land utilisation pattern, 2006-07.

Particulars	*Area (million hectares)*	*Per cent*
(i) Total geographical area	329	--
(ii) Total reporting area	306	100
(iii) Barren land, not available for cultivation	42	14
(iv) Area under forests	69	23
(v) Permanent pastures and grazing land	11	4
(vi) Cultivable waste lands, etc.	18	6
(vii) Fallow lands	25	8
(viii) Net area sown	140.3	46
(ix) Area sown more than once	53.4	19
(x) Total cropped area (viii+ix)	193.7	66

SOURCE : *Statistical Abstract, India 2002* (Central Statistical Organisation)

Area under forests. Table 1 shows that 69 million hectares of land or 23 per cent of the total land area is under forests. Area under forests includes all land classified as forests by law or administered as forests, whether state-owned or private, and whether wooded or maintained as potential forest land.

Pastures and grazing land. Permanent pastur and other grazing lands include all grazing lands such permanent pastures and meadows and village comm grazing land. Table 1 shows that 11 million hectare or 3 per cent of the total land area--are classified permanent pastures.

Culturable waste Lands, etc. Table 1 refers culturable waste lands, viz., lands available for cul vation but not cultivated during the previous 5 or m years. They include land under miscellaneous tree cr such as casuarina trees, thatching grasses, bamb bushes and other groves for fuel, etc. These lands m either be fallow or covered with shrubs and jungl which are not put to any use.

Such lands are called culturable waste land they account for 18 million hectares or 6 per cent of t total land area (Table 1).

Fallow lands. These are cultivable but rem uncultivated or remain fallow during a given year or some period. Fallow lands are further classified current fallows and other fallow lands. Current fallo represent cropped areas which are kept fallow dur the current year, as, for example, the seeding area not be cropped in the same year. Other fallow la include all lands which are taken up for cultivation are temporarily out of cultivation for a period not than one year and not more than five years. The rea for keeping such lands fallow may be due to : unre nerative nature of farming, poverty of the cultiva *inadequate supply of water, silting of canals and riv* etc. Table 1 shows that fallow lands account for million hectares or 8 per cent of the total reporting in this country.

Agricultural Land. Now, out of the total ported area of 306 million hectares, net area sow only 140.3 million hectares or 46 per cent of the t land area. Net area sown includes the total area sown crops and orchards, counting area sown more than in the same year, only once.

Area sown more than once represents the area which crops are cultivated more than once during agricultural year. Total cropped area represents total covered with crops and it is the sum total of all the covered by all the individual crops; area sown with c more than once during the year being counted as sep areas for each crop. Table 1 shows that the total crop area in India in 1990-2000 was 193.7 million hectare was 185 million hectares in 1990-91).

Problem of increasing cultivable are

At the time of Independence, in 1947, India the massive problem of achieving self-sufficiency food. The various "Grow more food" program initially aimed at increasing the total cultivable are the country. As a result, till the beginning of the 196 increase in agricultural production was more the re of expansion of cropped area. This was done

(a) converting grazing lands and forest lands into crop lands,

(b) bringing cultivable wastelands under the plough and

(c) shifting the cropping pattern in such a way as to divert land under fodder crops to food crops.

However, as the National Commission on Agriculture, (1976) estimated, the net area sown could increase only marginally, say upto 145 million hectares by the year 2001. Actually, the net sown area could be expected to decline, with the relentless growth of population and growing urbanisation– cultivated and cultivable land is in fact, fast disappearing under concrete buildings and metalled roads and good agricultural land is being destroyed to produce bricks for house construction.

The 2001Census of India estimated India's population at a staggering 1,027 million as on March, 1, 2001. Besides, Indian's population is rising at the rate of around 17 million per year and is expected to be around 1,150 million in the middle of 2008 to support nearly 17 per cent of the global population with just 2.4 per cent of the world surface. This necessitates the production of 240 to 250 million tonnes of foodgrains as against the present 200 million tonnes. Agricultural scientists have always been confident and optimistic that India can meet the challenge, as it has vast land, water and sunlight resources. Most of our land, however, remains underutilised : unirrigated, single cropped and low-yielding. The possibility of increasing the country's irrigated area at least and increased production is possible through multiple cropping. Between 1951 and 2000, area sown more than once had increased from 13 million hectares to 49 million hectares. There is thus vast scope for double cropping in India.

Vohra's Thesis : Reduce net sown area

While attempts are being made to protect our land area from erosion and other environmental degradation, to increase the net area sown, and adopt modern techniques of agricultural production in the context of exploding population, B.B. Vohra of the National Commission of Environmental Planning, had pleaded for a reduction of the cultivated area from the present 141-142 million hectares to around 100 million hectares. In his Sardar Patel Memorial Lecture, in 1980, Vohra argued that 100 million hectares of good agricultural land could yield upwards of 300 million tonnes of foodgrains per year which could maintain a population of 1000 million or more in reasonable comfort. There is, very good case for Vohra's proposition on the score of economic efficiency in cultivation, provided of course, small and marginal farmers could be profitably employed elsewhere. Critics, however, easily brush aside Vohra's thesis as unrealistic and unpracticable, on the ground that only marginal and small farmers would lose their land and would be forced to become landless labourers.

So far, the Government has paid attention only to 46 per cent of the land area characterised as cultivated land. The present policy of emphasis on agriculture and increased farm production without equal emphasis on forestry and grazing lands is indeed counter-productive. The real challenge to the Government is to formulate a ***development strategy for an integrated land use plan*** with equal emphasis on the proper management of forest lands, grazing lands and crop lands.

3. FOREST RESOURCES

Forests are an important natural resource of India. They help control floods and thus they protect the soil against erosion. They supply timber, fuel wood, fodder and a wide range of non-wood products. They are the natural habitat for bio-diversity and repository of genetic wealth. Forests, thus, play an important role in evironmental and economic sustainability.

Area under Forests

Under land utilisation pattern, the Government of India estimated the total area under forests as 69 million hectares or 23 per cent of the total geographical area (Table 1). Using remote sensing technology, the Forest Survey of India has been periodically assessing the forest cover of the country biennially since 1987. The results of these surveys are summarised in Table 2:

TABLE 2: Forest Cover Estimates from 1987

Assessment Year	*Forest Cover (million hectares)*	*Percentage of land Area*
1987	64.1	19.5
1991	63.9	19.4
1995	63.9	19.4
2003	67.8	20.64

Source: ***Tenth Five Year Plan (2002-07)***, Vol. II, p. 1056.

***Eleventh Five year Plan* (2007-12)**, Vol. III, p. 67

The assessments since 1987 show clearly that the forest cover in India has stabilised around 19 per cent of the total geographical area (i.e. around 64 million hectares). The State of Forest Report 2003 of Forest Survey of India indecates the tree cover over 67.8 million hectares i.e. 20.6 per cent of the land area.

Actually, however, only about 38 million hectares are dense forests (i.e. 12 per cent) and the rest are open forests or degraded forests (about 7 per cent) and mangroves.

Despite their potentiality to reduce poverty and contribute to economic growth of India and their significant contribution to local and global environment, forest resources are not given the importance due to them.

Actually, forests have generally been undervalued in economic and social terms in our country. The contribution of the forest sector to GDP was put at 1 per cent in 1996-97 (measured at 1980-81 prices). A recent estimate puts the gross value of forest products at 2.4 per cent of GDP. These estimates, however, do not take into account the huge economic value of the eco-system services of the forests (which obviously cannot be quantified). These values are indeed important and should be given proper weight in all policy decisions affecting forestry.

There is concentration of forests in a few states like Assam, Madhya Pradesh, Orissa and a few Union territories. Northern India is particularly deficient in forests. There is a need to increase forest cover in the entire country as also to develop them in deficient states.

Plan outlays on Forests

During the first Five-Year Plans, the expenditure of forest development has been in the range of 0.5 per cent to 0.6 per cent of the total Plan expenditure. The Sixth Plan outlay on forests was ₹ 690 corores, which was 40 per cent more than what was spent in the previous five plans (₹ 480 crores); but in percentage terms, the Sixth Plan outlay was less than 0.6 per cent of the total Plan outlay. During the successive Plans also there was been an increase in plan outlay on forests, but in relative terms it was more or less insignificant.

The Eleventh Plan (2007-12) has projected a total investment of ₹ 8,840 crores for forests and environment (in 2006-07 prices) or about ₹ 10,000 crores at current prices.

Forest Policy, 1952

Appreciating the necessity of developing forests, the Government of India formulated its forest policy in 1952 to be implemented. According to this policy, it was decided to raise steadily the area under forests to 100 million hectares or 33 per cent for the country as a whole. The target was to provide green cover over two-thirds of the land area in the hills and mountains. To achieve this goal, it was necessary to secure the long-range development of forest resources on the one hand, and to meet the increasing demand for timber and firewood on the other. The main objectives of forest policy under the Five-Year Plans were :

(i) to increase the productivity of forests,

(ii) to link up forest-development with various forest-based industries; and

(iii) to develop forests as a support to rural economy. Keeping these broad guidelines, efforts were directed in the following specific areas :—

(1) Afforestation measures. To meet the deficiency of supply of wood in view of the growing demand, three important schemes were undertaken : (i) Plantation of quick growing species; (ii) plantation of economic species (teak, sisso and seamal, etc.); (iii) plantations to be raised under the scheme of rehabilitation of degraded forests.

There were various afforestation schemes under state plans and a total area of about 4.5 million hectares were brought under man-made plantations between 1951 and 1991.

(2) Social forestry. The Government of India accepted the recommendation of the National Commission on Agriculture (1976) and agreed to set up social forestry projects on non-forest lands, public lands and on village commons, in order,

(i) to increase green coverage,

(ii) to produce and supply firewood, fodder, small timber and minor forest produce to the rural population, specially to the landless and other weaker sections,

(iii) to produce raw materials for paper, rayon and match industries,

(iv) to meet the fuelwood requirements of the urban poor, and

(v) to create more employment in rural areas through afforestation.

There were three components in social forestry programmes, viz :

(a) farm forestry : Farmers were encouraged to plant trees on their own farms with free or subsidised seedlings supplied by the forest department;

(b) public woodlots : The forest department undertook the planting of fast growing trees along roadside, canal banks and other such public lands for the needs of the community; and

(c) community woodlots : Trees were planted by the communities themselves on community lands to be shared equally by all the villagers. This was the self-financing component of the social forestry programme.

Social forestry was launched by several states and ambitious programmes were formulated. Districts chronically deficient in fuelwood were selected for raising quick growing fuelwood and fodder species. During the Sixth Plan, for instance, over 9,000 million seedlings were distributed which could cover over 4.5 million hectares. Many of the social forestry programmes were financed by the World Bank and other foreign aid agencies.

(3) Promotion of Methods for increased Production. In order to improve utilisation of forest

resources, modern tools and equipments tested in advanced countries were used increasingly. Such a step was bound to be more useful in the hilly areas. Forests at high altitudes generally remained unexploited, due to inaccessibility.

One of the problems of India's forestry was low productivity. On an average, the growing stock per hectare was only 28 cu. metres against the world average of 110 cu. metres, and the average annual increment was only 0.5 cu. metre per hectare against the world average of 2.0 cu. metres. A recent estimate pointed out the possibility of increasing Indian forest produce at the rate of 5 cu. metres per hectare, provided the forests are properly stocked with fast growing valuable species and are protected and tended in a scientific manner.

(4) Forest Development Corporations. To attract institutional finance for forestry development, autonomous Forest Development Corporations have been set up in various states and Union Territories. Their main functions are : raising new plantations, developing infrastructure to exploit forest resources through large-scale investment in economically viable projects, logging and marketing timber and minor forest produce and so on.

(5) National Wastelands Development Board (NWDB). The Central Government set up NWDB in 1985 to bring 5 million hectares of wasteland per year under fuelwood and fodder plantations. The setting up of the Board was the Government's response to the ominous deforestation in the context of the exploding population, on the one side and the tremendous suffering of the weaker sections in the rural areas in their search for fuelwood and fodder, on the other. NWDB works under the overall guidance of the National Land Use and Waste lands Development Council headed by the Prime Minister and attempts to reverse the trend of rapid deforestation, and to conserve the already depleted forests by bringing wastelands under tree cover.

This programme of afforestation at the rate of 5 million hectares per year was, of course, ambitious, for it was more than 10 times the rate achieved in the Sixth Plan period. A programme of this dimension can be achieved only if it became a people's movement. While setting up of NWDB in 1985, the then Prime Minister Rajiv Gandhi announced : "We shall develop a people's movement for afforestation".

Evaluation of 1952 Forest Policy

(a) Massive deforestation

The target of 100 million hectares or 33 per cent forest cover was fixed by 1952 forest policy. This target was never achieved by the turn of this century. Despite all the big talk about the spectacular success of social forestry and of the many ambitious afforestation programmes, deforestation has been going on at an alarming rate of 1.3 to 1.5 million hectares every year through open collusion between the corrupt officials of forest departments, timber forest contractors and wood-based industries. While the ecological degradation of Western Ghats and Eastern Ghats is continuing unabated, the rich forest wealth of the Himalayas is expected to disappear completely in another 30 to 40 years.

The 1952 forest policy ***was bound to fail***, as it had declared that the people's need for minor forest produce, the industry's demand for raw materials and the States' demand for revenue (through the sale of timber and other forest produce) were all of equal importance. In practice, however, industry's demand for raw materials took precedence. At the same time, the States were interested in getting more and more revenue by selling timber and other forest produce.

As a result, the forest bureaucracy found a wonderful opportunity to make money through permitting illegal felling of trees by forest contractors. Massive deforestation began with the indiscriminate cutting down of vast tracts of trees beginning with those nearest the villages from which the villagers traditionally got more than 50 per cent of their food and met their fodder and fuel requirements. With the cutting down of trees by industry began the vicious circle of people's impoverishment, indebtedness, land alienation to the moneylenders and consequent dependence of the landless poor on the cutting and sale of firewood for their very survival. Because of industrial and revenue orientation and, notoriously corrupt forest officials, the pace of deforestation has intensified after Independence. It is estimated that

(a) between 1854 and 1952 – that is, roughly 100 years before Independence – tree cover had come down from an estimated 40 per cent to 22 per cent of the land area. The annual rate of decline was about 0.2 per cent;

(b) on the other hand, between 1952 and 1988, i.e., in a short period of 36 years, however, tree cover had come down from 22 per cent to 12 per cent of the total land area i.e., at the annual rate of decline of 0.4 per cent.

According to an estimate of FAO, India lost 3.4 million hectares of forest area between 1951 and 1972, which worked out to an annual denudation of 155,000 hectares. The latest satellite imagery studies paint a more tragic picture viz., the country is currently losing its forest cover at the annual rate of nearly 1.3 million hectares.

The State and the forest bureaucracy attempted to check this massive deforestation by trying to protect forests from poor forest dwellers but they did little or nothing to protect them from contractors and industry. Even the social forestry programme, initially designed to meet the fuel and fodder requirements of poor people, was distorted by the forest department to suit the needs of large landowners and industry.

The devastation caused to the Indian economy by continued and excessive deforestation is indeed enormous. Deforestation is directly responsible for greater frequency and intensity of floods, soil erosion, heavy siltation of dams built at enormous expense and changes in climatic conditions. It has also caused increased suffering to the landless labourers and marginal and small farmers who have steadily lost their traditional sources of fuel wood and fodder for their cattle. Loss of fuelwood, in turn, has led to the use of cowdung as fuel, resulting in loss of precious organic manure. Continuing deforestation, therefore, has brought us face to face with a major ecological and socio-economic crisis.

(ii) Social Forestry Programme, a disaster

The Government of India has been jubilant over the spectacular progress of the social forestry programmes, by "the unparalleled enthusiasm among the people for tree planting as could be seen from the offtake of seedlings supplied for farm forestry". Another report states : "In Uttar Pradesh, the World Bank-assisted social forestry programme overshot its farm forestry target by 3,430 per cent, phenomenal and unprecedented degree of success for a government programme. In Gujarat, farm forestry targets exceeded by more than 200 per cent."[4]

Despite all this praise, the social forestry has emerged as the most controversial initiative of the Indian Government. In the words of T.L. Sankar, a former Secretary of the Planning Commission's Working Group on Energy Policy : "I have seen many programmes launched in the name of the poor but soon distorted to benefit the upper classes. But no programme has been diverted further away from its objective than social forestry."[5] The basic weaknesses of this programme are : –

(*i*) The so-called spectacular success of social forestry is actually the success of *farm forestry* undertaken specially by the large farmers and encouraged by the supply of free or heavily subsidised seedlings by the Forest Department. Farm forestry has become extremely lucrative because of the heavy demand for wooden poles, and for woodpulp needed by paper and rayon mills and for firewood in urban areas. The richer farmers spontaneously responded to the commercial incentive of rising wood prices and perceived that "farming fast growing short rotation trees as a cash crop could be profitable as farming some of the traditional cash crops." This has led to the conversion of large tracts of prime agricultural land to tree farming especially eucalyptus plantations. It is, indeed, a mistake to equate farm forestry with social forestry.

As mentioned earlier, farm forestry is only one aspect of social forestry. In fact, the more important aspects of social forestry are tree plantations in public woodlots and in community woodlots. The community woodlots planted by the communities themselves on community lands ***to be shared equally by all people*** have achieved only about 11 to 12 per cent of the targets in Uttar Pradesh and about 43 per cent in Gujarat. It was only in West Bengal that this aspect of social forestry achieved over 109 per cent of the target, mainly because the landless were allotted small plots of government wastelands and were given wages, besides the full rights to the trees they planted and nurtured.

(*ii*) The social forestry programme has completely ignored the primary objective of ensuring for all rural households and particularly the landless in the rural areas ready access to fuelwood and fodder for domestic consumption and, thereby (a) reduce the amount of time women and children have to spend daily in collecting fuelwood, and (b) prevent the use of animal dung as fuel.

The World Bank which went in a big way in financing social forestry programmes in many developing countries is now worried about the extent to which social forestry would actually benefit the landless to meet their fuelwood and fodder requirements. In other words, ***under the present social forestry programme, trees are planted as commercial investment and not to fulfil basic survival needs for fuel and fodder of the tribals and rural folk.*** As a matter of fact, the social forestry programme has worsened the energy crisis for landless labourers and intensified the fodder problem by encouraging the plantation of hybrid eucalyptus which even animals do not touch.

(*iii*) The social forestry programme has made no real attempt to involve the landless in afforestation programmes. Properly planned and executed, 5 to 10 million landless families could be settled in these lands, making it the country's largest land reform programme. The social forestry programme could have become an anti-poverty and pro-employment programme. Instead, ***it actually aggravated unemployment in rural areas.*** For instance, a study of the Kolar district in Karnataka estimated that for each hectare of land shifted from foodcrops to eucalyptus, there was a loss of about 250 man days of employment per year.

(*iv*) An important failing of social forestry programme is ***the lack of involvement of poor women who ought to be the main beneficiaries of this programme.*** It is the women who collect fuel for the family every day but the social forestry programme ignored them altogether. The "male orientation of the social forestry projects has turned them into cash-generating rather than basic needs generating exercise. ***The social forestry programme has also not involved***

4. Quoted by the Centre for Science and Environment : *The State of India's Environment*, 1984-85, p. 52.
5. *Ibid*, p. 52.

the tribals who are deeply interested in the protection as well as promotion of forests.

(iv) Finally, social forestry does little for ecological restoration, for enhancing soil fertility and for water conservation. There is, in fact, a general feeling in the states of Uttar Pradesh, Punjab and Haryana that the fast growing eucalyptus plantations are depleting soil nutrients.

Thus, the social forestry programmes which started with the professed aim of meeting the dire fuel and fodder needs of the poor have become schemes of subsidies to support lucrative tree farming by the rich and more affluent farmers. The forest dwellers and poor people are forced to depend on the sale of fire wood and fall deeper into the clutches of moneylenders. Small farmers with unirrigated lands have not taken advantage of subsidised seedlings. In many states, irrigated lands have come under tree farming, affecting food production adversely. There has even been popular demand for suspending social forestry programmes in such cases. The programme has thus been badly distorted to benefit large landowners and industrial and commercial classes and has become an anti-people programme.

National Forest Policy, 1988

The 1952 forest policy had failed to stop the serious depletion of forest wealth over the years. Accordingly, it became imperative to evolve a new strategy of forest conservation. The Ministry of Environment and Forests of the Government of India announced the new forest policy in December 1988. The 1988 Forest Policy acknowledged the importance and primacy of tribals and local communities and provided for a sustainable management approach with maintenance of environmental stability as the prime objective. The important features of this policy are :-

1. Role of tribals in forests recognised. The new 1988 forest policy removes many anti-people stereotypes of earlier documents and recognises the symbiotic relationship between the tribal people and forests. It seeks to ensure that communities living within and around forest areas, specially the tribals should be able to get their domestic requirement of fuelwood, fodder, minor forest produce and construction timber from forests. The new policy enunciates that all agencies responsible for forest management, including forest development corporations should *associate tribal people closely in the protection, regeneration and development of forests*.

2. Depletion of forest area and the target for green cover. The new forest policy assumes that forests have been depleted owing to fuel, fodder and timber needs and transfer of land for non-forest uses and for raising revenue. It clearly recognises the failure of the state to preserve forests and control timber smugglers and contractors. The new policy reiterates that green cover should be extended to two-thirds of the land area in the hills and mountains and that the total forest area in the country should be raised to 100 million hectares or 33 per cent of the total geographical area in the country. Curiously, this was also the objective of 1952 Forest Policy.

3. Discouragement to forest-based industries. According to the new forest policy, forest-based industries must get their raw materials from wood raised through farm forestry. Besides no forest based enterprises--except at the village or cottage level--should be set up in the future, unless it is first cleared, after a careful study of the availability of raw materials.

The new forest policy asserts that forest-based industries will, no longer, be allowed to plunder the country's forests. The practice of supplying forest produce to industry at concessional rates would cease forthwith. The new policy, states categorically that forest land will not be made available for lease to industry. The wood based industries are now advised to motivate farmers to grow trees by supplying them with seedlings, credit, technical advice and other measures.

4. End the system of private forest contractors. The new forest policy advocates an end to the system of contractors working the forests. The contractors will be replaced by institutions such as tribal cooperatives, government corporations, etc. It is a well-known fact that private contractors have exploited ruthlessly the simple and ignorant forest-dwellers. But the tribal development co-operatives and other official agencies had also failed miserably and have become sources of exploitation. Even then, the new forest policy advocates the distribution of minor forest produce through state-run depots.

5. Forest land not to be diverted to non-forest uses. The forest department used to assign forest land to individuals or non-government agencies for the purpose of reforestation. But it is a cognisable offence to put forest land into "non-forest uses" which have been defined as "cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horti-cultural crops or medicinal plants."

The Government has generally suggested alternatives to industrial timber, railway sleepers and fuelwood. The new policy also suggests that India should import timber from other countries.

Evaluaton of 1988 Forest Policy.

Even though the new forest policy has been hailed as a blueprint for restoring the green cover over one-third of the country's land, it says nothing that has not been said by the forest policy of 1952. The target fixed by the policy of 1988 is to have 100 million hectares under forestry; and the strategy to be used is to provide green cover over two-thirds of the land area in the hills and mountains--*the target and the strategy of the 1988 policy were exactly the same as those fixed by the 1952 policy*.

The period of 36 years between 1952 and 1988 had witnessed such ruthless destruction of forests in the country that, instead of the forest cover being raised to 33 per cent of the total geographical area, it had been reduced to 12 per cent by 1988.

The reasons behind the destruction of forests in India are well-known. Reports after reports have appeared highlighting the damage that has been done in particular areas and experts have even predicted the time when forests would disappear completely. However, no significant steps have been taken to restore green cover in India.

There are three parties interested in the forest question; the people, the forest-based industries and the State. There are, however, inherent contradictions in the approaches and attitudes between people and industry and between people and the State. These contradictions started in the 19th century, with the British rulers of India who regarded the forests only as a source of revenue for the Government. Accordingly, the British declared that all forest land belonged to the State. However, even they conferred certain rights and privileges to the forest dwellers to the use of minor forest produce. The 1952 forest policy allowed forest dwellers and the poor people living near the forests to use minor forest produce. In practice, however, the forest officials did not permit them to collect fuelwood and the use of minor forest produce.

At the same time, industrial and commercial requirements for timber and raw materials were called national needs and were subsidised by the State. Industry was supplied with cheap timber and raw materials; and the State could raise revenue from the sale of timber and other forest produce. The forest department officials were happy with the regular bribes they received for permitting illegal felling of trees. It was because of this industrial orientation that the felling of trees for industrial and commercial purposes became extensive and the pace of deforestation got intensified after Independence.

It is a pity that the new forest policy of 1988 has done nothing to resolve this contradiction and reverse this trend, even though it talks about the symbiotic relationship between the forest dwellers and forests. The forest department is expected to supply denuded forest land to forest dwellers for the purpose of regeneration and to build community resources depleted by indiscriminate felling.

However the tribals and other forest dwellers are not allowed to grow fruit trees, medicinal plants or even fodder and fuel wood all of which they need for survival—because these come under the definition of "non-forest uses".

On the other hand, industries could acquire forest land for growing exclusively industrial species, as they were considered forest plantations.

This has been the situation till recently but the amendment to the Forest Conservation Act, 1980 aims at checking this trend and preserve ecological balance. Voluntary agencies working to protect forests, however, believe that, despite the new forest policy, the Government would not be able to check industrial and commercial pressures.

Accordingly, the 1988 Forest Policy is also bound to fail in the face of uncontrolled expansion of population and regular encroachments on forest land—the ruling party invariably regularises such encroachments at the time of general elections—mindless construction of multi-purpose irrigation dams destroying prime forests, extension of mining and construction of townships and above all illegal felling of trees; all these directly result in rapid deforestation and all these processes are likely to continue unchecked.

To conclude. Of the many environmental problems facing the country, the problem of deforestation has received the maximum attention from the Government and the general public but ironically, Government policies on afforestation have attracted the greatest public criticism.

Achievements under the Five Year Plans

We have explained, rather elaborately, the failure of the 1952 forest policy and the inherent weaknesses of the 1988 Forest policy. We should, however, mention some of the major programmes undertaken by the Government under the Five Year Plans and their major achievements.

(*i*) Forest cover which should have been 33 per cent of the total geographical area is now stabilised around 19.4 per cent. This is highly unsatisfactory but it is not that bad too, considering the persistent pressure of ever-growing population on forest resources of the country.

(*ii*) There is growing realisation that active and willing participation of the rural and forest communities is necessary for the success of any forest regeneration programme. Accordingly, the Government has adopted a new strategy known as Participatory Forest Management System. This new strategy involves rural people, particularly women and tribal community who have intimate knowledge of plant species, their growth characteristics, utility and medicinal value, etc. They also know the specific requirements of fuel, fodder, timber and other non-food products. The adoption of the new strategy has led to several positive outcomes, such as:

(*a*) change in the attitude and relationships of local communities and forest officials towards each other and the forests;
(*b*) improvement in the condition of forests;
(*c*) reduction in encroachments;
(*d*) increase in the income of local people; and
(*e*) involvement of non-governmental organisations (NGOs) in forest research, tree planting, promotion of productivity, etc.

(*iii*) The private sector, comprising farmers, cooperatives and industry has started playing an increasing role in the management of forests. Though the responsi-

for conservation and expansion of forest area lies mainly with the Government, rural people have been encouraging tree planting and tree maintenance and conservation in their farms, households, village woodlots, etc. to meet household requirements of fuel, fodder, poles, timber and medicinal plants. Currently, the area of private tree plantation under various programmes of social forestry, agro-forestry, farm forestry, etc. covers over 6 million hectares. There are also a large number of small private nurseries meeting the local demand for seedlings.

(iv) Forest research and education are being promoted by the Indian Council of Forestry Research and Education (ICFRE). The ICFRE undertakes, aids, promotes and coordinates research and application through a network of 10 institutes and centres. Besides, an increasing number of private companies and NGOs are doing their own research in such areas as tree breeding, medicinal plants and non-wood forest products.

(v) Finally, the Government has promoted external assistance as a major source of funding for forestry projects. The main donors of forestry projects in India are the World Bank, Japan Bank for International Co-operation, and others. Donor assistance in the total plan outlay was as much as 30 per cent in the Fifth and Sixth Plans. It had gone up to ₹ 830 crores in 1998-99. Under the Tenth Plan, 16 projects with a total outlay of ₹ [illegible] crores have been proposed to various donor agencies.

The Tenth Plan strove to set up Joint Forest Management (JFM) committee to enhance green cover and integrate livelihood opportunities. By the beginning of the Eleventh Plan, participatory forest management – or Joint Forest Management – had evolved sufficiently. Over 1,06,000 Joint Forest Managemental committees (with over 22 million participants) are functioning in 28 states, covering 22 million hectares of forest area.

The Eleventh Plan attempts to strengthen the JFM regime by:

(i) Incorporating the concepts of harvesting, value addition and improved marketing of forest produce

(ii) Improve the productivity of forests and make them provide timber and non-timber products without unnatural change in the composition of the forests; and

(iii) To manage forests to meet the livelihood needs of the neighbouring population.

The Eleventh Plan targets an increase of forests cover by 5 percent of the total geographical area, or an additional cover of 16 million hectares. National Afforestation Programmes, Joint Forest Management (JFM) District level Forest Development Agencies, Panchayati Raj institutions, National Afforestation, Eco-restoration and Eco-development Board, etc. – all these are to work together to achieve the basic targets of the Eleventh Plan.

The actual management of Government forests is handled by the state Governemnts, while capacity building and research are with the Central Government. The Eleventh Plan has proposed to strengthen "Integrated Forest Protection Scheme" to provide assistance to states for building capacity and basic infrastructure for modern forest management. The setting up of Indian Institute of Forest Management (IIFM), Wild Life Institute of India, Indian Council of Research and Education, Indian Plywood Industries Research and Technology Institute etc. are some of the initiatives to promote and strengthen the management of forests.

We may conclude this section by referring to four important programmes being implemented in recent years:

1. The Scheduled Tribes and other Forest Dwellers (Recognition of Forest Rights) Act – under this Act, land records for the recognized rights, mapping of common forests for community management and organization of federation of non-timber forest produce (NTFP) marketing societies are included.

2. As women are the principal stakeholders in the use and management of national resources, the Government attempts to ensure equal representation of women in the decision making and implementation processes in all participatory planning and development programmes – in JFM, aforestation plans of Panchayats, Tribal Rights Act, etc.

3. National Rural Employment Guarantee (NREG) programmes will include afforestation as one of the activities of the Panchayats.

4. The setting up of sanctuaries and national parks under the 1952 National Forest Policy, the enactment of the Wild Life (Protection) Act, 1972, the launch of the Project Tiger in 1973, the Project Elephant in 1992, the Biological Diversity Act, 2002 – these are major initiatives in the protection of wild life and preservation of bio-diversity.

4. WATER RESOURCES

Extent of water resources

India is one of the wettest countries in the world, with average annual rainfall of 1100 m.m. There is, however, no accurate information about India's water resources. Narottam Shah of the Bombay-based Centre for Monitoring Indian Economy, stated: "Unbelievable as it may seem, till now we have no arrangements in this country to compile and publish on an annual basis, comprehensive data regarding various aspects of water which are important for policy analysis and programme formulation and for monitoring the efficiency of use of our scarce water resources."[6]

Central Water Commission in its Water Resources Information System Directorate provides estimates about water resources and utilization as given in Table 3.

In table 3 we note that total estimated annual rainfall in 2009 was 3136 billion cubic meters (BCM). Average annual potential in reverse is 1869 BCM. Per capita water availability in 2010 was 1588 cubic meter, which was 1816 cubic meter in 2001. This indicates fast declining per capital availability of water in the country. It is reported by Central Water Commission that total

6. Quoted by Centre for Science and Environment : *The State of India's Environment* (1984-85), p. 29.

TABLE 3. Water Sector at a Glance

1. Estimated Annual Precipitation (including snowfall)	400	BCM.
2. Geographical Area	328.7	Million Hectare
3. (i) Census Population – 2001	1029	Million
(ii) Census Population – 2011	1210	Million
4. Estimated Annual Rainfall 2009	3136	BCM
5. Average Annual Potential in Rivers	1869	BCM
6. (i) Per Capita Water Availability (2001)	1816	Cubic Meter
(ii) Per Capita Water Availability (2010)	1588	Cubic Meter
7. Estimated Utilisable Water		
(i) Surface	690	BCM
(ii) Ground	433	BCM
(iii) Total	1123	BCM

Source : Central Water Commission, Water Resources Information System Directorate December 2010.

BCM : Billion Cubic Meter

estimated Utilisable Water was 1123 BCM per annum, out of which 690 BCM was surface water and 430 BCM was ground water. The nation has been witnessing acute water shortages are being experienced year after year by most parts of Tamil Nadu, Rajasthan, Gujarat, Orissa, etc. The problem of water scarity is assuming crisis proportions with growth of cities and increasing urban population and rising demand for water for irrigation.

Central water commission also gives estimates of projected water demand in the country has given in table 4.

Here in table 4 a comparison has been made with regard to projected water demand as given by Ministry of Water Resources (MOWR) and Nation Commission for Integrated Water Resources Development (NCIWRD). We find that the projected water demand from irrigation, drinking water and others has been more in case of MOWR than NCIWRD. As regards industry and energy NCIWRD has projected higher water demand in both 2010 and 2025 as compared to MOWR.

Government Policy on water resources

The British rulers in India did not evolve a clear-cut and definite policy on the utilisation of India water resources before 1947. During the Secon World War, India had to suffer serious food shortag ultimately resulting in the Bengal famine. The part tion of the country worsened the food situation an grow-more-food and self-sufficiency in food becam the most important short-term objectives of the Go ernment at that time. At the same time, rapid indu trial development launched soon after 1951 nece sitated two things : the increased production of agr cultural raw materials on the one side and the gener tion of electricity on the other. To these were added third dimension, viz flood control. For centuries, D modar, Kosi and other rivers were the scourge of th people living in the eastern states and according flood control was added as an important objective management of water resources.

Thus, India's water policy since Independen or more specifically, since 1950-51, consisted of th construction of huge dams and reservoirs, distributio canals, etc., all of which were designated as major an medium irrigation works. Some were also known multi-purpose projects, since they were designed generate electric power, provide irrigation water agriculture and drinking water to cities and contr floods.

The Government launched a new agricultur strategy in 1962 in the form of intensive agricultur district programme (IADP) and high-yielding variet programme (HYVP). Water was a major compone of this programme. It was to support this ne agricultural strategy, that the Government encourag intensive utilisation of ground water resources in th form of tubewell irrigation and surface wells. Th form of irrigation was called minor irrigation. Ev though the Government encouraged minor irrigatio it did not formulate any positive policies to preve ruthless and uncontrolled exploitation of ground wa resources and/or for their regeneration.

In the formulation of its policy regardi utilisation and management of water resources, th Government did not consider the role and significan of traditional sources of water, or water bodies vi ponds and tanks, small rivers, and watersheds. Th importance as sources of drinking water, means

Table 4 : Projected Water Demand

	MOWR		NCIWRD				
	2010	2025	2010		2025		
			Low	High	Low	High	
(*i*) Irrigation	688	910	543	557	561	611	BCM
(*ii*) Drinking Water	56	73	42	43	55	62	BCM
(*iii*) Industry	12	23	37	37	67	67	BCM
(*iv*) Energy	5	15	18	19	31	33	BCM
(*v*) Other	52	72	54	54	70	70	BCM
Total	**813**	**1093**	**694**	**710**	**784**	**843**	**BCM**

Source : Central Water Commission, Water Resources Information System Directorate December 2010.

BCM : Billion Cubic Meter

irrigation, usefulness for controlling and moderating floods, use for inland fisheries, etc. — all these were ignored by the planners and policy makers.

Reliance on large dams. A serious blunder our planners have committed and continue to commit is their reliance on big irrigation dams as a means of raising agricultural production. These gigantic dams costing hundreds and thousands of crores of rupees—because of poor planning, and bad execution—have brought much less benefits than were anticipated and have caused positive harm to people and the environment. They have already displaced millions of tribals, who are the poorest and the most powerless in the country. They have drowned thousands of hectares of rich forests. Even though, one of the professed objectives of large dams is the prevention and control of floods, this objective is rarely achieved.

The most serious and damning condemnation of our reliance on big dams has come from, Rajiv Gandhi, a former Prime Minister of India, in his address to the State Irrigation Ministers in 1986 : "The situation today is that since 1951, 256 big surface irrigation projects have been initiated. Only 65 out of these have been completed. 181 are still under construction. This is not a happy state of affairs. We need some definite thrust from the projects that we started after 1970. Perhaps we can safely say that almost no benefit has come to the people from these projects. For 36 years we have poured money out. The people have got nothing back, no irrigation, no water, no increase in production, no help in their daily life. By pouring money out to a few contractors or a few thekedars and labourers to build canals and may be public works departments to construct the dam, we are not really doing our people a favour."[7]

This blunt and damning criticism – ***coming not from an anti-dam activist but from the Prime Minister of the country***–had absolutely no effect either on our planners or on our bureaucrats who continue to waste crores of rupees on huge multi-purpose river-valley projects.

Neglect of tanks. The planners' obsession with large irrigation projects has led to the neglect of tanks which at one time used to be the traditional and the most common form of irrigation in many parts of the country. Through poor maintenance, tanks were allowed to fall into disuse because of siltation. To the planners and to our bureaucrats, tanks have always meant small technology and their upkeep and maintenance called for people's participation and co-operation, both of which were anathema to them.

It is now generally realised that tanks are important for good water management and are substitutes for canal irrigation in medium rainfall areas. They help to reduce and moderate floods, recharge wells and provide drainage in high rainfall periods. They are beneficial wherever crop failures are common or where the rains recede early. The Second Irrigation Commission stated clearly : "Dug wells and tanks are, by and large, the most important source of irrigation in the drought areas."[8]

Dr. Bhumbla, a former Commissioner of Agriculture, Government of India, states : "There is absolutely no doubt that if stress is laid on management of rainwater by storing the excess run-off, the average production of rice can be raised to 120 million tonnes and that of wheat to 70 million tonnes within the next 5 to 10 years."[9]

Ground Water resources. Ground water and its proper use assume great significance for a country such as India which faces continuous threat of drought and famines and "the big thirst" in less than 20 years from now. Unfortunately there is no accurate survey of ground water resources in the country but, according to one guesstimate, India's ground water resources would be about 3,700 million hectare metres, or about 10 times the annual precipitation. The annual exploitable potential is put at 45 million hectare metres but only around 13 million hectare metres are being exploited at present. With the introduction of the new agricultural strategy in the early 1960's there has been increasing use of tube-wells. In 1961, only 1 per cent of net irrigated land received tubewell irrigation but by 1990-91 about 30 per cent of the net irrigated land got the benefit of tubewell irrigation. Actually, it is the ground water irrigation and not large dams and canals which is the basis of India's green revolution.

Ruthless exploitation of ground water has also serious consequences. Since ground water withdrawal is greater than the recharge, the ground water table is declining rapidly. This problem is assuming serious proportions in many states especially in Maharashtra where there has been a major shift in cultivation from rainfed coarse grains to water-intensive sugarcane. Over-exploitation of groundwater can also lead to the intrusion of saline water, making the water unfit for drinking or irrigation.

There is another danger to ground water resources. In recent years, certain cases of dangerous pollution of groundwater have been reported from different parts of the country, e.g., pollution of groundwater by the effluents of tanneries in Tamil Nadu, by the textile printing and dyeing units in Tamil Nadu and Gujarat and so on. While pollution of rivers and lakes is easily detectable, pollution of ground water is rather difficult to detect and to rectify.

7. Prime Minister's address to State Irrigation Ministers, July, 1986.

8. Centre for Science and Environment : ***The State of India's Environment***, 1984-85, p. 40.

9. *Ibid.* p. 40.

enth Plan and Water Resource lopment

'he 11th Plan (2007-12) has focused attention on gerously low ground water table in 60 percent of ted and rain-fed land. The country is facing a risk of deepening and impending agricultural dry-land areas. Watershed management, rain arvesting and ground water recharge will augater availability in rain-fed areas. The 11th Plan d a total investment of ₹ 80,000 crores plan for structures for water management and water

he UPA Government at the Centre started in ilot project for repair, renovation and restoration bodies directly linked to agriculture. The pilot ncludes work on repair of silked ponds and lakes, ams, weirs and water conveyance systems. The es of pilot projects on water bodies are:

) to restore and augment storage capacity of dies; and

) to recover and extend their lost irrigation po-

epletion of ground water has assumed grave and sis proportions. The Central Water Board has d 1,065 blocks in the country as "over-exploited" al." Over 80 percent of these blocks are in 100 in seven states. The strategy for ground water is to divert rain water into "dug wells". Each is expected to cost ₹ 4,000. The requirement is structures, including about 2 million structures belonging to small and marginal farmers. In the budget, the Government proposed a grant of ent subsidy to small and marginal farmers and 50 subsidy to other farmers. The total amount of nvolved is ₹ 1,800 crores which the Finance has placed with NABARD.

he Government of India has solicited the World r financial assistance to undertake the pilot o repair, renovate and restore water bodies initially in 13 states. The World Bank has d a loan of ₹ 2,180 crores to Tamil Nadu to bout 5,670 water bodies in the state with a d area of over 400,000 hectares. Likewise, the ank has entered into an agreement with Andhra n March 2007 to cover over 3,000 water bodies ommand area of 2,50,000 hectares. Preparation r loan agreements with the World Bank are in stages in Karnataka, West Bengal, Orissa etc. re is bringing pressure on other states to give ce on repair, renovation and restoration of water

conclude: India is one of the wettest countries vorld but it is not able to hold all the water it Because of deforestation and denudation, a ion of the monsoon water disappears into surface run-off. Community water resources ponds, tanks and rivers are misused and continuously neglected. Rivers are increasingly gettin polluted as urban and industrial wastes are dumpe into them. India's water policy has concentrated o gigantic river systems and reservoirs and despite hu investments on them, their productivity continues to b low. They have not helped in controlling or moderatin floods. Nor are they cost effective, or ecological desirable.

5. FISHERIES[10]

India has a vast and diverse potential of fishin resources comprising 2 million sq. kms. of Exclusi Economic Zone for deep sea fishing, 7,520 kms. o coastline, 29,000 kms. of rivers, 1.7 million hectares reservoirs, nearly 1 million hectares of brackish wat area and 0.8 million hectares of tanks and ponds f inland and marine fish production. All these resource are waiting to be exploited fully.

India is the third largest producer of fish in th world and, second largest in inland fish productio Fisheries sector plays an important role in the socio economic development of India, generating employme for a large coastal population — about 14 million fishe men draw their livelihood from fisheries, but they gene ally live on the verge of extreme poverty, being victi of middlemen and money lenders. The fisheries sector i not only an important source of direct employment be generates employment in downstream industries—th sector provides employment to over 11 million peopl engaged fully, partially or in subsidiary activities. Fis eries help in raising nutritional levels, augmenting foo supply and being a major foreign exchange earning.

The contribution of the fisheries sector to gro domestic product (at current prices) has increased fro ₹ 1,230 crores to ₹ 32,060 crores between 1981 an 2002. Fisheries contribute about 1.2 per cent of India' GDP.

Broadly, fishery resources of India are eithe inland or marine. The principal rivers and the tributaries, canals, ponds, lakes, reservoirs comprise the inland fisheries. The rivers extend over about 17,00 miles, and other subsidiary water channels compris 70,000 miles. The marine resources comprise the tw wide arms of the Indian Ocean and a large number of gul and bays along the coast.

In 1951 total fish production was about 0.7 millio tonnes. This had increased to 6.8 million tonnes in 2005-06. Less than 10 per cent of fish production is exporte bringing in foreign exchange earnings of ₹ 6,300 crore in 2000-01 and nearly ₹ 12,901 crores in 2010-11. In dollar terms, export earnings from marine product exceeded over 2.2 billion dollars.

10. Statistics on Indian fisheries are taken from *Economic Survey*, 2011-2012.

4 : Production a marine p

	Production (m. tonnes)		
	Marine	Inland	Total
-51	0.5	0.2	0.7
-91	2.3	1.5	3.8
-01	2.8	2.8	5.6
-07	3.0	3.8	6.8
-08	2.9	4.2	7.3
-09	2.9	4.7	7.6
-10	3.1	4.8	7.9
-11	3.2	5.1	8.3

visional

Economic Survey, 201

The Five year plans velopment of fisheries be the nutritional levels and to earn much need eries programmes have r-intensive inland and improving the harvesti the growth of country deep sea trawlers.

velopment of Ma

Despite the vast fish of fish in India is duces only 9 per cent whereas Japan contribu cent and China coming ne importance of developin fact that they can act ources. However, we ine resources fully. The has estimated that only 1 ilable along the Eastern g caught at present. If be are employed, it is poss h by 10 times i.e., from lion tonnes in (2009-10) f nes per year. This indee s impact on nutritional s on raising the standard ken fishermen as also o ngs.

The government of Ind heries Development Boar pped potential of the fishe of modern tools of resea ding biotechnology.

Table 4 : Production and Export of fish and marine products

Year	Production (m. tonnes)			Export of marine products	
	Marine	Inland	Total	Quantity ('000 tonnes)	Value (₹ crores)
[illegible]-51	0.5	0.2	0.7	20	2
[illegible]-61	2.3	1.5	3.8	140	873
[illegible]-71	2.8	2.8	5.6	503	6,300
[illegible]-77	3.0	3.8	6.8	612	8,313
[illegible]	2.9	4.2	7.3	541	7,620
[illegible]-09	2.9	4.7	7.6	602	8,608
[illegible]-10	3.1	4.8	7.9	678	10,480
[illegible]-11	3.2	5.1	8.3	8.3	12,901

Provisional

Source: *Economic Survey*, 2011-12.

The Five year plans assign high priority to the development of fisheries because of the necessity to raise the nutritional levels of protein deficient Indian diet and to earn much needed foreign exchange. The fisheries programmes have emphasised family-based semi-intensive inland and brackish water fisheries and improving the harvesting from seas by stimulating the growth of country boats, mechanised boats and deep sea trawlers.

Development of Marine Fisheries

Despite the vast fishery resources, the production of fish in India is far from adequate. India produces only 9 per cent of total supply of fish in Asia whereas Japan contributed to the extent of 43 per cent and China coming next, to about 18 per cent. The importance of developing fishery resources lies in the fact that they can act as substitute to our land resources. However, we have not exploited our marine resources fully. The Indian Ocean Expedition has estimated that only 1 to 8 per cent of the fish available along the Eastern and Western coasts is being caught at present. If better methods of catching fish are employed, it is possible to increase the fish catch by 10 times i.e., from the present nearly 3.0 million tonnes in (2009-10) from the sea to 40 million tonnes per year. This indeed would make a tremendous impact on nutritional standards of the people and in raising the standard of living of our poverty-stricken fishermen as also on our foreign exchange earnings.

The government of India has set up the National Fisheries Development Board (NFDB) to reduce the untapped potential of the fishery sector with the application of modern tools of research and development including biotechnology.

Marine Fishing Policy, 2004

High priority is now being given to the development of deep sea fishing, as increasing production can come only from deep sea and oceans. The programme of mechanisation of fishing crafts is being followed vigorously. The Government of India is providing subsidy up to 33 per cent of the cost of vessels and is permitting charter of foreign fishing vessels and joint ventures, and excise duty relief on diesel utilised by mechanised craft for marine fisheries To exploit marine fish resources, landing and berthing facilities for fishing crafts are being provided at various major and minor ports. Fishing harbours capable of handling small and medium size fishing vessels are being developed at the minor ports. For the operation of medium and large size deep sea fishing vessels, special fishing harbours have been developed at the major ports.

Even though the subject of fisheries is in the State list in the Indian Constitution, Government of India has launched a comprehensive marine policy in November 2004, with the objective of boosting fish production so as (a) to increase exports of fish and increase per capita consumption of fish within the country, and (b) promote economic security of Coastal fishermen. The important features of the 2004 marine policy are as follows:

(i) Reduce fishing pressure in the traditional fishing area but promote exploitation of deep sea and oceanic waters;

(ii) Protect subsistence level fishermen by earmarking exclusive areas in terms of depth and distance for non-mechanized (non-motorized) traditional craft; areas beyond this are demarcated for mechanical and motorized craft;

(iii) Union territories of Lakshadweep Islands and Andaman and Nicobar Islands are rich in fish resources, but they are at present, grossly under-exploited; special policy measures are being be taken to promote harvesting, marketing and processing of fish in these groups of islands;

(iv) Give attention to post-harvest operations, viz. maximum utilization of harvested fish for internal consumption and for export, conforming to international standards, and to minimize wastes;

(v) To promote the welfare of fishermen and their households in the coastal belt and ensure their social security and economic well being; and

(vi) Give increased attention to environmental factors as well as the effect of pollution on marine fisheries.

Inland fisheries

While considerable interest is being shown to the development of marine fisheries, inland fisheries

have not been neglected altogether. During the Fifth Plan, for instance, the Central Government sponsored (a) Fish Farmers Development Agencies (FFDA's) to popularise fish farming in tanks and ponds and (b) Brackish Water Fish Farmars' Development Agencies (BFADs) for development of brackish water acquaculture.

There are nearly 150 FFDAs functioning in 17 States. These agencies have brought nearly 386,000 hectares of water area under intensive fish culture and over 5 lakh farmers have been trained in improved practices. The fish yield has been raised from 50 kgs per hectare in the 1970's to about 150 kgs per hectare now. The Government of India is also implementing a ``Shrimp and Fish culture Project'' with World Bank assistance for development of shrimp culture in the states of AP, Orissa and West Bengal.

The Government is also increasingly aware of the immense potential for fishery development in East and North-Eastern States. Fish is an important constituent of the diet of the people of these states. Accordingly, development of fisheries in these states can go a long way to tackle the problem of food as well as unemployment.

While there has been remarkable improvement in inland fisheries (Table 4) there are some disturbing trends as well. In the first place, there is danger to riverine fisheries because of growing river pollution. Discharge of untreated effluents from the industrial units located near the rivers and of urban sullage destroy fish in thousands and millions.

Secondly, the construction of dams, weirs and barrages prevents the free migration of fish to their usual breeding and feeding grounds and thus adversely affects the stock of fish in rivers.

Accordingly, fisherfolk who have depended on rivers and lakes for their livelihood for centuries, have been forced to give up their hereditary occupation and become landless labourers in rural areas or migrate to cities and towns in search of employment.

6. MINERAL RESOURCES AND MINERAL POLICY

The Tenth Plan correctly asserted: "The development and management of mineral resources plays a major role in the industrial growth of a nation."[11] Coal and iron, for instance, are the basic minerals needed for the growth of iron and steel industry which in turn, is vitally necessary for the country's development. Similarly, there are other minerals like mica and manganese, copper, lead and zinc which are of economic importance. Then, we have mineral fuels like petroleum, coal, thorium and uranium which are of national importance. Besides these, we have a number o minor minerals with varying degrees of utility to th country.

The reserves of coal and iron so essential fo basic industries viz., are ample. But there is a fair long list of vital minerals like copper, tin, lead, zin nickel, cobalt and sulphur and most of all petroleum, which India is deficient.

Trends in mineral production

On account of the efforts of the Indian Govern ment, there has been significant improvement in th production of minerals both in volume and valu The value of mineral production has improved fro about ₹ 58 crores in 1947 to ₹ 55,360 crores in 200 01 (consisting of Rs 30,000 crores of minerals and 25,360 crores of crude petroleum and natural gas pr duction). It would be useful to discuss briefly a fe major minerals.

Coal

Coal is one of the primary sources of ener accounting for about 67 per cent of total energy co sumption in the country. The total workable reser of coal are estimated at 180 billion tonnes for th country as a whole though the geological coal reserv of the country are estimated at 221 billion tonnes. Th principal centres of coal are the Bengal-Bihar regio the Madhya Pradesh, Maharashtra, Orissa and Andh Pradesh. But bulk of the coal production comes fro Bengal-Bihar coal fields. They contribute 60 to 65 p cent of the total production.

The main problem with coal which is an impo tant source of energy is that two-thirds of India's co resources lie too deep and their extraction is always profitable under present technological con tions. Despite heavy investments made in mechanisati of underground mines, productivity is low and has st nated for many decades.

Secondly, the reserves of good quality co needed for industrial purposes are limited. Indian co has high ash content -- 25 to 40 per cent and sometim exceeding 40 per cent. The transport of such poor qu ity coal over long distances leads to (a) wastage transport capacity and energy and (b) low efficien and pollution of coal based thermal power plants.

Coal has the highest forward linkage effect w steel, cement, fertilisers, electric power and a numb of other industries. Fed up by the policy of pro hungry private owners of coal mines, the Governm nationalised coal mines and Coal India Limited was up in 1975. Since then, there has been sharp incre

production. Coal production (production of coal and lignite) was 33 million tonnes in 1950-51, 94 million tonnes in 1973-74 and 525 million tonnes in 2008-09. Even though, there has been a regular rise in the production of coal under the Five Year Plans, the demand for coal had generally exceeded the supply. During the 1950's the Railways were the largest consumers of coal, accounting for more than one-third of the total coal consumption. With increasing dieselisation and electrification, the consumption of coal by railways declined steadily. On the other hand, the demand for coal by the steel industry and for power generation has increased sharply.

With the sharp rise in oil prices since 1970's, it is recognised that the prime source of energy in India will have to be coal for some decades. Reorganisation of old mines, introduction of new methods and techniques in the development of new mines and standardisation of plant and equipment are some of the steps adopted by the government to increase coal production.

India has an estimated 1,000 billion cubic meters of Coal Bed Methane (CBM) which is likely to emerge as a new source of commercial energy in India.

Oil and Natural Gas

In the beginning of 2001, it was estimated that India had reserves of 734 million tonnes of oil crude and [illegible] billion cubic meters (BCM) of natural gas.

The great stimulus to industrial development and the general intensification of the country's economic activities since Independence led to a rapid growth in the consumption of petroleum products, which rose from 3.3 million tonnes in 1950-51 to 138.2 million tonnes in 2009-10 (Table 5).

Oil Crude

At the beginning of the First Plan, the production of indigenous crude out was insignificant, at 0.3 million tonnes. The Government went in a big way for oil exploration through the Oil and Natural Gas Commission (ONGC) and Oil India Limited (OIL). The discovery of oil reserves on and offshore led to rapid increase in the indigenous production of crude. The domestic production of oil crude rose smartly to nearly 7 million tonnes in 1970-71, and to 33 million tonnes by 1990-91. Since then, domestic production of oil crude has been stagnant around 32 to 34 million tonnes. Due to stagnant production of oil crude in the country, gross import of crude oil went up from [illegible] million tonnes in 2008-2009 to 153.3 million tonnes in 2009-2010.

Table 5 : Petroleum and Petroleum Products
(in million tonnes)

Item	*1950-51*	*1970-71*	*1990-91*	*2010-11*
A. Oil Crude				
(i) Refinery Throughput	0.3	18	52	206.2
(ii) Domestic Production	0.3	7	33	37.7
(a) On-shore		7	12	16.4
(b) Off-shore		-	21	21.8
(iii) Net Imports	NA	12	21	163.6
B. Petroleum Products				
(1) Domestic Consumption	3.3	18	55	141.8
(ii) Domestic Production	0.2	17	49	190.4
(iii) Net imports	3	1	6	–30.6

Source : *Economic Survey*, 2011-12.

Petroleum products

Let us now consider the growth in demand and supply of petroleum products. As mentioned above, rapid industrialisation and consequent growth of the transport system, the demand for and consumption of petroleum products rose rapidly since Independence. For instance, consumption of petroleum products (naphtha, kerosene, high speed diesel oil, petrol and fuel oils) rose from 3.3 million in 1950-51 to 138.2 million tonnes in 2009-10.

Domestic production of petroleum products was insignificant in 1950-51— just 0.2 million tonnes. However, it rose smartly so as to match with total demand; domestic production of petroleum products was over 17 million tonnes in 1970-71 and touched 150 million tonnes in 2009-10. The gap between demand and supply of petroleum products is normally met through imports. In 2009-10, India's exports of petroleum products exceeded its imports.

Actually, imports of petroleum, oil and lubricants and crude oil have been rising steadily for the past many years and they constitute the single largest import item for India — the value of imports rose from ₹ 136 crores in 1970-71 to ₹ 71,500 crores in 2000-01and further to ₹ 7,46,335 crores in 2011-12

In 1970-71, India's imports of petroleum products constituted just 8 percent of total imports; but by 2010-11 this has increased to over 30 percent of total imports. With the international price of oil crude shooting up the oil position of India is indeed grim.

In order to meet the rising demand for crude oil and petroleum products, the Government of India initiated a number of short term and long-term measures to augment the production of crude oil in the country. Short-term measures include: early production systems, deepening of existing wells, adoption of improved technology. Long-term measures include: development of new oil fields, participation of private capital in oil exploration, change in the oil exploration policy, etc.

In this connection, we may refer to the major role natural gas is likely to play in bridging the gap between demand and supply of liquid hydrocarbons in the future. At present, natural gas is being used as a domestic fuel and also as as feedstock for core sector industries like power and fertilisers. About 10 per cent of the total production of natural gas is flared. Both ONGC and OIL have initiated the Gas Flaring Reduction Project to reduce flaring to the barest minimum.

Iron Ore

Iron ores are extremely important both for the production of steel and for purposes of exports. The production of iron ore was only 3 million tonnes in 1950-51. It rose to 54 million tonnes in 1990-91, and 218.6 million tonnes in 2009-10.

Explorations of iron-ore have revealed the presence of the numerous and rich deposits of iron in Bihar, Orissa and Madhya Pradesh. Low grade iron-ores were also found in Tamil Nadu, Maharashtra and Andhra Pradesh. The total reserves of iron have now been estimated to be of the order of 21,000 million tonnes.

The Indian iron and steel industry is fortunate in the sense that it possesses high quality iron ores and at low cost. India is today one of the cheapest producers of steel in the world.

Mineral Development and the Plans.

Minerals are non-renewable natural resources and, hence, they are called as "wasting assets". Once they are extracted, they are lost for ever. The guiding principle of mineral policy, therefore, is social economy and conservation.

The First Plan proposed to spend ₹ 2.5 crores for the exploration of minerals. The Geological Survey of India and the Indian Bureau of Mines made extensive surveys relating to the location of mineral deposits. The National Mineral Development Corporation Limited was set up in November, 1958, for the exploitation of minerals other than coal, oil and natural gas. From modest investments on mineral development successive five year plans raised the outlays considerably. Between 50 to 60 per cent of the outl is on the exploration and production of petrole crude. This is because of the paramount need become self-sufficient in the production of oil cru as soon as possible.

Mineral Policy before 1994

The mineral policy of the Government of Ind since independence was based on the Mines and Mi erals (Regulation and Development) Act, 1957. Th Act asserted :

(a) the mineral wealth of the country was a na ral resource, limited and non-renewable;

(b) mineral resources were required for devel mental and strategic needs of the country;

(c) their exploitation should strike a balance tween the immediate needs of the present generat and those of the future generations; and

(d) exploitation of minerals should satisfy requirements of conservation and environment.

Accordingly, the Central Government and State Governments had framed rules and guidelines the grant of mining leases and for the extraction export of minerals. The Central Government had reserved for itself, apart from coal and oil, the exc sive exploitation of 13 important minerals, viz., ore, manganese, chrome, sulphur, gold, diamond, c per, lead, zinc, molybdenum, tungsten, nickel, and pl num. Finally the Government always attempted to m the best use of the available mineral resources thro scientific methods of mining.

The pre - 1994 mineral policy governing extr tion and export was broadly successful. The Gove ment had kept a strict control over extraction and port and in certain cases, the Government had reser for itself the exclusive ownership and extraction. this policy had to be reversed and a new liberal min policy had to be introduced for two important reas

(a) Since 1991, the Government had introdu new liberal economic policy in industry, trade and nance. The management of mineral resources sho be closely integrated with the over-all strategy of dustrial development.

(b) Public sector's exclusive ownership and ploitation of mineral wealth had not generally moted rapid industrial development nor had it enc aged export of minerals adequately.

New Mineral Policy 1994

Accordingly, the Government of India amen the Mines and Minerals (Regulation and Developm

Act, 1957 in January 1994 and announced a new mineral policy;

(a) throwing open the mining sector to the private sector including direct foreign investment,

(b) empowering the states to grant prospecting licences/mining leases without prior approval of the Central Government (except in a few cases), and

(c) removing the restrictions on equity holding by foreign nationals in a mining company.

The major objectives and the strategies of the new mineral policy are as follows:

(i) To explore for identification of mineral wealth on land and off-shore. Under the new mineral policy, the Government would continue exploration of the mineral wealth of the country and while doing so, special attention would be given to the development of the strategic minerals, (b) those minerals in which India is poor or just adequate resource base and (c) those minerals which are required for electronic and other high-tech industries.

(ii) To develop mineral resources taking into account the national and strategic considerations : The strategy of development adopted by 1994 mineral policy would ensure :

(a) a regular supply of mineral raw materials for industrial production;

(b) exploration and supply should keep the present needs as well as future long-term needs of the country;

(c) adoption of efficient measures of processing of minerals and effective measures for conservation; and

(d) adoption of scientific methods of exploration.

In this connection, the new mineral policy invites through equity and technology participation in exploration and mining of high value scarece minerals. Joint ventures with Indian and foreign equity participation would be encouraged. The Government would also grant mineral concessions for small deposits in scheduled areas to scheduled tribes.

(iii) To minimise adverse effects of mineral development on the forests, environment and ecology through appropriate protective measures : Extraction and development of minerals are closely inter-linked with other natural resources like land, water, air and forests. The areas in which minerals occur are ecologically fragile and some are biologically rich. Hence the new mineral policy takes a comprehensive view to facilitate the choice or order of land use keeping in view the needs of development as well as the needs of protecting the forests, environment and ecology.

Mining activity often leads to environmental problems like land degradation (particularly in open casting mining), land subsidence (in underground mining), deforestation, atmospheric pollution, pollution of rivers and streams, disposal of solid wastes, etc.—affecting the ecological balance of the area. Therefore, prevention and mitigation of adverse environmental effects due to mining and processing of minerals and reparing and revegetation of the affected forest area and land covered by trees in accordance with the prescribed norms and established forestry practices shall form integral part of mining development strategy in every case.

Under the new mineral policy, *mining operations will not ordinarily be taken up in identified ecologically fragile and biologically rich areas*. No mining lease will be granted to any party—either private or public — without a proper mining plan, including the environmental management plan approved and enforced by statutory authorities. Such a plan should adequately provide for

(a) controlling the environmental damage,

(b) restoration of mined areas, and

(c) for planting of trees according to the prescribed norms.

As far as possible, reclamation and afforestation should proceed concurrently with mineral extraction. Efforts will be made to convert old disused mines into forests and other appropriate forms of land use.

(iv) To promote foreign trade in minerals : Minerals have been important source of foreign exchange earnings. The policy of export of minerals keeps in view : (a) the mineral inventory position, and (b) long term needs of the country.

As far as possible, efforts will be made to export mineral in value added form.

(v) To promote research and development in minerals. The new mineral policy emphasises the promotion of research and development, technology upgradation, and research in mining methods.

Evaluation of the 1994 mineral policy

The 1994 national mineral policy makes a radical departure from the long-standing policy of the Government of India to keep the exploration and exploitation of major minerals exclusively within the public sector. The Government is now allowing domestic and foreign enterprises to invest in mineral extraction and export. There are, however, two serious dangers in this approach :

(i) The short-sighted greed for huge profits on the part of the private companies can lead to serious

damage to the long-term national interests of the country. There is also the temptation and pressure to over-exploit and push up the exports of the mineral resources to increase foreign exchange earnings.

In this connection, the export policy for minerals must be made an integral part of the industrial, trade and investment policy of the Government whereby (a) the foreign exchange earned through such exports is put to productive use, and (b) the countries importing minerals from India are encouraged to invest in India to develop India's long term export capability.

(ii) The new liberal policy of exploitation of minerals is likely to have adverse impact on the environment. The private sector is not bothered about the environmental angle. The Government of India must, therefore, watch carefully the role and behaviour of the private sector — and also the public sector— mining companies should be really concerned with the protection of the environment.

Mineral Policy in the Eleventh Plan (2007-12)

The Eleventh Plan proposes various measures to attract private investment for exploration of mineral deposits and operation of mines. Accordingly, the Plan proposes further revision and modification of the Mines and Minerals Act and the Mineral Concession Rules. The Plan is taking concrete steps to remove procedural hassles and numerous discretionary provisions in the laws and thus encourage prospective investors. The Eleventh Plan has proposed a thorough review of the policy and of the laws and procedures concerning mining, to identify and eliminate urgently the constraints in the way of investments in mining activities. The Planning Commission has also proposed to formulate transparent and equitable conditions of resettlement of those whose lands have been acquired.

7. ECONOMIC DEVELOPMENT AND ENVIRONMENTAL DEGRADATION

After Independence, India launched a series of economic plans for rapid expansion in agriculture, industry, transport and other infrastructure, with a view to increase production and employment, to reduce poverty and inequality of incomes and wealth and to establish a socialist society based on equality and justice. To bring about increase in agricultural production and also to increase employment opportunities in agriculture, the Five Year Plans in India brought additional land under cultivation, expanded irrigation facilities and used increasingly chemical fertilisers, pesticides and high yielding hybrid seeds,—all collectively known as the New Agricultural Strategy. In the sphere of industries, new industries have been set up, existing industries have been expanded and technology is being continuously upgraded, Development of agriculture and industry has been accompanied by development and expansion of infrastructure--namely, of power, transport and communication, banking and finance, etc.

At the same time, because of growing population and high degree of mechanisation, mindless and ruthless exploitation of natural resources, we have degraded our physical environment. By physical environment we mean the whole complex of climate, soil, water and biotic factors on which we all subsist, and on which our entire agricultural and industrial development depends. Rapid economic development is actually turning India into a vast wasteland.

Land degradation and soil erosion

According to the Ministry of Agriculture, Government of India, soil erosion and land degradation have assumed serious proportions. This can be seen from Table 6.

Table 7. Problems of soil erosion and land degradation

	million hectares
1. Total geographical area	329
2. Area subject to water and wind erosion	103.16
3. Area degraded through special problems (ravines, salinity, waterlogging, etc.)	43.65
4. Average area annually subject to damages through shifting cultivation	5
5. Annual average area affected by floods	8
6. Annual average cropped area affected by floods	4
7. Total drought-prone area	40

Source : *Indian Agriculture in Brief*, 27th Edition, 20 Water Commission of India, 2012.

Table 6 shows that 174 million hectares (Addition of serial numbers 2 and 3) or 53 per cent of the total land area in India is suffering from serious degradation. Of this, area subject to water and wind erosion amounts to 103.16 million hectares and area degraded through special problems like ravines, salinity water-logging etc. accounted for another 43.65 million hectares.

Area degraded through special problems includes : Waterlogged area : 8 million hectares, alkaline soil : 4 million hectares, saline soil : 5.5 million hectares, etc.

It is estimated that the total flood prone area is 40 million hectares but the annual average area affected by floods is 8 million hectares and the annual average cropped area affected by floods is 4 million

Loss from Soil Erosion. Soil erosion takes place when the surface soil is washed away through excessive rains and floods. It occurs because of indiscriminate felling of trees and conversion of forests into cultivated land, uncontrolled grazing by cattle and wrong methods of cultivation. The annual soil loss from erosion is tremendous and the consequences are disastrous; heavy siltation of the dams and reservoirs, canals, stream and river beds reduces their capacity to hold water and thus result in increasingly disastrous floods.

It is difficult to calculate the total national soil loss as a result of erosion but the loss is estimated to be around 6,000--7,000 million tonnes of soil, which, in terms of major nutrients, such as nitrogen, phosphorus and potassium alone is equal to an annual loss of 8.7 million tonnes. Measured at the current market prices, present annual loss due to soil erosion will work out around ₹ 60,000 crores.

Dr. K. G. Tejwani of the Central Soil and Water Conservation Research and Training Institute has estimated that one-third of our land under forests, nearly two-thirds of land under agriculture and nearly all culturable waste lands, permanent pastures and grazing lands are in urgent need of soil conservation measures.[12]

Every State Government has now set up a State Land Use Board (SLUB) to promote schemes of soil conservation. But soil conservation measures such as afforestation, contour bunding, regulation of land use, reclamation of saline, alkaline and of ravine lands, etc. are slow, time-consuming and expensive.

Problem of overgrazing and ecological degradation

Since Independence, the Government has badly neglected grazing lands. According to land use statistics, only about 11 million hectares of land in the country are classified as permanent grazing lands. (Refer to Table 1). Apart from these pastures, livestock and cattle breeders are supposed to use village commons and other common resources. In the past, there were informal agreements for public grazing on private crop lands after the harvests--actually, crop stubbles, undergrowth of crops, re-sprouting of harvested crops as well as bushes and topfeeds of trees etc. provided graziers with better forage than pastures and uncultivated lands. But in the last 50 years or so, the area of grazing lands has declined drastically. The commons lands and common resources of the villages which generally belonged to the Panchayats have been encroached upon by the richer farmers. Besides, because of growing population, there has been pressure to produce foodgrains and to raise cash crops and, accordingly, forests and permanent pastures and village commons have been converted to crop lands, even though most of them may not be really suitable for crop farming. Government irrigation schemes too have been responsible for turning earlier grazing lands into crop lands. This had led to haphazard overgrazing. The animals have to scrounge for whatever they can get on millions of hectares of fallow land, uncultivated lands, uncultivable wastelands as well as on forest lands. The livestock snap up every accessible vegetation, wherever it is found, leaving only non-palatable weeds. To ensure their own survival, livestock breeders have responded by increasing their animal population and keeping more browsers. The result is more rapid destruction of grazing lands and pressure on forests.

The effects of haphazard grazing on the environment are alarming. Land degradation due to overgrazing has led to ***desertlike conditions*** in many parts of the counry. Besides, depletion of vegetative cover, overgrazing is hardening the soil, preventing forest regeneration and causing soil erosion in many parts of the country. In addition to ecological destruction, there is a growing hostility from farmers against the graziers who are generally nomads. In fact, many nomadic groups have given up nomadism and have become landless labourers.

To stop ecological destruction caused by indiscriminate grazing, Indian experts have been regularly recommending stall feeding. But the State Governments have ignored this recommendation and fodder development is a low priority in the State Plans. Some form of co-ordinated development of fodder crops was undertaken only from the 1970's. The much publicised social forestry programmes which were to provide fuelwood for the poor and fodder for their animals have hopelessly deteriorated into supplying wood for the urban-based paper and rayon industries. Almost nothing has been done about afforesting public lands with fodder species and regenerating grasslands.

The Indian planners are completely ignorant about this problem and are not even aware of the fact that there is immense potential for grazing lands in India. In Rajasthan alone, cultivable wastelands are estimated at 9.5 million hectares which even if moderately developed can support a large livestock population.

Deforestation and land degradation

There is probably no other area of India's environment that has been viciously attacked and destroyed in the last 60 years since Independence than the country's forests. According to FAO, India was supposed to have lost 3.4 million hectares of forest land

12. Centre for Science and Environment : ***The State of India's Environment***, 1982, A Citizens' Report, p. 4

between 1951 and 1972 alone; over 72 per cent of forest area was lost to agriculture (2.4 million hectares) and another 17 per cent was lost to river valley projects, industries and roads and communications

The process of deforestation has continued till today at the current annual rate of 1.3 to 1.5 million hectares. A recent report prepared by the International Union for the Conservation of Nature and Natural Resources (IUCN) mentions that India has lost nearly 2.5 million hectares of mangrove forests in this century alone--these remarkable forests can grow on marginal lands, and survive soil infertility, waterlogging and salinity and high winds.

It is now estimated that the rate of depletion of forests in the Himalayan ranges from Kashmir to Assam--which represents 25 per cent of India's forest resources--is so great and so fast that this mighty mountain range is destined to become barren by the year 2030. There are literally no forests left in the Himalayan ranges below the height of 2,000 metres.

The forests in the foothills of Uttar Pradesh were totally decimated during the 1950's and have since made way for crop lands and today this erstwhile forest region constitutes the most prosperous agricultural region of the State. Even though current official statistics put the forest area in India at 68 million hectares or 22 per cent of the total geographical area, the National Committee on Environmental Planning states that no more than 12 per cent of the country's land surface is under adequate tree cover.

The progressive depletion of the country's forest wealth is literally driving the country towards an ecological collapse. Increasing floods, soil erosion, heavy siltation of dams constructed at enormous cost, changes in the micro-climate--these are the dangerous consequences of deforestation. Floods are becoming too frequent and their intensity and heavy damage to life and property are increasing over the years. There is acute scarcity of fuelwood in the whole country and it is assuming the proportions of a famine—fuelwood famine—in certain parts of the country.

Who is responsible for this growing deforestation ? Even though the Forest department blames the nomads and graziers, the tribals, and the shifting cultivators and the ordinary women collecting their daily fuelwood needs as responsible for deforestation, *the maximum blame for deforestation rests squarely on the state governments and the management policies of forest departments.*

The State governments in their desire to collect revenue from forests, have permitted felling of trees to private forest contractors. They have also permitted the setting up of a large number of forest-based industries and further supply them raw materials at subsidised rates. To cite only one example. The Government of Karnataka used to supply bamboo to paper mills at ₹ 15 a tonne, while the basket weavers and other small users of bamboo had to buy it at ₹ 1,200 per tonne. The State government will not allow the forest dwellers and the villagers living near forests to meet their legitimate demand for minor forest produce. The forest officials are anti-people and while they attempt to keep the rural people and tribals away from the forests, they connive with forest contractors and smugglers in extensive illegal tree-felling.

The most unfortunate state of affairs is that there is virtually no section of the country's population which has any personal stake in the preservation of forests. Madhav Gadgil of the Indian Institute of Science, Bangalore puts this forcefully : "The local population is not bothered about preserving forests because it earns more if it steals the wood, instead of working for low wages. The industry is interested only in immediate profits. The forest bureaucracy has neither responsibility nor accountability."[13]

The new forest policy formulated in 1988 is a weak attempt to reverse the trend of ruthless destruction of forests, and promote regeneration and conservation.

Adverse Environmental Effects of faulty utilisation of water resources

Even though India is one of the wettest countries of the world, it is not able to hold all the rain water it receives. Because of deforestation and denudation, a large portion of the monsoon water disappears into the sea as surface run-off. While many parts of the country suffer from acute shortage of water, drought and famine, India is also one of the most flood-prone areas of the world. Between 250 and 270 million people in India live in areas that may be affected by floods in any one year. Global statistics indicate that over 7 per cent of all flood victims live in India and Bangladesh. One of the biggest blunders of economic planning in this country is to continue to allow vast quantities of water resources to be lost to the sea, often after causing flood havoc on the way.

(i) Adverse environmental effect of big dams. As mentioned earlier, our planners have relied too much on big irrigation dams as a means of raising agricultural production. These gigantic dams costing thousands of crores of rupees have caused positive harm to people and to the environment. They displace millions of innocent tribals, the poorest and the most powerless. They drown millions of hectares of rich forests. They have failed to prevent and control floods. Besides, heavy siltation of the reservoirs of major

13. Quoted by Centre for Science and Environment, in *The State of India's Environment*, 1982, p. 35.

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silt reduces their storage capacity and makes them incapable of absorbing heavy floods. Often, panic releases from these reservoirs have led to destructive flash floods in the valleys downstream. Recent estimates reveal that the area affected by floods has increased to 40 million hectares from 20 million hectares in 1971. The average annual loss due to floods on standing crops, cattle, agricultural lands, houses, roads, bridges, embankments, cottage industries etc. is estimated to be anywhere between ₹ 12,000 crores to ₹ 15,000 crores.

A major environmental effect of huge dams and multi-purpose irrigation projects is the degradation of the soil in the command areas due to waterlogging and soil salinity.

(ii) Evils of waterlogging. Whenever drainage systems are neglected while building roads, rail and road embankments, rain and flood water may be held up and land gets waterlogged. Sometimes, unusual heavy rains and floods in irrigated areas increase the supply of water so much that land remains under water for long periods. Over-irrigation is becoming a common practice in many areas and is another reason for waterlogging.

Though reliable and accurate statistics are not available about the extent of waterlogging, a very intelligent guesstimate was made by B.B. Vohra of the National Committee of Environmental Planning : "It would not be unreasonable to assume that at least [illegible] million hectares of our total irrigated area of about 40 million hectares are threatened by waterlogging and salinity and are in urgent need of attention lest they are not to go out of production in the near future."[14] Dr. M.S. Swaminathan, the World famous agricultural scientist, argued that within 10 years of the introduction of canal irrigation in the Chambal area in Rajasthan and Madhya Pradesh, about 25 per cent of the command area became waterlogged.[15] This was also the case in Bhakra command area as well as in other command areas.

Waterlogging has become a serious problem and menace in Punjab and Haryana. This problem also arises in various irrigation projects in U.P., West Bengal, Gujarat, M.P. and Maharashtra.

(iii) Salinity. The soil contains certain salts which are harmful for the plants. So long as these salts lie deep in the earth, there is no problem. But they are brought to the surface--known as salt effervescence—by the seeping of the canal water into the lower layers, thus forcing subsoil water to come up. As the subsoil or ground water level rises, the salts of the earth come up to the surface ruining crops and making cultivation impossible. The problem can be tackled best by lining canals and distributaries with concrete to prevent water from seeping in. Pumping out subsoil water by tubewells can also prevent it from coming up. A major portion of the salt-affected lands lies in fertile Indo-Gangetic plains of Punjab, Haryana and U.P.

In this connection, we may refer to the steady and disquieting series of reports about the negative effects of one of the largest canal systems of the world, viz the Indira Gandhi Canal in Rajasthan. While the desert had indeed bloomed overnight and transformed many lives in the command area of the Canal system, the hopes of better life for farmers and villages have faded equally rapidly in those areas affected by waterlogging, salinity and water seepage from the Canal. For quite sometime, environmentalists and social activists have been warning the concerned authorities about the devastation of the desert eco-system and the growing dangers of waterlogging and salinity. These warnings are now confirmed by a Central Government study of the affected areas. In its report, the Water and Power Consultancy Services have recently shown that :

(a) One-third of the command area of stage one of the Indira Gandhi Canal is affected by waterlogging and salinity; and

(b) the command area in the second stage of the Canal, where irrigation is about to begin, showed a similar dimension of negative effects.

The Government bureaucrats — have till now ignored these warnings on the ground that a few difficulties and some negative effects are bound to appear in a gigantic programme like the Indira Gandhi canal. They also point out that, in some cases, waterlogging is the result of unwise and inefficient use of canal water. They also accept that technical aspects of the programme could have caused the problem—in fact, the impervious layer of gypsum just beneath the soil could be cited as a major cause of waterlogging and salinity in this area.

Instead of pretending that the problem does not exist, it would be wise to have a technical survey of the damage being done to the villages and to the land and take remedial action.

(iv) Destruction of habitat. Large dams and multi-purpose river valley projects have become India's most controversial environmental issue. The construction of large dams in India has displaced millions of families. It has been estimated that the colossal Narmada Basin Development Programme, consisting of 31 dams and costing ₹ 25,000 crores will displace a million people, mostly helpless tribals.

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14. B.B. Vohra : Sardar Patel Memorial Lecture, 1980, Quoted in *The State of India's Environment*, 1982, pp. 6-7.
15. *The State of India's Environment*, 1982, p. 7.

Our water and energy planners and bureaucrats in their zeal and enthusiasm, stress the benefits of canal irrigation and hydro-power but completely ignore the problem of human suffering involved in displacement and rehabilitation. And, what is worse, India's record in rehabilitation of the dam-displaced is the most shameful--too little compensation and that too, after prolonged litigation and corruption and bribery at all levels.

Apart from the destruction of habitat, large dams have resulted in decimation of millions of hectares of vital forests in the catchment areas, increased soil erosion and landslides and consequently greater danger of floods, dangers of earthquakes and dam-bursts, and so on.

Voluntary environmental protection groups which have opposed the blind bureaucratic emphasis on huge dams and multipurpose river valley projects in our country are not against "progress" or "economic development" but are positively in favour of the benefits of irrigation and of hydropower. They, however, point out that small-earthen dams for water harvesting are both ecologically sound and economically profitable. These small dams do not result in large human displacement nor do they lead to soil erosion, deforestation and desertification. Besides, very little investment is involved in their construction. Finally, the time lag between investment and benefit in small earthen dams is minimal.

Till now, India's water policy has concentrated on gigantic river systems and reservoirs which have not helped in controlling or moderating floods. They are not desirable ecologically. The Government has misused and has continuously neglected community resources such as ponds, tanks and rivers. However, the UPA Government at the Centre seems inclined to reverse the trend and go for community water bodies.

Environmental Problems arising out of mining

Since Independence, the Indian Government has gone in a big way for extraction of minerals of all types but it has not paid sufficient attention to the environmental problems created by mining activity to land, water, forest and air.

Large mining enterprises involve conversion of agricultural land into townships, roads, railway lines, stockyards, and so on. Besides, surface mining involves the removal of vegetation and top-soil. The disposal of mining wastes requires additional land. The mineral dust from the mines pollutes the air and settling on land, reduces agricultural productivity. The residues from waste dumps spread to agricultural fields and make them useless for cultivation.

Underground mines often lead to subsidence o land due to excessive exploitation or because of e cessive "depillaring". In the vast tracts of coal minin districts of Eastern India, big crater like depressio have been formed and lakhs of hectares of land a lost permanently. Finally, underground fires and stoc yard fires cause damage to land. Underground fires coal mines are generally difficult to control. For i stance, an underground fire in a Jharia coal mine said to rage continuously since 1932 and over 50 mi lion tonnes of coking coal are reported to have bee destroyed so far.

Mining activity can adversely affect wat resources in a particular area. Rain water, passi through mining wastes, flows into rivers and strea and pollutes them. Mineral treatment plants and co washeries use enormous quantities of water for was ing the ores, which are released into neighbour lakes and rivers, thus polluting the sources of wa supply to the neighbouring population. The mines al pump out millions of litres of water, lowering surrounding ground water table, reducing the availab ground water and the natural vegetation.

Mining activity is a major cause of defores tion and soil erosion in certain parts of the count As mining activity is often carried out in forest regions, forests are cleared and timber is cut and used for supporting the roof of mine galleries. Min leases in India do not include provisions for conservation measures or refilling the worked-ov mines. Hence, a large number of abandoned sto quarries and mines are lying in bad shape and are und extensive gully erosion.

Through water and air pollution, mining act ity degrades the quality of life of the people who li and work in the vicinity and is responsible various respiratory and other illnesses. The wo affected are the poor tribals whose lands and fore have been extensively damaged and whose health ruined. The environmental damage of mining is i creased manifold when mining activity is accompani by industrial activity.

Proper mineral policy should, therefore, clude measures for reclamation. In U.S.A., Fede and State laws require that reclamation plans filed and approved before any coal mining licence issued. India too should pass such legislation so t reclamation is made an integral part of mining activi

Industrialisation and Atmospheric Pollution

India's uncontrolled industries and ba maintained automobiles rival with those in the w in their pollution generation capacity. They are a ing large amounts of pollutants to the atmosphere, t

giving off a host of environmental problems. The major atmospheric pollutants are carbon dioxide, carbon monoxide, sulphur dioxide, oxides of nitrogen, suspended particles of matter, hydrocarbon and metallic traces. Other specific pollutants arise from particular sources, as for instance, urea dust from fertiliser factories, lead from automobile emission, fluorides from aluminium production, cement and lime dust from cement factories, radiation from nuclear power stations, etc. All these are causing serious health problems.

On the global level, a steady increase in the carbon dioxide content of the atmosphere – accumulation of green house gases (GHG)– is undoubtedly the most serious environmental problem confronting the whole world, since it holds out the threat of catastrophic climatic changes.

The harmful effects of air pollution include noxious fumes and odour, diminished visibility, injury to human health, crops and other vegetation and damage to property through dusts and corrosive gases. Besides, chemical and fertiliser factories and those producing paper, leather, and other goods do not treat their harmful effluents and wastes but discharge them untreated into rivers, lakes and seas. Thus they pollute precious water resources and destroy fish seriously. In the words of an expert, "Rivers have now become a resource for urban and industrial India to be used as cheap dumpyards for their wastes and all this is sanctioned in the name of economic development".

The major environmental problems in the West are those arising out of waste disposal, that is problems of air and waste pollution and of disposal of highly toxic, industrial and nuclear wastes. In India as well as in the Third World countries with progressive pace of industrialisation, the waste disposal problems are getting worse day by day.

Measures taken during the Five Year Plans to Control Pollution

From the very beginning, Indian planners recognised that rapidly growing population and fast economic growth would directly and indirectly affect the sustainability of the environment. Specifically, the planners wanted the Government to tackle three problems — air pollution, water pollution and disposal of solid waste. Accordingly, Central Pollution Control Board and State Pollution Control Boards have been set up to tackle these problems.

(1) *Air Pollution*: Air pollution has led to respiratory diseases in cities. The Central Pollution Control Board (CPCB) has set up air quality standard for short-term (24 hours) and annual for industrial, residential rural and other areas with respect to various pollutants like suspended particulate matter (SPM), respiratory particulate matter (RPM), etc. CPCB has established a national air quality monitoring network covering 290 stations spread over 90 cities and towns. To reduce vehicular emission, CPCB has introduced emission standards for petrol and diesel driven vehicles. Guidelines have also been laid down for setting up of industries. 24 critically polluted areas have been identified across the country and an action plan has been devised for the control of pollution in these areas.

(2) *Water Pollution*: This is the result of contamination of surface and ground water due to discharge of untreated/partially treated water from industry, domestic sewerage and fertilizer/pesticide run-off from agricultural fields. CPCB and State Pollution Control Boards have been monitoring water quality in different states and have found that organic and bacterial contamination continues to be critical sources of pollution in Indian aquatic resources. Chemical composition of ground water in some areas has revealed a high concentration of nitrates, potassium and even phosphates. In areas of intensive industrial activity, there is high concentration of heavy/toxic metals in different proportions in ground water. The Government has enacted:

(a) Water Prevention and Control of Pollution Act, 1974 to lay down and maintain specific standards for discharge of waste water;

(b) The Environment Protection Act, 1986 to empower the Central Government to intervene directly to protect environment; and

(c) National Water Pollution Act, 1987 to provide priority to drinking water and proper management of water resources.

Besides, the Government has launched:

(i) National River Conservation Plan (NRCP) in 1995 to clean stretches of major rivers of the country; and

(ii) National Lake Conservation Plan (NLCP) in 1997 to clean and restore major lakes of the country.

(3) *Solid Wastes*: According to one estimate, the present annual generation of solid wastes in Indian cities and towns has increased from 6 million tonnes in 1947 to 48 million tonnes in 1997 and is expected to increase to 300 million tonnes by the middle of this century. The Government set up a National Waste Management Council in 1990 to suggest disposal of municipal waste. Accordingly, rules have been framed and are being implemented for the use of recycled plastic, for energy recovery of urban wastes and for biomedical waste management and handling.

The Municipal Solid Waste Management and Handling Rules (2000) have been introduced under which municipalities are required to submit annual re-

rts on waste management to CPCB.

Industrial and hazardous waste includes sludge ntaminated with heavy metals, wastes from paints, es and organic chemical units and highly acidic and kaline wastes. The relatively more industrialised states e Gujarat, Maharashtra, Tamil Nadu and Andhra adesh face problems relating to toxic and hazardous astes. The major hazardous waste generating indus- es are petroleum and petrochemicals, pharmaceuti- ls, pesticides, paints and dyes, fertilisers, inorganic emicals, etc. Some of these hazardous wastes lead to round water contamination. At present, about 7.2 illion tonnes of hazardous wastes are generated an- ually in the country and that around ₹ 1,600 crores e required for treatment and disposal of these wastes. he Government has formulated the hazardous waste anagement and handling rules and serious efforts are eing made:

(i) to make an inventory of hazardous wastes;

(ii) to arrange for training programmes to deal vith hazardous wastes management;

(iii) to prohibit import and export of hazardous vastes;

(iv) to close/shift industrial units producing haz- rdous wastes (e.g. recent closing of 200 tanneries in Tamil Nadu and 35 foundries in Bengal); and

(v) to set up common effluent treatment plants or a cluster of small scale units.

Various programmes were taken up in the 9th nd 10th Plans to enhance the handling and manage- nent of hazardous substances and these are to be con- inued with great vigour in the Eleventh Plan (2007- 12) as well.

Bio-diversity: The Tenth Plan had asserted clearly that "the sustainable use of biodiversity is fun- damental to ecologically sustainable development." India is identified as one of the 12 major biodiversity countries of the world. However, since 1951, industrialisation has put severe strain on the ecosys- tem, altering and even destroying it. The loss of biodiversity arises from the destruction of the habitat, extension of agriculture, filling up of wetlands, con- version of rich bio-diversity areas for human settle- ment and industrial development, destruction of coastal areas and uncontrolled and unregulated commercial exploitation. A series of steps have been taken in re- cent years to protect and conserve biodiversity. These include:

(a) establishment of 88 national parks and 490 wild life sanctuaries;

(b) the setting up Indian coral reef monitoring work for the conservation and management of mangroves and coral reefs;

(c) declaration of five sites as world heritage sites;

(d) project tiger reserves and project elephants have been set up to ensure long time survival of tigers and elephants in their natural habitats; etc.

Many of these initiatives had already been un- derway during the 8th and 9th plan periods. The Tenth Plan (2002-07) has proposed to complete them, be- sides introducing new programmes/schemes.

Need to change Development Strategy

Soon after Independence, the Government of India adopted a policy of rapid economic development through extensive and intensive exploitation of natural resources. Unfortunately the Government has allowed landlords, private contractors, mine owners and industrialists to encroach upon public lands and pastures, and literally loot and destroy forests, water resources and mineral wealth. The rich and the powerful have gradually but surely appropriated the country's natural resources in their favour. The bureaucrats have actively colluded with the more affluent in the destruction of India's environment.

While economic development has enriched a small group of people — namely, the rich landlords in the villages, the small and large industrialists, the contractors, the smugglers, the bureaucrats and the politicians—environmental degradation which is the direct result of this economic development has led to tremendous suffering and misery to millions of farmers, tribals, nomads and traditional craftsmen and fisherfolk. It has been responsible for the steady growth in the number of landless labourers and squalor-stricken migrants to cities. The continuous influx of millions of rural people to the cities and towns are indeed "ecology refugees" displaced by dams, destruction of forests, victims of floods and droughts, and so on. The destruction of environment has imposed the heaviest burden on women from poor, landless, small and marginal farm families, forcing them to spend 5 to 10 hours a day foraging for fuel, fodder and water in addition to household work, agricultural work and caring for animals.

A few voluntary organizations have tried, in vain, to inform and influence the policy makers and the general public about the dangers inherent in the government's development policies and the environmental degradation they lead to. Quite often voluntary organisations agitating against huge dams (Tehri, Narmada Sagar, etc.) with a view to protect forests, helpless tribals and others, are condemned by our bureaucrats and politicians as agents of foreign funding agencies.

It is high time that our planners ***review the entire position of development and environmental crisis and evolve a new process of balanced and rational development which*** will also preserve the environment.

8. GLOBAL CLIMATE CHANGE AND INDIA

A new dimension to the environmental situation has been added in the form of "Global Climate Changes" due to high carbon emission. This has taken the form of rapid melting of glaciers in Arctic and Antarctic regions, melting of snows in high mountain regions like the Himalayas, untimely rains and heavy floods, frequent earthquakes and tsunamis, rise in seas levels and erosion of coastal regions etc. Global warming is turning out to be a reality and the humanity is reeling under the same. In urban areas pollution levels have increased to dangerous levels and breathing fresh air has become a luxury.

Increasing pollution levels are causing global warming due to the Green House Effect (GHE). The outer atmosphere of the earth has several gases, which are critical for life on earth as they keep some of the sun's warmth from reflecting back into space and without them the world, would be a cold and barren place to live. The "Green House Effect" refers to the temperature regulating effect that such atmospheric gases have on the earth. The temperature regulating gases are called green house gases, which form a blanket around the earth, keeping some heat from the sun within the earth's atmospheric orbit and thus keeping the planet warm and habitable. Six types of gases have been identified as 'Green House Gases',

1. Carbon dioxide (CO_2).
2. Methane (CH_4).
3. Nitrous oxide (N_2O).
4. Hydro fluorocarbons (HFC's).
5. Per fluorocarbons (PFC's).
6. Sulfur hexafluoride (SF_6).

Increased level of pollution had caused the presence of these gases in increased and augmented quantities due to which the global temperature is increasing artificially. Some climatic change is now inevitable because of emissions of such gases over the years. The climate generally does not respond immediately to such external changes but after 150 years of industrialisation, global warming has gained momentum and it is bound to affect the earth's atmosphere in future.

Though green house gases makeup only one percent of the atmosphere, but they act like a blanket around the earth. Human activities are making the blanket 'thick', the natural levels of these gases are being supplemented by emissions of carbon dioxide from the burning of coal, oil and natural gas; by additional methane and nitrous oxide produced by farming activities and changes in land use; and by other long lived industrial gases that do not occur naturally.

The average temperature on the surface on the earth has risen by 0.60 Celsius since the late 1800's and is expected to increase by another 20 Celsius. Average sea level has also increased by 10 to 20 centimeters and is expected to rise further by another 40 centimeters by 2100, causing contamination of underground sources of water across the world. Pollution and global warming is endangering the living species. Higher temperatures are expected to expand the range of diseases like malaria, Influenza etc.

According to Human Development Report 2007-08, High-income OECD countries' total emissions of CO_2 were 10,055.4 million metric tonnes in 1990 and 12,137.5 in 2004. United States alone caused 4818.3 in 1990 and 6045.8 in the year 2004. As on date US accounts for only 4.6 per cent of world population and is causing 22 per cent of world' pollution, where as India which is 17.4 per cent of the world population, causes hardly 4 per cent of CO_2 emissions.

UN Initiative, Kyoto Protocol and Bali Convention

UN took the initiative and made efforts towards coping with rising global temperatures and hazardous effects of global warming, in the form of Inter-Governmental Panel on climate Change (IPCC) which gave its assessment report in 1990. The United Nations Framework Convention on Climate Change (UNFCCC) took effect in 1994 and after a series of meetings and discussions an International Treaty was adopted at the Kyoto Summit in 1997, an International agreement linked to the existing treaty, but standing on its own. The text of the Kyoto Protocol was adopted unanimously in 1997; it entered into force on 16 February 2005.

Article 3 of Protocol binds the member countries to reduce their combined emissions to 5% below 1990 levels by 2012. The overall target of 5% varies from nation to nation and ranges between -8% to 10%. The overall 5% target is to be met through cuts of 8% in the European Union and most Central European economies, 6% by Hungary Japan Poland and Canada and 7% in the United States, 0% by New Zealand, Russia and Ukraine i.e. these counties have to maintain their present level of emissions, while countries like Norway may increase its emissions by 1%, Australia by 8%, and Iceland by 10%. All the countries, which have a fixed commitment in the Protocol, are classified as Annexure 1 countries. The current targets of all Annexure 1 countries are setup on the basis of level of industrializations, current carbon emissions, geographic spread of the member countries, the economic progress done till now, the atmospheric contents and such several other factors.

Many developing nations like China, India, and Brazil are not included in Annexure I for the first

mitment period as during negotiation stage, these ntries resisted to the pressure of developed countries fixed commitments in their own national economic rests.

Versus the Rest

It is significant to note that U.S. had pulled itself of the Kyoto Protocol in 2001, saying implementing ould gravely damage the U.S. economy. U.S. is ng for an alternative way of emissions reduction mitments based on absolute emissions levels, instead eduction in percentage terms. This should mean sure on India, China, Brazil and also many other eloping countries to reduce their emissions levels. h an arrangement would put developing countries India and China at disadvantage due to the fact that se countries will be forced to overhaul their duction processes and embrace a process that has to ither developed anew or be imported from the ones already have the technology. This is likely to ersely affect their efforts aimed at reducing poverty inequalities.

On the other hand developing countries including ia are of the view that per capita approach be adapted ead. They argue that whereas U.S. accounts for 22 cent of global carbon emissions with a population than one third that of India and India accounts for dly 4 per cent of global carbon emissions. In per ita terms this comes to 20.6 per metric tons for US 1.2 metric tonnes for India, which means on per ita basis US accounts for 17 times more emissions India in per capita terms. Therefore from the point view of equity instead of aggregate approach, per ita approach be adapted instead of aggregate or centage approach.

struments of Kyoto Protocol

Though targets have been set for the member ntries to reduce their emissions levels, and these gets have also been stated as binding targets, ibility has also been provided in the protocol itself. understand this flexibility, one needs to know about terms like sinking, clean development mechanism, issions trading etc.

nking

Member countries can partially compensate for ir emissions by increasing "sinks" - by planting trees soil conservation, which remove carbon dioxide m the atmosphere. That may be accomplished either their own territories or in other countries. Such ntries may pay for foreign projects that result in enhouse-gas cuts. This way the countries making h efforts are also to gain credits for activities which ost the environment's capacity to absorb carbon.

Emissions trading (Carbon Credit Trading)

We understand that according to Kyoto Protoc annexure 1 countries are committed to reduce th emissions level. But the flexibility provided under th protocol allows countries to buy and sell their agre allowances of greenhouse gas emissions. High polluting countries can buy unused "credits" from tho which are allowed to emit more than they actually d At micro level companies that need to increase the emissions must buy credits from those who poll less. The transfer of allowances is referred to as a tra In effect, the buyer is paying a charge for polluti while the seller is being rewarded for having reduc emissions. Potential buyers of carbon credits are entities which emit Co2 to the atmosphere and may required by the law to balance their emissions throu mechanism of emissions reduction. On the other ha potential sellers of the carbon credits are two kinds entities.

- Entities that manage forest or agricultural l might sell carbon credits based on accumulation of carbon in their forest trees agricultural soils.
- Business entities that reduce their carb emissions may be able to sell their reducti to other emitters.

There are certain very significant scienti questions about efficacy of sinking and emissions trad program. We understand that part of the reason global warming is excessive land clearing. There restoring vegetation is thought to be the solution to problem. But the note of caution here is that in name of emissions trading old growth forests (wh have slow carbon absorption rates) are being clea and replaced with fast-growing vegetation, to detriment of the local communities

Indian initiative

Government of India ratified Kyoto Protocol climate change on 7th August 2002. Till than countries had already ratified the Protocol. Under Protocol India is not required to reduce emissio green house gases. Under the Protocol basically develop countries were required to reduce emission GHG by an average of 5.2 percent below 1990 level 2012. According to the Government of India, India benefit from transfer of technology and additio foreign investments as the result of Kyoto Prot coming into force. Additional investment will co into renewable energy, energy generation and efficie promotion and afforestation projects.

India has undertaken numerous respo

measures contributing to the objectives of UNFCC. Our development plans take care of balance economic development and environment concerns. In the recent years the reform in energy and power sector has enhanced the efficiency of energy use. Various measures relating to environment issues have be introduced. They include the following:

- Significant increase in the capacity of renewable energy installations.
- Improving the air quality in major cities by encouraging used of compressed natural gas (CNG). For instance the World's largest fleet of vehicles fuelled by compressed natural gas has been introduced in Delhi.
- Introduction of improved norms about vehicular pollution levels.
- Encouragement to afforestation.

Sectoral initiative has been started in this regards. For instance in coal sectors various measures for ensuring efficient use of coal. In oil sector various measures are being adopted to promote fuel efficiency and conservation. Regarding Hyper power the government's policy objective is to exploit the huge potential in India's northeast. At present, about 25% of the total installed capacity is accounted for by hydro. Government has been actively encouraging used of renewable energy including solar wind bio-gas, small hydro etc. in transport sectors a measure has been the upgradation of vehicular emission norms. In the industrial sector we find a significant improvement in the intensity of energy use in industries. Regarding afforestation and land restoration special initiatives have been started encouraging protection of existing forests, putting a check on the diversion of forest land for non-forestry purposes.

Kyoto Protocol Bali, Copenhagen and Cancun Conventions

In UN Climate Conference, at the end of 2007 at Bali an agreement was reached, whereby developed countries conceded for deep cuts in emissions (though without really quantifying the same). But the stand of US and its allies has thrown a challenge for developing countries specially India and China. Totally rejecting Kyoto protocol and refusing to accept reduction in emissions as per Kyoto protocol, US has demanded cuts in emissions by India and China. During the period from 1990 to 2004, CO_2 emissions of India have approximately doubled, thanks to our efforts to improve standard of living and reduction in poverty. In December 2009, another such convention was held in Copenhagen (Denmark). But before this convention US and its allies have toughened their stand and efforts are being made to compel India, China and Brazil to reduce their emissions. Apart from this US has changed its law, forbidding US companies to sell green technology to developing countries like China, India and Brazil. Copenhagen was anable to achieve any concrete results, except a last minute accord reached between United States on the one had and China, India, South Africa and Brazil on the other. This at best could be called a United position of these countries and does not talk of successor of Kyoto protocol which ends in 2012. Another such convention held at Cancun in 2010 also could not produce tangible results. In other words we can say that there is a total lack of consensus an how to same our earth. However there is also a hope that a holistic view would emerge on the issue of climate change.

Instead of accepting its responsibility to reduce emissions, USA has been continously been trying to exert pressure on India, China and other emerging economies to reduce their emission levels.

If US succeeds in forcing India to reduce its emissions levels, our efforts towards growth would get jeopardised. And if instead india is forced to buy emissions credits, a significant portion of india's fruits of growth would get transferred to the rest of the world.

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CHAPTER

8

INFRASTRUCTURE IN THE INDIAN ECONOMY

"The link between infrastructure and development is not a once for all affair. It is a continuous process; and progress in development has to be preceded, accompanied and followed by progress in infrastructure, if we are to fulfil our declared objectives of a self-accelerating process of economic development."

— Dr. V.K.R.V. Rao

1. INFRASTRUCTURE AND ECONOMIC DEVELOPMENT

The prosperity of a country depends directly upon the development of agriculture and industry. Agricultural production, however, requires irrigation, power, credit, transport facilities, etc. Industrial production requires not only machinery and equipment but also skilled manpower, management, energy, banking and insurance facilities, marketing facilities, transport services which include railways, roads, and shipping, communication facilities, etc. All these facilities and services which help in industrial and agricultural production constitute collectively the infrastructure of an economy. The development and expansion of these facilities are an essential pre-condition for increasing agricultural and industrial production in a country. In the last 200 years or more, industrial and agricultural revolutions in England and in other countries were accompanied by a revolution in transport and communications, the extensive use of coal and later oil as source of energy, tremendous expansion in banking, insurance and other financial institutions to finance production and trade, an explosion of knowledge of science and technology, and so on.

Infrastructural facilities—often referred to as economic and social overheads—consist of :

(*a*) Irrigation, including flood control and command area development.

(*b*) Energy : coal, electricity, oil and non-conventional sources.

(*c*) Transport : Railways, roads, shipping and civil aviation.

(*d*) Communications : Posts and telegraphs, telephones, telecommunications, etc.

(*e*) Banking, finance and insurance.[1]

(*f*) Science and technology.

(*g*) Social overheads : health and hygiene and education

Growth of Infrastructure since Independence

Indian planners were fully aware of the link between infrastructural facilities and general economic development and, accordingly, they gave high priority to

1. Irrigation, banking and finance and social overheads are dealt with separately and hence do not form part of the chapter.

the rapid expansion of these facilities right from the First Plan itself. The plans have generally devoted over 50 per cent of the total plan outlay on infrastructure development. As a result, there has been phenomenal increase in infrastructural facilites.

For instance, coal production including lignites rose from 32 million tonnes to 566 million tonnes between 1951 and 2010. During the same period, power generation from public utilities, excluding power generation from captive and non-conventional power plants rose from 5 billion kwh in to 768 billion kwh; and production of petroleum crude rose from an insignificant 0.4 million tonnes to over 34 million tonnes. Likewise, there has been tremendous expansion in the other infrastructural facilities. (Table 1) We should however, note three basic features of infrastructural development here :

Table 1. Trends in the Performance of Infrastructure Sectors

	Unit	*1950-51*	*2009-10*
Energy			
1. Coal	m. tonnes	32	566
2. Electricity generated	b. kwh	5	768
3. Petroleum			
- oil crude	m. tonnes	0.4	33.7
II. Finished Steel (m. tonnes)		1.0	59.7
III. Cement (m. tonnes)		2.7	200.7
Transport and Communication			
1. Railway goods traffic	m. tonnes	73	887.8
2. Cargo handled at major ports	-do-	19	561
4. Telecommunications: Total telephones provided	(millions)	NA	621.2

* As on September 2008

Source: *Economic Survey* (2009-2010) Ch 9, Central Statistical Organisation.

Base : *Statistical Outline of India, 2003-04.*

(i) The heavy investments by the Government on infrastructural facilities could be easily justified since they had provided the necessary impetus for rapid agricultural development and industrial expansion. In fact, without the rapid development of the infrastructure, it would have been impossible to register the ***threefold rise in agricultural production and seven fold rise in industrial production*** during the last six decades.

(ii) Though infrastructural facilities were not altogether neglected for the rural areas—for example, expansion of irrigation, rural electrification, etc.--the overwhelming emphasis was on the ***provision of infrastructural facilities mainly for the urban areas.*** It is the people in our cities and towns who could take full advantage of the development of power, transport, communications, banking, and such social overheads as education and health. The concentration of the infrastructure in urban areas and their relative neglect in rural areas resulted in ***inadequate development and, therefore, of inadequate employment opportunities in rural areas***. This led to mass exodus of the rural poor to urban areas--causing problems of urban congestion, growth of slums, acute housing shortage, transport bottlenecks, and so on.

(iii) Infrastructural development has not only shown an ***urban-bias***, but it has also shown ***a bias in favour of the rich and the more affluent***. It is the higher income groups who could take full advantages of such facilities, as power, transport and communications, health, etc. The major and medium irrigation works have generally benefited the rich farmers. Our planners generally neglected the minor irrigation works which would have benefited a large number of small and marginal farmers.

2. ENERGY

The most important single factor which can act as a constraint on economic growth of a country is the availability of energy. India is both a major energy producer and consumer. Currently, India ranks as the world's seventh largest energy producer and fifth largest energy consumer.

There is a direct correlation between the degree of economic growth, the size of per capita income and per capita consumption of energy. Table 2 based on World Development Report shows per capita income and per capita consumption of energy of six countries :

In Table 2, the first three countries are developing countries with low per capita incomes, while the next three are developed countries with high per capita incomes. The per capita consumption of energy in India in 2003 was 529 kg of oil equivalent (Kgoe) as compared to 1,484 in China. On the other hand, per capita consumption of energy was as much as 3,464 in England, 4,019 in Japan and 7,766 in U.S.A. Per capita consumption of energy in India was only 13 per cent of that in Japan, and only 6.8 per cent of that in the U.S.A. Although per capita commercial energy consumption in India has been steadily going up during the last 2 decades, it is still one of the lowest in the whole world (26 per cent of the world average of 1,750 kgoe).

Table 2. Per capita income and per capita Consumption of energy for selected countries

Country	*Per capita income (in U.S. dollars) 2008(ppp)*	*Per capita consumption of energy (kgs. of oil equivalent)2007*
India	2,930	529
China	6,010	1,484
U.K.	36,240	3,464
Japan	35,190	4,019
U.S.A.	46,790	7,766

Source : *World Development Report*, 2009-and *World Development Indicators* (2010)

Sources of Energy

Broadly, there are two sources of energy, viz., commercial energy and non-commercial energy. Commercial energy, or more correctly, commercial sources of energy, consist of coal, petroleum and electricity. These sources are commercial in the sense that they command a price and the users have to pay for them. Commercial energy accounts for over 50 per cent of all energy consumption in India.

Non-commercial sources of energy – also known as traditional sources of energy – consist of firewood, vegetable wastes and dried dung. These are called non-commercial sources, as they are supposed to be free and command no price. Actually, the non-commercial sources such as firewood and dried dung have started commanding a price in urban areas and to some extent in rural areas as well. While commercial sources of energy are generally exhaustible—exception being, hydro-electric power—non-commercial sources of energy are renewable. More than 60 per cent of Indian households depend on traditional sources of energy for meeting their cooking and heating needs.

Availability of primary energy in India

There are three broad sources of primary commercial energy, viz., (a) coal and lignite; (b) oil and gas, and (c) electricity.

Coal and lignite. The total estimated resources of coal in India are placed now around 148,790 million tonnes, but the mineable reserves may amount to about 60,000 million tonnes. The total lignite reserves, found mostly at Neyveli in South Arcot district of Tamil Nadu, are placed at 3,300 million tonnes of which 1,900 million tonnes are in the proved category. Annual production of coal including lignite was around 566 million tonnes (2009-10). According to the present and future demand projections, the coal reserves in India would be just sufficient for about 130 years.

Oil and gas. According to the latest available estimates, net recoverable reserves of oil are placed around 550 million tonnes, and the net recoverable reserves of gas are put at about 500 billion cubic metres. Annual production of oil crude is around 34 million tonnes (2009-10). At the current rate of consumption, oil may last for only about 20 to 25 years.

Electric power. As regards electricity, there are hydro-electric power and thermal power. Thermal power is generated by the use of oil and gas and also by the use of nuclear energy. The official estimated annual energy potential from hydro-electric sources is placed around 90,000 MW; of this potential, about 18,000 MW has been developed. This implies that only 20 per cent of the hydro-potential has been utilised and 80 per cent still remains unharnessed, despite the inherent advantages and superiority of hydro power plants over thermal and nuclear plants.

The public utility power units–that is, public sector power units –produced 768 billion kwh of electricity in 2009-10 of which hydel and renewable energy sources power contributed 19 per cent of the total power generation; thermal power plants account for 80 per cent and nuclear power contribute 3 per cent. The data on power generation includes only power from or the public sector (also known as public utilities) and hence underestimates generation of electric power in the country by failing to include captive production of about 109.7 billion KWH by private sector).

Besides public sector power units, there are private sector power units – known as non-utilities or captive power units.They contributed 8 billion kwh in 1980-81 and 109.7 billion kwh in 2009-10. Nevertheless, the end-consumers of electricity continue to experience shortages in terms of reliable access to power.

The uranium reserves of the country are estimated to be about 70,000 tonnes which, when used in breeder reactors, will be equal to 120 billion tonnes of coal. The thorium reserves of India are estimated to exceed 360,000 tonnes which, when used in breeder reactors would be equivalent to 600 billion tonnes of coal — about 5 times the coal reserves of the country. Thus, the long range potential of nuclear energy in India seems to be high, even though there is considerable popular opposition to the generation of electricity through nuclear power because of failure of atomic power plants in Russia and USA. Remember the near -escape of Kalpakkam nuclear power plant during the recent Tsunami.

Though there was considerable increase in production of primary energy in the last six decades, the peristent shortages of electricity – average peak shortage was estimated at about 12 per cent in 2008-09– indicate the magnitude of the energy problem in India and how it is a serious constraint on rapid economic growth in the country.

As a matter of fact, India is not really endowed with large and adequate primary resources, in keeping with her vast geographical area, growing population and increasing energy needs. Besides, the distribution of primary commercial energy is quite skewed. For instance.

(a) Coal is abundant but is concentrated in the eastern region which accounts for 70% of the total coal resources of the country;

(b) the Western region of India has over 70 per cent of hydro-carbon reserves in the country;

(c) More than 70 per cent of the total hydro potential in the country is located in the Northern and North - Eastern regions ; and

(d) The southern region has only 6 per cent of the coal reserves and 10 per cent of the total hydro potential but has almost 100 per cent of lignite deposits of the country.

Non-commercial energy resources in India

(i) *Fuelwood.* Fuelwood is essential for cooking and it is extensively used in our villages and towns. According to the Tenth Plan estimate[2], 65 per cent of total rural energy consumption is met from fuel wood. During 2001-02, fuel wood consumption was put at 223 million tonnes—180 million tonnes for household consumption and the balance 43 million tonnes for cottage industry, hotels, etc. If the present demand and supply conditions continue, there would be a veritable fuelwood famine. In fact, scientitsts anticipate that in the near future, fuelwood could be a greater constraint than the availability of foodgrains.

(ii) *Agricultural wastes.* Agricultural wastes such as straw are presently used as feed and fodder, roofing material, organic matter for compost making and as fuel for cooking purposes. There are no really reliable estimates of agricultural wastes, but according to one estimate the consumption of agricultural wastes for fuel purpose was put around 41 million tonnes for the year 1975-76 and it may be around 65 million tonnes now.

(iii) *Animal dung.* Dried dung of animals is extensively used as fuel in our rural areas (and also in towns). Out of the total estimated production of 324 million tonnes of animal dung, about 73 million tonnes are estimated to be burnt for energy purposes every year. This is more than the total fertiliser consumed in agricultural production in India. If this animal dung, which is a valuable organic manure, was used as fertiliser, food production could be increased considerably.

Non-conventional sources of energy in India

While the above sources of energy--both commercial and non-commercial--are known as conventional sources of energy, there are three other sources of energy which are commonly called as ***non-conventional sources of energy***. They are : solar energy, wind energy and tidal power. Solar energy potential is almost unlimited in India, a tropical country. Likewise, wind energy is available in abundance, especially in coastal areas and in hilly regions, but both solar energy and wind energy are not so far utilised in the absence of cost-effective technologies. However, in the context of acute shortage of conventional sources of energy, many countries are exploring the possibilities of using these non-conventional sources of energy. Accordingly, they would assume more significance in the years to come.

Trends in the Consumption of commercial energy

The sectoral pattern of consumption of commercial energy (i.e. coal including lignite, oil and gas and electric power) is given in Table 3.

The transport sector was the largest consumer of commercial energy (44%) in 1953-54. However, there has been a continuous fall in the share of the transport sector in the total commercial energy consumption. For instance, its share declined to 22 per cent in 2005-06. The industrial sector is now the largest consumer of commercial energy in the country.

During this period, the agricultural sector has, however, registered sharp increase in the consumption of commercial energy, i.e., from one per cent to 9 per cent.

TABLE 3. Sectoral trends in commercial energy consumption

(in percentage)

	1953-54	*1970-71*	*2005-06*
Household sector	10	12	12
Agriculture	1	3	9
Industries	40	50	42
Transport	44	28	22
Others	5	7	15
	100	100	100

SOURCE : *Ninth Five Year Plan*, Vol. II, Ch 6.

Table 4 brings out the percentage share of different fuels in commercial energy consumption.

TABLE 4. Percentage share of different fuels in commercial energy consumption

(in percentage)

	1953-54	*1970-71*	*2005-06*
1. Coal	80	56	29
2. Oil and gas	17	35	54
3. Electricity	3	9	17
	100	100	100

SOURCE : Same as for Table 1.

It is interesting observe that (a) the share of coal in the total commercial energy consumption has declined steadily over the years; and (b) the share of oil and electricity, however, has steadily increased.

These figures do not really reflect the real significance of coal. As these figures relate to final energy consumption, only the direct consumption of coal in industry, household sector, transport, etc., is considered and the use of coal in power generation has been excluded. But it is important to remember that about 65 per cent of the total coal produced in India is used for thermal power generation.

Trends in the production of commercial energy since 1950-51

As energy is an essential input for economic development, the production and the consumption of commercial energy has increased steadily after the introduction of economic planning in 1950-51.

Between 1951 and 2007, coal production had increased by nearly 14 times, crude oil production by 120

2. *Tenth Five Year Plan (2002-07)* Vol II, Chapter 7.3.

times and electricity (installed capacity) by over 106 times.

TABLE 5. Growth of Commercial energy since 1950-51

	1950-51	*1970-71*	*2009-10*
Coal (m. tonnes)	33	76	566
Oil crude (m. tonnes)	0.3	7	33.7
Electricity*			
Installed Capacity (000MW)	2.3	16.3	188
Generation (billion kwh)	7	61	877.5

*(Utilities and non-utilities)
SOURCE : *Economic Survey*, 2010-11

Energy Crisis : The genesis

Flare up of oil crude. Industrial development in the 18th and 19th centuries was based on coal, as the leading source of energy. Towards the end of the 19th century, however, oil replaced coal as the leading energy source. Accordingly, the industrial development everywhere in the 20th century was based on low cost oil. After Independence, India followed the example of other leading industrialised countries and imported Arab oil to accelerate her industrial development. So long as ***crude oil flowed cheaply***, there was no problem.

In 1973, however, the OPEC (Organisation of Petroleum Exporting Countries) hiked the oil price for the first time. Since then, the price of petroleum crude was regularly hiked up from $ 2.1 per barrel in 1973 to $ 27.3 per barrel in 1980. The price of crude had hovered between $ 50 and $ 60 per barrel in the last two decades of the last centry. Then the price of all crude was rising upward regularly it crossed $147 per barrel during 2008-09.

As a consequence of this sharp increase in oil prices, the value of India's oil imports rose sharply, from ₹ 1,110 crores in 1973-74, to over ₹ 5,620 crores in 1982-83, and to ₹ 4,11,579 crores in 2008-09.

In relative terms, oil imports were just equal to 12 per cent of India's exports in 1970-71 but rose dangerously to be equal to 76 per cent in 1982-83. Currently imports of petroleum, oil and lubricants (POL) account for about 30.6 per cent of India's exports (in 2008-09).

Due to regular mark up in crude oil prices, India's trade gap between imports and exports widened with every passing year, creating serious problem of adverse balance of trade and of payments. For instance in 1973-74, the adverse trade balance was just ₹ 430 crores; this rose dramatically to ₹ 5,840 crores in 1980-81, and to ₹511,344 crores in 2009-10.

India has, however, been saved from serious adverse balance of payments crisis only because of large inward remittances of foreign currencies by Indians working abroad.

There has been continuous rise in international price of oil crude and gas and consequently rise in the price of POL. For instance, since the middle of 2004, the international price of petroleum rose smartly and has exceeded $ 147 per barrel. The prices of petrol, diesel, kerosene etc. are fixed by the Government and changed according to changes in international prices of oil crude. But the UPA Government at the Centre is finding it difficult to adjust retail prices of petrol, diesel etc according to international price of oil crude.

The Nature of Energy crisis

The energy crisis of the seventies and eighties was basically an oil crisis; it was not just a national issue affeating India alone but it was a global problem. In the context of India, however, energy crisis has certain peculiar features.

(a) India's energy problem is not one of demand-supply imbalance in oil only. In fact, demand-supply imbalance is widening rapidly in all commercial fuels, basically because demand for commercial fuels has been increasing tremendously. With a projected higher rate of economic growth in India, the demand for commercial energy would continue to rise over the years.

While demand for petroleum products has been rising in India, the supply of crude oil has also been rising but not adequately. Oil and Natural Gas Commission (ONGC) and Oil India Limited (OIL) have been following vigorous policies of exploration and increase of indigenous crude. But the consumption of petroleum and oil products has far exceeded the indigenous production and refining capacity, thus forcing the country to depend upon imports.

(b) At the same time, the coal industry which was expected to meet the growing energy crisis in India by stepping up coal production substantially has been faring badly in recent years. Besides, coal reserves are poor, both in quality and in quantity.

(c) The demand-supply gap for electricity too has been widening while the demand for power has been growing rapidly; the supply side, has faced too many constraints, creating severe shortage and bottlenecks in generation and distribution of electric power in the country. Erratic and inadequate power supply constitutes a major dimension of energy crisis in India.

Thus, in the context of India's economic development, energy crisis has taken the form of oil shortage, coal shortage and electric power shortage.

(d) Energy crisis in rural India. The OPEC-

inspired energy crisis affects only the relatively affluent minority in India. There is, however, a deeper and rather frightening crisis which affects the millions of rural poor who have now to spend anything upto 100 man-days every year in gathering fuelwood for cooking purposes. Painful reports of poor people eating uncooked soaked rice have been heard. For the rural poor, the firewood shortage is emerging as a serious energy crisis.

Measures to tackle the energy problem in India

When the price of crude shot up from $ 2.09 per barrel in 1973 to $27.30 in 1980, the immediate need was to check the consumption of petroleum, oil and lubricants (POL), keep imports of these items within reasonable limits and increase domestic production of oil crude as well as refining capacity.

(i) *Stepping-up of oil production.* The ONGC and OIL increased their exploratory drilling operations all over the country and also offshore areas. The production of oil crude rose smartly from 7 million tonnes in 1973-74 to 35 million tonnes in 1995-96; it declined later and is steady around 32 to 34 million tonnes during the last few years.

(ii) *Control over the Consumption of POL.* The Government's attempt to check the consumption of petroleum and lubricants, however, did not succeed fully. In 1973, the consumption of petroleum products stood at about 24 million tonnes and it remained static around this figure partly because of the price rise and partly because of the restrictions imposed by the Government. But the growth of consumption was quite perceptible since then--it touched 75 million tonnes in 1995-96 and 138.2 million tonnes in 2009-10.

During the last four years, left parties have forced the coalition UPA Government not to raise the prices of POL and thus restrict their consumption, despite huge rise in international price of oil crude.

Accordingly, the Government was forced to increase imports of POL, against its declared policy of keeping imports of petroleum products to the minimum necessary. As mentioned earlier, the value of imports of petroleum products had been mounting touching an all-time high of ₹ 4,11,579 crores in 2009-10. The outflow of foreign exchange to meet oil imports rose steeply and at one time threatened a virtual "foreign exchange drought."

(iii) *Substitution of oil by coal*. As recommended by the Fuel Policy Committee, the Government drew up a phased programme of substitution of furnace oil by coal in a number of industries, consistent with the availability of coal and transport capacity. According to an official estimate, those industries including power houses which could switch over to coal immediately without major modification in their plant would require approximately 10 million tonnes of coal a year and this would effect a saving of about 4 million tonnes of furnace oil. Actually, power houses are switching over from oil to coal quickly. The coal industry is being geared up to meet the consequent sharp increase in demand. Reorganisation of old mines, introduction of new methods and techniques in the development of new mines and standardisation of plant and equipment have contributed to a rapid growth in coal production. In spite of all these measures, production of coal has fallen considerably short of demand and the demand-supply imbalance in the field of coal will continue for many years to come. Besides, at the present rate of growth of 7 per cent per year, the existing coal reserves may get exhausted by 2035-40. Coal, therefore, is not the real answer to solve our energy crisis.

(iv) *Expansion of Electric Power*. With its versatility of application and ease of transport over long distance, the importance of electricity as source of energy has increased further due to oil crisis. Ideally, the expansion of power should be based on maximisation of hydro-electric power generation since this is a replenishable form of energy. But bulk of the untapped hydro-electric potential is in the geologically difficult and relatively inaccessible areas of the North and North-East and further, construction of hydro projects takes too long a time. The share of hydel power in the total generating capacity of the country has declined from 43 per cent in 1970-71 to 17 per cent in 2005-06.

In spite of the many advantages claimed for hydro-power, the Government of India is going ahead with the expansion of thermal power which has been the leading source of power (80 per cent) in the country. Thermal power is more costly as it uses coal or oil, both non-renewable inputs. As further power development is planned through thermal system, supply of electric power grows slowly due to high costs and huge capital requirements. For instance, during the Eighth Plan period (1992-97), additions to installed capacity were 16,400 MW as against the targeted 30,540 MW — which was 46 per cent less than the targeted addition.

During the Tenth Plan period (2002-07), the target of additional electricity production was 41,110 MW but the anticipated production at the end of March 2007 was only 23,250 MW – a shortage of 17,860 MW or nearly 40 percent. Actually, in every Five Year Plan, there has been shortfall in the production of electric power.

The main reasons for the shortfall in capacity addition were inadequate funding, procedural delays in land acquisition and environmental clearances, contractual failures, suspension of World Bank support, etc. Supply side is also adversely affected due to high transmission losses to the extent of 20 to 22 per cent as against the world average of 9 per cent.

As a result, power shortage and load shedding are

common in India and there is a serious constraint for the rapid growth of industries and agriculture.

The Ministry of Power, Government of India had taken a series of measures to increase power production: Important steps include:

(*i*) Revival of the Dabhol Power Project closed since June 2001 through a joint venture company with shareholding of National Thermal Power Corporation (NTPC), Gas Authority of India (GAIL), Indian Financial Institutions and the Maharashtra State Electricity Board. The Dabhol project ahs already been commissioned (in May 2006).

(ii) NTPC and a few State Electricity Boards are commissioning power plants using supercritical technology (capacity of over 660 MW upto 800 MW). The Government has invited tenders from private parties to set up large size units of upto 800 MW.

(iii) The Government is encouraging the use of hydel and wind energy sources which do not rely on fossil fuels and avoid carbon emissions. The Central Electricity Authority has identified

- 399 potential hydro projects
- Aggregate Capacity : 107,000 MW
- Preparation of pre-feasibility of 162 schemes completed.

(iv) The Ministry of Power, Government of India has initiated the setting up of 9 coal-based Ultra-mega Power Projects, each with a capacity of 4,000 MW or above. These projects are being awarded to developers on the basis of tariff-based competitive bidding.

Other important measures include:

(a) Identification of 14 transmission projects to be developed by the private sector through tariff-based competitive bidding.

(b) Increase by 60,000 MW in the 11th Plan to move to a comfortable situation consistent with a growth rate between 8 and 9% per annum; and

(c) Availability of fuel such as coal or natural gas for newer power plants and long term finance to lower capital charge.

In spite of the progress made, shortage of power and lack of access continues to be a major constraint on economic growth.

(v) *Conservation of Energy*. As indicated at the beginning of this section, energy consumption has been steadily going up in India, even though in per capita terms, it is much lower than that in developed countries. The growth in energy consumption has been more in commercial energy (coal, petroleum and electricity which are fossil fuels) than in non-commercial energy (firewood, animal dung, etc). Currently, demand for coal has been rising at the rate of 4 to 5 per cent per year, petroleum products by 6 to 7 per cent per year and demand for electricity has been rising at the annual rate of 9 to 10 per cent. The critical situation in India now is the steady depletion of fossil fuel resources and the rising costs of production. Accordingly, the Government has accorded high priority to the conservation of petroleum products, and has taken a variety of measures in this direction covering transport, industry, agriculture and household sectors. These include

(a) the adoption of measures and practices conducive to increased fuel-efficiency and training programmes in the transport sector;

(b) replacement of old and inefficient boilers and furnaces with efficient ones, and promotion of fuel efficient measures and equipment in the industrial sector;

(c) standardisation of fuel efficient irrigation pump sets and rectification of existing pump sets to make them more energy efficient in the agricultural sector; and

(d) development as well as promotion of the use of fuel efficient equipment and devices like kerosene and LPG stoves in the domestic sector.

The Government of India initiated the National Energy Efficiency Programme (NEEP) with a total outlay of ₹ 1,000 crores during the Eighth Plan. The NEEP set firm target of electricity saving to the extent of 5,000 MW and saving of petroleum products to the tune of 6 million tonnes.

(vi) *Renewable Energy Sources*. Conventional energy resources show clearly that they alone cannot solve India's energy crisis triggered by hike in oil prices. This has led to a search for non-conventional and renewable sources of energy. India is fortunate to have a large potential of non-conventional energy resources in the form of biogas, solar energy, small hydro-power, wind power etc. Government's strategy for the promotion of renewable sources of energy consists of:

(a) providing budgetary support of the Government for demonstration projects;

(b) extending institutional finance from Indian Renewable Energy Development Agency (IREDA) set up by the Government in 1987 and other financial institutions to commercially viable projects; and

(c) promoting private investments in new and renewable energy sources through fiscal incentives such as tax holidays, generous depreciation allowance, exemption from excise duty and Central sales tax, custom duty concessions, remunerative prices for the power provided for the grid, etc.

Bio-gas generation programme has been boosted up by the government through the National Project on Bio-gas Development. Nearly 3.3 million bio-gas plants

have been set up in the country with an estimated bio-gas generation capacity equivalent to about 7.3 million tonnes of fuel wood and 0.7 million tonnes of NPK in the form of manure.

Under the National Programme for Improved *Chullah*, over 10 million efficient smokeless *chullahs* were installed upto the end of March 2002, against the target of 15 million *chullas* (at the end of the Ninth Plan).

The Government of India launched the National Programme on Bagasse Based Cogeneration in 1993-94 to use bio-mass available in the form of bagasse with sugar mills to generate electric power. The government has estimated a potential of 3,500 MW of surplus power from bagasse in 420 sugar mills in the country. To tap this potential, the Government is

(a) setting up 12 demonstration projects with partial budgetary support; and

(b) has launched a scheme involving an interest subsidy of 2 per cent to cover a large number of sugar mills.

The Government has also launched a scheme for utilisation of agricultural biomass available at Taluka level for decentralised power generation to meet the power requirements of the people locally. The Government has launched a national programme since June 1995 — for recovery of energy from urban and industrial waste for which it provides financial support, interest subsidy and investment subsidy.

Another important source of energy—waiting to be tapped, in a big way — is solar energy. Solar furnaces, solar power systems, etc. have immense scope and possibilities. For a tropical country like India, utilisation of solar energy has to be accorded high priority, especially as it can meet energy requirements in villages. Several research institutions in India have initiated major programmes for solar energy utilisation in water heating, grain drying, food preservation, water- pumping, power generation, etc. Considerable progress has already been achieved in the solar thermal extension programme–as, for instance (a) sale of 200,000 solar cookers and (b) setting up of 10,000 street lighting systems in villages using solar photo-voltaic technology. The solar photo-voltaic (SPV) programme has now progressed spectacularly from projects of a few KW to hundreds of KW installation for power generation.

Rapid progress is being made in the development and demonstration of wind energy. A capacity of about 1,000 MW of wind power generation has been established, of which over 70 per cent has been installed by the private sector. India is the second largest exploiter of wind energy in the world, after U.S.A. The Government has extended a package of incentives for wind power generation: 100 per cent accelerated depreciation, loans from IREDA at concessional interest rates, tax holiday for 5 years, exemption from excise duty and exemption/reduced rate for custom duty on imports of wind turbines.

Efforts are also being made to harness energy from micro-hydel systems Till the end of the Eighth Plan, a capacity of 250 MW of small hydro-power projects had been commissioned and another 230 MW capacity was under construction. The Government of India has also announced various measures to promote setting up of small hydro-power projects based on waterfalls, canals, small rivers and streams. Financial and fiscal incentives include: financing upto 75 per cent of the project cost by IREDA at concessional rate of interest and buyback arrangements with SEBs.

The main problem with tidal power plants is that they are economical only if installed capacitites are high; besides, the investments involved are considerable. In fact, this has been a major inhibiting factor. France has already demonstrated the use of tidal power. The possibilities of erecting a tidal power station in the gulf of Cambay near Bhavnagar port of Gujarat and in the Sunderbans in West Bengal are being seriously examined by the Government.

The Tenth Five Year Plan gives the following figures of non-conventional sources of energy in India. Table 6 gives the present assessment of the potential of these sources and their status of exploitation :

TABLE 6 : Renewable Energy Potential

Source	*Potential/ Availability*	*Potential/ Exploitation*
Bio-gas Plants	12 million	3.2 million
Biomass-based power	19,500 MW	384 MW
Efficient wood stoves	120 million	33.9 million
Solar Energy	20 MW/Sq. km	1.7 MW
Small Hydro	51,000 MW	1400 MW
Wind Energy	45,000 MW	1,370 MW
Energy from wastes	1700 MW	16.2 MW.

SOURCE : *Tenth Five Year Plan (2002-2007),* Vol. II p. 763

It is clear from this table that a large potential of non-conventional sources of energy exists in the country. Only an insignificant portion of these resources has been exploited till now.

We can conclude this section by referring to the increasing and active role being played by IREDA in recent years with support from the World Bank and the

Global Environment Fund (GEF). IREDA was set up in 1987 as a public sector enterprise for the promotion, development and financing of new and renewable sources of energy technologies. IREDA has initiated the "India Renewable Resources Development Project" consisting of three projects (a) Wind-farm Development, (b) Photovoltaic Market Development, and (c) Small Hydro-Power Development. IREDA has also organised several entrepreneur development programmes to attract entrepreneurs and project developers in the field of renewable energy.

The Government of India has announced various policy measures to encourage direct foreign investments and collaborations. NRIs particularly are taking up projects such as wind farms and solar plants in the states of Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh and Kerala, totalling an aggregate capacity of 450 MW.

Green Power and Bio-fuels

Gradual depletion of mineral oil and hectic rise in price of oil crude by OPEC (touched $147 per barrel) has led countries to search for alternative fuel- or a fuel revolution. Accordingly, ethanol a bye-product of sugarcane and biodiesel derived from *jatropa* plant have come to the market. Initially, they will be mixed with petrol and diesel. The 11th Plan expects that by 2012, about 5 percent of vehicles will be powered by bio-fuels – i.e. Vehicles will run on ethanol made from sugarcane and on bio-diesel from oil extracted from *jatropa* seeds. At present, the cost of production of ethanol and bio-diesel is around ₹ 20 to 21. Increase in production of bio-fuels will reduce cost of production. At the same time, the Government may have to subsidize production of bio-fuels within the country and check their import through imposition of imports duties.

National Bio-Fuel Board is being set up to promote the use of bio-fuels. The short term target is to encourage *jatropa farming*, suitable adoption of vehicle engines to use bio-fuels along with minimal oil and target bio-fuel consumption to 20 percent by the end of the 12th Plan (i.e. by the Year 2017).

Rural Energy crisis and Decentralised energy

The conventional energy systems, based on fossil fuels such as oil crude and coal and electricity (rural electrification) have miserably failed to solve the rural energy crisis, in India. This may at any time, provoke "fuelwood riots" similar to the food riots of the late 1950's and early 1960's. The problem of rural energy supplies calls for a radically new approach known as the "decentralised energy" approach which seeks to supply energy from the locally available renewable sources like the cowdung and agro-wastes. In other words, attempt has to be made to supply commercial energy based on the traditional non-commercial energy forms.

Firewood is obviously the most important cooking fuel and will remain so for a long time. With the rise in the price of fossil fuel (of kerosene and of LPG) and their non-availability, people in urban areas have come to depend increasingly upon firewood. There is an acute shortage of firewood and consequent rise in the price of fuelwood. Contrary to the common belief, there is no shortage of land in India to produce even two to three times the fuelwood requirements. The Planning Commission Fuelwood Study Committee estimated that some 240 million tonnes of fuelwood (as against the present demand of 133 to 140 million tonnes) can be produced every year, through :

(a) fuelwood on farm lands : Growing trees on farm lands as shelter belts, windbreaks, shade trees, fodder trees and fruit trees, all of which will produce fuelwood;

(b) fuelwood on wastelands : Growing fuelwood on nearly 80 million hectares of barren and waste lands including land along the country's roads, railway lines, canals etc.—even if 15 per cent of this vast tract of land is planted with fuelwood species, the estimated yield would be 95 to 100 million tonnes per year; and

(c) fuelwood degraded forests : proper protection of degraded forests and afforestation through fuelwood trees can supply about 50 million tonnes of fuelwood per year.

Really speaking, therefore, the problem of firewood famine can be successfully tackled, if the Government is prepared to mobilise sufficient financial resources—about ₹ 800 to ₹ 1,000 crores a year—and is willing to change the present forest policy from timber production to the production of fuel and fodder. Such an effort is worth attempting since this would not only solve the acute problem of fuelwood in both rural and urban areas but also ***help promote employment in a big way***, in planting, maintenance, in felling of trees, in processing of wood, etc. Moreover, it will have a favourable ecological effect through increase in tree cover, control of floods and of soil erosion and of promoting soil fertility.

To some extent, the Government has appreciated the need to encourage the fuelwood plantation programme and has promoted farm forestry and social forestry programmes since 1976. But by subsidising and encouraging richer and more affluent farmers to go for massive tree planting, the Government has turned wood into a lucrative economic commodity and has condemned the weaker sections

in the rural areas to continue to experience acute fuelwood crunch. The correct alternative would be to involve the rural poor, especially the rural women, directly in the community forestry programmes and help them to produce more fuel and fodder and share these resources equally. This alternative is rather difficult for the bureaucrats to implement but sooner or later, the Government policy makers will have to try this method.

Biogas. The oil-energy crisis was also responsible for an explosion of interest in biogas plants in India during the 1970's. The Planning Commission Working Group on Energy Policy stated enthusiastically, "Biogas plants constitute the most promising alternative energy technology in the household sector."[3] The Government announced a series of subsidies and concessional bank loans for the construction of biogas plants in rural areas. Under the National Project for Biogas Development nearly 3.2 million biogas plants have been set up so far in the country; the current annual target is around 2 lakh biogas plants.

The biogas plant has the double advantage of producing fuel as well as manure. The gas produced can be used for cooking and lighting and to carry out simple agricultural operations. It is estimated that there are 15 million households with the requisite number of cattle--4 to 5 heads of cattle are the minimum needed to feed a family size plant. The scheme has thus a large potential for developing local sources of energy supply and the Government introduced an ambitious and massive programme of installation of biogas plants.

The biogas programme did not have the success the Government anticipated. One basic reason for the poor performance is that no attempt was made to study carefully the cost-benefit of these plants to the users. More important than this factor, is the growing realisation that the biogas scheme would further accentuate the inequality between the energy-haves and the energy-havenots in the rural areas. For instance, it has been estimated that only about 10 per cent of rural households in India possess 4 to 5 heads of cattle and, therefore, the biogas plants would be useful only for richer farmers. Again, these richer farmers would use animal dung only for their own personal needs and deprive the poor of a fuel that does not have any price at present and has been freely available. To overcome these problems created by family biogas plants, the Government and some voluntary agencies have started promoting community plants which are relatively economical to set up and to operate. But there are problems of collection of manure and distribution of gas–in fact, the cost of distribution to individual households is quite high. Considering the caste, religious, and other social factors in our villages, the community biogas programme does not promise to have much future.

Agicultural Wastes. At present around 80 million tonnes out of a total estimated output of 450 to 500 million tonnes of agricultural wastes and residues are used as fuel for cooking purposes. With the increase in the production of foodgrains to around 200 to 210 million tonnes, residue from grain crops alone would come to about 335 million tonnes. With the use of improved and efficient technologies, it is possible to increase the scope of rice husks, cotton stalks, etc. as cooking fuels. Dr. Pathak of the Punjab Agricultural University studied the potential of agricultural wastes in a rich village in Ludhiana District and found that after all the fodder needs of the village were met, the energy potential of the remaining crop wastes and animal wastes was enough to meet all the energy requirments of the village and still leave a surplus.[4] In a situation where supplies of conventional energy, and sources like firewood, are decreasing and since alternatives like kerosene are not within the reach of the rural poor, this increase in energy supplies in the form of agricultural wastes will benefit the society in general and the rural poor in particular.

Wanted a national cooking energy policy

Whenever we talk of energy, we think of the thousands of large and small factories and work shops burning fuel, millions of farmers using kerosene, diesel and electricity to operate their pumpsets and tube wells for irrigation purposes, millions of cars, buses, trucks and other vehicles using petrol and diesel, hundreds of rail locomotives running on coal and diesel, etc. In other words, we are thinking of energy used for commercial purposes. Rarely, however, do we consider the firewood, the dried dung, the agricultural wastes, and others which are used as cooking fuel in rural areas. In fact, half of all the energy consumed in India is spent on cooking food—nearly double the energy consumed by industry and agriculture together. No other form of energy is more crucial for human survival or more sensitive to environmental conditions than the energy for cooking. However, neither economic planners nor energy planners in this country have properly appreciated this most essential need.

3. Quoted by Centre for Science and Technology, ***The State of India's Environment*** (1982), p. 156.

4. Centre for Science and Environment : ***The State of India's Environment*** (1982), p. 159.

The present national energy policy of the Government has been extremely lopsided, as it seeks to solve essentially the oil shortage on the one side and coal and power shortage, on the other. ***The major consideration has been the energy needs of industry and transport and of the higher income groups in urban areas.*** The national energy policy has virtually ignored the cooking energy needs of the poor people in urban and rural areas. The sporadic and half-hearted measures to promote solar cookers, biogas plants and recently fuelwood plantations have not solved the cooking energy crunch in any significant way. The Centre for Science and Environment, an enlightened voluntary organisation, therefore, pleads for a national cooking energy policy : "If the Government wants to help meet the basic needs of our population without causing wholesale environmental destruction, an integrated national cooking energy policy is an imperative. If the Government fails to come up with an implementable policy or lacks the will to implement one, the results will be disastrous for the people and the environment."[5]

3. POWER

Electric power, which is one form of energy, is an essential ingredient of economic development and, it is required for commercial and non-commercial uses. Commercial uses of power refer to the use of electric power in industry, agriculture and transport. Non-commercial uses include electric power required for domestic lighting, cooking, use of domestic mechanical gadgets like the refrigerators, air conditioners, etc. With rapid growth of population in India and with the increase in the use of modern gadgets in daily life, it is quite natural that the demand for electrcity for domestic use should grow at a fast rate. Table 7 explains the pattern of utilisation of electric power produced and supplied by public power sector units or public utilities.

Table 7. Pattern of electricity consumption (utilities)

(per cent)

	1950-51	1970-71	2009-10
Industry	63	68	36.7
Agriculture	4	10	21.0
Railway traction	7	3	2.2
Public lighting and commercial	13	10	15.2
Domestic use	13	9	24.9
Total	**100**	**100**	**100**

Source : *Economic Survey*, 2011-12 CSO (2010)

* Provisional.

A marked feature is the increasing use of electricity in agriculture. With programmes of rural electrification, the demand for power for lift irrigation and energisation of pumpsets has increased during recent years, from 4 per cent to 21 per cent. The establishment of new industries like iron and steel, machine tools, engineering, fertilisers, etc., and the expansion of capacity of consumer goods industries have led to considerable increase in the consumption of power in India. But it will be observed that the share of industry in the total utilisation of power has come down from 68 per cent in 1970-71 to 36.7 per cent in 2009-10. This does not mean that industrialisation has slowed down, nor does it imply that industrial units are shifting to other sources of fuel. Many large industrial units have set up, in a big-way, their own captive power plants, instead of depending upon the inadequate and often undependable public utilities. It is estimated that non-utilities (the private sector power units) generated 109.7 billion kwh of power which was consumed by industries.

It may be observed that the consumption of power by domestic consumers has increased rapidly. However, consumption of electricity by railways and for public lighting as a proportion of total consumption has declined.

Sources of electric power

There are three main sources of generation of electric power, viz., hydel power thermal power, and nuclear power.

Table 8. Growth of Installed Plant Capacity in Public Utilities (in thousand MW)

Year	*Hydro*	*Thermal*	*Nuclear*	*Total*
1950-51	0.6(33)	1.1 (67)	–	1.7
1970-71	6.4 (43)	7.9 (59)	0.5 (2)	14.7
2000-01	25.1 (25)	73.6 (72)	2.9 (3)	101.6
2008-09	36.9 (25)	107.0 (72)	4.1 (3)	148.0(100)
2009-10	36.9(23.0)	118.0(74.0)	4.5(3.0)	159.4(100)
2010-11	37.6	131.2	4.8	173.6

Note : Figures in brackets are percentage of total installed capacity.

Source : *Economic Survey*, 2011-12.

Hydel Power

Hydro-electric power is a renewable natural resource. In 1950-51 installed capacity of hydro-power was 560 MW but by 2010-11 it had increased to 37,600 MW; but in relative terms, it had declined from 33 per cent to 21.6 per cent. (This was because of the greater growth of thermal power since 1951)

Hydel power has several advantages :

(a) It is the most economical source of power;

(b) there is no problem of pollution of atmosphere

or disposal of waste in generation of hydel power; and

(c) Oil, coal and natural gas resources which can be used for producing electricity are in short supply and have implications in terms of high costs and exert greater pressure on foreign exchange resources; hydel power can easily replace them.

It has, however, been aruged that hydel projects take a long period of gestation as compared to thermal projects. This point was examined by the Power Economy Committee which after thorough investigation concluded that in case a hydro project is thoroughly examined and designed before implementation, the actual period of construction is nearly the same as that of a thermal project. This explains why the Power Commission in 1962 and Energy Survey of India Committee (1965) recommended that greater reliance be placed on hydro-projects. After the tremendous enthusiasm for hydro-electric projects during the First and the Second Plans, there was a slackening of emphasis of hydro schemes. This was an unwise step, and there was a need to reverse this trend. Emphasising this as a future directional change of policy, the Power Economy Committee (1971) stated : "Under the existing conditions in the country, the hydel schemes constitute the most economic source of electric production . . . . To control and reduce the cost at energy generation and supply in the country, to enable full utilisation of generating facilities already built up and to ensure that the limited capital allocations to the power supply industry go the farthest in meeting the country's estimated deficit, the bulk of the new generating capacity to be added during the 5th and 6th Plans should be derived from hydro sources."

In spite of these clear advantages claimed for hydro-power, and despite the fact that only one-fifth of hydro power has been harnessed in the country so far, the Government has been relying more on thermal power to relieve the power shortage in India. (Table 8)

During 1998-99, the Governemnt of India announced a policy on Hydro-Power Development with a view to exploiting the vast hydropower potential available in the country at a faster rate. Accordingly, action was initiated to add nearly 8800 MW hydel capacity in the Central Sector by 2004-2005.

Thermal Power

Thermal power which is generated by coal and oil has always been the major source of electric power in India. In absolute terms installed capacity of thermal power had increased from 1,150 MW in 1950-51 to 1,18,000 MW in 2009-10; and in relative terms the share of thermal power had increased from 67 per cent to 74 per cent during this period. Bulk of the thermal power is derived from coal and only a small fraction comes from oil. Both coal and oil are non-renewable and exhaustible resources. Low grade coal and middlings available at collieries and washeries are used for the generation of electric power. Accordingly, thermal power generation plants are located near coal mines and washeries. With the increase in the international price of oil and consequently with the rise of domestic price of oil, the cost of generation of power through oil has shot up and the Fuel Policy Committee recommended the substitution of coal based technology in place of oil. While the use of oil for power generation is being discouraged, the success of its substitution by coal depends on the extent to which coal production can be augmented in the country.

Nuclear Power

Nuclear power is of recent origin and its supply accounts for only 3 per cent of the total installed capacity of electricity. The Planning Commission has stated clearly : "In relation to the total capacity of the power systems in India and their rates of growth, the contributions of nuclear power will remain relatively modest in the coming two decades."[6] Attempts are, however, made to set up nuclear power stations in Tamil Nadu, Rajasthan, etc. Considering the relative failure of nuclear power plants in Russia and in other countries including India, nuclear energy is unlikely to make a significant contribution to power generation in the country.

Amidst increasing aversion of developed world, it is being said that the future of nuclear energy is now in developing countries. At present there are 19 nuclear power plants in the country, with a total installed capacity of 4000 megawatts. In the post Indo-US nuclear deal this capacity is expected to get enhanced to 60000 megawatts. Five new nuclear power parks have been planned including one in Jaita Pur, Maharashtra. Other nuclear parks have been planned in West Bengal, Gujarat, Andhra Pradesh and Tamilnadu. Each such park will have an installed capacity of 10000 megawatts.

In December 2009, there were 436 nuclear reactors in the world. US, Japan and France were producing 56.5 percent of global nuclear energy production, fulfilling 6.5 percent of energy requirements all over the world. It may be noted that US fulfils 19 percent of its electricity requirements from nuclear power, but for some time it is not establishing any new nuclear power plant. Even Japan is producing less energy from nuclear source. Major reason for the same is that its Kashiwazaki kariwa nuclear plant was closed down after earthquake in 2007. Many nuclear reactors have retired and they have not been replaced by new ones. Last year global production of nuclear power came down by 1.8 percent. Therefore it seems that government of India is extra enthusiastic about the feature of nuclear energy in India. Strong opposition to Jaitapur nuclear project is a signal to the future resistance, which nuclear plans are going to face in context to the international experiences.

Targets and Achievements

Table 9 shows how the targets of power generation were not reached in any of the plans

6. Planning Commission, *Sixth Five-Year Plan*, 1980-85, p. 234.

completed so far. In every Five Year Plan there was a shortfall in achievement--15 per cent in the First Plan and as much as 50 per cent in the Fourth Plan The cumulative result of slackness in this basic area of planning is that power crisis threatens to choke the growth process of the Indian economy. In fact, it seriously damaged the targets of the Fourth and Fifth Plans. Accordingly, the Sixth Plan (1980-85) put maximum emphasis on power generation; even then, there was a shortfall of 28 per cent in the power generation target. The short-fall of 4 per cent during the Seventh Plan period was the lowest. The shortfall in the Ninth Plan was a hefty 53 per cent.

Chronic Power Shortage in India

Power development during the last 50 years has been significant. The total installed generating capacity from all sources — utilities and non-utilities—had increased from 2,300 MW in 1950 to 1,88,000 MW by 2010-11. (Table 10) Besides

TABLE 9. Power generation targets and achievements

(in MW)

	Additions to Installed Capacity		*Percentage Shortfall*
	Target	*Achievement*	
First Plan	1,300	1,100	15
Second Plan	3,500	2,300	36
Third Plan	7,000	4,500	36
Fourth Plan	9,300	4,600	50
Sixth Plan	19,670	14,230	28
Seventh Plan	22,250	21,500	4
Eighth Plan	30,540	16,420	46
Ninth Plan	40,250	19,015	53
Tenth Plan	41,110	23,250	40

SOURCE : Various *Five Year Plans.*

enlargement of generating capacity, the last five decades witnessed the growth of power systems from the rudi mentary stage of isolated stations to fairly well-integrated systems in most of the states and emergence of grids. Construction of inter-state and inter-regional lines has also made headway. Despite this tremendous growth, India has always faced chronic power shortage since 1950-51.

TABLE 10 : Installed Power Capacity 1950 to 2009

(Thousand MW)

Year	*Public*	*Non-utilities*	*Total*
1950-51	1.7	0.6	2.3
1970-71	14.7	1.5	16.2
1990-91	66.1	8.6	74.7
2008-09	148.0	27.0	175.0
2009-10	159.4	28.5	188.0
2010-11	173.6	32.9	206.5

SOURCE : *Economic Survey*, 2009-2010, Table 5.27.

Basically, there are two reasons for this:-

Firstly, the demand for electric power has been rising continuously, as for instance, during the 1980's, it has risen at the annual rate of 9 to 10 per cent. This rise in demand is at all levels, viz. public lighting and domestic use, railway traction, industrial use and lift irrigation in agriculture (the demand in agriculture actually goes up when the monsoon is delayed or fails altogether, which is precisely the period when the generation of hydro-electric power declines sharply).

Secondly, while the demand for electric power has been rising continuously, the generation and distribution of power has not risen proportionately. A variety of factors have affected the performance of the power sector and these have been examined in depth by many committees:

(a) The generation of hydel power has been *fluctuating from year to year*, depending upon the nature and intensity of monsoons. Failure of monsoons adversely affects the generation of hydel power. For example, the generation of hydel power in 2009-10 declined to 106.7 billion kwh, from 120.4 billion kwh in 2007-08.

(b) The commissioning of new capacity has often considerably fallen short of targets.

(c) Power cuts have also been due to sub-optimal performance of a considerable number of thermal units. This has been aggravated by teething troubles in commissioning newly installed thermal generating units.

(d) The plant load factor (PLF) is an important indicator of operational efficiency of thermal power plants.[7] The average PLF in capacity utilisation of thermal power plants of the SEBs has been low because of deficiencies in management and operation, lack of proper maintenance and non-availability of coal of appropriate quality.

In this connection, we should refer to the increasing role played by captive power plants, also known as non-utilities. Because of the tight power situation for many years, the Government has been encouraging large industrial units specially in the fields of sugar, paper, cement, petrochamicals and fertilisers to set up their own captive power plants. (Table 10)

The generation of power in these plants is around 12.7 per cent of the total power production in the country in 2009-10 and it is steadily increasing. This has helped to ease the pressure of demand on power generation in public sector electricity units (known as utilities) to some extent.

SEBs : Problem Institution in the power sector

The critical problem area in the power sector is the poor performance of the State Electricity Boards (SEBs) which generate and distribute power, set power tariffs and collect revenues from the users. Each SEB operates

7. It has been estimated that every one per cent improvement in national average PLF makes available an additional 450 MW of installed generating capacity. The average PLF of SEBs during 2000-01 ranges between 80 per cent in the Southern region to 18 per cent in North Eastern region.

as a state monopoly combining functions relating to generation, transmission and distribution of electricity. A serious weakness of over the last 5 decades is the sub-optimal capacity utilisation of their thermal generation units and high transmission and distribution (T&D) losses. Thermal power plants have generally suffered from low capacity utilisation largely due to deficiencies in the operation and maintenance of plants, deficiencies in the generating equipment, poor quality of coal received by the power plants etc. This has led to chronic shortage of power in the country.

The high transmission and distribution losses are due to sparsely distributed loads over a large area, particularly in the rural sector, under-investment in the transmission system, inadequate billing and substantial pilferage of power. These T&D losses have been around 27 per cent against the international average of about 9 per cent. Different states show different percent of T&D losses ranging from 6 percent in Puducherry to 55.7 percent in Jammu and Kashmir.

Table 11 : Statewise Transmission and Distribution (T&D) Losses (2007 – 2008)

States/UTs	*T & D Losses (GWh)*
Haryana	32.8
Himachal Pradesh	17.0
Jammu & Kashmir	55.7
Punjab	22.8
Rajasthan	34.7
Uttar Pradesh	28.6
Uttarakhand	35.7
Chandigarh	23.8
Delhi	28.7
Gujrat	26.1
Madhya Pradesh	35.6
Chhattisgarh	29.8
Maharashtra	29.8
Goa	21.2
D & N Haveli	-35.0
Daman & Diu	64.0
Andhra Pradesh	22.4
Karnataka	18.9
Kerala	17.8
Tamil Nadu	18.7
Lakshadweep	18.1
Puducherry	5.9
Bihar	48.8
Jharkhand	23.2
Orissa	39.4
West Bengal	21.3
A & N Island	63.6
Sikkim	-27.0
Assam	38.6
Manipur	63.6
Meghalaya	37.6
Nagaland	55.6
Tripura	42.8
Arunachal Pradesh	67.2
Mizoram	44.6
Total All India	**27.2**

Source : All India Electricity Statistics, Published by CEA, M/o Power

The most serious weakness of SEBs is their inability to arrive at and implement an economic power tariff. The average price of power has been increased only marginally since 1981-82 and today it constitutes only about out 50 per cent of the long run marginal cost. Because of the powerful agricultural lobby in all the States, SEBs are unable to raise the power tariff. The tariff for agricultural power is zero or near zero in some states. Both agriculture and domestic sectors are highly subsidised and, as a result, SEBs are incurring heavy losses on their sale of power to agricultural and domestic sectors. Gross subsidy involved on account of sale of electricity to these two sectors rose from ₹ 7,450 crores in 1991-92 to ₹ 40,054 crores in 2006-07 (Table 11 below) ***mainly because power was supplied at a mere 18 paise per unit as against the cost of ₹ 1.53 per unit.*** To some extent, these heavy losses have been brought down through :

Table 12 : Financial performance of the State Power Sector

(*₹ crores*)

		1991-92	*2006-07 (Provisinal)*
A.	**Gross subsidy involved**		
(i)	On account of sale of electricity		
	(a) Agriculture	5,940	26,606
	(b) Domestic	1,310	13,172
	(c) Inter-state sales	200	276
	Sub-total	7,450	40,054
(ii)	Subventions received from State Governments	2,050	13,752
(iii)	Net Subsidy	5,400	26,302
(iv)	Surplus generated by sale to other sectors	2,170	5,276
(v)	Uncovered subsidy	3,230	21,026
B.	**Commercial Losses***	**4,120**	**28,825**
C.	**Additional revenue Moblisation**		
(i)	From introducing 50 paise unit from agriculture/irrigation	2,180	1,631

* Commercial losses include, besides uncovered subsidy, financial results of other activities undertken by SEBs.
Source: *Economic Survey,* 2007-08, p. 214.

(a) Surplus revenues generated from sale of electric power to industrial, commercial and other sectors at very high prices. The surplus is used to cross subsidise the losses on account of sales to agriculture and domestic categories – but there are limits to the extent this could be done, if we are not to retard the pace of industrialisation in the country; and

(b) State governments sharing a part of the subsidy by providing a subvention mainly for rural electrification.

Even then, the SEBs are left with heavy uncovered subsidies which are ever increasing with every passing

year. For instance, uncovered subsidy borne by SEBs (refer to Table 11) amounted to ₹ 3230 crores in 1991-92 but rose to ₹ 19,320 crores in 2004-2005.

These uncovered subsidies more or less explain the commercial losses incurred by SEBs annually. This order of heavy losses is unsustainable for the financial position of SEBs. In this connection, it is estimated that:

(a) A minimum agricultural power tariff of 50 paise per unit as accepted by the Power Ministers Conference as far back as 1991 is still to be implemented universally by all SEBs.

(b) In the alternative, if SEBs were to earn *the stipulated 3 per cent rate of return* (ROR), on their investment they could generate an additional revenue of about ₹ 27,000 crores in 2006-07.

In practice, nothing was done to mobilise additional revenues for SEBs. The net result is that nearly all SEBs have accumulated huge losses and have become almost bankrupt. Originally, the SEBs were intended to be commercially autonomous professional bodies, but they have been reduced to being extensions of State Government departments, with consequent political interference and contol. At the time of Independence, many SEBs were headed by strong power plant technologists and engineers, but for the last several years, most SEBs are manned by generalist IAS administrators with little or no experience in the power industry and who simply carry out the wishes of the state political leadership. Accordingly, SEBs suffer from serious maladies, such as overmanning, construction and procurement contracts awarded to poorly qualified parties, poor project management leading to enormous delays and cost overruns, poor quality in construction and equipment selection, resulting in unsatisfactory performance, mismatch in generation and transmission capacities, extensive power thefts, lax billing and collection of money due, etc. Many commissions and committees have studied these problems and have suggested many key changes, but all in vain.

The Government of Orissa was the first to initiate reform of the State power sector with substantial restructuring of SEB to make the operation of the sector more efficient and financially viable. Under the Orissa Electricity Reforms Act 1995, Orissa SEB was replaced by three separate Corporations — Grid Corporation of Orissa, Orissa Hydro Power Corporation and Orissa Power Generation Corporation. The Orissa effort placed special emphasis on the reform of electricity distribution, with management of one of the four zones being privatised as an initial step — eventually, all electricity distribution zones to be privatised on the basis of competitive bidding. A few other States are also considering the reform of the State power sector on the Orissa pattern. But there is stiff resistance from organised trade unions against restructuring and privatisation.

Power Sector Reforms

In India, as in all developing countries, power generation and distribution have been a government monopoly. Since the middle of the Eighties, many developing countries started opening up the generation and distribution of electricity to the private sector, basically because of paucity of financial resources. Besides, the World Bank and other international financial institutions which were approached for funds forced governments of developing countries to bring in private producers into the power sector with a view to introduce competition. It was in this background that India too fell in line with other developing countries and introduced the new power policy in 1992 and invited private investment, both Indian and foreign, into the power generation business through the concept of Independent Power Producers (IPPs). Government offered a whole package of incentives to the private sector :

(i) higher debt equity ratio at 4 : 1 for financing new power schemes;

(ii) a guaranteed rate of return of 16 per cent on the paid-up and subscribed capital in the case of generating companies;

(iii) 100 per cent equity participation by foreign companies;

(iv) reduction of import duty on power projects.

(v) a 5 year tax holiday for new power projects.

The new power policy was not intended to supplant the public sector but only marginally support the public sector. For instance the Working Group on Power had envisaged only 3,000 MW capacity from the private sector during the Eighth Plan, and 10,500 MW in the Ninth Plan.

Ever since the Narasimha Rao Government announced its new power policy for private power, this country has witnessed one of the most acrimonious debates on various aspects of the policy. The quantum of return on equity, the counter guarantees to be given by the Government and the project selection process have all been the subject of debate. This has resulted in delay in signing of power purchase agreements (PPAs) guarantees and counter - guarantees, environmental clearances, matching transmission networks and legally enforceable contracts.

Power sector reforms basically were prompted by the rising losses of State Electricity Boards (SEBs) and their inability to meet demand. It followed worldwide reforms that began in the United Kingdom, Norway, Canada, and the USA and were later adopted in Latin America as well. In developed countries, sweeping reforms focused on restructuring vertically integrated monopolies and introducing competition, while developing countries focused on their need to accelerate power generation investment.

In India, reforms have made major progress in the following areas:

i. Entry by private independent power producers (IPP);

ii. corporatization of state-owned enterprises;

iii. unbundling of generation, transmission, and distribution (T&D);

iv. a national enabling legislation (Electricity Act 2003);

v. independent power regulation at national level

(CERC) and in States bulk transmission improvements (for example Power grid), with wholesale electricity markets emerging in inter-State trading and merchant power sales (as an alternative to long-term power purchase agreements) and spot and futures markets. Some, limited, private entry into distribution (for example Orissa, Delhi,), and splitting up of some State electricity distribution companies into discoms (distribution companies); and Central incentives (APDRP, Accelerated Power development and Reform Programme) to support the implementation of electricity reform in States including accelerated metering and reducing high unaccounted-for T&D losses.

Economic Survey claims "composite reform index (although it does not assess quality), ranks India among the top reformers worldwide, comparable to Latin America (for example Chile, Brazil), better than East Asia (for example China, Indonesia, Thailand) and a step behind the most advanced (for example France, the UK, some US states). Among States in India itself, there remain significant variations. The highest ranked include most of the larger states, i.e. Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Maharashtra, and West Bengal (as evident in their utilization of APDRP incentives), apart from Orissa and Delhi, two States with private distribution (with mixed impacts)." Government claims that with expected lags and some temporary reversals, outcomes are now beginning to emerge : accelerated power generation investments and competition; switch to tariff-based awards for new power projects; more efficient fuel sourcing (offshore natural gas, imported coal); rapid development of a national grid (with four out of five regions synchronized and the fifth—southern—interconnected), with greater reliability; and increased wheeling of electricity generated with emergence of a national bulk market with open access to States and wholesale trading.

Future Directions

Though some head way has been made in power sector reforms, reforms are still incomplete. Accelerating demand and critical role of the power sector in sustaining growth and therefore massive investment requirements, pose a major challenge for these reforms. Constantly rising incomes are further fuelling demand for electricity. High 'peak deficit' indicates rising unmet demand. Unreliable power supply not only hampers agriculture and industry growth, but also causes hardships for the households. Nearly 35 per cent unmetered and unaccounted sale, which is among the highest in the world, is causing major losses to the exchequer. Today State Electricity Boards (SEBs) have annual losses equivalent to nearly 1 per cent of GDP. Low tariff coupled with high transmission and distribution losses, not only make this sector depended on the government support, it also leads to inefficient use of electricity.

Reforms are now essential in three directions:

(1) Strengthening Regulation: Given our federal system and obvious political reasons, power sector reforms are very slow. Conflicting interests come in way of these reforms. If we allow private sector in generation or distribution of electricity, natural monopolies in the hands of private players might hurt the interests of various other stake holders. With multiple actors and interests: SEBs, generation, transmission and distribution companies, wholesale and retail actors, and a variety of consumers—the farm sector, urban households, and industry, the strong role of independent regulators is crucial to balance these interests, promote competition, and enhance the working of the market. Worldwide evidence suggests that electricity reform works only in the presence of strong and independent regulators, insulated from political and commercial pressures. For example, regulators will need to ensure adequate competition and act on uncompetitive behaviour in wholesale trade, including capping wholesale tariffs and investigating competition.

(2) Improving Distribution and Opening Bulk Supply to Competition: The next step is to introduce competition and open access at bulk level. Most power distribution is still the monopoly of SEBs, with mounting losses and poor services. Three different models of restructuring are possible; with States adopting whichever model works best and setting-up surrogate competition amongst these modes:

(a) public private partnership (PPP) mode with open access: Long-term concessions granted to private distribution companies, incorporating high investment requirements, performance standards, tariffs subject to regulation, and permitting bulk consumers open access to networks (similar to telecom).

(b) Distribution franchisee mode: Competitive bidding to select franchisee operators, where ownership of assets remains with state discoms and licencee supplies bulk electricity to franchisee at predetermined prices, franchisee retains predefined portion of revenues and pays discoms annual rate bids, T&D losses are monetized and borne by discoms with incentives to lower them and tariffs remain the same as in larger licensing area.

(c) Performance-based State electricity discoms: With independent management and overhaul, and strict commercial performance standards, some stronger state discoms could potentially provide competitive services, with bulk consumers again permitted to have open access to networks.

(3) Rationalizing Tariffs to More Economic Levels: The previous two steps will not be enough without a strong political decision by all States to rationalize/revise electricity tariffs to economic levels and reduce subsidies and cross-subsidies.

Rural Electrification – A Note

In order to stimulate the growth of small-scale industries and promote a more balanced and diversified economy, rapid rural electrification was found necessary and was pursued vigorously at both central and state levels. The progress of rural electrification is given in Table 12.

Between 1950 and September 2009, the number of villages electrified had increased from a mere 3,000 to 5,04,000. The number of pump sets energised had increased from 21,000 to nearly 12 million.

TABLE 12. Progress of Rural Electrification

Year	*Number of villages electrified (in thousands)*	*Number of pumpsets energised (in millions)*
1950-51	3	0.02
1960-61	22	0.19
1979-80	250	4
1984-85	370	6
2007-08	488	12
Sep. 2009	504	NA

SOURCE : Planning Commission, *Tenth Five-Year Plan*, (2002-07), Vol. II and previous Five Year Plans Infrastructure Statistics, CSO (2010).
Mid Term Appraisal, Eleventh Five Year Plan (2007-12)

In the early stages, the emphasis was on village electrification. However, the serious famines of mid-sixties focussed attention on the need to stabilise agriculture through exploitation of ground water resources. For this purpose, the energisation of pump sets was considered important and hence the emphasis shifted from village electrification to energisation of pump sets. The setting up of the Rural Electrification Corporation has helped to accelerate the speed of electrification in the rural areas in an organised manner. The total number of pumpsets energised had reached 12 million.

According to Tenth Five Year Plan (2002-07), around 80,000 villages in the country were yet to be electrified. 13 States have declared 100 per cent electrification of their villages. The villages yet to be electrified are mostly in Assam, Orissa, UP, MP, Rajasthan and north-eastern states. The Tenth Plan points out about 62,000 villages could be provided through conventional grid expansion by 2006-07 and the balance of 18,000 villages which are in remote areas, hilly terrains, deserts and island could be electrified economically through decentralised and non-conventional energy sources like solar, wind, small hydro and biomass by the year 2011-12.

In order to facilitate the flow of funds for Rural Electrification Programme, the Tenth Plan has allowed: (a) the pooling of funds under Minimum Needs Programme, and (b) utilising funds available under Member of Parliament Local Area Development Scheme and Jawahar Gram Siddhi Yojana.

During 2003-04, the Government of India amended the definition of an "electrified" village to linking at least 10 percent of the households in the village and to provide electricity to public places like schools, panchayat office, health center etc. Electricity should be provided to Dalit Bastis if they existed. Using this new definition, it has now been estimated that 5,87,560 villages have been electrified and that 1,12,400 villages are yet to be electrified.

Rural Electrification Policy

The Government of India notified its Rural Electrification Policy in April 2006, under sections 4 and 5 of the Electricity Act, 2002. The policy aims at :

(a) provisioning of electricity to all households by year 2009;

(b) quality and reliable power supply at reasonable rates; and

(c) minimum lifeline consumption of one unit per household per day as a merit good by the year 1012.

4. TRANSPORT SYSTEM IN INDIA'S ECONOMIC DEVELOPMENT

Significance of Transport

If agriculture and industry are regarded as the body and the bones of the India economy, transport and communications constitute its nerves which help the circulation of men and materials. The transport system helps to broaden the market for goods and by doing so, it makes possible large-scale production through division of labour. It is also essential for the movement of raw materials, fuel, machinery etc., to the places of production. The more extensive and continuous the production in any branch of activity, the greater will be the need for transport facilities. Transport development helps to open up remote regions and resources for production. Regions may have abundant agricultural, forest and mineral resources but they cannot be developed if they continue to be remote and inaccessible. By linking the backward regions with the relatively more advanced, transport development helps in the better and fuller utilisation of resources. Finally, expansion of transport facilities, in turn, helps industrialisation directly. The demand for locomotives, motor vehicles, ships etc. leads to the start of industries which specialise in the production of these goods. Expansion of transport is thus of fundamental importance for a developing country like India.

Transport and the Five Year Plans

Indian planners gave high priority to the development of transport, for in their opinion "an efficient and well developed system of transport and communications is vital to the success of a plan of economic development which lays stress on rapid industrialisation."[8] Accordingly, the allocation on the transport sector was quite high during the first three

8. *Second Five Year Plan* (1956-61), p. 459.

plans, viz., between 25 and 28 per cent. The allocations in the next successive Plans on the transport sector declined gradually. The Eighth Plan outlay, for instance, was only 13 per cent of the total outlay. But the lower allocation in the last three plans does not mean that the transport sector had been fully developed.

There is the resource crunch on the one side and there is increasing importance given to energy and industrial sectors, on the other.

Growth of Transport System since 1951

Rail and road transport systems dominate but other forms of transport are also important within their specialised areas considering the size of the country and its geographical features. Table 13 shows that the transport sector has recorded a substantial growth since the introduction of economic planning in 1950-51. Railways have recorded a growth of 3 per cent per annum in freight originating tonnage, though the growth in route length was indeed low. The road network has expanded at an annual rate of 5 per cent while road transport fleet has increased by 7 per cent per annum in respect of goods vehicles. About 70 per cent of the Indian villages have been connected by a net work of rural roads and over 40 per cent of our villages are served by all weather roads. Shipping tonnage has increased by an impressive 11 per cent while coastal shipping could register only a meagre rise of 1.4 per cent. Airlines passenger traffic has risen sharply by 9 per cent per annum. The traffic handled by major ports has increased from 19 million tonnes to 562.7 million tonnes between 1951 and 2010, at an annual rate of over 5 per cent. The growth of the transport sector in general is indeed quite impressive and it reflects the enormous outlay allocated to the development of the transport system during the planning period.

Problems of Transport Development in India

Since 1950-51 transport systems have registered impressive progress but there are many bottlenecks, constraints and difficulties. Inadequacies and imbalances in transport threaten to constrain economic growth and the quality of life in urban as well as rural India.

(a) ***Transport bottlenecks.*** The capacity of the entire transportation system including the road network continues to fall short of demand for transportation. For instance, capacity constraints in railways have led to the movement of bulk commodities like coal, over long distances, by road, at high cost to the economy. The acute shortage of wagons had affected almost all industries in the country. The scarcity of coal experienced throughout the country with enough coal at the pit-heads, the piling up of stocks of cement with manufacturers but with the scarcity of cement everywhere, scarcity of fertilisers and foodgrains, and so on, were often due to shortage of railway facilities. The inefficiencies, the delays and the corruption prevalent in the railway staff had driven manufacturers to make use of the services of road transporters for the movement of their products. The railway bottlenecks have largely been now removed.

Even now 30 per cent of villages in our country still lack road connection. The road transport system is under heavy strain, with inadequacy of capacity and sub-standard infrastructure. This has led to excessive transit delays, fuel wastage and higher operating costs. Similar problems are to be met with in the case of shipping also.

(b) ***Poor planning of transport system.*** In the formulation of transport plans, sufficient attention was not given to spatial and economic features which influence the pattern of transport demand in the country. For instance, population and economic activities tend

Table 13. Growth of the Transport System

		1950-51	*1970-71*	*2005-06*	*2009-10*	*2010-11*
1. *Railways :*	Route length ('000 km)	53,600	59,800	63,300	64000	644.50
	Freight Traffic originating (million tonnes)	93	196	680	888	922
2. *Roads :*	Total length ('000 km)	400	915	2,713*	4,236**	NA
	surfaced	160	400	1,510*	2,090**	NA
	No. of goods vehicles ('000)	82	343	4,782	6041@	NA
3. *Shipping :*	Overseas shipping (million tonnes GRT)	0.2	2.2	7.0	9.7	NA
ports	traffic in m. tonnes	19	—	424	562.7	NA
4. *Civil Aviation :*	Number of passengers (lakhs)	—	26	318	569	NA

Source : ***Tenth Five Year Plan,*** 1997-2002, Vol. II. and ***Economic Survey,*** 2011-2012, Tables S-27 etc.
Ministry of Shipping Annual Report 2009-10. N.A- Not Available
* For the year 2003-04 ** For 2007-08 @ 2008-09

Planning Commission, ***Seventh Five-Year Plan,*** 1985-90, Vol. II, p. 201.

to concentrate in major cities and towns. Massive volumes of traffic are concentrated in certain regions of the country and hence there is tremendous pressure on rail and road transport systems in the cities and certain regions. Alternative routes should be developed or there should be balanced development of regions.

There is bound to be substantial build up of transport demand in the years to come. Such increase in transport demand cannot be met always by expansion in transport services. Careful transport planning should include greater dispersal of industries, balanced regional development, generation of thermal power, development of other sources of energy, etc.

Another aspect of poor transport planning is that in the urban areas, lack of adequate mass transport, complete absence of demand management and policy distortions in the areas of fuel pricing and bank finance have resulted in an explosion of personalised transport comprising mainly of scooters and cars. This has contributed to high levels of pollution and alarming rates of accidents. On the other side, a large number of villages lack a reliable all-weather transport connection with nearby markets and towns.

Yet another aspect of poor transport planning in India is that North East and Jammu & Kashmir have not been adequately linked with the rest of the country and as a result, they have remained physically and emotionally isolated.

Finally, certain environment-friendly and socially cost effective means of transport like coastal shipping, inland water transport and non-mechanised transport have remained largely underdeveloped.

(c) ***Rail-road coordination***. Rail and road transport are the dominant modes of transport in the country and they would continue to be so in the future too. However, the modal mix of transport has been continually shifting against the railways. For instance, in 1950-51, the road transport accounted for 11 per cent of the freight traffic and 26 per cent of the passenger traffic; but now, its share had increased to 60 and 80 per cent respectively. This continuing shift in favour of the road transport system is undesirable from economic as well as environment angles. A continuously mounting energy import bill is one of the direct consequences. The Seventh Plan argues in this connection : "Ideally, the Railways should have adequate capacity to clear all train and wagon load traffic for long and medium loads particularly for bulk commodities while the road transport would cater essentially for small lot, short haul traffic for which it is the more efficient mode."[19]

(d) ***Overaged and obsolete assets***. The transport infrastructure in India suffers from over-aged and obsolete assets. This is true of all modes of transport. For instance, in the case of Indian railways, about 25 per cent of the total route length, 80 per cent of the equipment in railway workshops and a large portion of the rolling stock have to be renewed and replaced. Nearly 80 per cent of the buses operated by the SRTUs, nearly half of the shipping tonnage and one-third of the aircraft of our airline corporations would come up for replacement. This problem of replacement has assumed enormous proportions and it is now generally realised that this cannot be done during a single plan.

(e) ***Technology Upgradation***. Transport technology has a great influence on the productivity and safety of the transport sector. Modernisation of the transport system and the use of emerging technologies are essential elements of transport planning — these, however, should be based on the local needs and not imitation of those used in developed countries. Even though, every five year plan has talked about technology upgradation as a thrust area, the actual progress has been painfully slow : engine design, multi-axle vehicles, construction of roads, cargo handling equipment at the ports, navigational and communication facilities at the airports, modernisation of rolling stock and signalling system in the railways — all these continue to be primitive. Unless attention is given to these aspects, the productivity of operation and the quality of service, besides making the transport system more safe and reliable.

Despite impressive expansion over the years, the entire Indian transport network is characterised by many deficiencies and a major exercise in expansion of capacity and modernisation and technological upgradution is necessary. The Tenth Plan (2002-07) has proposed a comprehensive transport policy to tackle the above diverse problems facing the transport sector. The problems in the transport sector are so huge and the financial resources required are so vast — estimated at ₹ 2,00,00 crores — that transport plan programmes of the Tenth Plan are bound to be just paper plans and nothing more.

5. GROWTH OF INDIAN RAILWAYS

The Indian Railways had modest beginnings in 1853 when the first railway train journeyed a distance of 22 miles between Bombay and Thana. From a modest beginning in 1853, the railway development was very rapid and by 1900 there were nearly 25,000 miles of railway line. Railway construction slackened and in the next 50 years, only 10,000 miles of railway lines were added making up a total of a little more than 34,000 miles of railway line in 1950.

Originally, the Railways were operated by private companies owned by Englishmen. The Government gave certain concessions such as free grant of land, guarantee of a minimum return on capital etc. There were criticisms and complaints against private ownership and management. In 1925, the Government of India took over the first railway company. Gradually, the other companies were also taken over; by 1950 the railways in the former princely States were also taken over by the Government of India.

The Indian railways have now become a unified State-enterprise. It is the country's biggest nationalised enterprise and one of the largest railway systems of the

world with a capital base of about ₹ 58,000 crores, 63,000 route Kms, approximately 8,000 diesel and electric locomotives, 42,000 passenger coaches, 2,22,000 wagons and employing nearly 1.6 million staff. For long haul freight movement in the bulk and long distance passenger traffic, and for mass rapid transportation in suburban areas, railways occupy a unique position in the Indian economy.

Railway Development Under the Plans

As the Indian Railways constitute the largest transport agency intimately connected with the development of the national economy, the main objective of planning in Railways in the past was to expand railway traffic in such a way as to avoid bottlenecks in the production process and to ensure an efficient rail transport system. The total outlay on Railways in the first seven plans was ₹ 24,000 crores. Apart from the general objective of an efficient rail transport system, each Plan had a special objective, as for example,

(i) First Plan—rehabilitation and replacement of over-aged assets;

(ii) Second Plan—particular emphasis to prepare the Railways for carrying the traffic generated by the new steel plants and the increased production of coal;

(iii) Third Plan—Building up additional capacity so as to be ahead of the traffic demand and to prevent bottlenecks;

(iv) Fourth Plan to Seventh Plan– Modernisation of the system to improve efficiency of operations; and high priority to the development of freight terminals to facilitate the free and smooth movement of wagons; accelerate the conversion of steam locomotives to diesel and electric traction.

(v) Eighth and Ninth Plans — The main thrust was on capacity generation, man-power planning and energy conservation, safety, and customer satisfaction through reliable and better quality of services.

(vi) Tenth Plan: The Tenth Plan (2002-07) emphasized, as under previous plans, capacity expansion through modernization and technological upgradation of the railway system, improvement in quality of service, rationalization of tariff and improvement in safety and reliability of railway services.

During the first three years of the Tenth Plan, the Indian Railways were in a bad shape. But there was a spectacular increase in productivity in the last two years of the Tenth Plan which resulted in quantum expansion in capacity augmentation, increase in railway receipts, control of railway expenditure and huge surpluses.

Railways under the Eleventh Plan (2007-12)

Despite the significant progress of railways during the last two years of the Tenth Plan, the Eleventh Plan emphasized the persistence of capacity bottlenecks, the piling up of containers, the congestion at the ports etc. The Eleventh Plan emphasized particularly the need to augment capacity on critical routes such as Delhi-Mumbai and Delhi-Howrah for which freight corridors are to be constructed during the 11th Plan.

The Railways are taking a major initiative in shifting to Public Private Participation (PPP) for building and operation of selected railway infrastructure. This will enable the railways to undertake a much large programme of capacity augmentation than what public finances alone would permit.

The Eleventh Plan expects the Railways to provide world class transport services – through provision of quality passenger amenities at terminals, introduction of modern rolling stock and improvement in overall sanitation. As regards freight, the Railway would go for appropriate changes in designs of wagons, entrusting manufacturing and maintenance of rolling stock to companies, outsourcing many activities etc.

The data given in table 14 indicate the trend towards modernisation since 1950-51. In terms of route length, the railway network had grown by only 18 per cent between 1951 and 2010-11 but freight transport had increased by 891 per cent and the passenger movement by 493 per cent. The increases in transport output has been brought about by more intensive utilisation of the available assets, improvement in productivity and technological upgradation. The steam locomotives are being gradually replaced by diesel and electric locomotives. The number of steam locomotives has been drastically reduced from 8,120 to just 45 betwen 1951 and 2009-10. During the same period the number of diesel and electric locomotives had increased from 90 to 8,889. Diesel and electric locomotives carry over 99 per cent of the total goods traffic. Modernisation and improvement of signalling and telecommunication are also going ahead.

Table 14 : Progress of Railways under the Plans Since 1950-51

Particulars	*At the end of* 1950-51	1970-71	2009-10	2010-11
1. Route length (KM)	53,600	59,800	63,974	64,400
of which Electrified (KM)	390	3,700	18,927	19,600
2. Passengers originating (millions)	1,290	2,430	7,246	7651
3. Goods originating (million tonnes)	93	197	888	922
4. No. of Locomotives	8,210	11,160	8889	NA
of which diesel	17	1,170	5,022	NA
electric	72	600	3,825	NA
5. No. of coaches	19,630	35,150	57,535	NA
6. Number of Wagons (000)	206	384		220

SOURCE: *Explanatory Memorandum on the Railway Budget*, 2012-13 and Outcome and performance Budget of Railways for 2008-09. Ministry of Railways

10. *Tenth Five Year Plan*, Vol. II, Ch.7.

Railway Finances

Before 1924, Railway finances formed part of the Central Government finances. But from 1924, the Railway finances were separated from the general finances of the Central Government. The general tax-payer was given the status of a shareholder in the Railways, but in practice, the Central Government was the sole shareholder of the Indian Railways. The relation between the Central Government and the Railways and the finances of the Railways in particular is determined by Parliamentary Railway Convention Committees. According to the Railway Convention 1950.

(a) The Government of India was entitled to receive a guaranteed dividend of 4 per cent on the loan capital invested in the railways;

(b) the Railways had to set up a Railway Development Fund to finance the construction of new lines which might be unremunerative, to provide increased passenger amenities, and to spend on labour welfare work, etc.; and

(c) the Railways had also set up the Railway Depreciation Fund to be used for the replacement of railway equipment.

It became the practice to appoint Railway Convention Committees once in 5 years to review the finances of the Railways, the constitution and administration of the various railway funds such as the Reserve Revenue Fund, the Railway Development Fund and the Depreciation Reserve Fund and to fix the guaranteed dividend by the Railways to the General finances.

Table 15 gives a summary of the working of the Indian Railways since Independence. The first column gives total earnings which include

(a) Total traffic receipts, which consist of passenger earnings and goods earnings, and

(b) Miscellaneous receipts.

From ₹ 260 crores in 1950-51, total earnings of the Railways touched ₹ 24,625 crores in 1996-97 and is expected to touch ₹ 1,35,694 crores in 2012-13 (Budget).

During the same period, total working expenses have also been mounting—from ₹ 210 crores in 1950-51 to ₹ 1,13,461 crores during 2012-13 (Budget). The total working expenses of the railways include operating expenses and also appropriations to (a) the Depreciation Reserve Fund and (b) the Pension Fund.

The Railway Ministry calculates net revenue or net earnings by deducting total working expenses from gross earnings. Table 15 shows that net revenue was ₹ 50 crores in 1950-51; it rose to ₹ 3,625 crores in 1996-1997 and would touch ₹ 22,233 crores in 2012-13 (B.E).

Out of the net revenue or earnings, the Railways pay a dividend to the Government (as the sole shareholder) and this is known as dividend to General Revenues. The annual dividend paid by the Railways to the Government is calculated on the percentage of Government investment in the Railways — it is a percentage of the capital-at-charge and as such, it increases year by year.

In 1950-51, the dividend to General Revenues was ₹ 30 crores; in 1996-1997 it was ₹ 1,507 crores. During 2012-13, it is estimated to touch ₹ 6,676 crores

After meeting all the expenses and also providing for dividend to general revenues, the Railways used to have a surplus every year, right up to 1965-66. From 1966-67 onwards, however, Indian Railways ***entered an era of persistent deficits***. Out of the 10 years ended 1975-76, only two years yielded surplus while the other eight years showed deficits. In fact, the Railways were unable to meet even their dividend liability in certain years. When the Railways could not meet fully even the annual dividend liability to the general exchequer, the shortfall was credited to a separate Deferred Dividend Liability Account — it was called deferred dividend liability, since the Railways had to pay the dividend some time in the future. By 1984-85, the deferred dividend liability of the Railways was over ₹ 500 crores. This was finally liquidated by 1996-97.

TABLE 15. Finances of Indian Railways

(₹ crores)

Year	*Total Earnings*	*Total Expenses*	*Net Earnings*	*Dividend to General Revenue*	*Surplus (+) Deficit (-)*
1950-51	260	210	50	30	+20
1980-81	2,620	2,500	120	320	-200
1996-97	24,625	21,000	3,625	1,507	+2,118
2006-07	64,780	50,330	14,450	4,250	+10,200
2010-11(R)	97,151	88,129	9,021	4,917	4,104
2010-11 (A)	96,681	90335	6346	4,941	1405
2011-12 (RE)	1,06,647	99,502	7,144	5,652	1492
2012-13 (BE)	1,35,694	113461	22,233	6,676	15,557

SOURCE: *Explanatory Memorandum on the Railway Budget* for 2011-12 and for various previous years.

After a short spell of deterioration Railway finances again on right track. In Table 15 it may be noted that the net railway earnings are expected to the ₹ 22,233 crores for the year 2002-13. Out of this, dividend payment to general revenues will be ₹ 6,676 crores. The balance amount would be was ₹ 15,557 crores. This surplus will be appropriated partly to Railways Development Fund and partly to Railways Capital Fund.

During NDA Government, the Railways were in dire financial straits and were battling a deep financial crisis. They defaulted on the dividend payable to Government of India and were not in a position to undertake timely replacement of over-age assets.

Under UPA Government, however, the Railways have done extremely well by converting losses to large surpluses. The Railway have regularly reduced the passenger and freight rates. What is the cause of this turnaround ?

The Railways are a capital-intensive business and, in such business, the marginal cost is substantially less than average cost of operations. Accordingly, the Railway Ministry adopted a strategy of playing on volumes and driving down unit cost. The focus adopted was :

(a) increasing yield per train rather than increasing tariff per passenger or per tonne carried.

(b) achieving incremental loading through reducing wagon turnaround time (additional incoming ₹ 14,000 crores in 4 years)

(c) Undertaking rationalisation of the freight tariff e.g. reduced freight tariff for petrol and diesel but raised the tariff for iron ore for exports (earned an additional income of ₹ 2,000 crores by giving lean season discounts and levying peak season surcharge).

(d) increasing the length of passenger trains of instead of increasing passenger fares (thereby earning an additional ₹ 2,000 crores)

(e) adopping a new investment policy giving priority to low cost and high return projects – this helped in better utilisation of rollling stock, decrease in transit time, etc.

(f) managing new alliances – as for instance by giving licence to run container trains to shipping and road transport companies, the Railways have made partners out of erstwhile competitors.

(g) The surplus is being invested augmenting the rail capacity

The UPA Government can take justifiable pride in steadily raising cash surplus during its regime. Indian Railways are probably the most successful in the whole world and its profitability is comparable to top corporates of the world. The Railway Ministry has ambitious plans to further moderise the system, provide improved facilities to industries and the travelling public.

A Note on Railway Budget 2012-13

Although the railway in India is the cheapest mode of transport than any other mode, Indian Railways has never incurred massive losses. And ultimately in the past more than a decade it turned out to be a profitable venture, even contributing to the exchequer significantly. But in the past few months, railway finances were in doldrums and that railway was heading towards near bankruptcy as deficit in railway was getting unmanageable. Railways had cash reserves of rupees 19,000 crores in 2007-08, major portion of which got depleted and railways was left with only 75 lakhs in 2011. Financial results of Railways between April and December were not very encouraging and it is believed that this year's (2011-12) revenue target is not expected to be achieved and gross traffic receipts are short by 2322 crore of the budget estimates. All this shows that railway's health is already very poor. An indicator of Railways' health is 'Operating Ratio'. By Operating Ratio we mean how much money railway needs to spend to earn rupees 100. This ratio in 2008-09 was 90.5 and 94.7 in 2009-10, which rose to 125 in 2011-11, now are down to 95 percent, but higher than budget estimate (91.1%). High operating ratio is a cause of major concern. The main reason for increase in Operating Ratio is constantly raising cost and stagnant fare and freights in the last three years. In the past one decade cost of living has more than doubled, whereas railway ministers have chosen not to raise passenger fares and freight, patting their back for efficiency. In the three years (2008-2011) Operating Ratio of railways rose from 90.5 to 125, mainly because of rising fuel cost, salary bill (thanks to Sixth Pay Commission) and component and other costs. Increase in these costs has led to huge losses to the railways. Thus it is not the inefficiency of Railways, which is causing losses to railways; it is refusal of the minister to raise user charges, despite huge increase in operating cost.

Railway is a Departmental Commercial Undertaking of Government of India. In the same way majority of petroleum companies are also public sector undertakings. Sometime back these companies were allowed to determine prices of petroleum products and since then they have revised prices of their products at least nine times. The argument put forward for decontrol of petroleum prices is that control regime was causing operative losses to these companies. As a matter of fact when this decision to decontrol was taken these companies were actually making huge profits as per their books of accounts and were even paying hefty dividend to the government as well. Development of railway has great significance for the nation. Railway is not only carrying 210 lakh passengers daily and 9264 lakh tones Km goods are annually carried presently by it; it has a promise to reduce the transport cost significantly. Railway goods freight is approximately one third of road freight. For long distance journeys there is no alternative to railways. Even for short distance journeys railway fares are nearly half of bus fares. Development of railways can go a long way to reduce transport cost in the country. For development of railways we need to keep it in good health and for keeping it in good health we need to rationalise fare and freight structure of railways. A delay in making this decision thus hampers the growth of railways.

Today railways requires urgent efforts for expanding railway lines, new engine factories, coach factories and other types railways infrastructure. Thus despite rising costs, refusal to raise fares and freights is bound to disrupt development of the railways. Though the Railway Budget 2012-13 proposes plan expenditure of Rs60,100crores, this allocation could have been much

more, had railway revenue been revised periodically rationally.

Populist orientation of the government is hampering the growth of railways and improvement in the facilities for the users. The government will have to give up this populist approach and further rationalise the fare and freight structure because the possibilities of providing additional resources from the general budget are minimal. The railways will have find its own resources for improvement and expansion of its operations.

Social Responsibility of Railways

The Railways, being a public utility undertaking, have to bear a mounting social burden in the form of loss on coaching services (as for example, suburban passenger traffic) and loss on lower than cost freight rates for foodgrains, coal, fodder, fruits and vegetables, salt, ores, etc.

Table 16 brings out clearly the heavy social burden which is responsible for deterioration in Railway finances. Between 1971 and 2011-12 the annual losses due to social responsibilities had mounted from ₹ 120 crores to ₹ 23,143 crores.

Table 16. Social Burden on Indian Railways

(₹ crores)

	1970-71	*1980-81*	*2005-06*	*2011-12*
1. Loss on coaching services	70	250	8,490	23,070
2. Loss on low rated freight cargo	50	100	60	73
Total	**120**	**350**	**8,550**	**23,143**

SOURCE : Government of India, *Explanatory Memorandum on the Railway Budget for* 2012-13 (Ministry of Railways) and earlier issues.

The bulk of the losses were on sub-urban and non-suburban passenger traffic (₹ 23,070 crores) in 2011-12.

Expansion of Chinese and Indian Railways – A Comparison

The mid-term appraisal of the Tenth Plan document had noted that the Chinese Railways is carrying 4.5 times more freight than the Indian Railways, mainly due to the larger investments made in the Chinese Railways in expanding and strengthening the infrastructure which also contributed towards improvements in the productivity of the Chinese Railways. Indian Railways carries more passengers than Chinese Railways, but the longer term development of the Railways in India depends crucially upon its ability to move freight, in keeping with the needs of the growing economy, and at speeds and reliability determined by the need to be competitive. This is especially important given the greater energy efficiency of the Railways in the long-distance freight (table 17).

Table 17

Expansion of Chinese and Indian Railways (1992–2002)— A Comparison

	China	*India*
New track (RKM)	13797	682
Track doubling (Kilometres)	9400	1519
Electrification (RKM)	8975	5192
Investment (billion $)	85	17.3
Freight (2003–04) (billion Net Ton Kilometres)	1724	381
Passenger (2003–04) (billion Passenger Kilometres)	478	541

6. ROADS AND ROAD TRANSPORT SYSTEM IN INDIA

Importance of Road Transport for the Indian Economy

As compared to the railways, the road transport system has definite advantages:

(*i*) Motor transport as well as road construction have contributed significantly to the growth of the gross national product all over the world, but India has remained significantly backward in this regard. Besides, there is tremendous scope for creating employment through road construction and maintenance. Further, India needs increased road mileage, specially to open up the vast areas which cannot be reached except through roads.

(*ii*) Road transport is quicker, more convenient and more flexible. It is particularly good for short distance travel as well as for movement of goods. Motor vehicles can easily collect passengers and goods from anywhere and take them to wherever they want to be dropped. Door-to-door collection and delivery are possible in the case of road transport. But in the case of railways, the lines are fixed and the railways do not have the flexibility of the roadways. Passengers and goods will have to be taken to the railway station.

(*iii*) Roads are a necessary complement to railways. India is a country of villages and it is only roads which can connect villages; Railways can connect towns. The railway stations will have to be properly served by a network of feeder roads. Only through these roads the railways can receive their passengers and goods. If railways are essential for the movement of goods and people for long distances, road transport is essential for such movement for short distances. Roads and railways are, therefore, not competitive but are complementary.

(*iv*) Road transport is of particular advantage to the farmers. Good roads help the farmers to move their produce, particularly the perishable products, like vegetables, quickly to the mandis and towns. Only by developing the road system, the farmer can be assured of

a steady market for his products. This assumes great importance in the context of the green revolution. Besides, good roads reduce the strain on the draught animals. During the monsoon season, it may be impossible for the villagers to move out of their villages unless there are good roads. In this connection, it is important to recognise that it is the road system which brings the villagers into contact with the towns and the new ideas and the new system which emanate from the towns.

(*v*) Roads are highly significant for the defence of the country. We have explained earlier that in a vast country like India, it is necessary that the troops should be moved quickly from one place to another in times of emergency. The railways are useful here. But more important than the railways is the road transport. Now-a-days the army has to move its troops, its tank and armoured cars, its field guns, and so on. For the movement of these, roads are essential. The great importance given to the construction of border roads to facilitate the movement of troops for the protection of the northern borders against the Chinese aggression is an example of the great importance of roads in the defence of the country.

The Seventh Plan (1985-90) brings out the importance of roads as follows: "Since the country's economy is still largely agrarian in character and the settlement pattern is rural-oriented, roads constitute a critical element of the transportation infrastructure. Road construction and maintenance generate sizeable employment opportunities, a factor that has assumed considerable importance with demographic expansion and the growth of the labour force. Better roads also achieve fuel economy and improve the overall productivity of the road transport sector. Road development will thus continue to play an important role in the Seventh Plan."

Road Construction Under the Five-Year Plans

Road development in India was neglected in the past for various reasons. In the first place, the governments—Central and State—did not appreciate the importance of developing the road system. Secondly, there was shortage of finance for road construction and maintenance. This was particularly so in the case of municipalities and district boards. Finally, there was the shortage of road building materials such as road rollers, cement, etc.

At the time the First Five-Year Plan was introduced in 1951, there were over 1,60,000 kms of surfaced roads and about 2,40,000 kms of unsurfaced roads. The Hyderabad Plan was adopted in 1959 by the Chief Engineers of the States and of the Central Government. The Plan was formulated for a 20-year period. The total length to be reached was 4,03,000 km of surfaced roads and 6,48,000 kms of unsurfaced roads. The Hyderabad Plan aimed at bringing every village in a well-developed agricultural area within 6 kms of metalled roads and 2.5 kms of any road. The Third Plan embodied the objectives laid down in the Hyderabad Plan for road development. The cost of the road development programmes included in the Third Plan was ₹ 830 crores. The Third Plan made special provisions to meet the needs of the areas which were comparatively backward in regard to means of transport. Besides, special consideration was given to the road development in rural areas and to border roads.

During the next three Plans, the Planning Commission provided for a total outlay of ₹ 8,600 crores on road programmes and for road transport. The Seventh Plan had an outlay of ₹ 5,200 crores on road construction but the actual expenditure was ₹ 6,300 crores.

Table 18. Progress of Road Construction (000 kms).

*Year**	*Length of roads*	*Length of national highways*	*Length of state highways*	*Share of surfaced roads to total (%)*
1951	400	22.2	NA	39.25
1961	524.5	23.8	NA	50.1
1971	915	24	56.8	43.5
1981	1485.4	31.7	94.4	46
1991	1998.2	33.7	127.3	51.3
2000	3325.8	52	132.8	47.32
2001	3373.5	57.7	132.1	47.48
2002	3426.6	58.1	137.7	48.49
2003	3528.7	58.1	134.8	48.21
2004	3621.5	65.6	133.2	48.62
2005	3929.4	65.6	144.4	46.99
2006	4003.9	66.6	148.1	47.72
2007	4140.5	66.6	152.8	48.24
2008	4236.4	66.8	154.5	49.34

*Year ending on 31st March, NA: Not Available

Sources: (*i*) Economic Survey, 2009-10

(*ii*) CSO, Infrastructure Statistics 2010

Since 1951, road length had increased from 4 lakh kms to 42.2 lakh kms by 2008; about 59 per cent of these roads are surfaced. The Indian road network is the largest in the world.

Indian roads are classified into three types—National highways, State highways, District and rural roads. The National Highways encompass a road length of only 66.8 thousands Kms or 1.5 per cent of the length of the total road system but they carry nearly 40 per cent of the goods and passenger traffic. The National Highway system is the primary road grid and is the direct responsibility of the Central Government.

The State Highways account for nearly 154.5 kms. or about 3.8 per cent of the total length of roads. The construction and maintenance of these roads are the responsibility of the states.

Besides, there are rural roads constructed under Minimum Needs Programme (MNP), Rural Landless Employment Guarantee Programme (RLEGP), National Rural Employment Programme (NREP) and Command Area Development (CAD). In all these cases, the objective of road construction is linking villages in the country.

The focus of road development programme on :

(i) Strengthening and improving the crucial sections of the highway network through phased removal of deficiencies and multi-laning of high density corridors;

(ii) improving the road communications in remote areas such as the North-East; and

(iii) providing all-weather connectivity to remaining villages and promoting energy conservation, safety and environment protection.

The Tenth Five Year Plan (2002-07) stressed the need for improving mobility and easy accessibility. Accordingly, the Planning Commission adopted National Highway Development Programme (NHDP) and the Pradhan Mantri Gram Sadak Yojana (PMGSY) for rural roads. One of the most ambitious projects launched in independent India is the National Highway Development Project (NHDP) comprising :

(*i*) Phase 1 : 5,846 Km Golden Quadrilateral (GQ) connecting the four major cities of Delhi, Mumbai, Chennai and Kolkata.

(*ii*) NHDP Phase II : The North-South and East-West Corridors (7,300 km) link Kashmir in the north to Kanyakumari including spur from salem to Kochi and Silchar in the East and Porbandar in the west.

(*iii*) Port connectivity and other projects – comprising 1,157 km; and

(*iv*) NHDP Phase III A (4,015 km) – four laning of over 4,000 km of BOT in the year 2005 approved at an estimated cost of ₹ 22,000 crores.

By the end of 2005-06, nearly 6,300 km of roads under NHDP – with the bulk of nearly 5,100 km lying on the Golden Quadrilateral (GQ) – was complete and another 6,200 km was under construction. The Government hopes to complete the North-South (NS) and East-West (EW) corridors by December 2008. Phase III A is being targeted to be completed by December 2009.

Major Initiatives in Highway Development by NHAI

Since Independence, road transport has emerged as the dominant form of transport of people and of goods. Over 80 per cent of passengers and over 60 per cent of freight move by roads and this was expected to rise to 87 per cent and 65 per cent respectively by the year 2000. This would obviously necessitate enhancement of the quality and capacity of national and state highways consistent with the traffic expansion and overall economic growth of the country. As we have explained already, the movement on the highways is suffering from frequent stopovers and congestion — 15 per cent of the national highways and 75 per cent of state highways are still single lane roads — inadequate road pavement thickness, poor riding quality, existence of railway level crossings that need replacement, weak and distressed bridges and culverts, congested city sections, lack of wayside amenities and inadequate road safety measures. These highways will, therefore, require major augmentation of capacity as well as structural upgradation. According to a Government estimate:

20 % of national highways have to be converted to double lanes;

50 % of two lane roads have to be strengthened

30 % of two lane roads have to be four laned. Some selected corridors have to be developed into expressways.

In the past, road construction has generally been financed from budgetary sources and undertaken by the public works departments, either of the Centre or of the States.The magnitude of the task on hand and the volume of funds required for this purpose are clearly beyond the capacity of the public sector. As the budgetary allocation is not adequate to meet the immediate problems of road construction and development, the Government of India has amended the National Highways Act in 1995 to allow the private sector to participate in construction, maintenance and operation of roads on Build, Operate and Transfer (BOT) basis. The Government has taken the following measures to attract private sector participation in highway development :

(i) The Government has promulgated a separate ordinance for land acquisition for construction of national highways — once the Government declares that the land is required for the purpose of development of national highways, such land is vested with the Central Government and compensation alone is to be settled through negotiation.

(ii) The Government has exempted projects for widening of the existing national highways from environmental and forest clearances.

(iii)The Government has simplified several procedures of road construction and development . For instance, feasibility studies and detailed project reports for projects costing upto ₹ 100 crores can be approved by the Ministry of Surface Transport.

(iv) The Government has decided to levy a user fee (toll) on completed 4-lane sections, including those which are funded through the budget. The rate of fee will be fixed taking into account the savings in vehicle operating costs. The revenue generated through user fees will be used for future road development.

(v) Public Private Partnerships (PPPs). The Government has decided to take up some of the projects which may have a high economic potential but which may not be commercially viable, on a build and lease basis.A commercial enterprise initially invests the funds required for the project and is paid back at pre-agreed annual sums over a period of time.

(vi) In order to encourage private sector participation, the Government of India has permitted the National Highway Authority to participate in the equity of a company promoted by the private or the public sector.

(vii) The National Highways Authority can help an entrepreneur overcome problems of short-term repayment or servicing of debts.

(viii) The Government of India has further

liberalised the provisions relating to foreign investment in the road sector, e.g., automatic approval is given for foreign equity participation upto 74 per cent in the construction of roads and bridges, and for majority foreign equity upto 51 per cent in support services to land transport like operation of high bridges, toll roads and vehicles.

Road Transport in the Eleventh Plan

Keeping in view the nationwide connectivity and mobility, the Eleventh Plan has proposed to undertake an expanded programme for highway development. It includes NHDP III to VII. For instance:

NHDP III - 4 laning of important sections
NHDP IV - 2 laning
NHDP V - 6 laning of Golden Quadrilateral (GQ)
NHDP VI - Expressways
NHDP VII - Bypasses, ringroads etc.

All the NHDPs, including the first two, will involve a total length of 45,970 Kms and incur total cost of ₹ 220,000 crores during the Eleventh Plan period. As a result, the Government would go for extensive PPPs.

At the same time, PMGSY programme for rural roads is being expanded to connect 1,000 habitations and more than 500 in hilly and tribal areas with all-weather roads. This programme will help bring India's villages into the market economy. Likewise, the 11th Plan will continue the Special Accelerated Development Road Programme for the North Eastern Region, to develop and integrate these regions with the rest of the country.

Progress in Highway Development by NHAI

Table 18 as given below depicts the progress in various national highway project. We know that except Golden Quadrilateral and port connectivity progress in all other road building projects is very slow and unsatisfactory and therefore there is an urgent need to give a fresh boost to road building in the country.

Nationalisation of Road Transport

Road transport is now undertaken by State Governments, private operators and co-operative agencies. Since Independence, most State Governments have nationalised the bus transport system either completely or partially. Taking all States together, nationalised bus services now account for about 40 per cent. The State Governments are constantly attempting to nationalise more and more road routes. The important arguments given in favour of nationalisation of bus transport are as follows :

(i) Road transport is a public utility service and as such should be in the hands of the State;

(ii) Road transport brings in large revenue for the State which can be used for economic development;

(iii) Nationalisation of road transport helps to bring about co-ordination between road transport and railways. It also eliminates competition between bus transport companies;

(iv) It brings in advantages of large-scale operation. Facilities which are not available to small bus companies are available to the large Government road transport corporations; and

(v) The State road undertakings can provide better facilities to the passengers and good working conditions to the employees.

The above arguments are weighty ones. In the past, private bus operators, in their desire for maximum profits, did not care for any thing else. However, theoretically, every one of the above arguments in favour of nationalisation of bus transport can be easily answered. In fact, whatever the Government wants to achieve can also be done through proper regulation and control of road transport.

There are currently 60 State Road Transport Undertakings (SRTUs) with a total fleet of over 100,000 buses with a total investment of over ₹ 5,000 crores and

TABLE 19 : National highway development projects (as on December 2011)

NHDP Component	*Total length (Km)*	*Completed 4/6 Lane (Km)*	*Under implementation works*		*Balance for award of civil Work (Km)*
			Length (Km)	*No. of Contracts*	
1. GQ	5846	5831	15	8	-
2. NS-EW	7142	5914	803	76	420
3. Port Connectivity	380	341	39	4	-
4. Other NHs	1390	946	424	5	20
5. SARDP-NE	388	5	107	2	276
6. NHDP Phase III	12,109	3024	6514	90	2572
7. NHDP Phase IV	20,000	-	2549	18	17,451
8. NHDP Phase V	6500	709	2768	22	3023
9. NHDP Phase VI	1000	-	-	-	1000
10. NHDP Phase VII	700	7	41	2	659
Total	**55,455**	**16,777**	**13625**	**277**	**25,421**

Source : Economic Survey 2010-11, (Original Source : Ministry of Road Transport and Highway)
Note : GQ – Golden Quadrilateral Connecting Delhi, Mumbai, Chennai and Kolkata; NS-EW – North-South and East-West Corridor; SARDP-NE – Special Accelerated Road Development Programme in the North-Eastern Region.

a direct employment of over 1.5 million; and they carry 45 million passengers every day.

The physical and operating efficiency of SRTUs as a whole is low. Many of the SRTU buses and the services they provide to the general public are a disgrace. The overall financial results of SRTUs are disappointing and the total accumulated losses are over ₹ 2,500 crores. The major causes of these losses are : gross inefficiency, extensive pilferage of stores, poor maintenance of buses, absence of a cost-based fare structure and lack of timely adjustment of fares in response to changes in input prices, operation of uneconomic routes for social reasons, etc. While private operators are flourishing, most SRTUs are running badly and accumulating huge losses year after year and making the general taxpayers to bear them. There is a strong public feeling that state Governments, by and large, are unfit to run bus services efficiently and should hand them over to private operators.

7. RAIL-ROAD CO-ORDINATION

Railways and roads are complementary to each other much more than other modes of transport and are mutually helpful. The road system links up the cultivators with the local market and the nearest railway station. The Railways, on the other hand, provide the connecting links between the area of production and the consumers at a distance and between the manufacturers in the town and the cultivators in the village. The Railways cannot collect for transport enough produce, unless there are good and sufficient roads. At the same time, even the best of roads cannot place the producers of agricultural produce, iron and steel, cement, coal and other bulky commodities in touch with the final consumers. Road and railways are thus complementary. However, they have become competitive everywhere. In India, too, such a competition has been taking place. In the last three decades or more, there has been an effort to eliminate competition and bring about co-ordination between the two transport services.

The Natural Superiority of Road Transport

The bus and lorry companies can out-compete the railways in attracting passengers as well as goods traffic. Motor transport can provide certain services which the railways can never provide—as for instance, door-to-door collection and delivery, highly flexible time table, speedy transport, etc. These advantages of road transport have made this form of transport very popular among the mercantile community, "particularly for less than wagon load consignments." According to David Hughes, "Road delivery has in many instances halved our cost and slashed delivery time. Yet there is also another potent advantage of road over rail delivery and that is the absence of pilferage. No loss, no ill-will and no unduly expensive method of packing is involved."[11] According to Hughes, "road transport companies are taking up as much as 80 to 90 per cent of the small parcel traffic in South India."[12] While the transport of goods by rail is full of complaints such as denial of wagon facilities, long delays in booking, the unconsciously long time taken in transportation, loss through pilferage, and so on, transport of goods by road is speedier, suffers less from pilferage and has the advantage of direct delivery from door to door.

While speaking about the advantages of road transport, the Masani Committee emphasised : "Speed is of vital importance in a developing economy and. . . this is where road transport which is about three times as fast as rail transport will inevitably play a far greater role than at any time in the past and will have to be developed on large scale."[13]

The superiority of the road system also arises from the fact that railways have to work against certain inherent disadvantages. For instance, the railways have to accept all kinds of traffic and can never choose between traffic as the road system can do. They have to give special concession rate for foodgrains, cement, coal, fertilisers and other commodities which can bear only low freight. They have to move some essential commodities on a priority basis. For example, the Railways had to incur huge losses because of large-scale movement of foodgrains and fodder to famine areas. This traffic was moved by cancelling a number of passenger services and the sacrifice of a considerable amount of high rated general traffic. Finally, the railways have to serve vital and national needs even at a loss. This is so when they have to construct strategic lines and carry such essential goods as foodgrains, fertilisers etc. at concessional rates. Thus, being a public utility undertaking the railways have to bear heavy loss (over ₹ 2,800 crores in 1996-97) in running unremunerative lines, on suburban and other traffic, on the movement of low rated freight cargo and loss due to freight concessions on export trade, etc. All these facts clearly prove that the railways and roadways can never operate on an equal footing and that railways are in a vulnerable position.

Protection of Railways Against Road Competition

In the 1930s a number of committees went into the question of competition between railways and road transport. One important suggestion was that the railways should improve their services and face road competition effectively. For instance, the Railways should run shuttle

11. Quoted by *Road Transport Reorganisation* (Masani) Committee, p. 6.
12. *Ibid.*, p. 6.
13. *Ibid.*, p. 40.

trains, make time table adjustments, provide cheap return tickets, season tickets, etc. In the matter of goods transport, the Railways should introduce express goods trains, more expeditious handling of goods, simplification of clerical formalities, door-to-door collection and delivery services, etc. Most of these suggestions have been implemented by the Indian Railways.

The Motor Vehicles Act of 1939 made it compulsory for all motor vehicles to get licence and made them observe specified conditions with regard to maintenance of vehicles, avoidance of over-crowding, speed, etc. The Act of 1939 imposed restrictions on the free transport of goods. Permits were valid for particular regions and special permission had to be taken for plying beyond the region of origin. The object of the Motor Vehicles Act was to protect the Railways from the unhealthy competition of motor transport.

In 1945, the Government of India issued to the State Governments "A Code of Principles and Practices" for the regulation of road transport. This Code sought the free carriage of all goods other than those of perishable or fragile nature to a distance of only 75 miles and that beyond this distance permits should only be issued if the Railways were not able to handle the traffic.

It is thus clear that throughout the Government has been seeking to control road transport with the object of protecting the railways. This was given clear expression to by Masani Committee : "In respect of railways and roads, the principle of rail-road co-ordination was accepted long ago, but in the opinion of the Committee it has not been fairly applied and has been working in a one-sided way so as to restrict road transport."[14]

Should Railways be protected against Road Transport?

The Government has always protected the interests of railways against the competition of motor transport. Important reasons for this attitude are:

(i) Railways are the predominant system of land transport and they are a vital factor in respect of Central finance.

(ii) Without effective co-ordination, there would be wasteful duplication with adverse effects on Central finances.

(iii) Railways are publicly owned, managed and controlled; Road transport should also be publicly controlled.

(iv) There are two obligations on the railways which do not apply to the roads, viz., (a) obligation to carry everything that is offered, and (b) prohibition of undue preference and prejudice.

(v) The railway rates are based on the principle 'what the traffic can bear' and not on maximisation of profit.

(vi) The railways carry two types of goods, viz., high rate traffic and low-rate traffic. The low-rate traffic consists of cheap raw materials such as coal, cement, mineral ores, fertilisers, etc., which are important for industrial and agricultural production. The railways make up their loss on such traffic through profit on high rate traffic. If road traffic is allowed to take away the cream of traffic, then the inevitable result will be the pushing up of the freight rates on lower-rate goods. This will adversely affect industrial development of the country, and will also have serious repercussions on regional development as well as exports.

(vii) Above all, the railways have to serve certain vital and national needs even at a loss. This is so when they have to open up strategic lines and give special travel concessions for social and national purposes.

The Government of India, therefore, feels that the Railways are in a special position and are operating under conditions which do not apply to the road transport system. There can be no equality between road transport and Railways and competition between the two will be against the interests of the Railways and of the country in general. Naturally, the Government would like to protect the Railways and impose restrictions on road transport.

The Road Transport Reorganisation (Masani) Committee was highly critical of the protection given to the Railways and the restrictions placed on the road transport system in the name of co-ordination. The Masani Committee mentioned three specific arguments against special protection of railways.[15]

In the first place, investment in roads was quite considerable as much as half of that in Railways. Secondly, the cost of construction of roads was much less than that of Railways. Thirdly, motor transport was setting up the pace of progress in Western countries. In advanced countries of the world, such as U.K., U.S.A., Italy, etc., traffic handled by roads including haulage of long distance traffic has been increasing at a far greater rate than the increase in rail-traffic. In fact, modern technological development definitely favours motor transport. In this connection the National Council of Applied Economic Research has pointed out the net over-all contribution as percentage of capital outlays on roads works out at 19 per cent; on the other hand, the net revenue contributed by railways as percentage of capital works out at 5 per cent only.[16]

The Masani Committee pleaded that, because of the inherent advantage and superiority of road system, on the one hand and because of the defects of the railway transport, no restrictions should be placed on the road transport system. Road development is all the more important because of the difficulty of railways to meet the growing transport needs of a developing economy.

User preference is shifting in favour of transpor-

14. *Report of Road Transport Reorganisation Committee*, p. 41.

15. *Ibid.*, pp. 42-43.

16. National Council of Applied Economic Research, *Contribution of the Road Transport to Public Exchequer*, pp. 45 and 55.

tation by road which is more costly but more demand responsive. The National Transport Policy Committee in the early 1980's had envisaged a model split in which Railways were expected to carry 72 per cent of the long distance freight traffic and the road transport the balance of 28 per cent. But the actual trends of model shares by rail and road have moved in the opposite directions. The decline in the share of freight traffic by railways, inspite of it being energy efficient and environment-friendly, is not a healthy trend. This is mainly due to shortage of capacities on railways and very high density on major routes. It is, therefore, necessary to give high priority to

(a) expansion of track and rolling stock capacity by Railways; and

(b) development of an inter-modal system based on cooperation between road and railways in which the railways share in freight movement will improve continuously.

This aspect of the transport problem should be considered urgently by the Indian planners as this would result in lower over-all transport costs to the country.

8. WATER TRANSPORT IN INDIA

There are two kinds of water transport—inland water transport or river transport and coastal or marine transport.

Inland Water Transport (IWT)

Inland water transport (IWT) comprising a variety of rivers, canals, backwaters, creeks etc. is the cheapest mode for certain kinds of traffic, both over long and short levels, provided the points of origin and destination are located on water front and no transhipment of goods is involved. Besides, IWT is one of the most efficient modes of transport from the point of view of energy consumption. Unlike in other modes of transport, there is practically no investment needed. IWT is also a labour intensive mode of transport and benefits weaker sections of the community. The only requirement is navigable water.

At one time, river and canal transport played an important part in the transport system of the country but since the middle of the last century inland water transport suffered because of the emphasis placed on railway transport and the diversion of river water for irrigation purposes. As a result, inland water transport (IWT) forms a small part of the total transport network of the country. Out of a total freight traffic of about 550 million tonnes by all modes of surface transport, IWT carries about 17 million tonnes — which is only 0.15 per cent of domestic transportation and there are opportunities for considerable growth.

Inland river transport is important in Assam, West Bengal and Bihar. Out of the 25 lakhs tonnes of traffic between Assam and Calcutta, river transport accounts for half and the Railways and road transport account for the rest. Inland transport is highly important in Kerala where rivers and backwaters are used for transporting goods and people. Inland transport is also of some importance in Orissa, Andhra and Tamil Nadu.

Total navigable waterways comprising a variety of rivers, canals, backwaters, etc extend to 14,500 kms. of which only about 5,200 kms of major rivers and 485 kms. of canals are suitable for operation of mechanised crafts. Even where waterways are available, the potential has not been fully exploited on account of various constraints.

Firstly, shallow water and narrow width of channels during dry weather, siltation and bank erosion and lack of navigational aids affect free movement of vessels.

Secondly, no attempt has been made to modernise the craft, most of which is overaged and inefficient.

Finally, there has been inadequate coordination in hydel power, flood control navigation and irrigation projects.

Till the Sixth Plan, inland water transport was neglected.

It was, only with the Sixth Plan that IWT was given high priority. The Sixth Plan proposed to

(a) give fresh impetus and encouragement to inland water transport and the over-all approach was to take up only well-defined schemes of national and inter-state importance for development;

(b) declare certain waterways as national waterways, replace vessels, modernise dockyards etc.; and

(c) float a scheme for grant of subsidy to inland water transport, entrepreneurs to acquire mechanised vessels and modernise the existing crafts including country boats.

Thrust areas and strategy in the Tenth Plan

(i) Development of IWT in the regions where it enjoys natural advantages.

(ii) Improvement in productivity of assets, through modernisation and upgradation of technology.

(iii) Building up of trained and skilled manpower for IWT operations.

In order to achieve these objectives, the Ninth Plan is adopting the following measures:

(a) Two national waterways — Ganga and Brahmaputra — are being developed. These would include dredging and conservacy works to attain and maintain adequate depth and width of channels, providing adequate navigation aids and setting up integrated terminals to enable navigation throughout the year and 24-hour navigation on selected stretches.

(b) Modernisation of IWT vessels and replacement of overaged ones, development of specific vessels to meet the requirement of different types of cargo to suit different waterways.

(c) Private entrepreneurs will continue to be given interest subsidy for acquisition of better designed vessels and improved country crafts. Private participation would also be encouraged in setting up of terminals.

Indian Shipping

Before Independence, Indian shipping companies did not succeed because of severe competition from foreign shipping companies and lack of support by the foreign rulers in India. It was only the Scindia Steam Navigation Company which could face foreign competition. At the time of India's Independence, there were only 42 ships with less than 1,00,000 tonnes of GRT (gross registered tonnage). It was only after Independence that Indian shipping became predominant in India's coastal trade and got some share in foreign trade. Indian ships carried only 2 per cent of the volume of India's overseas trade.

Growth of Shipping. In 1947, the Government appointed a Shipping Policy Committee which recommended a national shipping policy. India has an extensive coastline of nearly 4,200 miles and huge internal trade. About ₹ 100,000 crores worth of goods are imported and exported annually. With rapid economic development, international trade may be expected to increase continuously. All this trade is being taken up by foreign shipping concerns which earn huge income by way of shipping charges. It would be in the interest of India if a part, if not the whole, of its external trade is carried by its own fleet of ships. Besides, this would help India to save foreign exchange which it pays to foreign shipping concerns. Moreover, past history shows that extreme dependence on others in such a vital sector as shipping may create serious difficulties in crucial periods. The Shipping Policy Committee, therefore, recommended that (a) India should secure 100 per cent of her coastal trade; (b) she should secure 75 per cent of her trade with Burma, Ceylon and other neighbouring countries and at least 50 per cent of her overseas trade. The growth of shipping in the last four decades is the result of this policy.

Despite slow progress in the initial years, Indian shipping tonnage has grown significantly in the last four decades from 0.2 million GRT in 1950-51 to 2.2 million GRT in 1970-71 and 9.3 million GRT in 2007-08.

Share of Indian flag vessels has been rising prior to 1990-91, but due to slow progress in Indian shipping tonnage as compared to fast rising total overseas traffic, share of Indian shipping in the transportation of cargo in India's overseas trade has declined from 30% in 1999-2000 to only 12.2 percent in 2006-07.

Though sizeable, Indian shipping tonnage does not compare favourably with that of several maritime countries. At present, Indian shipping accounts for only one per cent of the total world fleet. While India maintained good progress during 1970s—addition of 3.7 million GRT—the Sixth and Seventh Plan periods witnessed a slow-down because of the long slump through which the Indian shipping industry had been going through for the last many years.

Government Participation in the Development of Shipping

The Indian Government gave high priority to the expansion of shipping as it would involve saving of foreign exchange. The Government set up two Shipping Corporations — the Eastern Shipping Corporation in 1952 to operate with Australia and the Far East, and Western Shipping Corporation in 1956 to operate on Indo-Persian Gulf, Indian-Red Sea and Indo-Poland routes. In 1961, the two corporations were merged to form the Shipping Corporation of India (SCI). At the end of March 1994, SCI had a fleet of 160 vessels aggregating 4 million tonnes GRT and was ranked among the largest shipping companies of the world. It is operating at present on all important sea trade routes of the world.

There are now 66 shipping companies in the country, of which 16 are engaged exclusively in the coastal trade, 43 in the overseas trade and the remaining 7 both in the coastal trade and overseas trade.

India has four major ship-building yards at Visakhapatnam, Calcutta, Bombay and Cochin. There are two major public sector ship building yards, viz Hindustan Shipyards Limited and Cochin Shipyards Ltd. Due to high construction cost, heavy interest under excessive manpower etc., these shipyards have been incurring losses.

Problems of Indian shipping

(i) The first major problem of Indian shipping is the inadequacy of tonnage capacity. At present Indian ships carry only 29 per cent of the India's total seaborne trade. Of this, petroleum crude and products account for the largest part (54 per cent).

(ii) While the world is moving rapidly towards

containerisation, the Indian container fleet is almost negligible.

(iii) The Indian fleet is overaged with resulting high operating costs. High operating costs are responsible for reducing the competitive strength of Indian shipping. Modern foreign vessels having low operating costs, generally offer lower freight rates and better services. Consequently, they skim off a larger chunk of high value cargo from Indian ports.

(iv) India's geographical position is such that a number of foreign vessels are able to use Indian ports as wayside ports, when returning from gulf countries or sailing towards the Far East. Thus in the absence of proper protectionist policies, Indian shipping companies face stiff competition and discrimination from well-established international shipping companies.

(v) Finally, Indian shipping suffers from inadequate infrastructure support like ship repair facilities, dry docking and cargo handling.

The Indian Government is fully aware of these difficulties and an attempt is being made to remove them.

Plan Objectives and Thrust Areas

The basic objective of the Ninth Plan in the field of overseas shipping was the acquisition of a modern and diversified fleet capable of fulfilling the national objective of export promotion and improved balance of payments of the country. The basic thrusts accordingly, are:

(a) replacement of aged and uneconomic ships by modern fuel efficient ships;

(b) diversification of the fleet through the acquisition of container ships, specialised carriers and crafts to service the offshore oil industry;

(c) selective addition to the fleet so as to achieve self-sufficiency in tankers, gain 50 per cent of the dry bulk cargo, 40 per cent of the liner trade and 100 per cent of the coastal shipping requirements;

(d) improvement in productivity in the shipping sector to be brought about by revamping of communications, data processing and control systems and development of managerial skills and improvements in support infrastructure like ship repair facilities and dry docking facilities;

(e) development of adequate infrastructure at the ports to help raise efficiency in the shipping industry;

(f) supportive measures to Indian shipping similar to the concessions extended by most other developed and developing maritime nations such as cargo support, priority banking, preferential allocation of cargo to Indian fleet, strengthening of transchart operations, etc., and

(g) financial assistance to the private sector shipping to replace their overaged and uneconomical fleet and modernise their operations.

Reforms in the Shipping Sector

With a view to promote the development of Indian shipping, the Government of India announced a new shipping policy in 1990-91, in conformity with the liberalisation of the Indian economy. Some of the important measures include:

(i) Introduction of automatic approval scheme for private shipping companies for acquisition of all categories of ships, except crude oil tankers, acquisition for replacement of tonnage and for acquisition of ships from an Indian shipyard;

(ii) No approval is required for sale of ships;

(iii) Shipping companies have been permitted to retain sale proceeds of Indian ships abroad for utilising them for fresh acquisition;

(iv) Shipping companies are allowed to acquire vessels on charter-cum-demise method;

(v) There is freedom to time charter out Indian ships to foreign companies for employment in international cross trade; and

(vi) Merchant Shipping Act, 1958 has been amended to facilitate Indian companies to raise foreign exchange loans abroad by mortgaging their vessels.

Several other measures have also been taken to promote the development of Indian shipping.

Development of ports and private participation

Ports play a crucial role in the transportation sector of India. Their development is urgently required for rapid development of the Indian economy.

There are 12 major ports which are managed by the Port Trust of India under Central Government jurisdiction and 185 minor ports under the jurisdiction of the respective State governments. The major ports handle 75 per cent of the total traffic, which amounted to 520 million tonnes at the end of March 2005. The existing port infrastructure is insufficient to handle trade flows effectively. Major investments in port construction have centered on container as well as bulk facilities; this investment is extremely inadequate.

The performance of Indian ports does not compare favourably with that of efficient ports in the Asian region. In international terms, labour and equipment productivity levels are still very low due to outdated equipment, poor training, low equipment handling levels by labour, etc.

In the last few years, container traffic has grown well in India, but it compares poorly with larger international ports. For instance, the largest port in the world (in the year 2003) was Hong Kong which processed 20.1 million TEUs (20- foot equivalent units); the 10th largest port Antwerp processed 5.4 million TEUs. In comparison, Jawaherlal Nehru Post (JNPT), India's largest container port, handled about 2.3 million TEUs[17].

In order to meet the huge gap between demand and availability of port capacity, private sector investment in ports is being encouraged and clear and transparent guidelines have been issued for the purpose:

(a) Private sector participation in ports will include leasing out existing assets of the ports, construction and operation of additional assets such as container terminals and cargo berths and construction of warehousing, dry docking and ship repair facilities.

(b) The BOT (Build, Operate and Transfer) model will generally be used for private sector participation with the assets reverting back to the Port Trust after the concession period. This period would be decided upon by the respective Port Trust, in each case, with the maximum period not exceeding 30 years.

(c) Private sector participation will be on the basis of open competitive bidding. The ports will give no guarantee either for financial return or for the traffic which can be expected.

(d) The guidelines for foreign investment in the ports sector have been further liberalised. Automatic approval is accorded for foreign equity participation upto 74 per cent in construction activities in the area of ports and harbours. In addition to this, automatic approval will be given for majority foreign equity upto 51 per cent for support services like maintenance of piers and loading and discharging of vessels.

Ushering in the era of private investment in the development of the port sector, the Government of India has given clearance to the Jawaharlal Nehru Port, Navi Mumbai to award the licence for the consuction, management and maintenance of a Two-berth Container Terminal for a period of 30 years on a BOT basis to the P & O Ports, Australia - led - consortium. The consortium would be investing approximately ₹ 700 crores on the project in a period of 36 months, with a view to double the capacity of the port. This is the first large project in the port sector being implemented through private investment in the country. The Government of India has also approved the contract for development, management and operation of the International Container Transhipment Terminal of Cochin to a Dubai based firm on BOT basis.

[17] GOI, *Economic Survey (2004-05)*, p. 210.

Conclusion

According to the present trends, Indian ports will have to handle cargo traffic of about 800 million tonnes by the end of the 11th Plan (2012). This would require substantial capacity expansion and augmentation in major and minor ports. The Plan has proposed the development of a deep sea port. The bulk of capacity augmentation would be undertaken through PPPs and captive users.

Adequate rail-road connectivity of ports with the hinterland is of crucial importance. The 11th Plan proposes to improve this on a high priority basis. Besides, the Government along with Port Trusts and major users would take up development of common user facilities.

9. CIVIL AVIATION IN INDIA

Air transport has a significant role to play. It offers saving in time that cannot be matched by surface transport over long distances. Air transport helps optimise technological, managerial and administrative skills in a resource scarce economy.

In 1950, the Air Transport Enquiry Committee known as Rajadhyaksha Committee, was appointed. The Committee recommended the integration of all companies into four companies so as to remove cut-throat competition and secure scientific and zonal distribution of work. But since the private companies did not voluntarily integrate, the Government had to nationlise civil aviation on three grounds:

(a) Nationalisation would raise operational efficiency;

(b) it would result in better organisation of civil aviation and would enable the Government to get trained technicians, pilots, etc.; and

(c) it would reduce duplication of services, wastage of flying hours and thus would reduce costs and losses.

In 1953 the Parliament passed the Air Transport Corporation Act under which the Indian Airlines Corporation was to run internal services and Air India International was to run external services. Since nationalisation, improvements in all directions have taken place. New aerodromes have been constructed. Both internal and external services have been extended.

Airports

There are a number of agencies which are involved in providing civil aviation services in India.

While Air India, Indian Airlines and Vayudoot provide air services, International Airports Authority of India (IAAI) and Director General of Civil Aviation (DGCA) provide infrastructural facilities. IAAI looks after the development of the four international airports; DGCA is responsible for maintenance and development of civil aerodromes, civil enclaves and aeronautical communication stations.

There has been rapid growth in air travel due to acceleration in economic activity in recent years. The Planning Commission anticipated air traffic to grow at the rate of 18 percent per annum. But during the Tenth Plan period, the actual growth rate was between 24 to 28 percent. As a result, airlines have been facing infrastructure constraints due to limited landing slots, inadequate parking bays and congestion during peak hours. Moreover, there is considerable suppressed demand for domestic air travel because many regional domestic airports have not been upgraded. The 11th Plan has given high priority for provision of infrastructural facilities at a much faster pace.

The Government of India has selected two joint venture companies (JVCs) to modernize, upgrade and operate Delhi and Mumbai airports. This step to restructure and modernize the Mumbai and Delhi airports through the joint venture route has been taken despite stringent opposition from the left parties. It has been estimated that capital invested to the extent of nearly ₹ 7,960 crores and ₹ 6,130 crores would be required for Delhi and Mumbai airports. The Government has decided, in principle, to modernize Chennai Airport through JV route. It may also be mentioned here that construction work at greenfield airports of international standards at Bangalore and Hyderabad has already commenced. The two airports are expected to be operational in 2008. "In principle approvals have already been given to construct greenfield airports of international standards in Goa, Ahmedabad and Trivandrum.

The Airport Authority of India (AAI) is considering development of non-metro airports. In addition AAI has also identified 15 more non-metro airports for development.

There has been a phenomenal increase in the volume of air traffic in the last two decades. With the entry of private airlines and particularly the entry of low cost carriers (LCCs) offering no-frills flights which are 30 to 35 per cent cheaper than the regular flights, domestic traffic grew almost by 24 to 28 per cent annually in recent years. Private lines now account for 70 per cent of domestic traffic. There is also a marked change in the profile of air passengers. Besides, India's new international status as IT and manufacturing hub has led to growth of international air traffic. In fact, the growth of domestic and international traffic in India is the second highest in the world, next only to China. Domestic air traffic has registered an average annual growth of 10 per cent between 1960-85 and Air India traffic registered an average annual growth of 12.4 per cent during the same period. While Indian Airlines and Air India have grown at a rapid rate, infrastructure facilities have not kept pace. Since its inception, however, IAAI has taken up a number of schemes aimed at creating additional capacities.

Five Year Plans and civil aviation

The Seventh, Eighth and Ninth Plans have kept certain important considerations while planning for investment in civil aviation. In the first place, they have planned for rationalisation of air services and of tariff structure. Secondly, some of the tourist routes served by the domestic services were showing heavy losses indicating the need to strengthen tourist promotion and development programmes. Thirdly, indiscriminate expansion of air services had resulted in increasing short haul operations and raising fuel consumption. Fourthly, Vayudoot services have been integrated with the services of Indian Airlines and are operated as feeders to the nodal service centres of Indian Airlines. Finally, the Seventh Plan emphasised the need to set up a separate organisation for running helicopter services to meet the requirements of helicopters by ONGC for air transport support for their operations.

The five year Plans included specific programmes for the different agencies providing civil aviation services in India. The programme for Indian Airlines included acquisition of aircraft, modernisation of workshop facilities, etc. The programme for Air India included acquisition of additional aircraft, increased capacity for freight traffic, strengthening of workshop and training facilities, etc. The programme of IAAI included completion of international terminal phase II at Bombay, international phase I at Delhi and Madras domestic terminal complex. DGCA programme included installation of flight safety equipments such as air route surveillance radar etc.

From the time the government set up Indian Airlines and Air India, it was the intention of the Government of India to keep a monopoly control over internal and international air service. These airlines were earning huge profits. But in the last few years they have been plagued by poor industrial relations. Numerous strikes have reduced the operational efficiency and financial performance of both the Airlines. Vayudoot which was set up to run feeder air servies has also been running on losses.

Since 1990, the Government introduced the scheme of air taxi service by private sector i.e. by Indian and non-resident Indians, or even public sector undertakings can apply for an air taxi operator's permit. Air taxis are permitted to operate to all authorised airports and can decide their fares and flight schedules.

There were also policy changes in the field of civil aviation and the monopoly position of Indian Airlines was given up and new private airlines have been permitted to operate. Thus the air services within India became competitive and, therefore, more efficient.

For the last few years, the Government of India has been going through motions of privatisation of Air India, the national carrier. Till 1992-93, Air India was a successful profit-making public enterprise. Since then, it has been allowed to deteriorate and incur huge losses.

The Government of India has given up its policy of privatizing Indian Airlines and Air India. Instead, it is going in a big way to expand them and improve their efficiency and finally merge them into one entity.

The Government of India has permitted private airlines which have completed 5 years of domestic operation to any destination in the world (excluding Gulf countries and West Asia).

Finally, both Air India and Indian Airlines have commenced operations on low cost pattern to other countries. For instance, since April 2005, Air India Express has started services to Dacca, Dubai, Hongkong, Los Angeles, Seoul, Toronto etc. Likewise, Indian Airlines have commenced new services to Bangkok, Kabul, Sharjah, etc. The objective here is to improve connectivity and increase profits. Both Government airlines have huge plans of expansion.

Regularity from work in Airline Industry. Because of the monopoly nature of airports, Government of India has set up an independent Airport Economic Regulator for tariff setting and monitoring of performance standards. The Indian Government has entered into bilateral agreements with 18 countries including U.S.A. for grant of traffic rights, more flights and better connectivity.

TABLE 20 : Growth of Indian Civil Aviation

Item/Year	Unit	2000-01	2009-10
1	2	4	9
I. Domestic Services (1)			
1. Hours flown	'000hr.	250	820
2. Passenger Kilometres flown Million Km.		12,283	43,959
3. Passengers Carried	'000 no.	13962	46,025
4. Passenger load Percentage factor		61.7	72.0
5. Cargo Carried	'000 tonne	209	298
II. International Services			
1. Hour flown	'000 hr.	98	432
2. Tonne kilometres flown	Million km.	1222	4020
3. Passengers carried	'000 no.	3828	11697
4. Cargo carried	'000 tonne	102	224

Source : Directorate General of Civil Aviation, Ministry of Civil Aviation

From Table 20 we can clearly understand that Air Transport in India (Civil Aviation) has shown a phenomenal growth in India after 1990-91. In this growth of private sector civil aviation has contributed significantly. For instance number of passengers carried by air increase from 7912 thousand in 1990-91 to 46025 thousand in 2009-10 in domestic sector. There has been similar growth in International passenger traffic and freight traffic, as evident from the table.

10. THE COMMUNICATION SYSTEM IN INDIA

The communication system comprises posts and telegraphs, telecommunication systems, broadcasting, television and information services. By providing necessary information about the markets and also supplying necessary motivation, the communication system helps to bring buyers and sellers together effectively and helps to accelerate the growth of the economy. Accordingly, the modern communication system has become an integral part of the development process.

Postal System in India

Since 1950-51, the postal network has been expanded throughout the country, and in recent years, with special emphasis on the rural, hilly and remote tribal areas. With more than 1.5 lakh post offices, the postal network in India is the largest in the whole world. The long term objective of the Department of Postal Services of the Government of India is to locate a post office within three Kms of every village and to provide the facility of a letter box in every village with a population of over 500. At present, it is estimated that there are approximately 1,10,000 Gram Panchayat villages which do not have a post office. The Postal Department seeks to provide basic postal services on a contractual basis by utilising the existing infrastructure of Panchayats in these areas. This scheme—known as the Panchayat Sanchar Sewa Scheme,—has been recently introduced by the Government and it has the twin advantage of (a) providing postal services to needy areas with less Government expenditure and (b) generating employment opportunities in such areas.

The postal department has given a new thrust to its programme of modernisation for providing new value-added services to customers. This includes:

(a) A programme of computerised services of such postal operations as mail processing, savings bank and material management;

(b) Introduction of Metro Channel Service linking 6 metros;

(c) Introduction of Rajdhani Channel linking Delhi with most of the State Capitals; and

(d) A business channel with exclusive treatment to pin coded business mail.

In recent years, there has been healthy growth in many lines of postal activity, such as speed post traffic,

postal life insurance which now covers over 2 million policies with a sum assured of nearly ₹ 5,000 crores, extension of postal life insurance and Post Office Savings Banks to rural areas, etc.

In line with the general trend of liberalisation and privatisation, the Government of India has adopted certain policies to reduce its monopoly control on carriage of letters. For instance, it is according a formal status to the private courier service. It is also considering a proposal to allow the private sector to get into the system of postal stationery as an agency function.

A worrying aspect about the postal department is that it is working under continuous deficit—it was nearly ₹ 340 crores during 1994-95. It can be made commercially viable with a little careful planning but this is lacking at the top level of postal bureaucracy.

Indian Telegraphs

Indian telegraphs is one of the oldest Government-owned public utility organisations in the world. The number of telegraph offices has increased from 8,200 in 1951 to over 30,000 now. The phonogram service for sending and receiving telegram by telephone, telex service to send and receive printed message directly from one centre to another, the tremendous expansion of telephone facilities and direct trunk dialling—all these facilities are available to the general public

Telecommunications

Telecommunication is a vital input for global competition and for India's success in the international markets. It is important not only because of its role in bringing the benefits of communication to every corner of India but also in serving the new policy objectives of improving the global competitiveness of the Indian economy and stimulating and attracting foreign direct investment.

There has been a phenomenal growth in the telecommunication sector after 1995. The telecommunications network of the public sector (BSNL and MTNL) is one of the largest telecommunication network in Asia with a capacity of 50 million lines and over 40 million working connections comprising 35,510 telephone exchanges in the country (by end - December 2002). The annual growth rate of providing new telephone connections has been increasing steadily from about 10 per cent in 1988-89 to 30 per cent in 1999-2000 and 17 per cent during 2001-02. The number of new telephone connections provided during 2003-04 alone was 22 million. – which was equal to the total number of phones installed as of 1999.

There has been a shift in importance towards the private sector and towards wireless telephony with falling tariff rates for cellur phones, there has also been a phenomenal increase in the number of cellular subscribers. At the time of independence, there were only two phones per ten thousand of population. By the year 2009, there were more than four phone connections per 10 persons. Today a customer, who wishes to own a phone, can get the same in minutes. Prior to advent of mobile companies, it used to take 8 to 15 years to get a phone connection. By March 2009, there were nearly 43 crore-telephone connections, out of which around 90 percent were mobile connections. **Cellular telephony has become the most preferred mode of communications among the Indian public, as capital costs of mobile telephony are lower**. Today an ordinary worker can and is affording a mobile phone. Today a mobile in the hands of a Plumber, Carpenter, Electrician, Autorikshaw driver is a common feature

From the data provided in table 19, we can make a review of the growth of infrastructure investment in the post-reform period.

New Telecom Policy, 1999

There was considerable confusion in the provision and management of telecom infrastructure and telecom services. The Department of Telecom Services (DTS) and Department of Telecom Operations (DTO) were two service providing departments. The Mahanagar Telephone Nigam Ltd. (MTNL) and Bharat Sanchar Nigam Ltd. (BSNL) were two public sector companies providing basic telephone services in Delhi and Mumbai (MTNL) and in the rest of the country (BSNL). The BSNL was set up in October 2000 under the new Telecom Policy, 1999 to provide all the services provided by DTS and DTO.

Under the new telecom policy:

(a) The Department of Telecom will concentrate its attention on policy formulation, licensing and their issues facing the telecom sector.

(b) MTNL and BSNL are permitted to provide basic telephone services in Delhi and Mumbai and the rest of the country and also operate cellular mobile telephone services.

(c) To supplement the efforts of MTNL and BSNL, the two public service providers and to ensure greater competition in providing basic telephone services, private companies are being licensed to offer basic services. So far, seven private companies have signed licence agreements with the Government to offer basic telephone services — these services are being provided in Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Madhya Pradesh, Rajasthan, Punjab, Tamil Nadu and Delhi. Between 2001-03, another 25 new basic licence agreements have been signed by private operators.

(d) The international long distance (ILD) service was opened up for unrestricted entry by private operators and the monopoly of public sector Videsh Sanchar Nigam Ltd. (VSNL) over ILD service was ended; VSNL has now been privatised. These policy measures have resulted in significant reduction in long distance tariff (both national and international) due to competitive pressures.

(e) The Government of India has set up the Telecom Regulatory Authority of India (TRAI) to determine and regulate telecom tariff. TRAI has both recommendatory and regulatory functions. It has undertaken the process of rationalisation of telecom tariff. It has increased the monthly rental but decreased STD and ISD tariff.

(f) The Government has also set up a separate disputes redressal body known as "Telecom Disputes Settlement and Appellate Tribunal" to adjudicate any dispute between a licenser and licensee, between two or more service providers, between a service provider and a group of consumers and to hear appeals against any decision or order of TRAI.

Thus, the core vision and goal of the New Telecom Policy, 1999 is the provision of affordable and effective communication. The telecom sector in India has been a great success story. With rapid growth, teledensity levels have surpassed the targets set. The total number of telephones – basic and mobile – rose from nearly 2.3 million to 125 million by the end of December 2005. Nearly 25 to 30 million phones are added every year – the rate of growth is one of the highest in the world.

Recent Developments in the Telecom Sector

Recent developments in the telecom sector include:

(a) Large number of villages are now covered through wireless in local loop (WLL);

(b) The National Internet Backbone (NIB) was commissioned.

(c) *Trends in telecom tariff:* With increased and intense competition, there has been a dramatic fall in telecom tariffs. The peak long distance calls between Delhi and Mumbai have come down from ₹ 30 per minute to ₹ 2.40 per minute between 2000 and 2004. Likewise international call charges have come down dramatically from ₹ 61.20 per minute to ₹ 7.20 per minute during this period. The tariffs for local calls, particularly for cellular, have also fallen considerably.

The public sector operators – BSNL and MTNL – have launched "One India Plan" from March 2006 under which customers of BSNL and MTNL can call from one end of India to the other at the cost of ₹ 1.00 per minute, any time of the day to any phone.

(d) *Rural telephony*. Villages in India are having inadequate telecom services. To enhance telecom services in rural and remote areas, the Telecom Department has issued guidelines for implementing Universal Service Obligation (USO). All telecom operators have to pay 5% universal levy on their gross revenue which will be credited to Universal Service Fund (USF) and operated by an Administrator. The support from the Universal Service Fund (USF) will be used to subsidise the cost of providing public or community telephones in villages as well as individual telephones in high cost rural areas and remote regions.

(e) According to the new telecom policy (1999), every village in India is expected to be provided with one public telephone by December 2002. This responsibility was given to BSNL and the licensed private operating companies. BSNL has provided village public telephones (VPT) in 5,40,000 villages by end-December 2005. The private operators could provide only 7,120 VPTs as against the stipulated 97,800.

As mentioned earlier, india has a telephone network of nearly 150 million (fixed and mobile) and the present projections are that by the end of the Tenth Plan (2007), the total number of phones could reach 250 million. India's telephone network is one of the largest in the world. However, the telephone penetration rate is low, at only 12 phones per hundred population. India offers vast scope for growth.

An interesting trend is that the public sector operators (BSNL and MTNL) have lost market share in fixed telephony from 99 per cent in 2001-02 to 85 per cent in December 2005 to the private operators. At the same time, their share in mobile telephony has increased from about 4 per cent to over 21 per cent during the same period. Over-all, the share of the public sector operators has declined to 56 per cent and correspondingly the private telephony operators have increased their share to 44 per cent.

Legislation in the Telecom Sector

The Government introduced the Communication Convergence Bill, 2001 in Parliament, with the purpose of promoting and facilitating the carriage and content of communications (including broadcasting, telecommunications and multimedia) in an orderly manner. The Bill also envisages the setting up of a regulatory and licensing authority known as Communications Commission of India (CCI).

The telecom sector has kept two important goals to deliver:

(a) low cost voice telephony to the largest possible number of individuals; and

(b) low-cost high speed computer networking to the largest number of firms. The progress of the telecom sector in India since 1995 has been quite impressive.

11. URBAN INFRASTRUCTURE

Urban infrastructure includes water supply and sanitation which are important basic needs for improvement of the quality of life and enhancement of the productive efficiency of citizens. Generally, State Governments and Union Administrations, with financial and technical assistance from the Central Government, have

planned and executed various schemes for providing drinking water and sanitation. The Government of India launched the National Water Supply and Sanitation Programme in the First Plan itself with an outlay of ₹ 49 crores (which was 1.5 per cent of the total Plan outlay) at that time; and this outlay had increased to ₹ 16,700 crores in the Eighth Plan (3.8 per cent of the total outlay).

With steady increase in urban population on account of rapid industrialisation, natural growth of population and migration from rural areas, the magnitude of the water supply and sanitation problem in our bulging cities and towns is assuming a critical dimensiion in the background of depleting ground water resources, environmental pollution, poor water supply and sanitation in slum areas and non-availability of proximate sources of water supply. In spite of the enormity of the problem, the Government of India has set bold targets of covering 100 per cent of the drinking water requirements of the urban population and 75 per cent of their sanitation needs.

Most urban infrastructure services are provided by Municipal Corporations and Municipalities who fund their requirements largely by loans and grants from Central and State Governments. In order to supplement the efforts of urban development, the Government of India has depended upon the following agencies :—

(a) Life Insurance Corporation of India (LIC) which invests in urban infrastructure projects — like water supply, drainage, housing, power and transport— as a part of its statutory requirements;

(b) The Housing and Development Corporation Ltd. (HUDCO) is given the task of financing urban infrastructure. HUDCO provides infrastructure loans to State Urban Finance Corporations, Water Supply and Sewerage Boards, Municipal Corporations, Improvement Trusts, etc; and

(c) *The Infrastructure Leasing and Financial* Services Ltd. which also finances urban infrastructure projects.

Many states in India are now inviting private sector participation in the provision of infrastructure services on a more cost - effective basis—e.g., contracting out the management of urban services such as construction and maintenance of toilets, garbage collection and disposal, solid waste conversion and maintenance of water supply systems, etc, BOT franchises and the provision of services through voluntary organisations, community organisations and common interest groups.

Urban transport

Another important problem of our cities, particularly in our metropolitan cities is the extreme inadequacy of public transport facilities, as a result of which the number of personalised vehicles has increased rapidly in urban areas in the last few decades. In many cities, the vehicle population has reached alarming proportions in relation to the road and network available. With high density of population, and scarcity of land, there is almost no scope for accommodating more vehicles and meet the growing demand for transport. Besides, control of energy consumption in order to check dangerously growing urban pollution point out to the need for rapid increase in public transport and rail-based transport.

Metro Rail

Metro reail projects in Delhi and some other metropolitan cities have started gaining momentum. The approvals and commissioning of metro routes in NCT of Delhi, Mumbai, Banglore, Chennai, Kolkata, etc, is given in Table 19.

TABLE 20 : Metro Rail Project Approved by the Government of India

Project	*Length (km)*	*Commissioning schedule range*	*Cost (₹ Crore)*
		National Capital Region	
Delhi MRTS Phase I	65.1	3/2004 to 11/2006	10,571
Delhi MRTS Phase II	54.7	6/2008 to 6/2010	11,691
Extension of Delhi Metro to Gurgaon	14.5	3/2010	1,589
Extension of Delhi Metro to NOIDA	7.0	11/2009	827
Central Secretariat at Badarpur	20.2	9/2010	4,012
Metro Link (Dwarka Sector-9 to Sector-21)	2.8	9/2010	356
Airport metro Express Link	22.7	9/2010	3,869
Total for Delhi & NCR	187.0		32,915
		Metro rail project other than Nation capital Region	
Banglore Metro	42.3	9/2012	8,158
Kolkata East-West Metro Corridor	14.7	1/2015	4,875
Chennai Metro	45	2014-15	14,600
Mumbai Metro Line-1	11.1	10/2010	2356
Mumbai Metro Line-2	31.9		7,660
Total outside NCT	145		37,649
Grand total (NCT + outside NCT)	331.8		70,564

Source : Ministry of Urban Development, 2010.

12. SCIENCE AND TECHNOLOGY

Science and Technology are ideas and the means with which man seeks to change his environment. While science represents "accumulation of knowledge", technology represents "refinement in tools". Over the last two hundred years or so, science and technology have helped to improve the quality of human life. For rapid economic progress, the application of science and technology (S and T) to agriculture, industry, transport and to all other economic and non-economic activities has become essential. S and T are changing in other countries like USA, Russia, Germany, Japan etc., and new knowledge and new technologies are being used in every line of production and these countries have experienced tremendous economic progress. The recent progress in agriculture and the green revolution it has ushered in has demonstrated to our people the promise of fulfilling the basic human needs and improving the quality of life of our people.

Nehru and S & T

Jawaharlal Nehru believed in the spread of scientific temper. He was responsible for the setting up of a chain of national laboratories devoted to basic and applied research, develop indigenous technology and processes and help industrial enterprises in solving their technological problems. The Council of Scientific and Industrial Research (CSIR) as well as the Department of Atomic Energy were set up. The Indian Council of Agricultural Research (ICAR) was strengthened. Then came the Department of Electronics, Department of Space Technology, the Indian Space Research Organisation (ISRO) etc., In 1958 the Science Policy Resolution was adopted to provide positive incentives for the development and utilisation of S and T in nation building activities. The major aims of this policy were :

(i) to foster, promote and sustain by appropriate means the cultivation in science and scientific research in all its aspects--pure, applied and educational;

(ii) to ensure an adequate supply within the country of research scientists of higher quality and recognise their work as an important component of the strength of the nation; and

(iii) to encourage and initiate with all possible speed programmes for the training of scientific and technical personnel on a scale adequate to fulfil the country's needs in regard to science and education, agriculture, industry and defence; and

(iv) to ensure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge.

This 1958 Resolution gave explicit recognition to the importance of research and development in the economic growth of India.

Both Indian industry and the Indian Government have come to realise the vital role of S and T in social, economic and technological development. The crucial role of S and T as an instrument of social and economic change and the rapid development of S and T are now accepted as a major objective of planning in India. The Indian Government has been giving special support to S and T since Independence and the large network of national laboratories and universities have been training a strong cadre of scientific, engineers, technologists, etc. Public and private sector organisations have established over 600 inhouse research and development (R & D) laboratories to meet their internal technological requirements. The rapid growth of engineering consultancy organisations to provide design and consultancy services and act as the bridge between research institutions and industry is really commendable. India's stock of technical manpower has been growing at the rate of about 9 per cent per year for the last 20 years and is now estimated to be about 2.5 million. After USA, India today ranks second in the world as regards qualified science and technology manpower. One may tend to be proud of India's achievement in the field of S and T, but considered populationwise, these figures are not really so impressive. The number of scientists and engineers per 10,000 population in India is hardly 22 and technicians number another 8; but the corresponding figures in Soviet Union are 311 and 456, and in the USA, they are 83 and 43 respectively. Moreover, hardly six per cent of this manpower is engaged in research and experimental development in India compared to 32 per cent in the USA and 14 per cent in the Russia

Application of Science and Technology

Agriculture and allied occupations. Since independence, the major thrust of agricultural education, research and extension has been the development of techniques to improve agricultural productivity, the discovery and use of new seeds, control of pests etc. The Indian Council of Agricultural Research (ICAR) and the network of agricultural universities have been behind the new knowledge and the research programmes. In recent years, efforts are being made in such programmes as nitrogen-fixation in soils, biological control of pests and diseases, recycling techniques for organic residues, development of intermediate technology for optimal use of human, animal and oil/electrical/mechanical farm power, balanced agro-climatic farming etc. In order to derive fullest benefits from S and T expertise and infrastructure, an integrated Agricultural Research Service was formed. S and T activities relating to irrigation include investigations and research relevant to river valley projects, activities relating to optimum utilisation of existing irrigation

systems. So far research programmes have been concentrated on irrigated or water intensive crops. But efforts are being made to shift towards the crop problem of arid, semi-arid as well as highly humid, hill and other problem areas so that a larger proportion of the country's rural population and cultivated areas may benefit.

In the field of agriculture, our scientists have achieved impressive success. Foodgrains production has more than trebled since 1951--from 51 million tonnes to 215 millions. Particularly striking has been the production in wheat and rice—from 11 to 75 million tonnes in wheat and from 21 to 94 million tonnes in rice. Equally impressive is the progress in the production of sugarcane, potatoes and long staple cotton. However S and T seem to have failed in the case of production of pulses and oilseeds. The production of pulses is stagnating for the last 30 years while the demand for pulses has been continuously going up. Even though production of oilseeds has been rising--mainly through increase in acreage--the contribution of technology seems to be negligible. India is the largest producer of groundnut in the whole world, but she has also the dubious distinction of being the largest importer of edible oil. All these indicate the lines on which S and T have to be directed in the field of agriculture and the extent of progress we have yet to achieve.

Industry. In the initial stages, the major thrust of industrial development was on the setting up of the infrastructure for production and consequently India had to import foreign technology through collaboration. Iron and steel industry, machine tools, heavy engineering, heavy electricals etc. are closely related to technology imported from elsewhere. However, research and development (R and D) efforts were initiated through government-run national laboratories, as unlike in other advanced countries, industries themselves did not come forward to do this work. But unfortunately the linkage between government laboratories and industry has, in general, been weak and sufficient attention was not given to design-engineering work. Of the industry-related research in the CSIR laboratories, the largest has been in the area of chemicals which includes fertilisers and pesticides, drugs and pharmaceuticals, oils and fats, polymers and resins, and various intermediate chemicals. The linkage between the R and D laboratories and the chemical industry have also been better, but S and T programmes had been mostly confined to the national laboratories and very little R and D was carried on in public and private sectors. Besides, even in this sector, the technology development programmes were not commensurate to the large investment in this dynamic sector. But during the Fifth Plan period, R and D work has been growing at a brisk pace in public and private sectors, particularly in the former. Another significant change was in the field of electronics where technology has a life only of 5 to 6 years.

In spite of continuous and constant talk about self-reliance, industry had spent very little on S and T, in modernising technology of the established units, in adapting imported technology to Indian conditions, to develop competitive new technology etc. But credit must be given to the Government for promoting research design and development (RDD) in industry through several measures like liberal incentives for setting up inhouse RDD units, free licensing of industries based on indigenous technology, liberal fiscal incentives, provision of increased investment allowance for using indigenous technology etc. Gradually, India has come to acquire a well developed infrastructure of R and D and design engineering organisations and there is good scope for Indian industries based on indigenous technology as far as possible.

In this connection, we should refer to the utter neglect of village and decentralised industries--S and T have almost not touched them so far. Existing units in these industries are waiting for technological assistance. While the annual budget for S and T is over ₹ 450 crores, the amount devoted for research and development for the promotion of village and cottage industries is insignificant--a few lakhs of rupees.

Other major S and T effort has been in such diverse fields as meteorology, space science and technology, mining and mines safety, communications, shipping and transport, petroleum and petrochemicals, information and broadcasting, housing, health and family welfare etc.

Weaknesses of S and T infrastructure

A serious weakness is the failure of the country to utilise the available scientific and technical manpower. The proper utilisation of the available skilled manpower has an important bearing on the promotion of research and development. Nearly a lakh of engineering graduates and diploma-holders are on the live registers of employment exchanges in the country—showing that these people are not able to make the most effective contribution to national construction.

Another weakness is that research and development are practically confined to Government laboratories and institutions--90 per cent of the expenditure is by institutions under the central and state Governments and hardly 10 per cent is spent by industry.

One of the major objectives in starting national laboratories viz., to develop indigenous technology has not been served. The volume of gross production from processes developed by the national laboratories is said to be insignificant.

The basic deficiency of S and T infrastructure in India is that it is elitist. It has been oriented to meet the needs of the rich; and the benefits from S and T did not reach the ordinary man but have mostly accrued to the affluent classes. As Vadilal Dagli force-

aptly put it : "We have all the funds for modern textile industries but not for handlooms, for atomic power but not for gobar gas, for cement but not for lime. There is money for the automobile industry but not for the bullock cart; there is money for ocean going vessels but not for country craft. Our priorities for research and development are meant to serve the affluent. It has never occurred to us that science and technology can double the real income of village artisans, marginal farmers and people living in hill areas in a decade."[18]

Finally, though self-reliance has been the basis of India's S and T effort in the last two decades. India has largely depended on borrowed technology from advanced countries. For one thing, import of technology has often been unrelated to factor endowment of India. Accordingly, industries have been set up which mostly cater to the needs of the higher income groups. For another, in many lines of production, India is continuing to depend on foreign technology, instead of taking to self-reliance. Our policy regarding foreign capital and foreign collaboration is promoting "technological colonisation" of India by multinationals.

The Sixth and subsequent Plans have aimed at removing many of these defects. The Sixth Plan, for instance, reoriented India's S and T effort to the development of rural areas, the removal of unemployment and of raising the standard of living of the rural people. There is, in fact, tremendous scope for development of S and T to enhance the productivity of artisans and craftsmen in rural areas, to introduce new simple processes and techniques to develop agro-industries, improve rural water supply and sanitation--in, other words, to improve the quality of life of the rural people.

In the past, technology imported from advanced countries was used to promote centralised development and for the creation of large enterprises and, therefore, the benefits of technical and economic progress were appropriated by those classes which were already well-off. The new emphasis in S and T in the Sixth Plan is decentralised development which will necessarily have to be based on local technology. This will imply that India should give up its reliance on other countries, evolve appropriate technology and become self-reliant. The new technology will be somewhere in between advanced technology of the West and the primitive technology of the old days but an intermediate technology whose purpose would be to increase employment opportunities for the rural people and make use of the available resources in the best possible manner. Some people are carried away by the concept of 'intermediate technology' and would like to have only such technology in the country and eliminate all the others. On the other hand, there are some who would like to continue the primitive techniques in the name of creating more employment. Correctly speaking from the long-term point of view, India requires a judicious mix of three types of technologies--large scale, medium scale and small scale.

13. PRIVATE INVESTMENT IN INFRASTRUCTURE : OUTLOOK AND PROSPECTS

The Government of India has increasingly realised that infrastructure need not be a public sector monopoly. In the past, the responsibility for providing infrastructure services was vested with the Government— the reasons being : heavy capital investments, long gestation periods, externalities, high risks and low rates of return on investment. The infrastructure under government ownership and management has, however, proved thoroughly inefficient and corrupt. The demand for infrastructure facilities and services has always outpaced supply; besides, the quality of the existing supply is extremely poor. The consequent shortfalls in capacity and inefficiencies in infrastructure facilities are patent in the increasingly congested roads, chronic transport bottlenecks, frequent power failures and load shedding, long waiting lists for installation of telephones and shortage of drinking water. The widening gap between demand and supply of infrastructure and the extremely poor quality of the existing supply raises important questions concerning the sustainability of economic growth of the country in the coming years.

In order to sustain an annual GDP growth rate of 7 per cent, it is imperative to accelerate the rate of investment in infrastructure. According to the Finance Ministry's Expert Group on Commercialisation of Infrastructure Projects (June 1996) the total infrastructure investment requirements would be about ₹ 40,000 crores to ₹ 45,000 crores during 1996-2001 and another ₹ 75,000 crores during the next 5 years (2001- 06). This order of massive investment requirements is clearly beyond the capacity of the Government. The financial resources available to the Government are very limited. At the same time, public debt and other government liabilities are increasing by leaps and bounds. Accordingly, the creation of quality infrastructure will need the infusion of private capital, both domestic and foreign. At the same time, technological and organisational innovations have made it possible for the private sector to enter the infrastructure.

Since 1991, Government strategy attaches high priority to the development of efficient infrastructure and towards creating an enabling environment for pri-

18. *Commerce*, Annual Number 1978, p. 8

vate participation in the infrastructure sector. Besides, public-private partnership can also encourage better risk sharing, accountability, cost recovery and management of infrastructure. Some of the important steps in this direction are :

(a) The Government set up the Infrastructure Development Finance Company in January 1997, under the Indian Companies Act, with an authorised capital of ₹ 5,000 crores.

(b) The Government has announced a tax holiday to companies developing, maintaining and operating infrastructure facilities, such as roads, bridges, new airports, ports and railway projects and also those dealing with water supply, sanitation and sewerage projects.

(c) The Government has permitted income tax exemption on dividend, interest or long term capital gains earned by funds or companies set up to develop, maintain and operate an infrastructure facility.

(d) The Government has raised the corpus of the National Highways Authority of India Ltd (NHAI) by ₹ 200 crores to enable it to leverage funds from the domestic and international capital markets.

(e) The Government has enhanced tax rebate limits for investments in shares and debentures offered by infrastructure companies; this is to channelise domestic savings into such investments.

Infrastructure investments are, by their very nature, long gestation activities. If private participation has to be encouraged to enter the infrastructure, there is the need to develop domestic capital markets which will make funds available for long periods through long term debt instruments. The Asian Development Bank (ADB) has provided a loan of $ 300 million for the Public Sector Infrastructure Facility (PSIF) in order to support private sector infrastructure projects through the development of the long-term debt market. The money will be borrowed by ICICI, IFCI and SCICI for onlending to infrastructure companies through long term debt instruments — viz., bonds and debentures, for a minimum of 15 year maturity.

In many developed and developing countries, contractual savings in the form of pension and provident funds are being tapped for infrastructure financing, since these savings are long term in nature and could act as a source of funds for debt instruments with long term maturities. The Government will have to introduce appropriate reforms in public provident funds, pension funds and insurance companies so that the private sector can have access to these funds for infrastructure development.

The Government of India has announced various measures to attract foreign investment in infrastructure. For instance, the Government has allowed automatic approval for foreign equity participation upto 74 per cent in key infrastructure industries such as electricity generation and transmission, non-conventional energy generation and distribution, and construction activities in the area of roads, bridges, railbeds, ports and harbours.

In recent years, the Government has undertaken many sector-specific reform measures. For instance, telecom projects are to be treated as infrastructure and are to receive all the fiscal concessions available for infrastructure projects — like tax holiday and concessional project import duty. The Government of India has promulgated an ordinance to facilitate private investments in the transmission of electricity, as distinct from generation and distribution of electricity. The Government has also announced guidelines for private investment in highway development through the Build-Operate-Transfer (BOT) route – these would provide more financial concessions and also facilitate the preparation of detailed feasibility reports, clearance for the right of way of land, relocation of utility services, resettlement and relocation of the affected establishments, environmental clearance and equity participation in the highway sector. Similar guidelines have been given for private participation in ports.

The Expert Group on Commercialisation of Infrastructure Projects has also recommended the setting up of an autonomous regulatory body for each infrastructure sector on the lines of SEBI to ensure fair competition among public and private operators, protect consumer interests, particularly the needs of vulnerable and weaker sections, ensure public safety, environmental sustainability, etc.

What will be the future role of public sector enterprises in the field of infrastructure, after the entry of the private sector ? The public sector enterprises will continue to shoulder the major burden of providing critical infrastructure services but public sector reforms would be necessary to broad-base their management, to upgrade their technology, to improve their performance and quality of services and to generate adequate investible resources through rationalisation of service charges and better recovery of costs.

Investment in Infrastructure

Growth in infrastructure is considered as an essential pre-requisite for stepping up GDP growth. For this purpose, it is vitally necessary to increase investment in infrastructure. This investment may be made by the public sector or the private sector. It is quite well known that the private sector undertakes investment in such areas in which it expects a high rate of return. It is

therefore, possible that certain very important sectors of economy which do not promise high rate of return may not attract the private sector investment. This gap has to be filled by the public sector.

Gross capital formation in infrastructure investment at current prices increased from ₹ 45,940 crores in 1993-94 to ₹ 289466 crores in 2009-10. However, expressed as percentage of GDP, total investment in infrastructure declined from 5.88 per cent in 1993-94 to 4.7 per cent in 2009-10. This is a very unhealthy trend. There has been a cutback in capital expenditure in Central Government. Not only that, many state governments are using plan funds ear-marked for capital projects to finance escalation in non-plan expenditure. Although the government has been emphasizing expansion in infrastructure to boost growth, the fact of the matter is that there is a strong retardation experienced in infrastructure investment, which needs immediate remedial action.

Finance of Infrastructure

Ambitious infrastructure development plans also require matching sources of finance. In this regard Table 22 gives details of sector wise incremental flow of bank credit, investment by insurance companies, external commercial borrowings and flow of FDI to infrastructure sector.

Table 22. Financial of Infrastructure Project

₹ *Crores*

	2006-07	*2007-08*	*2008-09*
Incremental Flow of bank credit	30122	61745	64852
Investment by insurance companies	28906	10400	13089
External Commercial Borrowing	....	10156	5225
Foreign Direct Investment Flow	961	5179	5400

Source : Economy Survey 2009-10

Apart from these sources of financing infrastructure, private placement and capital rsaised through public and rights issues also are some other sources. Table 21 given above reveals that major portion of financing was coming from domestic sources. These figures break the myth that foreign investment is primary to raise infrastructure in the country.

Table 23 : Gross Capital Formation in Infrastructure (at current prices)

₹ *Crores*

	1993-94	*1997-98*	*2000-01*	*2007-08*	*2008-09@*	*2009-10***
A. Gross Capital Formation in infrastructure	45,940	62,903	94,226	2,02,738	2,68,777	2,89,466
1. Electricity, gas and water	23,170	30,756	36,907	96,939	1,14,340	1,26,110
2. Transport, storage and communication	22,770	32,147	57,319	1,05,749	1,54,437	1,63,356
2.1 Railways	5,580	5,069	5,491	22,229	29,661	32,337
2.2 Transport by other means*	11,304	10,460	25,802	50,093	59,778	56,720
2.3 Storage	136	456	1,362	947	1,675	1,717
2.4 Communications	5,750	10,162	24,664	32,480	63,323	72,582
B. Gross Domestic Product	781,345	1,390,148	1,902,998	45,81,422	52,82,086	61,33,230
C. A as % B	5.88%	4.45%	4.95%	(4.4%)	(5.1%)	(4.7%)

*Includes roads, civil aviation, seaports and inland water. ** Quick Estimats @ Provisional Estimates

Source: Compiled and computed from Central Statistical Organisation, National Accounts Statistics (2010) and Economic Survey (2009-10), Press Release 31st January 2011. Press Information Bureau

Public Private Partnership and Infrastructure

Given the need of mega infrastructure required, public sector cannot cope with the need of the hour. Though the Government has been emphasizing the importance of infrastructure for the development of the economy, we witness a cut back in the investment by the government in the infrastructure, both at the central and state level. In the last few years, public private partnership in the infrastructure sector is gaining importance.

Economic Survey 2009-10, underlines the importance of PPP projects and says, "PPPs offer a number of advantages in terms of leveraging public capital to attract private capital and undertake a larger number of

TABLE 24 : Sector-wise PPP project

Sector	*Number*	*Below ₹250 crore*	*Between ₹251 to 500 crore*	*More than ₹ 500 crore*	*Value of contacts (in crore)*
Airports	5	0	303	18,808	19,111
Energy	24	734	2,669	13,708	17,111
Ports	43	1,066	2,440	62,993	66,499
Roads	271	8,689	32,862	60,454	102,005
Urban Development	73	2,753	2,404	10,132	15,288
Other sectors	34	1,613	905	1,644	4,162

Economic Survey, 2009-10

infrastructure projects, introducing private-sector expertise and cost-reducing technologies as well as bringing in efficiencies in operation and maintenance. Hence, more than their fiscal implications, PPPs are tools to fulfill the basic obligations of Governments to provide better infrastructure services (with large externalities), by increasing the accountability of the private sector as a service provider."

But it is not an automatic or easy task. Economic Survey further says, "A key pre-requisite is to lay down a policy, legal and regulatory framework that assures a fair return for investors, protects the interests of users, especially the poor, and assures quality supply at reasonable cost. For this purpose, it is important that issues related to the adopted, procurement strategies and templates to be employed and mechanisms for financial structuring to be considered, are clearly outlined ab initio at the level of the sponsoring agencies, including State Governments."

Sector wise description of PPP both at state and central level projects is given in Table 23.

Infrastructure in the 11th Plan: An Overview

The Planning Commission has openly accepted the fact that lack of infrastructure is a major constraint in India's economic performance. The development of rural infrastructure is a high priority in the 11th Plan with critical targets for irrigation, rural road connectivity, rural drinking water etc. There are huge gaps in general infrastructure encompassing power, roads, railways, ports, airports, telecommunications and the 11th Plan has proposed to address these vigorously. The 11th Plan, for instance, will raise total expenditure on infrastructure to 9.0 percent of GDP as against 4.5 percent in the Tenth Plan. Consistent with the above projection, the investment in physical infrastructure alone during the Eleventh Five Year Plan has been estimated to about ₹ 2,002 thousand crores (at 2006-07 prices) which is equivalent to about US $ 500 billion. Of this amount, the share of the Central government is estimated to be 37 percent, of the state governments to be about 33 percent and that of the private sector to be 30 percent. Obviously, the Government has adopted the strategy of public private partnership in the infrastructure structure.

The power sector is critical for industrial growth and the real problem is the distribution system, which is in the hands of State Governments. Top priority should, therefore, be given, to improve the performance of distribution companies.

Finally, PPPs have become the preferred mode for construction and operation of infrastructure services such as highways, airports, ports etc. They offer significant advantages in attracting private capital in construction of public infrastructures as well as in improving efficiencies in the provision of services to users.

During recent years, the UPA Government at the Centre has adopted such an approach in the construction of roads, ports, airports and in railways. Naturally, the people would expect state governments too to adopt a similarly transparent approach to ensure that the PPP projects succeed.

However, public private partnership can sometimes run into controversy if the private sector partner is seen to have received unduly favourable treatment. It is essential that the general public is convinced that PPPs are in the public interest. This can be done by ensuring that :

(*a*) the terms of concession agreements are transparent and protective of public interest; and

(*b*) there is robust competition in bidding for the project so that least cost options are chosen.

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CHAPTER

9

SOCIAL INFRASTRUCTURE AND SOCIAL SECTOR

"The social sectors have been the first target of retrenchment in public expenditure in the largely successful bid so far to achieve fiscal balance. The state, as a matter of deliberate policy, started scaling down, if not retreating from, its constitutional responsibility for providing public goods in such crucial areas as education, health, sanitation, housing etc. The responsibility is increasingly been transferred to private operators. As a result, there has been sharp deterioration the conditions of the poorest and marginalized, particularly the Scheduled Castes, Scheduled Tribes, other economically backward communities, and women and children in each of these social groups"

Muchkund Dubey
President
Council for Social Development, New Delhi

1. CONCEPT OF SOCIAL SECTOR AND SOCIAL INFRASTRUCTURE

"The ultimate objective of planned development is to ensure well-being through sustained development in the quality of life of the people, particularly the poor and the vulnerable segments of the population. In terms of policy measures, it requires emphasis on social sector development and programmes. The development of human resources contributes to sustained growth and productive employment. A healthy, educated and skilled workforce can contribute more significantly and effectively to economic development."[1]

From this it follows that there are two major areas in the social sector which require investment: Education and health. For this purpose, there is need for heavy investment in developing social infrastructure. For development of education sector, there is a need for investment in lower primary, upper primary, secondary and higher secondary schools so that people can send their children to school to acquire education. This would necessitate investment in school building and equipment, provision of teachers and other supporting staff. The process moving from urban areas has been extended to rural, hilly and tribal areas. After independence, the Government took upon itself the task of expanding education. At the higher education level, investment is required in colleges and universities and research institutions so that the products of school education can further improve their knowledge and skills of a higher order. To improve vocational education, there is a need to expand institutes of technology, engineering colleges and medical institutions to train technical persons at various levels. For sophisticated research, specialized institutions like National Physical Laboratory, Indian Council of Agriculture Research and other institutions in atomic energy and space research are needed.

For improvement in health of the people, there is a need for creating hospitals in allopathic, Homeopathic, Unani and Ayurvedic medicines. For expansion of medical facilities in rural areas, there is a need for having Community Health Centers (CHCs), Primary Health Centers (PHCs) and sub-centers (SCs) in rural areas. The rural population can take advantage of hospitals at the district and state levels for more serious diseases. For all these purposes there is a need to train doctors, nurses, paramedical personnel to provide service to the people. This implies the development of physical and human infrastructure.

1. Government of India, *Economic Survey* (2007-08), p.2[illegible]

Besides these, the population needs to the provided safe drinking water and sanitation. This involves expansion of social infrastructure to provide these facilities.

It has been documented that the creation of educational and health infrastructure along with safe drinking water and sanitation are essential for the growth of skilled and educated manpower and this helps the process of growth by providing impetus to the social sector development.

At the time of independence, India had very poor social infrastructure and the planning process during the last six decades has made efforts to strengthen it at various levels. It would be of interest to make an assessment of achievements, shortcomings and failures in this regard.

2. DEVELOPMENT OF EDUCATION IN INDIA

The Constitution of India resolved to provide elementary education for every one. It stated:

"The state shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years." (Article 45)

The Government set up the Education Commission (1966) to determine the need and give an estimate of Gross Domestic Product (GDP) required for promoting education. The Commission was headed by Dr. D.S. Kothari which emphasized the critical relationship between education and productivity and the critical role of education in national and economic development. It stated very categorically:

"Education as investment in human resources plays an important role among the factors which contribute to economic growth." It also stated that during the next 20 years, expenditure on education shall be stepped up to 6 percent of GDP.

The 42nd amendment of the Constitution in 1976 brought education which was largely a responsibility of State Government on the concurrent list, making it the responsibility of both the Central and State Governments.

The 86th Amendment of the Constitution led to the inclusion of a new article 21-A that made free and compulsory education to all children of 6-14 years of age a **Fundamental Right**. In persuance to this legislation the central government enacted Right to Education Act in the year 2009.

Besides, the Government has been making several National Policy Statements on education in 1968, 1986 and 1992 emphasizing the need for eradicating illiteracy altogether, provide universal elementary education to all in the shortest possible time. Another major point of emphasis was the need to expand vocational and technical education at the secondary level. The need for improvement in quality and relevance of higher education along with expansion for the age group 17-23 years was also emphasized.

Equity in education by gender, caste and socio-economic groups, especially scheduled castes and scheduled tribes has been another article of faith. More recently, the Government has reserved 27 percent seats in institutions of higher education for Other Backward Castes (OBCs) from 2007-08. This is in addition to reservation of 15% seats for Scheduled Castes (SCs) and 7.5% for seats for Scheduled Tribes (STs) available earlier.

Reduction in regional disparities has been another major objective of educational planning in India.

Progress of Elementary Education in India

Figures given in table 1 reveal that number of Primary Schools increased from 6.64 lakh in 2001-02 to 7.68 lakhs in 2004-05. Total enrolment at the primary level increased from 11.4 crores in 2001-02 to 13.1 crores in 2004-05.

At he Upper Primary Level, number of schools increased from 2.20 lakhs in 2001-02 to 2.75 lakhs in 2004-05. Total enrolment at the upper primary schools increased from 4.5 crores in 2001-02 to 5.1 crores in 2004-05.

Total enrolment at the Elementary Level (Class I to VIII) increased from 15.87 crores in 2001-02 to 18.2 crores in 2004-05 i.e. an addition by 2.33 crores.

Table 1: Enrolment in Elementary Education

	2001-02		*2004-05*	
	No. of Schools (Lakhs)	*Total Enrolment (Crores)*	*No. of Schools (Lakhs)*	*Total Enrolment (Crores)*
Primary (Class I to V)	6.64	11.39	7.68	13.08
Upper Primary (VI to VIII)	2.20	4.48	2.75	5.12
Elementary (I to VIII)	**8.84**	**15.87**	**10.43**	**18.20**

Source: Planning Commission, ***Eleventh Five Year Plan*** (2007-12), Vol. II, Social Sector Services.

It would of interest to study drop-out rates by social composition at the Elementary Education.

Table 2: Drop-out Rates by Social Composition (2004-05)

Categories	*Primary (I-V)*			*Elementary (I-VIII)*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*
SCs	32.7	36.1	34.2	55.2	60.0	57.3
STs	42.6	42.0	42.3	65.0	67.1	65.9
All	31.8	25.4	29.0	50.5	51.3	50.8

Note: Figures are percentages of total enrolment
Source: Ministry of Human Resource Development (MHRD) **Selected Educational Statistics** (2004-05).

Table 2 indicates drop-out rates. The points which emerge from this table are:

1. Although the Government has achieved a Gross Enrolment Rate (GER) of over 96 percent, but the drop-out rate continues to be quite high. For the primary level (I to V), the drop-out rate is 29 percent, but if we take the entire elementary education from class I to VIII, the drop-out rate is about 51 percent.

2. The drop-out rate among girls in the Scheduled Castes and Scheduled Tribes is higher than among boys. The Eleventh Five Year Plan rightly mentions: "The opportunity cost of girl-child education is quite high in the rural set up and she is often a 'nowhere child', neither in the school nor in the labour force but doing domestic work, mostly sibling care." [2]

3. Over-all drop-out rate among scheduled castes for class I to VIII was 57.3 % and for scheduled tribes was 65.9 %. In both these categories, drop-out rate among girls was higher than among boys.

Higher drop-out rates among weaker sections of our society, lower teacher attendance and lack of adequate facilities in schools in the form of rooms, black boards and other educational aids, virtual absence of separate toilets for girls and lack of environment to retain children in studies have all contributed to our failure on universalizing elementary education. *Out of 100 children* enrolled in class I, only 49 reached class VIII in 2004-05. The retention rate among SCs was 43% and among STs 34 percent. Although the framers of the Constitution set the goal of universalization of elementary education(UEE) to be achieved in a 10-year period by 1960, the country even after nearly 60 years is still way behind to achieve the goal of UEE.

The Constitution of India was amended in 2002 to make elementary education a justiciable Fundamental Right. However, 7.1 million children out of school by 2004-05 and over 50 percent dropping out at the elementary level, is a reflection of our gross failure and is a matter of serious concern.

2. Planning Commission, *Eleventh five Year Plan* (2007-012), Vol.II, p.3.

Mid-day Meal Scheme and other supportive measures

To improve retention rates in primary and upper primary schools, the government introduced the mid-day meal scheme (MDM) after the experience of its success in Tamil Nadu. In 1995-96, government spent ₹ 441 crores on it to provide for 3.34 crore children. In 2003-04, the government increased allocation tot ₹ 1,375 crores for 10.56 crore students. However, per student expenditure which was ₹ 132 in 1995-96 was raised to ₹ 163 in 1998-99, but thereafter, with its rapid expansion in quantitative terms per student expenditure touched a low of ₹ 99 in 2001-02. Thereafter, it has been increased to ₹ 130 in 2003-04.

Table 3: Coverage and expenditure on Mid-day Meal Scheme

	No. of Students (Crores)	*Expenditure (₹ Crores)*	*Per student Expenditure (₹)*
1995-96	3.34	441	132
1998-99	9.79	1,600	163
2001-02	10.35	1,030	99
2002-03	10.36	1,099	106
2003-04	10.56	1,375	130

Source: Ministry of HRD, **Annual Reports**

The scheme has been extended to upper primary schools from April 2008 to cover 5.4 crore children. MDMS will cover 18 crore children by 2008-09.

Assessment of the scheme undertaken by various government and non-government agencies, has brought out serious weaknesses of the scheme in form of sub-standard meals, poor quality of cooking arrangements and prevalence of corruption. It has also been observed that the states in which the stakeholders, especially mothers have been associated, the quality of meals has improved. Moreover, association of parents in vigilance committees has also helped to improve its effectivity. There is a need to strengthen transparency and improve vigilance by active association of parents, especially mothers. However, it is well-documented that mid-day meal scheme has improved retention rates, more especially among the weaker sections.

Measures to reduce private cost in education

To reduce droop-out rates, several governments have decided to provide free uniforms, free text books and stationery to students coming from below the poverty line families. Besides this, provision of free transport in state roads also helps to improve attendance in schools, more especially for rural children since these measures help to reduce the private costs of education for the parents, they help to increase attendance as also retention rates in schools. The government thinks of providing special incentives for girl children so that parents shed their apathy towards education of girls.

Performance in Secondary Education

According to census, population of children in the age-group (14-18) is estimated at 10.7 crores in 2001 and 11.97 crores in 2006. Enrolment in 1.02 lakhs secondary and 0.50 lakhs higher secondary schools in estimated at 2.43 crores and 1.27 crores. Taken together, total enrolment in secondary and higher secondary level is 3.7 crores. This accounts for 39.9% of the population in the relevant age group (14-18 years) which is quite low.

Table 4: Secondary Enrolment and Drop-out Rates (2004-05)

Enrolment in crores

	Boys	*Girls*	*Total*
1. Secondary(IX-X)	1.42 (57.39)	1.01 (45.28)	2.43 (51.65)
2. Higher Secondary (XI-XII)	0.74 (30.82)	0.53 (24.46)	1.27 (27.82)
3. Secondary & Higher Secondary (IX-XII)	2.16 (44.26)	1.54 (35.05)	3.70 (39.91)
4. Drop-out (%) Rates (I-X)	60.41	63.88	61.92

Note: Figures in brackets are Gross Enrolment Ratios – percentage of enrolment in the relevant age group (14-18 years for class IX to XII).

Source: MHRD, Selected Educational Statistics (2004-05)

These are glaring inter-state variations in enrolment, drop-out rates and access to secondary and higher secondary education. Whereas the national average of drop-out rates (class I-X) is 61.9%, this rate is much higher in Bihar (83.1%), 97.3% in Nagaland, 78% in West Bengal, 73.9% in Rajasthan, 75% in Assam and 70.8% in Arunachal Pradesh. A big effort is required to reduce drop-out rates so that the country should move in the direction of universalization of secondary education as its goal at this stage of development of knowledge economy in India.

Management pattern of Secondary Schools

There is a structural change in the management pattern of secondary schools. Whereas in 1993-94, government, local bodies and aided private schools accounted for 85 percent of the total schools in India, in 2004-05, their share declined to 70 percent. As against these, private unaided schools are showing an increase from 15% in 1993-94 to 24% in 2001-02 and 30% in 2004-05. This doubling of the share of private unaided schools in a short period of 11 years indicates that parents are willing to pay more for the education of their wards provided that they perceive of good quality education in such schools. This implies that public sector investment in government and aided secondary schools should, thereafter, be increased to improve their quality so that they attract more students toward them.

Table 5: Secondary Schools by Management

	1993-94	*2001-02*	*2004-05*
Government	47	42	41
Aided	38	34	29
Unaided	15	24	30

Note: Figures are percentage of total schools.

It may be underlined that Mathematics, Science and English are the three core subjects in which a large majority of students do not fare well. The ground reality is that nearly 50% fail in these subjects. Therefore, there is a need to focus on these subjects to improve good quality education in the secondary schools.

In order to reach a level of providing universal access to secondary education, it is now imperative to strengthen school infrastructure both physical as well as human in a substantial manner.

The Eleventh Plan proposes the following measures in this regard:

1. To improve the reach, the norm will be to provide a secondary school with in 5 km. and a higher secondary school within 7-8 km. of every habitation. The target should be to improve the Gross Enrolment Ratio (GER) from 15% in 2004-05 to 75% by 2011-12 and the combined secondary and higher secondary GER from 40% to 65% during the same period.
2. Strengthening infrastructure in existing schools with 3.43 lakh additional rooms and an additional 5.14 lakh teachers;
3. 100 percent trained teachers in all schools and reaching a pupil-teacher ratio of 25:1 by 2001-12;
4. Setting up 6,000 quality model school at the block level;
5. Upgrading 15,000 existing primary schools to secondary schools;
6. To provide Information and Communication Technology (ICT) to 1.08 lakh government and govt. aided schools. This would involve establishment of computer lab with at least 10 computers, a server, a printer connected to Local Area Network and broad band Internet connectivity in every school.
7. **Levy of Fees:** Even in government and aided schools, there is a need to charge some fees so that school management is enabled to raise some resources for quality improvement.

But to help poor and students from weaker sections, it is simultaneously necessary to provide generous scholarship to this group, keeping high priority of girl students who are at the risk of dropping-out and marrying early.

Vocational Education

National Sample Survey data for 2004-05 reveals that only 5% of the population of age-group 19-24 years in India has acquired some form of skills through vocational education. It may be noted that Education Commission in 1966 visualized that 25% of the students at secondary stage would undertake vocational stream by 1986.

Making an assessment about the failure of vocational education, JBG Tilak mentions: "Vocational education, particularly in secondary schools did not really take off, as it was planned to be of a second rate, meant for the poor, and as a terminal one having inter-connectivity neither with higher education nor with the industrial or agricultural sector. It is viewed as strategy to reduce demand for higher education. Vocational education is costlier than general secondary education. Employment opportunities have not been particularly better for vocational education school graduates and as result, economic rates of return to vocational education were generally less than those to secondary general education."[3]

Eleventh Plan has visualized that emphasis will be on demand-driven vocational education programmes in partnership with the employees. During the Eleventh Plan, vocational education would be extended to cover 20,000 schools with an intake capacity of 25 lakhs by 2011-12. The programmes will be so designed that they permit mobility between vocational, general and technical education. Thus, there should be enough flexibility in the approach.

Despite all these efforts, only 5% of the population can receive skill and training through the formal system. The reaming 4 crore aspirants who are unskilled and semi-skilled should be covered by a variety of delivery systems -- like on the job training, part-time courses, open and distance learning systems and sandwich courses etc. There is a strong need to strengthen computer literacy programmes because such programmes do help young people to improve their employability to secure jobs.

Higher and Technical Education

At the time of independence, there were only 20 universities, with around 500 colleges and an enrolment of only one lakh in higher and technical education. The higher education system has grown into one of largest in the world with 378 universities, 18,064 colleges, 4.92 lakh teachers and 1.40 crore students in 2007. The higher education institutions include 23 Central Universities, 216 State Universities, 110 Deemed Universities, and 30 institutions of national importance and other 5 institutions established through state legislations.

Enrolment in Higher Education

Higher education comprises of graduate and post-graduate courses, research and Diploma or Certificate courses. Total enrolment in higher education rose from 34 lakhs in 1984-85 to 49.2 lakhs in 1990-91 and it rose further to 84 lakhs in 2000-01 and was of the order of 110.3 lakhs in 2005-06 as per the University Grants Commission's Annual Report for 2005-06. The average annual growth of enrolment for the 21-year period (1984-85 to 2005-06) was of the order of 5.8 percent. Out of total enrolment of 110.3 lakhs, women students were 44.66 lakhs constituting 40.5 percent in 2005-06.

Table 6: All-India Growth of Student Enrolment in Higher Education

	Total enrolment in lakhs
1984-85	34.0
1990-91	49.2
2000-01	84.0
2001-02	89.6
2002-03*	95.2
2003-04**	99.5
2004-05**	104.8
2005-06**	110.3

*Provisional ** Estimated

Average Annual Growth Rate	
1984-85 to 1990-91	6.2
1990-91 to 2000-01	5.5
2000-01 to 2005-06	5.6
1984-85 to 2005-06	5.8

Source: Compiled and computed from UGC, Annual Report (2005-06)

Data about stage-wise enrolment reveals that 98.2 lakh students (88.9 percent of total), were enrolled at the graduate level, 10.4 lakh students (9.4 percent) were enrolled at post-graduate level, 1.1 lakh students (1.1 percent) were enrolled in certificate/diploma courses and only 0.7 lakhs (0.6 percent) were enrolled for research.

It would be useful to know the number of students enrolled faculty-wise. Data reveals that 92.3 lakh (83.6

3. Tilak JGB (2006), Education – a Saga of Spectacular Achievements and Conspicuous Failures, *India Social Development Report*, p.36.

percent of total) were enrolled in general education viz., arts, science and commerce/management, 16.4 lakh (14.9 percent) were enrolled in professional courses, viz., Engineering/Technology, Medicine, Education and Law, indicating highest percentage for Engineering/Technology followed by Medical courses. In a country like India, where 60 percent of the population is engaged in agricultural occupations, enrolment in agricultural courses were merely 0.6 lakh along with veterinary science a miniscule 0.1 lakh. There is a need for a policy change to reduce this imbalance.

Table 7: Stage-wise Enrolment of Students (2005-06)

	In lakhs	*percent of total*
1. Graduate	98.2	88.9
2. Post-graduate	10.4	9.4
3. Research	0.7	0.6
4. Diploma/Certificates	1.1	1.1
Total	**110.3**	**100.0**

Source: UGC, Annual Report (2005-06)

Table 8: Faculty-wise Enrolment (2005-06)

	Total enrolment	*% of Total*
1. Arts	49.8	45.1
2. Science	22.6	20.5
3. Commerce/Management	19.9	18.0
(i) Sub-total	**92.3**	**83.6**
Professional Courses		
4. Education	1.6	1.5
5. Engineering/Technology	7.9	7.2
6. Medicine	3.5	3.2
7. Law	3.4	3.0
(ii) Sub-total	**16.4**	**14.9**
8. Agriculture	0.6	0.6
9. Veterinary Science	0.1	0.1
10. Others	0.9	0.8
Total	**110.3**	**100.0**

Source: Compiled and computed from UGC Annual Report (2005-06)

Faculty Strength

Out of a total strength of 4.88 lakh teachers, 83.85 percent were in colleges and the remaining 16.15 percent were in University Departments/University Colleges.

Among the various categories of teachers, 47.9 percent were lecturers and 15 percent were senior lecturers. These two categories combined had strength of about 63 percent. Readers accounted for 25.7 percent and professors for 8.3 percent. There were 3.1 percent tutors/demonstrators working in colleges.

Table 9: Distribution of Teachers

Category	*Number of Teachers*	*percent of Total*
1. Lecturers	2,33,462	47.8
2. senior Lecturers	73,291	15.0
3. Readers & their equivalent	1,25,506	25.7
4. Professors & their equivalent	40,542	8.3
5. Tutors etc.	15,202	3.1
Total	**4,88,003**	**100.0**

Our Gross Enrolment Ratio (GER) around 11% is very low compared with the world average of 23.2%, as against 54.6% in developed countries, 36.5% for countries in transition and 22% for Asia. Obviously, there is a need to promote higher/tertiary education still further as India intends to grow from a nation in the transition phase to a developed country. The Eleventh Plan, therefore, lays down the following objective for higher education: "Our long term goal must be to set India as a nation in which all those who aspire to good quality higher education can access it, irrespective of their paying capacity." [4]

Table 10: No. of Higher Education Institutions (2005-06)

	No.	*% of Total*
1. General Education	12,751	65.7
2. Professional Education	5,179	26.7
3. Other (Including research institutions)	1,473	7.6
Total (1+2+3)	**19,403**	**100.0**
4. Universities/Deemed Universities/Institutions Of national important	350	

Source: Provisional figures as provided by University Grant Commission.

Notes: 1. General education includes Arts, Science and Commerce.
2. Professional Education includes Engineering, Technology, Architecture, Medical and Teacher Training Colleges.

Growth of Private Institutions in Higher Education

Another development during the Tenth Plan is that the share of private unaided higher education institutions increased from 42.6% in 2001 to 63.2% in 2006. The share of enrolment has also increased form 32.9% to 51.5% during the same period. Private institutions have improved access in a few selected areas like engineering, management, medicine and IT etc. where students are willing to pay substantially higher fees. The expansion of private institutions in higher education is not motivated by any philanthropic social purpose, but views invest-

4. Planning Commission (2007), *Eleventh Five Year Plan (2007-012)*, Vol.II, p.22.

ment in higher education as a very lucrative option, promising a very sumptuous and assured rate of return of the order of 20 to 30 percent. In other words, it is a good business option for investment. Moreover, its out-turn is absorbed in the expanding corporate and service sectors. Thus, its provides an elite group which becomes votaries of the private sector as the best alternative to growth by promoting unhindered growth of the corporate sector. Even brilliant students from lower and middle classes cannot afford this education, not to speak of the weaker sections of the society. The country must enforce the entry of the brilliant students in such institutions drawn from lower rungs of ladder of society so as to promote their vertical mobility.

The Eleventh Plan estimates that nearly about half of incremental enrolment targeted for higher education will come from private providers.

Technical Education

Technical institutions in India comprise of:

- 7 Indian Institutes of Technology (IITs) and 6 Institutions of Management (IIM) which are institutions of National Importance;
- 1,617 engineering and technology colleges, 1,292 polytechnics;
- 525 institutions of Diploma in pharmacy;
- 91 schools for hotel management and Institutions of Architecture in 2006.
- For post-graduates courses, there are 1,147 educational institutions for MBA/PGDM and 953 for MCA.
- 7 deemed-to-be-universities, viz., Indian Institute of Science (IISC), Bangalore, Indian School or Mines (ISM), Dhanbad, School of Planning and Architecture (SPA), New Delhi, Indian Institute of Information Technology and Management (IIITM), Gwalior, Indian Institute of Information Technology (IIIT), Allahabad, Indian Institute of Information Technology, Design and Manufacturing, Jabalpur and Kanchipuram.
- 20 National Institutes of Technology (NITs) which are institutions of national importance.
- There are many other Technology and Engineering, Technical Teacher Training Institutes in India.

The All-India Council for Technical Education was given a statutory staus in 1987 for co-ordinated development of Technical Education, promotion of qualitative improvement and maintenance of norms and standards. During the Tenth Plan, the number of AICTE approved Degree Engineering/Technology institutions has risen from 1,057 to 1,522 and the annual intake from 2.96 lakhs to 5.83 lakhs. However, the aggregate number of technical institutions by the end of the Tenth plan was 4,512 with an intake capacity of 7.83 lakhs.

Although the Tenth Plan outlay for technical education sub-sector was ₹ 4,700 crores, actual expenditure incurred was only ₹ 3,416 crores (73% of total outlay). It implies that the expansion of technical education is not limited by lack of resources, but rather by our inadequate absorptive capacity.

The Eleventh Plan underlined the following: "The dispersal of degree level technical institutions in the country however is highly skewed. Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra account for nearly 55% of the Engineering Colleges and 58% of enrolment in the country. The state-wise distribution is even worse."

Eleventh Plan: Targets and Strategy for Higher Education

The Eleventh Plan intends to achieve the objective of inclusiveness through the following:

- Reduction of regional imbalances;
- Support to institutions located in border, hilly remote and small towns and educationally backward areas;
- Support to SCs, STs, OBCs and minorities, physically handicapped and girl students with special scholarships/fellowships, hostel facilities, remedial coaching and other measures.
- Setting up of an "Equal Opportunity Office" in all universities to bring all schemes relating to these groups under one umbrella for effective implementation.

The Eleventh Plan proposals include setting up of 30 Central Universities, 16 universities on the basis of one Central university in each of the 16 uncovered states. It also proposes to set up 14 World Class Universities (WCUs) carefully planned to have various schools including medical and engineering. The Central Universities should be department-based and should have no affiliated colleges.

Although assistance is provided by the UGC to 160 state universities and 5,625 colleges through development grants, but the level of funding is low. During the Eleventh Plan, these colleges and universities will be provided one-time assistance at the rate of ₹ 1 crore respectively.

Eleventh Plan – Targets for Technical Education

During the Eleventh Plan, the intakes of technical education needs to grow at an estimated 15% annually to meet the skilled manpower needs of our growing economy. For the purpose, the Plan envisages the setting up of 8 new IITs, 7 new IIMs, 10 new NIITs, 22 IIITs, 5

establishing all these institutions, the scope for Public Private Partnership will be explored. Besides, the capabilities of 200 state engineering institutions will be upgraded with Central assistance. The intake capacity of existing institutions will be increased.

The Eleventh Plan underlined the fact "The State Engineering Colleges suffer from severe deficiencies in academic infrastructure, equipments, faculty, library facilities and other physical facilities ..... These institutions are supposed to be model for private sector institutions to benchmark their standards. If standards and norms are insisted upon for private institutions, the government cannot keep its institutions in unsatisfactory condition."[5]

Open and Distance Learning

At the school level, National Institute of Open Schooling (NIOS) provides opportunities for continuing education to those who missed completing school education. 14 lakh students are enrolled at the secondary and higher secondary level through open and distance learning.

At the higher education level, Indira Gandhi National Open University (IGNOU) co-ordinates distance learning. It has a cumulative enrolment of about 15 lakhs, serviced through 53 regional centers and 1,400 study centers with 25,000 counselors. It has 28 FM radio stations and six television channels. The Distance Education Council (DEC), an authority of IGNOU is co-ordinating 13 States Open Universities and 119 institutions of correspondence courses in conventional universities. While distance education institutions have expanded at a very rapid rate, but most of institutions need upgrading of standards and performance. Most of the correspondence courses have become milch cows for their universities and create heavy surpluses which are used to fund conventional education. There is a large proliferation of courses covered by distance mode without adequate infrastructure, both human and physical. There is a strong need to correct these imbalances.

Financing Education in the Eleventh Plan

Although the country targeted for 6% the GDP be devoted to education, but our performance has fallen short of expectations.

Expenditure of education steadily rose from 0.64% of GDP in 1951-52 to 2.31% in 1970-71 and thereafter reached the peak of 4.26% in 2000-01. However, it declined to 3.4% in 2007-08. There is a need to step it up again.

It may noted that presently, total educational expenditure is about 12% of the total budgeted, while in a 'model' budget, education should receive about 20 percent.

5. *Eleventh Five Year Plan* (2007-12), Vol.II, p.30.

Table 11: Growth of Public Expenditure on Education

	Percent of GDP	*Percent of of Budget*	*Per Capita (₹) at 1993-94 price*
1951-52	0.64	7.92	49.0
1960-61	1.48	11.99	123.0
1970-71	2.31	15.10	124.0
1980-81	3.08	13.48	186.0
1990-91	4.07	13.97	329.6
2000-01	3.9	12.23	509.5
2003-04	3.3	12.31	498.2
2004-05	3.1	12.27	NA
2005-06	3.2	NA	NA
2006-07	3.4	NA	NA
2007-08	3.4	NA	NA

Source: MHRD, **Selected Educational Statistics (2004-05)**, India HDR 2011.

Major Achievements and Conspicuous Failures in Education

As a consequence of sustained growth in expenditure on education, there has been a remarkable growth in educational institutions at all levels – Primary, secondary and tertiary. The country was able to achieve a Gross Enrolment Ratio of 96% at the primary level, though the drop-out rate for class I to VIII was 51 percent which is quite high.

At the secondary and higher secondary level, total enrolment for the age-group 14-18 years was about 40 percent, though the drop-out rate for class I to X was as high as about 62 percent.

Gross Enrolment Ratio in higher education reached a level of about 11 percent in 2004-05, though world average is 23.2 percent. The country has huge infrastructure in higher education with 378 universities and 18,064 colleges. The country was able to establish institutions of excellence in the field of engineering, medicine, management and also create national level research institutions in agriculture and science. As a consequence, the country produces second largest educated and skilled manpower in the world, only next to China.

The development of huge educational structure of 378 universities and 18,064 colleges, 1.52 lakh secondary and higher schools, and 10.43 lakhs of primary and upper primary schools is a matter of legitimate pride.

Glaring Failure in Education

However, there are glaring failures which deserve urgent attention.

- Despite nearly 58 years of development planning, the country has failed to achieve universalization of Elementary Education -- a goal set by the Constitution to be achieved by 1960. Even nearly

six decades after independence, the number of children outside schools in elementary education is quite large.

- Drop-out rate in elementary education (I to VIII) was 50.8% in 2004-05 which is very high.
- Drop-out rate among STs and SCs higher at 65.9% and 57.3% respectively is even much higher than the over-all drop-out rate.
- Although secondary education up to class X in not the real terminal stage, even then drop-out rate (I-X) was as high as 62 – 64% for girls and 60% for boys.
- Enrolment in Secondary and High Secondary level taken together was only 39.9% in 2004-05—44.3% for boy and 35.1% for girls which is very low.
- Mid-day meal scheme which covers about 18 crore children in primary and upper primary schools, has improved attendance and retention rate, but serious weaknesses about the implementation of the scheme to provide standard meals have been highlighted by NGOs which need remedial action.
- Glaring inter-state variations in enrolment, drop-out rates and access to secondary and higher secondary level need remedial action so that these variations can be narrowed down.
- A sharp shift in the management pattern of the schools has been noticed. The share of unaided public sector schools has doubled from 15% in 1993-94 t0 30% in 2004-05. As against it, the share of government and aided schools has come down from 85% in 1993-94 to 70% in 2004-05. This implies that parents are prepared to pay more for the education of their children, if they perceive of good quality education in a particular category of schools. Thus, there is a need to make more investment in government and aided schools for improving the quality of education.
- To reach the objective of universalization of secondary education as our goal in future, it is necessary to strengthen the school infrastructure, both physical and human in a substantial manner.
- Even in government aided schools, there is a need to charge some reasonably affordable fees so that management is provided more resources, besides state grants to improve quality of education.
- There is gross failure in the provision of vocational education since only 5% of the population in India of age-growth 19-24 in 2004-05 acquired some skill, whereas the target set by the Education Commission (1964-66) was 25% by 1986. There is a need to develop effective strategies so that demand driven vocational education programmes in partnership with employers can be drawn. These glaring shortages of skilled human power are being experienced in the rapidly computerizing knowledge economy.
- Higher education continues to be elitist since Gross Enrolment Ratio is only 11% of the population in the relevant age group against the world average of 23.2% and for the countries in transition at 36.5% to which India belongs.
- The share of private unaided higher education institutions increased from 42.6% in 2001 to 63.2% in 2005. Their share in enrolment also rose from 32.9% to 51.5% during the same periods. Since these schools operate purely for profit motive, and charge very exorbitant fees they price out the weaker sections of the society and become elitist. This militates against our goal of inclusive development and is thus a conspicuous failure of the educational system.
- The dispersal of technical education in the country is highly skewed. Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra account for nearly 55% of engineering colleges and 58% of enrolment in country.
- Distance education was adopted to provide opportunities for the deprived sections of the society, but universities are using these institutions as milch cows to provide huge surpluses for their development. Even IGNOU is charging very high fees for BCA, MCA, MBA and other vocational courses to either make them self-financing or surplus generating.
- Despite the target set at 6% of the GDP to be devoted to public expenditure in education by 1986, we have reached a level of 3.49% of GDP in 2004-05. This is another gross failure of our priorities toward education which is a potent instrument to promote inclusive growth.

It is heartening to know that in the Eleventh Plan the Central Government envisages an outlay of ₹ 2.37 lakh crores at 2006-07 prices for education. This is four-fold increase over the Tenth Plan expenditure of 0.54 lakh crores at 2006-07 prices. The relative share in the total plan outlay on education will correspondingly increase from 7.7% to 19.4%. Around 50% of the outlay is for elementary education and literacy, 20% for secondary education (VIII to XII) and 30% for higher education including technical education. The big boost to education proposed in the Eleventh Plan priorities will take care of the resource constraint and the country should devote its energies to improve effective implementation of the professed goals. Recently a legislation on Right to

education has been brought by the government and ₹ 25,000 crore have been earmarked in Union Budget (2010-11) to implement this law.

3. HEALTH AND FAMILY WELFARE AND THE DEVELOPMENT OF HEALTH INFRASTRUCTURE

Since independence, India has built a huge health infrastructure in the form of primary, secondary and tertiary health care institutions like primary health centers, community health centers, hospitals in public, private and voluntary sectors. For producing skilled human resources, a number of medical and paramedical institutions were set up including AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy).

Six decades of hard work has resulted in considerable achievements in improving health standards in terms of life expectancy, infant and maternal mortality rates. Small pox and plague have been eliminated and several other diseased like malaria, tuberculosis, and diarrhea have been contained to a large extent.

The strong link between poverty and health needs to be recognized. Long term illness and expensive illness often drive non-poor into poverty. To improve health care, a comprehensive approach is needed which comprises individual health care, public health, sanitation, clean drinking water and knowledge of hygiene and bringing up children. Whereas the rich can afford to pay for treatment, the poor and marginal groups find it difficult to pay the cost of expensive medical treatment, more especially long term and chronic illness. On account of this, the state owes a responsibility to provide for the health of deprived and marginal groups which include women, children below the age of three, disabled persons, scheduled castes and scheduled tribes, the economically weaker sections etc. to provide them either free or affordable health care.

From table 8, health indicators such as life expectancy, Infant Mortality, Maternal Mortality and Total Fertility Rate point out that countries in similar stage of development as China, Indonesia and Sri Lanka performed much better than India.

Total Fertility Rate (TFR) and Population Stabilization

Total Fertility Rate (TFR) refers to the number of live births by a woman during the entire reproductive period. In the early 50s, TFR was 6.0 which has come down to 2.62 in 2010. India is moving towards TFR of 2.1 which is required for population stabilization. This is achieved by an effective family welfare programme leading to increase in percentage of women using contraceptives form over 10% in early 1970s to 40% in 1992-93 and further to 56% in 2005-06.

Goals set by the Eleventh Plan for 2011-12

1. Reducing Maternal Mortality Rate (MMR) to 100 per 1,00,000 live births.
2. Reducing Infant Mortality Rate (IMR) to 28 per 1000 live births.
3. Reducing Total Fertility Rate (TFR) to 2.1
4. Providing clean drinking water to all by 2009
5. Reducing malnutrition among children of age group 0-3 to half its present level
6. Reducing anemia among women and girls by 50%
7. Raising sex ratio for age group 0-6 to 935 by 2011-12 and 950 by 2016-17.

Table 12: Health Indicators among selected Countries (2010)

Country	*Infant Mortality Rate (2007) (per 1000 live births)*	*Life Expectancy (years)*	*Maternal Mortality Ratio (per 1,00,000 live births)*	*Total Fertility Rate*
India	48	65.4	200	2.62
China	16	73.5	37	1.59
Republic of Korea	4	80.6	16	1.22
Indonesia	27	69.4	220	2.11
Malaysia	5	74.2	29	2.63
Vietnam	19	75.2	59	1.82
Bangladesh	38	68.9	240	2.24
Pakistan	70	65.4	260	3.42
Sri Lanka	14	74.9	35	2.31

Source: For India, Government of India; Others – *State of World Population*, (2009) UNDP, *Human Development report 2011*

Maternal Mortality Rate (MMR) during 2001-03 was 301 per 1,00,000 live births. It was a very ambitious target to reduce it to 100 by 2011-12, as we could bring if down to only 200 by 2010. Considering the present pace of decline, it would be very difficult to reduce it to 100. However, it points to improving birth attendance and midwifery facilities at a rapid rate to reduce MMR in India.

Infant Mortality Rate (IMR) is 48 per 1000 live births in 2007. It is higher in rural areas (55) and lower in urban areas (36). Despite progress in immunization, reduction in polio and diarrhea, it would be difficult to achieve the target of 28 by 2011-12.

Disparity in Rural/Urban Health Care – Rural health care is very poor in some states, though the situation is better in urban areas.

Disparity in urban and rural areas is observed in all the health indicators. Anaemia among rural children below the age of 3 years is a serious problem to the extent of 82% and that of pregnant women to the extent of 59%.

The large disparity places heavy burden on the poor, the scheduled castes and scheduled tribes. There are sharp differences in health indicators between advanced and backward states.

Table 13: Urban/Rural Health Indicators in India (2009)

Health Indicator	*Urban*	*Rural*	*Total*
Crude Birth Rate per 1000	18.3	24.1	22.5
Crude Death Rate	5.9	8.0	7.4
IMR per 1000 live births	34	55	50
Prevalence of anemia among children (6-35 months)*	72.7	82.1	79.2
Prevalence of anemia among pregnant women*	54.6	59.0	57.9

Source: Ministry of Health and Family Welfare, Government of India (2006) and *National Health Family Survey* (NHFS-3), *2005-06, National Health Profile 2010.*
**2004*

Although coverage of health and family welfare services is much better, yet high density and the existence of slums is a serious problem in urban areas. According to 2001 census, 42.6 million persons lived in urban slums spread over 640 towns and cities. This accounts for about 15% of the urban population. High density and congestion among slum dwellers with housing conditions, lack of sanitation and poor quality of drinking water leads to high incidence of diseases like asthma, TB, malaria, heart diseases, diabetes etc. Since urban poor lack access to health care facilities, and do not have enough savings to tide over the crisis of diseases, their capacity to earn is seriously affected.

Disease Burden

National Commission on Macro-economics and Health (NCMH), 2009 figures of disease burden are given table 14.

In India, 3.1 million people suffer from HIV/AIDS which is a threat to their life. In December 2008 about 1.26 lakh cases of AIDS were reported.

Tuberculosis remains a public health problem. 1.8 million persons in India develop tuberculosis every year.

An estimated 130 million persons are exposed to the risk of Kala-azar in endemic areas. The annual incidence of disease has come down form 77,100 cases in 1992 to 31,220 cases in 2005. Similarly deaths from the disease have come down from 1,420 cases to 157 in the same period

Table 14: Disease Burden Estimates

Disease	*Year*	*Estimated cases per lakh*
Communicable disease		
Acute Respiratory Infection	2009	2400
Diarrhoea per year	2009	1018
HIV/AIDS	2009	523
Malarial & other vector bone diseases	2009	133
Tuberculosis	2009	100
Non-Communicable Diseases		
Cancer	2004	8
Diabetes	2004	310
Mental Health	2004	650
Blindness	2004	141
Cardiovascular diseases	2004	290
Asthma	2004	405
Injuries – Deaths	2004	9.8

Source: NCMH, 2005, *Status Indicators, National Health Profile 2010.*

Non-communicable diseases such as cardio-vascular (heart related) diseases, cancer, blindness, mental illness and diabetes imposed heavy burdens on the budgets of the poor and they also seriously impair their capacity to earn.

Cancer has become an important public health problem with 7 to 9 lakh cases occurring every year. At any point of time, there are nearly 25 lakh cases of cancer. Tobacco related cancers account for about 50% of the total cancers for men and 20% for women.

About 1 million deaths are caused by tobacco related diseases, making these diseases a major public health problem.

In India, more than 12 million persons are blind. Cataract accounts for about 63%, is the main cause of disease, followed by weak eyesight (20%).

Table 15: Shortfall in Health Infrastructure

per 2001 Census	Required	Existing	Shortfall	% shortfall
Sub-centres	1,58,792	1,44,998	20,903	13.2
PHCs	26,022	22,669	4,803	18.5
CHCs	6,491	3,910	2,603	40.9

Note: The all India shortfall in health infrastructure has been calculated on the basis of aggregate of shortfall in various states. While doing so, the surplus in some states has been ignored.

Source: Planning Commission, *Eleventh Five Year Plan (2007-12)*, Vol. II, p.64

Health care Infrastructure and shortage of Health Personnel

Rural areas suffer on account of inadequate rural infrastructure. There are three tiers in health infrastructure in rural areas. There are Community Health Centres (CHCs) at the Block level to cater to 1,00,000 population. For a cluster of 30-40 villages, there is a Primary Health Centre (PHC) and at the gram-panchayat level for 500 villages, there is a sub-Centre. At the Village level, there is ASHA (Accredited Social Health Activist). The level of facilities improve as we move from the lower level sub-Centre, to PHC to CHC.

It may be noted form table 11 that there is a shortage of 40.95% CHCs which only suggests that secondary health care is seriously affected by this shortage. As a consequence, for any serious ailment, the rural population has to approach hospitals in towns and cities.

Government and Private Hospitals

Number of government hospitals increased from 4,278 in 2000 to 7,663 in 2006 i.e. an increase of 67.6% which a substantial. Number of beds n these public hospitals increased from 4.30 lakhs to 4.93 lakhs during the same period i.e. an increase by 14.4%.

Government hospitals suffer from semi-used or dysfunctional infrastructure and as a consequence, people in rural areas have lack of trust in them. Consequently, they prefer to opt for private hospitals.

Up-to- data for private hospitals are not available, but in 2002, there were 11,345 private hospitals with a capacity of 2.63 lakh beds. Most of the private sector hospitals are located in cities and towns. Since the private sector hospitals are rapidly expanding, this share of the percentage of cases treated is rising.

In rural areas, the percentage of cases treated in Government hospitals has declined from about 60% in 1986-87 to about 42% in 2004-05. As a consequence, private hospitals have increased their share from 40% to 58% during the same period.

Table 16: Percentage of cases Treated by type of hospital

	Govt.	Private
Rural Areas		
1986-87	59.7	40.3
1995-96	43.8	56.2
2004-05	41.7	58.3
Urban Areas		
1986-87	60.3	39.7
1995-96	43.1	56.9
2004-05	38.2	61.8

Source: *Eleventh Five Year Plan, Vol. II, p.67*

In urban areas, the share of cases treated in private hospitals has increased from about 40% in 1986-87 to about 62% in 2004-05.

Cost of care in private hospitals is much higher than in Govt. hospitals as is indicated by the data in table 13.

Table 17: Average Medical Expenditures (₹) per hospitalization case

	Govt. Hospital (1)	Privatel Hospital (2)	Ratio of 2 to 1 (3)
Urban Areas			
1995-96	2,195	5,344	2.43
2004	3,877	11,553	2.98
Rural Areas			
1995-96	2,080	4,300	2.06
2004	3,238	7,408	2.29

Source: Compiled and computed from *Eleventh Five Year Plan* (2007-12), *vol. II, p.68*

Explaining the growing shift from public (Govt.) hospitals to private hospitals, the Eleventh Plan mentions: "Despite higher costs in the private sector, this shift shows the people's growing lack of trust in the public system. Critical shortages of health personnel, inadequate incentives, poor working conditions, lack of transparency in posting of doctors in rural areas, absenteeism, long wait, inconvenient clinic hours, poor outreach, time of service, insensitivity to local needs, inadequate planning, management and monitoring of ser-

vice/facilities, appear to be the main reasons for low utilization." [6]

Health Expenditure in India

According to National Health Account (NHA), for the year 2001-02, total health expenditure was ₹ 1,05,734 crore i.e. 4.6% of GDP. Out of this, public health expenditure was ₹ 21,439 crores (0.94% of GDP), private health expenditure constituted ₹ 81,830 crores (3.58% of GDP) and external support was merely ₹ 2,485 crores (0.11% of GDP).

Using World Development Indicators (2008), a comparison of health expenditures is presented in table 18. In India in 2010, health expenditure as percent of GDP was 4.0 percent, out which public expenditure was 1.4%, accounting for 33% of total. Although in China, total health expenditure was 5.0% of GDP, the share of pubic expenditure was 2.2%, accounting for 40%.

Table 18: Health Expenditure in Selected Countries (2010)

		Public		
	Total as % of GDP	*% of GDP**	*% of Total*	*Per capita US$*
India	4.0	1.4	29.1	54
China	5.0	2.2	53.6	221
Egypt	4.7	2.0	37.4	123
South Korea	6.9	3.5	59.0	1,439
Japan	9.4	6.7	82.5	4,065
Russian Federation	5.0	3.5	62.0	525
UK	9.6	7.8	83.9	3503
USA	17.9	7.9	53.0	8,362

Source: World Bank, ***World Development Indicators*** (2011) 2009*

Per capita expenditure on health was $54 in India in 2010, as against $221 for China, $4,065 for Japan, $3,503 in UK and $8,362 in USA. Obviously, India must increase its health expenditure, especially public expenditure so that it provides better health facilities even to the poor at a relatively lesser cost.

The Eleventh Five Year Plan will aim for inclusive growth by introducing National Urban Health Mission (NUHM) which will along with NRHM (National Rural Health Mission) form Sarva Swasthya Abhiyan (Health for all campaign).

National Rural Health Mission intends to increase access and utilization of quality health by strengthening health infrastructure, both physical and human.

Under NRHM, it is planned to have:-

- Over 5 lakh ASHAs (Accredited Social hea activists) for every 1,000 population/ large habi tions by 2008.
- All sub-centres (nearly 1.75 lakh) functional with 2 ANMs (Auxiliary Nurse Midwives) 2010.
- All Primary wealth Centres (PHCs) nearly 30,0 to be provided 3 staff nurses for 24 hours servic on all days by 2010.
- 6,500 Community Health Centres to be est lished, strengthened with 7 Specialists and 9 st nurses by 2012.
- 1,800 Taluka/sub-divisional hospitals and 6 district hospitals to be strengthened to prov quality services by 2012.
- Mobile Medical Units for each district by 200

The emphasis under NRHM will not be on merical achievements only but also on Indian Pu Health Service Standards and enforcement of guide for improving the functioning of infrastructure be strengthened and created.

Expected outcome of NHRM are listed belo

1. Malaria Mortality Reduction by 50% by 2 and additional 10% by 2012.
2. Kala Azar Reduction 100% by 2010.
3. Dengue Mortality Reduction 50% by 2010 then sustaining at the level till 2012.
4. Cataract operations to be increased to 46 la until 2012.
5. Leprosy Prevalence Rate to be reduced from per 10,000 in 2005 to less than 1% thereaf
6. Tuberculosis cure rate to be maintained at 85
7. Filaria Reduction – 70% by 2010, 80% by 2 and elimination by 2015.
8. Upgrading all health establishments in the District to Indian Public Health Services Stand
9. Increase Utilization First Referral units fr bed occupancy from less than 20% to over 75 for all referred cases.

Janani Suraksha Yojana (Maternity Protection Scheme)

The scheme has the dual objectives of reduc maternal and infant mortality by promoting institutio deliveries. The scheme is 100% Centrally sponsored integrates cash assistance with medical care. Und NHRM, out of 184.25 lakh institutional deliveries w conducted in the country, (as on 1st April, 2007) JS beneficiaries were 28.74 lakhs.

Two critical factors have to be taken into acco one being that India does not have the institutio

6. Planning Commission Ibid, p.67

capacity to receive 26 million women giving birth every year, and the other that half of maternal deaths occur outside of delivery, during pregnancy, abortions and post-partum complications. A gradual approach of increasing institutional capacity and encouraging institutional deliveries would ensure success of the scheme. Secondly, JSY money sometimes does not reach hospitals on time and thus, poor women and their families do not receive the promised amounts. This problem should also be redressed.

National Urban Health Mission (NUHM)

National Urban Health Mission (NUHM) is intended to meet health needs of urban poor, particularly the slum dwellers, making available to them their essential primary health care services. NUHM will cover all cities with a population of 1,00,000. it would cover slum dwellers, other marginalized urban dwellers like rickshaw pullers, street vendors, railway and bus station porters, homeless people, street children, construction site workers, who may be in slums or on sites.

Strengthening Existing Health System

The states need to develop systems that comprehensively address the health needs of the poor. The Eleventh Plan insists on Integrated District Health Plans and Block Specific Health Plans by involving all stakeholders and emphasizing partnership with Panchayati Raj Institutions, local bodies, community, NGOs, Voluntary and Civil Society Organisations.

1. Primary Health Care – A Major issue, especially in rural areas, where habitations are scattered and women and children continue to die en route to the hospital. Achievement of health objectives will, therefore, involve much more than curative or even preventive health care, an integrated approach will be provided. The policy interventions have to be area specific and not administering a single plan throughout the country.

All States will be encouraged to implement the Tamil Nadu model in which nearly 58% of centres (PHCs and CHCs) are functioning round the clock. Success models of various states such as higher salary to health workers posted in tribal regions of Himachal Pradesh and KBK districts of Orissa can be considered. In Assam, a highly flood prone state, UNICEF and government of Assam, started Akha which means hope in Assamese. A 22 meter wide ship carried hope and health care to 10,000 forgotten people in Tinsukhia, Dhemaji and Dibrugarh districts. Doctors and Auxiliary Nurse Midwives unwilling and unable to survive in these remote islands live on the ship stocked with medicines and other supplies and hold health camps. They immunize, treat and provide medicines and advise people on preventive measures. They even take critically ill patients to the nearest Dibrugarh health centre. The scheme has been quite successful and so is referred as Akha – Ship of Hope.

The tribal population in India is considered to be most socio-economically disadvantaged group. Consequently, there is a need for encouragement of tribal medicine under AYUSH (Ayurvdea, Yoga and Naturopathy, Unani, Siddha and Homeopathy). There is a need to involve the community by explaining to them and providing proof that some of their beliefs and superstitions need to be shed. The SEARCH hospital is a habitat of huts built between trees. For instance, in one year, the tribals in their Aarogaya Sansad (Health Parliament), were shocked to learn that malaria was caused by a mosquito bite and thus voted for the elimination of malaria. By communicating with tribals in the language that they understand, SEARCH has been able to tackle many superstitions and unhealthy practices. Thus, cultural alignment along with medical care can succeed in tribal areas.

Secondary and Tertiary Health Care

The Eleventh Plan emphasized that "Administration of secondary and tertiary care hospitals will be professionalized and trained professionals posted as Medical Superintendents." (p.75). This is an over-statement because already in these hospitals the posts of Medical Superintendents are held by professionals in the public sector. Even other staff and paramedics also have professional qualifications. The situation may be different in the private sector where mushrooming of hospitals may not be equipped with qualified staff. However, reputed private sector hospitals and specialized hospitals are able to attract qualified staff, by paying them more than the public sector.

However, the initiative of the government to set up 6 AIIMS like institutions, upgrading 13 existing medical institutes is very welcome.

Access to Essential Drugs and Medicines

Household expenditure on health and drugs as per the National Commission on Macro-economics and Health (2005) is 6.1% of total household expenditure in rural areas and 4.9% in urban areas. Out of this, the share of drug expenditure is 77.3% in rural and 69.2% in urban areas. The poor are the worst affected because they are frequently affected by diseases and are least able to purchase and utilize the health services and drugs.

In this regard, the Eleventh Plan aims to follow the Tamil Nadu experiment in providing Essential Drugs, as per WHO list, at affordable prices. The experiment is being implemented in Rajasthan and Delhi, but this

requires more expenditure by the Central and State Governments, which at present spend only 10% of the overall budget on health. Timely supply of drugs which involves the establishment of a system of procurement as well as management assumes great importance. If implemented with sincerity, this can reduce the out-of pocket expenses of the medicines.

Enhancing Public-Private Partnerships

The Eleventh Plan very enthusiastically recommends Public and Private Partnerships. It notes a very successful experience in Karnataka of Yeshawini Health Insurance Scheme which includes the State Department of co-operatives, the Yeshawini Trust with its 200 private hospitals, a corporate Third Party Administrator. It also quotes the Government of Gujarat experiment of Chiranjeevi Yojna which enlists the co-operation of private doctors for deliveries of pregnant women of BPL families in normal as well as caesarian cases. Similarly, the Andhra Pradesh government for Urban Slum Health care project provides public premises to the private sector partner. Likewise, the Government of Rajasthan contracts diagnostic services in public sector, providing drugs at cheaper rate in hospitals than at market rates for the welfare of BPL families and senior citizens above the age of 70 free of cost.

There are various initiatives taken by the governments in various states, but the experience shows that such experiments succeed with NGOs which have charitable motives, but since the private partner operates with an eye on profits, such experiments hardly succeed. The Eleventh Plan concedes that "however, true partnerships which mean equality among partner, mutual commitment to goals, shared decision-making and risk taken are rarely seen."[7]

Health Insurance: Protecting the Poor

Ensuring good health for all, especially for the poor is a difficult task. The 60th Round of NSS (2004) revealed that in rural government hospitals, out-of-pocket expenditure of more that ₹ 3,000 is made during every hospitalization. In rural private hospitals, it is more than ₹ 7,000. The expenditure in urban private hospitals is more than ₹ 11,000 per hospitalization, and this is about 3 times higher than in public hospitals. The poor who dare to incur expenditure on hospitalization have to incur heavy indebtedness. There is a need to develop new initiatives so that out-of-pocket expenses of the poor on health services and drugs are considerably reduced. This will certainly have a positive impact in alleviating poverty.

7. Planning Commission, *Ibid.*, p.79.

Current health insurance in Government and private sector cover only 1% of population. The existing Employees State Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS) and Ex-servicemen Contributory Health Scheme (ECHS) provides services to industrial workers, Government employees and Ex-Armed Forces Personnel along with their families. Mediclaim covers mainly the upper middle income groups. Private health insurance schemes are mainly urban-oriented and have problems like unaffordable premiums, delay in settling claims, unilaterally changing rules, and non-transparent procedures.

There is a strong need to involve Self-Help Groups (SGHs) so that the poor are encouraged to contribute small portion of their income for health insurance and thus needy households can be provided a cash support of ₹ 5,000 to ₹ 10,000 per hospitalization, catastrophic illness and death.

A number of initiatives have been suggested. A few of vital importance are listed below:

1. **Community Based Health Insurance (CBHI)** – CBHI is "any not-for profit insurance scheme that is aimed at the informal sector and formed on the basis of a collective pooling of health risks and the members participating in its management." The major issue in developing CBHI is to involve the targeted section of the community in defining the contribution amount and developing a collective mechanism so that packages of benefits are provided to the participants.

   ACCORD, BAIF, Karuna Trust, SEWA, DHAN and VHS are some good examples of success stories. These schemes should be tailored to the needs of the poor and organized according to their convenience.

2. **Health Insurance for Unorganized Workers** – About 93 percent of labour force is employed in unorganized sector who are practically without any health coverage scheme. The National Commission for Enterprises in the Unorganized Sector (NCEUS) has recommended a specific scheme for Health incidence in the illness and hospitalization of workers and their families.

   The scheme is a part of the national social security scheme which includes:

   (*i*) Each worker will be entitled to hospitalization for himself and his family members, costing ₹ 15,000 a year in total with ₹ 10,000 per ailment in designated hospitals and clinics, public or

private, recognized by the State Board with at least 15 beds. If there is no such clinic available within 10 kilometers from the worker's residence, he would be entitled to transport cost to the nearest hospital. All payments will be made directly by the insurance company to the clinics/ hospitals, except for transportation; no cash payment will be made to the workers.

(*ii*) Maternity Benefits of ₹ 1,000 maximum or actuals for the members and the spouse per year.

(*iii*) Sickness cover of ₹ 750 for earning head of the family (during hospitalization) for 15 days.

3. **Maternity Health Insurance** – All pregnant women belonging to BPL families will be covered under the scheme. The capitation fee in this regard will be borne by the government.

4. **Extension of CGHS and other government schemes to the unorganized sector** – CGHS as on 31st December 2006 covers only 33 lakh workers. There are other schemes like ESIS (Employees State Insurance Scheme) and ECHS (Ex-servicemen Contributory Health Scheme). The NCEUS report categorically recommends that these schemes be extended to the unorganized workers. For the expansion of health infrastructure, both the Central and State Governments should enhance their contributions in a substantial manner.

Although the NCEUS Report was presented in August 2007, the Cabinet approved the scheme on 21st August 2008 to be sent to the Parliament for the final approval of the National Social Security Act..

Jan Swasthya Sahyog (Co-operation for people's health) — For the last 7 years, a group of dedicated and socially motivated young doctors left their highly paid jobs to work in the remote areas of Bilaspur and Chattisgarh. They have developed simple technologies to conduct various diagnostic tests. By application JSS method, early detection of UTI costs less than ₹ 2 per test, anaemia Re. 1, diabetes ₹ 2, pregnancy ₹ 3. They have developed low cost mosquito repellant creams, pneumonia detection technique among children, easy to read blood pressure instruments and simple water purification methods. These techniques are designed so that they can be used by illiterate or semi-literate women and school children. Similarly, they have developed simple techniques for detection of malaria. Village health workers are trained to get blood samples which are neatly packed in soap cases and the bus drivers on their way hand them over Ganiyare hospital run by JSS. Here they are immediately tested and reports sent back by the same bus driver on their way back. This courier system has been made operative and has helped to save many lives. These simple techniques developed by JSS can be used by all health workers to diagnose various diseases and thus suggest drugs to control them.

Trends in Health Financing by the Centre and States

The financial allocation for health over the past decade indicates that public expenditures on health (Centre and States) as a percentage of total government expenditure have declined from 3.12% in 1992-93 to 2.9% in 2009-10.

Table 20: Centre and States Health Expenditure

₹ crores

	2004-05	*2009-10*
Centre		
(*i*) Health	2,688	6,688
(*ii*) Family welfare/ NRHM	5,525	12,529
(*iii*) North Eastern Areas		1,838
(*iv*) AYUSH	225	922
I. Centre's Total	**8,438**	**22,025**
II. States Total	**20,980**	**43,849**
III. Centre + States Total	**29,418**	**65,874**
Population (crores)	107.9	117.0
Per capita health allocation (Nominal) ₹	272.6	563
Per capita health allocation (Real) ₹	228.1	229
GDP at current prices (₹ crores)	28,43,897	59,60,661
Health Allocation as % of GDP	1.03	1.10

Source: Peter Berman and Rajeev Ahuja, Government Health Expenditure in India, *Economic and Political Weekly*, June 28, 2008. Union Budget 2009-10. *Assumed given 7 percent growth and inflation at 7 percent,

State Finances: Analysis of Budgets 2009-10.

Centre's public health spending is broadly classified into NRHM and non-NRHM expenditure with the latter including expenditure on secretariat, health, international co-operation, provision for North Eastern States and AYUSH. To this is added State health expenditure to arrive at a total of Centre and States expenditure.

Data for 2004-05 to 2009-10 reveals that total health expenditure as a percentage of GDP has increased form 1.03% in 2004-05 to 1.10% in 2009-10. This is not a significant development, and we are still way behind the goal set by the Eleventh Plan to raise it a level of 2.3% of GDP by 2011-12. But the same is not reflected by the actual data. Per capita real expenditure is almost constant, so is the public health expenditure as percent of GDP.

Clean Drinking Water and Sanitation

Clean drinking water is a vital necessity because unsafe drinking water increases the risk of diseases and malnutrition. Moreover, water-borne diseases produce adverse effect on health.

In 2005, out of a total of 14.22 lakh habitations, in rural areas, 13.8 lakhs (97.0%) were fully covered with water supply. Unfortunately, 1.66 lakh habitations (11.7%) have slipped back to a position where people do not have adequate water and have to travel more than 2 kms. to fetch drinking water – a basic necessity of life. Similarly, 1.86 lakhs (13.1%) have to depend on contaminated water supply, which results in various health problems.

According to World Development Indicators (2008), access to improved water source was available to 86% of the population in 2004.

Lack of sanitation is directly responsible for several water-borne diseases. Rural sanitation coverage was 1% in the 1980s. With the launch of the Central Rural Sanitation Programme, the coverage improved to 4% in 1998 and to 22% in 2001. It is now believed that unless 100% coverage is achieved, rural health indicators will not show sufficient decline. So a massive programme of sanitation improvement has to be launched to achieve the goal of 100% rural sanitation. For this purpose, the agency of Village and Health Sanitation Committees under NRHM can provide significant assistance.

According to World Bank, 33% of the population in India had access to improved sanitation facilities in 2004 as against only 14% in 1990. In comparison, the figure for Malaysia was 94%, Philippines 72%, Pakistan 59% and Indonesia 55%. Several developing countries have a much better record on sanitation. There is a need to make a concerted effort in this regard.

Overall Health Status of India's Population

Although India has achieved significant improvement in various health indicators like life expectancy, infant and maternal mortality rate, yet countries in similar stage of development as China, Indonesia and Sri Lanka performed much better. During 2002-04, 20% of its population was malnourished and 47.9% of its children under age 5 years suffered from malnutrition.

42.6 million persons lived in slums in urban areas, accounting for 15% of urban population. Lack of sanitation and poor quality of drinking water leads to high incidence of diseases among slum dwellers.

Although India has developed a huge infrastructure of 1.45 lakh sub-centres, 22,670 primary health centres and 3,910 community health centres, yet due to shortage of staff and in adequate diagnostic equipment, rural population has to approach towns and city hospitals for treatment.

In recent years, as against public hospitals, private hospitals are growing at a faster rate and in 2004-05, about 58% cases for treatment approached private hospitals in rural areas, and the figure of urban areas was higher at 62%. Despite high cost in private hospitals about 3 times as compared with public hospitals, people prefer private hospitals.

National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM) are the two major initiatives to help the poor in the availability of health facilities.

In secondary and tertiary health care, both public and private sector are involved, but the system is overloaded due to shortage of primary health care facilities in rural areas especially.

Household expenditure on health is 6.1% of total household expenditure in urban areas and 4.9% in urban areas. Out of this, the share of expenditure on drugs is 77% in rural areas and 69% in urban areas. The poor are the worst affected because they are frequently affected by diseases and are least able to purchase and utilize the health services and the drugs. There is a need to set up mechanisms so that at least essential drugs are made available at affordable prices.

Eleventh Plan enthusiastically recommends public-private partnerships, but experience shows that the private sector which operates with an eye on profits, cannot redress the concerns of the poor, except such experiments where private sector is motivated by a charitable and social purpose.

There is a need to extend health insurance for workers in the unorganized sector so that the weakest sections of the labour force are provided assured benefits in the form of insurance cover and thus can be saved from falling into poverty trap, because periods of prolonged illness result in fall of incomes but rapid rise of expenditure.

Combined expenditure of Centre and State government declined from 1.01% of GDP in to 0.99% in 2003-04. However, it has improved to 1.13% in 2006-07. There is a need to raise it further to 2.3 percent during the Eleventh Plan so that it can serve the ends of social justice in a more effective manner.

There is a need to provide clean drinking water and sanitation especially in slums and backward and remote rural regions so that they do not carry water-borne diseases. India's record on sanitation is very poor since only 33% India's population has access to improved sanitation.

Nanda A.R. and Almas Ali conclude their survey on health issues and challenges: "Detailed analysis of the NSS data shows that untreated illness among the poor has clearly increased due to financial constraints. Inequality as measured by figures of household consumption expenditure group appear to have worsened, and the divide between the rich and poor in terms of untreated illness and expenditure on health services, as well as their use of both public and private health care institutions, has grown. The rich are now the major users not only of private but also of public hospitals. Increased drug costs and rising fees for different health services in both public and private sector seems to have played a major role in this."[8] This is the major challenge for reproductive health agenda.

Our achievements on health indicators are encouraging, but we have miles to go before we sleep.

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PART II

PLANNING AND ECONOMIC DEVELOPMENT

- Objectives and Strategy of Economic Planning
- Industrial Policy and Indian Planning
- Public Sector and Indian Planning
- Disinvestment of Public Enterprises
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CHAPTER

10

OBJECTIVES AND STRATEGY OF ECONOMIC PLANNING IN INDIA

"Industrialisation produces steel, it produces power. They are the base. Once you have got the base, it is easy to build. The strategy governing planning in India is to industrialise and that means the basic industries being given the first place."

– Jawaharlal Nehru

Historical Review of Planning

The Indian National Congress, under the inspiration of Jawaharlal Nehru, set up the National Planning National Planning Committee (NPC) towards the end of 1938. The Committee produced a series of studies on different subjects concerned with economic development. The Committee laid down that the State should own or control all key industries and services, mineral resources and railways, waterways, shipping and other public utilities and, in fact, all those large-scale industries which were likely to become monopolistic in character.

Besides the National Planning Committee (NPC), eight leading industrialists of India conceived "A Plan of Economic Development" which was popularly known as the Bombay Plan. There was also a Gandhian Plan which was prepared by Shriman Narayan. The world-famous revolutionary M. N. Roy formulated the People's Plan. All these plans were only of historical importance because they were just paper plans which were never implemented. But they stimulated thinking about the various aspects of planning in India.

Just after the attainment of Independence the Prime Minister Nehru set up the Planning Commission in 1950 to assess the country's needs of material capital and human resources and to formulate economic plans for their more balanced and effective utilisation. The First Five-Year Plan commenced in 1950-51 and it was followed by a series of Five-Year Plans.

1. OBJECTIVES OF ECONOMIC PLANNING IN INDIA

The Directive Principles of our Constitution laid down : "The State shall, in particular, direct its policy towards securing--(a) that citizens, men and women equally, have the right to an adequate means of livelihood : (b) that the ownership and control of the resources of the community are so distributed as best to subserve the common good : (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment." The Directive Principles of the Indian Constitution are, thus, an expression of the will of the people of India for rapid economic growth. Accordingly, the Government of India adopted planning as a means of fostering economic development. The Planning Commission set out the following four long term objectives of

Planning:

(i) to increase production to the maximum possible extent so as to achieve higher level of national and per capita income;

(ii) to achieve full employment;

(iii) to reduce inequalities of income and wealth; and

(iv) to set up a socialist society based on equality and justice and absence of exploitation.

The First Five-Year Plan expressed clearly the long-term objectives or goals of economic planning in India as follows : "Maximum production and full employment, the attainment of economic equality or social justice which constitute the accepted objectives of planning under present day conditions are not really so many different ideas but a series of related aims which the country must work for. None of these objectives can be pursued to the exclusion of others, a plan of development must place balanced emphasis on all of these."[1]

In his book *"Planning and the Poor"*, B.S. Minhas a former member of the Indian Planning Commission states : "Securing rapid economic growth and expansion of employment, reduction of disparities in income and wealth, prevention of concentration of economic power, and creation of the values and attitudes of a free and equal society have been among the objectives of all our plans."[2]

We may discuss the above socio-economic objectives under the headings of (a) Economic planning and removal of poverty, and (b) Economic planning and social change.

A. Economic Planning and Removal of Poverty

Rapid economic growth. The basic aim of economic planning in India is to bring about rapid economic growth through development of agriculture, industry, power, transport and communications, and all other sectors of the economy. *The basic measure of economic growth of a country is the continuous expansion, year after year, of real national income and real per capita income. Economic growth, should also include improvements in quality of life consisting of life expectancy, infant mortality, literacy, etc.* A little consideration will show that all these indicators of development are inter-related in the sense that expansion of real national income is the basis for increase in per capita income and also improvement in the quality of life. For a poor country such as India with a large mass of people steeped in poverty and misery, increase in national income by itself is not enough-instead, consistent increase in per capita income over a period, alongwith improvement in quality of life is the yardstick to judge the economic development of India.

Indian planners aimed at increasing national and per capita incomes on the assumption that the continuous increase in these incomes would reduce and eventually remove poverty and misery and raise the standard of living of the masses. But when our planners found that increase in national income was not accompanied by reduction of poverty in the country, the objective of planning from the Fourth Plan onwards was not simply economic growth but raising the standard of living of those who have been living in abject poverty for generations, nay, for centuries. According to the Fourth Five-Year Plan, "the basic goal is a rapid increase in the standard of living of the people", and again" emphasis is placed on the common man, the weaker sections and the less privileged." In fact, the slogans of *"garibi hatao"* (Removal of poverty) and *"growth with justice"* were coined during the early 1970's to indicate clearly that the emphasis would be on removal of poverty and not simply on increase in national income.

Increase in employment. Unemployment and under-employment are important causes of poverty in India. Hence, from the very beginning, removal of unemployment and underemployment has been an important objective of economic planning in the country. The Planning Commission has all along assumed that increase in investment would be accompanied by increase in employment as well as increase in national income of the country. The Commission argued explicitly in the Third Plan that as national income increased in response to investment and development outlay, the demand for labour would automatically rise and more employment would the created.

At the same time, the removal of unemployment would result in increase in gross national product and standard of living of people on the other. Accordingly all the Five Year Plans had programmes of economic growth, with increase in employment as inherent in the development programmes.

Even though employment has been mentioned as one of the objectives of economic planning in all our Five-Year Plans, it has never been accorded a high priority. In no plan, do we find separate employment plans framed for each one of the sectors and regions, so as to boost employment on the one side and national income on the other. This explains why unemployment has increased over the years. For the first time, the Planning Commission admitted in the Janata Party Sixth Plan (1978-83) the possibilities of real conflict between employment and economic growth and accorded employment a pride of place in the Plan. However, in the Sixth Plan (1980-85) which was finally accepted and implemented by the Congress Party, the main focus

1. Planning Commission, *The First Five-Year Plan*, p. 28.

2. B.S. Minhas, *Planning and the Poor*, p. vii.

reverted to the traditional growth approach, with the usual assumption that employment would increase with rise in investment, irrespective of choice of techniques. Thus, not a single plan has been framed keeping employment generation as a primary objective and only lip service was paid to the achievement of full employment goal.

B. Economic Planning and Social Justice

In an unplanned society, various types of retrogressive forces operate, such as inequalities of income, poverty, absence of equal opportunities for progress, etc. India's economic plans made conscious effort to remove all these retrogressive forces and foster social as well as individual development. Reduction of inequalities of income and the establishment of a socialist society create conditions in which everyone will have equal opportunities in the matter of education and employment. Besides, there will be no concentration of economic power and exploitation of one individual by another.

Reduction of inequality of incomes. A very small group of persons in India are better-off and have not experienced poverty and misery. These are rich landlords in the countryside, merchants, industrialists, bankers, top officials of the Government, etc. The vast majority of people are, however, very poor because their income is very low. Extreme inequalities of income and wealth in India have their roots in the traditional social formation and necessarily, therefore, the reduction of inequalities of income and wealth would be possible only through abolishing the semifeudal relations of production in our villages. The Planning Commission outlined such measures as the removal of all intermediaries and the ceiling on landholding for reduction of inequalities of wealth and income in rural areas.

Another aspect of inequalities of income in India is the large disparities between rural and urban incomes which are bound to be accentuated over the years with industrialisation and economic growth. The Planning Commission has suggested measures to raise agricultural productivity, development of agro-based industries, fair price to farmers for their products, etc.

Even though reduction of income inequalities has always been mentioned as one of the objectives in all the plans, in terms of priority this objective invariably got a very low position. This could possibly be so because Nehru, the architect of Indian planning, did not believe that the problem of economic inequalities of income and wealth could ever be solved merely by redistribution. The Fourth Plan stated clearly: "In a rich country, greater equality could be achieved in part by transfer of income through fiscal, pricing and other policies. No significant results can be achieved through such measures in a poor country ..."[3]

Establishment of a Socialist Society. Finally, the Indian planners visualised the establishment of a socialist society in which everyone would have equal opportunities in the matter of education, occupation, etc. Wealth would be distributed equally and there would be no concentration of economic power in the hands of a few individuals or families. Above all, there would be no scope for exploitation of man by man. The first three plans talked of the setting up of a "socialist pattern of society" or "development along socialist lines". The Fourth Plan talked about the "establishment of a social and economic democracy". It stated: "The broad objectives of planning could thus be defined as rapid economic development accompanied by continuous progress towards equality and social justice and the establishment of a social and economic democracy".[4]

But the definition of economic democracy as given by the Indian planners is different from what is commonly understood elsewhere. In affluent economies where abysmal poverty has been eliminated, economic democracy is almost the same as a free market economy. ***In India, however, the broad definition of economic democracy is the availability of opportunities for education, public health and sanitation, drinking water supply, etc., for large masses of people, irrespective of whether they are rich or poor.***

After the initiation of the Liberalisation, Privatisation and Globalisation model of growth in 1991, these objective have been completely abandoned at the altar of market forces.

An evaluation of the long-term objectives of Planning

On paper, the long-term objectives of Indian planning appear to be perfectly sound and worth achieving. While the first two are economic objectives and relate to increase in income and employment, the last two are social objectives and relate to the distribution of wealth and income and the establishment of an egalitarian society in the country. But these two sets of objectives obviously conflict with each other. For instance, the objective of rapid economic growth based on heavy investment and development of capital-intensive production could raise national income but was bound to lead to concentration of wealth and income and accentuation of income disparities.

3. Planning Commission, *Fourth Five-Year Plan*, p. 15.
4. Planning Commission, *Fourth Five-Year Plan*, p. 11.

In practice, only the first objective viz., rapid economic development was given real importance in all the plans and the other objectives were either underplayed or simply neglected. We had earlier indicated how even the employment objective was not given much importance in the plans, since the rate of saving was considered inadequate to match the rate of investment required for providing employment to everyone. Rapid economic growth implied the choice of capital-intensive techniques which generated surplus for rapid growth but this obviously hampered creation of new jobs on the one hand and accentuated inequalities of income and wealth on the other. It was this pre-occupation with the first objective of rapid economic growth which prevented the Indian planners from opting for labour-intensive techniques which would have created extensive employment opportunities.

The Indian planners assumed all along that if the country achieved rapid economic progress and increase in production, it would be possible to bring about a better distribution of income and a higher standard of living for all, over a period of time. The Fourth Plan document which carried the imprint of Professor D.R. Gadgil, stated : "To some extent, income disparities can be reduced through fiscal measures aiming at reduction of income at the top level; but for us it is important to lay far greater stress on positive steps for ameliorating the conditions of poor people through planned economic development. In a rich country, greater equality could be achieved in part by transfer of income through fiscal, pricing and other policies. No significant result can be achieved through such measures in a poor country, where whatever surpluses can be mobilised from the higher incomes of rich classes are needed for investment in the economy to lay the basis for larger consumption in the future."[5]

Thus, India's Five Year Plans had always given the highest priority to economic growth and all other objectives were given only lip-service and thus ignored.

2. DEMOCRATIC SOCIALISM IN INDIA

Development of the Idea

The theoretial basis of socialism was provided by Karl Marx and Frederick Engels who believed that to end exploitation from the world, it was necessary to abolish private ownership of the means of production. Marx and Engels considered private property to be the cause of all social and economic evils. Following the ideas of Marx and Engels economic planning based on total nationalisation was adopted as the means to foster economic growth in Soviet Russia. For the first time in the history of mankind, the Soviet Government made a concerted effort to end poverty, hunger and unemployment according to a carefully prepared economic plan. The success of the plans in the initial years and the rate at which Soviet Russia industrialised itself rapidly since 1928 was a great inspiration to many under-developed countries. But the high rate of growth in Soviet Russia was accompanied by enormous human sacrifice in the form of liquidation of countless millions of people-branded as "enemies of socialism" and brutal suppression of individual freedom.

The tremendous progress achieved by the Soviet Union had an impact on the capitalist countries of the world also. The Great Depression of 1929-33 destroyed people's faith in the operation of price-mechanism as an automatic self-adjusting mechanism. Keynes' book *The End of Laissez Faire* and his public works programme made a tremendous and epoch-making influence in abandoning non-interventionism and setting in an era of positive role of the state in the economic and social life of the people. Although the capitalist governments did not lose faith in private property and individual freedom, yet they were convinced that the government could play an effective role in reducing and eventually removing poverty, misery, unemployment and ignorance.

When India became independent, the Indian people were steeped in mass poverty, unemployment and underemployment. India had an illiterate and untrained labour force, static agriculture with semi-feudal relations and a comparatively less developed industrial sector, and woefully inadequate infrastructure in the form of poor transportation and communication, energy and power, banking and finance, etc. Thus, India's problems required a big national effort and therefore India adopted "planning as a lever of social and economic change." Jawaharlal Nehru, the architect of Indian planning, greatly admired the achievements of Soviet planning and so borrowed the concept of socialism from the Russians but, he also regarded the democratic values of the capitalist society as indispensable for the full growth of a just society. Thus, in his endeavour to take advantage of the virtues of the two extreme societies which were themselves also undergoing a transformation, Nehru's vision of the new India was described as "democratic socialism."

Socialism and democracy are the means for the creation of a society in India in which all have equal opportunities to education, health care, employment etc; and exploitation of one class by another is abolished. To foster free and fuller growth of human personality is the supreme goal of democratic socialism. If poverty, inequalities of income and wealth are conceived of as obstacles to the realisation of this supreme goal, then it is equally true that the absence of democracy is also an impediment to the realisation

5. Planning Commission, *Fourth Five year Plan*, P.15.

of this supreme goal. It is, therefore, of vital significance to reconcile the ideas of socialism and democracy so as to evolve a new pattern of society in which man can realise his self or his innate nature in a fuller manner, as also attain a higher standard of material comfort.

The disintegration of Soviet Russia and political and economic upheavals in other East European Socialist countries resulting in the introduction of market-based economies have proved that the vision of Nehru was conceived of a holistic approach to development, rather than having a bias only in favour of economic forces, neglecting the urge for freedom and democracy as a part of the development process. India too has been liberalising its economy, reducing government controls and regulations, but, at the same time, not throwing overboard the Nehruvian ideology of democratic process of dialogue and consensus.

Features of Democratic Socialism

The philosophy of democratic socialism is based on a total vision of society. It implies that material prosperity alone cannot make human life rich and meaningful. Alongwith the provision of a higher standard of material comfort and well-being, it is imperative that all citizens should have equal opportunities wherein ethical and spiritual values needed for the enrichment of the individual and the communal life can be developed. The Fourth Plan memorandum, in this context stressed the need "for establishing a progressive and rapidly growing economy based on high levels of productivity, the application of science and technology and the use of manpower resources, and a truly democratic and socialist society in which the burdens and the benefits are widely and justly shared."[6] Thus, along with proposals for maximising production, a programme of action towards reducing economic and social disparities, ensuring a national minimum to the people is an integral part of this philosophy. The principal features of democratic socialism are as follows :-

(i) Faith in democratic values for the enrichment of the individual and communal life. The concept of democratic socialism as conceived in India believes in democratic values for the enrichment of the individual and communal life. The adjective 'democratic' before socialism sharply distinguishes it from the socialism practised in totalitarian economies. Only a democratic society provides adequate opportunities to the individual for self-expression.

(ii) A socialist society aims at the removal of poverty and the provision of a national minimum. Socialism can have meaning to the poverty-stricken masses only if it can assure the provision of basic needs of every individual and can guarantee in the near future a national minimum in respect of food, clothing, shelter, medical aid and education. The provision of a national minimum was incorporated as one of the goals of the Fourth Plan and of the successive five year plans.

(iii) A socialist economy aims at the reduction of inequalities of income and wealth. Socialism is essentially a movement for redistribution of income in favour of the labouring classes of the society. Unless the share of labour in national income improves significantly, socialism can have no meaning to the masses. The growth of trade union pressure does help to improve the share of labour but trade unions do not exist in such sectors as agriculture and cottage and small-scale industries. Consequently, in a planned economy it is essential to lay down a policy to bring about reduction of inequalities of income and wealth. The Second Five-Year Plan observed : "The process of reducing inequalities is a two-fold one. It must raise incomes at the lowest level and it must simultaneously reduce incomes at the top. The former is, basically, the more important aspect, but early and purposeful action in regard to the second aspect is also called for."[7]

(iv) A socialist economy aims at the provision of equal opportunities to all. All citizens irrespective of caste, class or birth should enjoy equality of opportunity. One of the basic conditions for equality of opportunity and for achieving a national minimum is the provision of gainful employment for every able-bodied citizen. The problem of unemployment in India is on account of fundamental deficiencies in the Indian economic structure. The most important deficiency is the failure of the Indian economy to raise investment to a level adequate for full employment. This calls forth a great sacrifice on the part of the community. Besides this, due to excessive pressure of population on land, under-employment exists in the rural areas. The unemployed rural labour moves continuously to urban areas creating heavy congestion, squalor and misery. In order that the country's human resources are utilised to the full, expansion of industries is essential to increase the absorptive capacity of the economy. In addition to this, a largescale programme of rural works in densely populated areas and for periods of under-employment during slack seasons is of vital significance to provide continuous work to the rural labour force.

To help the less privileged classes, it is necessary that expansion of facilities of education takes place and that every child is able to pursue a course of education most suitable for his ability and intelligence. Provision of free and universal education at the primary stage, extension of opportunities for technical and higher education, the liberal grant of scholarships to the weaker sec-

6. Planning Commission, *Memorandum on the Fourth Five Year Plan*, p. 94.

7. Planning Commission, *Second Five Year Plan*, p. 38

tions and other forms of aid can go a long way in removing the disadvantages caused by birth.

(v) Faith in a mixed economy. The philosophy of democratic socialism does not consider the total abolition of private property as desirable or necessary. Only when private ownership comes into serious conflict with common good, it should be either replaced by public ownership or by a suitable form of co-operative ownership. The relative roles of the public and private sectors in a developing country have been outlined in the Second Five-Year Plan in the following words : "In a growing economy which gets increasingly diversified, there is scope for both the public and the private sectors to expand simultaneously, but it is inevitable, if development is to proceed at the pace envisaged and to contribute effectively to the attainment of the larger social ends in view, that the public sector must grow up not only absolutely but also relatively to the private sector."[8]

However, the leading role of the public sector in ecomic development in not accepted in the era of liberalisation and globalisation in the Indian economy.

(vi) A Socialist economy endeavours to check concentration of economic power and the growth of monopolistic tendencies. The growth of largescale industrial units is responsible to a great extent in the emergence of monopolistic tendencies, and as a result, new entrepreneurs find it impossible to enter such industries. Moreover, the concentration of economic power in the hands of a few individuals is the very negation of the principles of socialism. It is, therefore, essential to devise ways and means to counteract the growth of monopolistic combinations through (a) extension of the public sector into fields requiring the establishment of large-scale units and heavy investments; (b) widening of opportunities for new entrants (c) setting up of medium and small-sized units as well as industries organised on co-operative lines and (d) effective exercise of Government powers of control and regulation and use of appropriate fiscal measures. "The object, briefly must be not merely to prevent concentration of economic power and the growth of monopolistic tendencies, but also to promote a pattern of industrial organisation which will lead to high levels of productivity and give full scope, within the framework of national planning, to new entrepreneurs, to medium and small-scale enterprises and to co-operative organs."[9]

(vii) The basic criterion of economic decisions in a socialist economy is not private profit but social gain. The Second Plan states : "Essentially, this means that the basic criterion for determining the lines of advance must not be private profit but social gain, and that the pattern of development and the structure of socio-economic relations be so planned that they result not only in appreciable increase in national income and employment but also greater equality in incomes and wealth. Major decisions regarding production, distribution, consumption and investment--and in fact all significant socio-economic relationships--must be made by agencies informed by social purpose."[10] In a mixed economy where the public and the private sectors have both to play a part in economic development, the criteria of public investment take a more comprehensive view of the requirements of the economy, but in the private sector the decisions about investment are made by considerations of costs and returns. It is therefore, necessary that appropriate economic policies be developed so that investments in the private sector, too, broadly conform to the social pattern conceived in the plan. The Second Five-Year Plan states : "There are, broadly speaking, two types of techniques through which the objectives in view have to be attained. Firstly, there is the overall regulation of economic activity, through fiscal and monetary policy, and, secondly, there are devices like export and import controls, licensing of industries or trades, price controls and allocations which influence and regulate economic activity, in particular sectors, or sub-sectors of the economy."[11]

Conclusion. The process of planned economic development while preserving the institutions of democracy and private enterprise is a complex and difficult one. It is only a courageous and purposive leadership which can create conditions suitable for rapid economic growth and at the same time retain the institutions of a vibrant democrary. The contradictions inherent in the mixed capitalist enterprise system hinder the achievement of the goals of economic planning. The process of economic development can move smoothly if the roles of the private, public and co-operative sectors, are clearly defined and also if efforts are made to implement plan programmes effectively.

3. MIXED ECONOMY AND ECONOMIC PLANNING

Evolution of the Concept of Mixed Economy

Mixed economy is the outcome of the compromise between the two diametrically opposite schools of thought--the one which champions the cause of *capitalism* and the other which strongly pleads for the socialisation of all the means of production and of the control of the entire economy by the state. The economic development of U.K., USA and

8. *Planning commission, Second Five Year Plan P.33.*
9. *Third Five-Year Plan*, p. 14.
10. *Second Five-Year Plan*, p. 22.
11. *Ibid.*, p. 38.

many free nations of Europe and America was due to private enterprise. This explains why in the writings of the 18th and 19th century economists, the concept of mixed economy finds no mention, since in those days, economic liberty and non-interference of the state in economic affairs were cardinal principles. According to the English classical and neo-classical economists, the economic system worked smoothly and what was most profitable for the individual, was also most conducive to the economic welfare of the community at large. Perfect harmony in the economic system could be achieved through the acceptance of the invisible hand of self-interest and the use of market forces of demand and supply.

Karl Marx believed that the capitalist economy allowed a few powerful industrialists and traders to exploit the vast majority of workers. Marx advocated socialization of all the means of production and wanted the state to direct the economy. He would have no private enterprise system based on self-interest, private property, market forces of demand and supply and maximization of profit for the individual. The rise of communist regimes in USSR in 1917 and eastern European countries, Communist China, Vietnam, Cuba etc., later was the direct consequence of the impact of Marxist ideas.

While Karl Marx was laying the foundations of a socialist system, the capitalist system failed to respond to the needs of the people during the great depression of the 1930's and thus opened the eyes of the economists and statesmen to its intrinsic weaknesses. Lord Keynes wrote in 1926 : "The world is not so governed from above that, private and social interests always coincide . . . . It is not a correct deduction from the principles of economics that enlightened self-interest always operates in the public interest. Nor is it true that self-interest is generally enlightened."[12] Keynes was proved correct when the Great Depresssion of the 1930's showed the hollowness of the classical claim of the smooth working of the economic system.

As a direct reaction to the failure of the old capitalist order, the socialist economy was advocated as an alternative system. It was maintained that complete socialization of the means of production and state direction of production and distribution would be the ideal solution to the pressing problems of the contemporary society.

Keynes, however, thought that capitalism, shorn of some of its defects, was an admirable system as it helps to promote competition and efficiency in production. At the same time, socialism of the authoritarian type would spell death to individual freedom, both economic and political. But state control and direction was inevitable in the modern complex society. A compromise was, therefore, necessary between the high degree of state intervention and participation in the socialist economy on the one side and free enterprise capitalist economy based on market forces on the other. It was from these ideas of Keynes that the concept of mixed economy was evolved.

India as a Mixed Economy

India is regarded as a good example of a mixed economy. Under the Directive Principles of the Indian Constitution, it has been laid down that the State should strive "to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of national life."

The positive economic role of the State. In the economic sphere, the State is to direct its policy to secure a better distribution of ownership and control of the material resources of the community and to prevent concentration of wealth in the hands of a few and the exploitation of labour. It would be impossible for the State to attain these ends implied in the directive principles unless the State itself enters the fields of production and distribution. This explains the rationale behind the deliberate policy of expansion of the public sector to promote rapid industrialisation and self-reliance. To protect the weaker sections, the State is also expected to control the distribution of essential commodities.

Similarly, by controlling the financial system, viz. insurance and banking, the State can endeavour to direct investment in socially desirable channels. Besides, in a poor and under-developed country like India, market forces based on profit motive cannot, by themselves, induce the private sector to move into infrastructural development (which involve heavy capital investment, long gestation period, low rate of return, etc.). Accordingly, the State has to promote infrastructural facilities like hydro-electric projects, irrigation, road and railway transport, and has to create conditions conducive to a higher level of investment so that national and per capita incomes of the people can be improved continuously. This was an important reason for the creation and dominance of the public sector in India during the first three decades of planning.

Co-existence of public and private sectors. In India, the State demarcated the areas for the promotion of industries in the public and the private sectors. This division was specified in the Industrial Policy Resolution of 1956. In the first category were included such industries whose development would be the exclusive responsibility of the State. In the second category were included such industries which would be progressively state-owned, but the private sector may be permitted to supplement the efforts of the state. In both these categories the State wanted to deliberately push the expansion of the public sector with a view to develop industries of basic importance to the economy, defence and heavy

12. J. M. Keynes, *The End of Laissez faire*.

industries, to rid the country from foreign dependence and infrastructural industries to provide water, energy and transport to create conditions favourable for investment in agriculture and industry. The nationalisation of major commercial banks in 1969 was another big step to channelise investment in socially desirable lines of production.

Although the public sector was conceived of as a senior partner in the process of economic development in India, the private sector was to be permitted to exist and supplement the efforts of the public sector within the overall framework laid down for the economy. The Planning Commission stated this objective clearly : "In a planned economy, the distinction between the public and the private sector is one of relative emphasis. The two sectors are and must function as parts of a single organism."

Combined features of capitalism and socialism. The mixed economy has the salient features of capitalism and of socialism very clearly and cleverly incorporated. For instance, the private sector industries are based on self-interest and profit motive. Individual initiative is given full scope and the system of private property is respected. Individual freedom and competition are allowed to exist. At the same time, it is not free or *laissez faire* capitalism but is controlled capitalism since free enterprise and initiative, the driving forces of self-interest and profit motive and the system of private property are all limited in the interest of society. On the other hand, the public sector industries are managed and operated on the basis of welfare of the community. The advantages of planning and relative equality of incomes are thus sought to be harmonised with the advantages of private initiative and profit motive.

In India, therefore, the State is pledged to the establishment of a socialist order of society in which the present glaring inequalities of wealth are sought to be reduced to the minimum. At the same time, the State would not eliminate the system of private enterprise, which, inspite of many shortcomings and obvious handicaps, has been doing a good job in the field of production and growth. The mixed economy, therefore, is the result of India's commitment to democracy and also to socialism.

Planning process in a mixed economy

A mixed economy is necessarily a planned economy. The public sector will have to be operated according to certain priorities and to achieve certain specified social and economic goals. Accordingly the public sector has to have an economic plan to guide it. At the same time, the government cannot leave the private sector to develop in its own unorganised manner. Naturally, the Government will have to prepare an integrated economic plan in which the private sector will also have a well-defined role. The state will guide, direct and control the private sector through various incentives.

Since mixed economy operates under the divergent and often conflicting set of motivations, the planning process in a mixed economy is much more complex. The conflicting motivations are those of self-interest on the one hand and social gain on the other. The purpose of economic planning in a mixed economy is to reconcile the conflicting interests so that they subserve the national interest. Accordingly, the success of planning in a mixed economy depends upon the following factors :

(i) To what extent is the public sector able to pursue the socially determined goals ?

(ii) To what extent is the State able to guide the private sector to follow the socially determined goals ? and,

(iii) To what extent is the State able to check the distortions in investment decisions arising out of private sector interests going against overall objectives of the economy.

The Government has been making efforts through a variety of social instruments and measures so that economic activity in India is directed towards the attainment of the long-term socio-economic objectives of planning. The major steps taken in this regard are as under :

(a) The State allocated a very significant proportion of the plan outlays to promote defence, heavy and basic industries. Most of these industries were not developed during the British period. The deliberate promotion of these industries resulted in the creation of an industrial base in the Indian economy.

(b) The State has also been allocating a substantial portion of investment for the creation of economic infrastructure in the form of irrigation works, hydro-electric projects, roads, railways, posts and telegraphs, shipping and air transport. Substantial expansion of the economic infrastructure has been made and this has helped in enlarging the size of the market, has raised the possibilities of attaining higher productivity in agriculture and industry and has enlarged the scope for further productive investment.

(c) The State has been undertaking investment in social infrastructure in the form of educational institutions, dispensaries and hospitals and other institutions of social welfare for the disabled, orphans and other deprived sections with a view to create better human capital necessary for promoting development.

(d) The State acquired a dominant control over financial institutions. Life insurance was nationalised. The banking system was progressively brought under state ownership and control. The principal purpose of controlling the financial institutions was to direct investment in priority areas, mainly to help rural and backward areas and the weaker sections of the society.

(e) The State has been using rationing and controls to check the prices of articles of essential consumption so that their availability to the weaker sections is ensured at reasonable prices. The main purpose of these instruments is to protect the weaker sections from the exploitation of the businessmen.

(f) The State has been undertaking special programmes to help the education and training of the socially backward scheduled castes and tribes, and other backward classes and economically weaker sections so that (i) they can secure better employment in life and (ii) they can be provided equal opportunities for development. These measures, it must be admitted, have helped a large number of children born in poor families to acquire vertical mobility.

(g) The State has been using the instruments of taxation and public expenditure – use of fiscal policy so that resources are transferred from the richer sections to be used for the welfare of the poor.

Distortions in the planning process

The experiment of mixed economy in India has been carried on for over six decades now. Both Central and State Governments in India set up several public sector enterprises in many lines of production, trade and finance. In some cases, successful private sector units were nationalised (insurance companies and banks by the Central Government and road transport systems by the State Governments). Often sick private units were taken over by the Government (e.g. textiles mills and engineering units). Many states set up public sector enterprises just to accommodate party legislators as chairmen to provide them with ministerial status and perquisites. In general, a good numbers of public sector enterprises in India have been running inefficiently involving huge losses to the Government and ultimately to the tax-payers. As in the case of erstwhile Soviet Russia and East European communist countries, the public sector enterprises wasted precious resources and, therefore, came in for sharp criticism from the general public.

Further, the private sector has been constantly and incessantly trying to evade and, in many ways, distort the planning process. The private sector has corrupted the bureaucracy and the politicians-in-power. Consequently relaxations in plan priorities were permitted. The Subimal Dutt Committee revealed that the Government has permitted the private sector to set up industrial units in areas reserved for the public sector. Similarly, while imports were to be permitted in areas of sophisticated technology, they were permitted in areas of low priority under one pretext or the other. The profit motive and the acquisitive spirit of the private sector on the one side and the inefficiency of the public sector on the other have resulted in serious distortions in the planning process.

The upshot of the above analysis is that, whether investment is made in the public sector or the private sector, the major beneficiaries of growth have been the big business houses, the big traders and the landlords and the relatively better off sections of the society. These are the inherent contradictions of the mixed economy.

After the adoption of liberalisation, privatisation and globalisation or the LPG model of development. several decisions were taken which reverred the earlier policies:

(a) Private sector has been permitted in banking and insurance. ICICI Bank is now the second largest bank in the country. Foreign banks also find a place in the banking system. These banks work on the principle of profit motive and would not pursue social and economic policies as laid down by state from time to time. The share of the private sector in insurance is also growing.

(b) The emphasis in development policies has shifted in pushing the rate of GDP growth, but the percolation of the benefits of growth down to help weaker sections has been relegated to take a back seat. This explains the hard reality that with GDP growth reaching a level of over 7 percent during the last decade, the rate of poverty reduction has slowed down.

(c) The employment objective in treated as a corollary of the growth objective. However, as fact stare us in the face increase in employment has taken place only in the unorganised sector, but the fast growing corporate sector has shown near zero growth of employment.

(d) The objetive of reducing inequalities is conspicous by its absence in the growth process. Inequalities between rural and urban sectors have widened. Similarly, the inequalities between the better off sections and the poor have become much wider.

(e) Although the rate of investment has reached a level of 35-36 percent of GDP, yet it has not been able to take care of unemployment and underemployment.

(f) Instead of the public sector, the private sector has become the engine of growth. But experience of its working shows that the private sector is interested in areas of high profit. Consequently, public sector has to undertake investment in physical and social infrastructure.

The only redeeming feature is the existence of parliamentary democracy Institutions of democracy, especially at the time of elections, force the political parties to talk about 'aam admi' (The common man) and also initiate measure to help the weaker sections of the society. This has resulted in some trickle down.

4. DEVELOPMENT STRATEGY IN INDIA

The basic objectives of our Five-Year Plans were "development along socialist lines to secure rapid economic growth and expansion of employment, reduction of disparities in income and wealth, prevention of concentration of economic power and creation of values and attitudes of a free and equal society." In order to achieve these objectives, the planners formulated a strategy of planned economic development.

Mahalanobis model of growth

It was only with the Second Plan that there was a clear enunciation of a strategy of development by Indian planners. Prof. P.C. Mahalanobis who was the real architect of the Second Plan, was responsible for introducing a clear strategy of development based on the Russian experience. This strategy emphasised investment in heavy industry to achieve industrialisation which was assumed to be the basic condition for rapid economic development. For Jawahar Lal Nehru, the first Prime Minister of India, the development of heavy industry was synonymous with industrialisation. He stated : "If we are to industrialise, it is of primary importance that we must have the heavy industries which build machines."[13] Again, "there are some who argue that we must not go in for heavy industry but for lighter ones. Of course, we have to have light industries also but it is not possible to industrialise the nation rapidly without concentrating on the basic industries which produce industrial machines which are utlised in industrial development."[14] Nehru was, thus, extremely forthright in pointing out that ***industrialisation meant development of heavy industries.*** The Plan frame of the Second Plan stated this, in unequivocal terms, as follows :

"In the long run, the rate of industrialisation and the growth of the national economy would depend upon the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals and heavy industries generally--which would increase the capacity for capital formation. One important aim is to make India independent as quickly as possible of foreign imports of producer goods so that the accumulation of capital would not be hampered by difficulties in securing supplies of essential producer goods from other countries. The heavy industry must, therefore, be expanded with all possible speed."[15]

Thus the core of the strategy adopted by Indian planners for the Second Plan and with minor modification for the subsequent three Plans (i.e. up to the Fifth Plan)--was rapid industrialisation through lumpy investment on heavy, basic and machine-building industries.

The Need for Rapid Industrialisation

The planners justified their strategy of rapid economic development through rapid industrialisation.

(a) At the time of Independence, India was essentially agrarian, though the country with its vast natural and human resources was ideally suited for industries. The planners felt that diversification of the use of resources would be in the interest of the country from the point of view of production, employment and defence. Resources should, therefore be applied more towards the development of industry rather than to agriculture.

(b) Indian agriculture was already suffering from heavy population pressure on land and productivity of labour on land was quite low--it was even thought that marginal productivity of labour on land might be zero and even be negative. One method of reducing this pressure of population on land and to raise agricultural productivity was to reduce the percentage of people living on land, and to shift the surplus population to industries. The setting up and expansion of the industrial sector was thus a necessary condition for raising the national product in general and for agricultural development in particular.

(c) Rapid industrialisation was an essential condition for the development of not only agriculture but also for all other sectors in the country. For instance, with the expansion of industries and the shifting of labour from rural to urban areas, the demand for foodgrains and agricultural raw materials (such as cotton, jute, oil seeds, etc.) would increase. At the same time, increased production and supply of fertilisers, pesticides, agricultural machinery, etc. would help in the expansion of agricultural production. With rapid industrialisation, and with rapid expansion of markets, there would be expansion in trade and commerce, in transportation, in banking and finance, etc.

(d) Productivity of labour is much higher in manufacturing than in agriculture. The growth rates are much higher in industry than in agriculture. Rapid

13. Nehru's speech in the Parliament on the Draft Outline of the Third Plan, on August 22, 1960.
14. Government of India, ***Problems in Third Plan, A Critical Miscellany***, pp. 34-35.
15. ***Second Five Year Plan--The Framework***.

increase in national and per capita income would be possible only through rapid industrialisation.

(e) The income elasticity of demand for industrial goods was much higher and export opportunities for manufactured goods were also high.

It was for all these reasons that industrialisation was emphasised by the Indian planners.

Heavy Industry Vs Light Industry

An important aspect of the investment strategy formulated by Professor Mahalanobis was the emphasis on heavy industries producing basic machines and basic metals. In other words, an increasing proportion of investment should be on machine-building industries. The Planning Commission supported this strategy for two reasons :

(a) Investment in the heavy industry helps the Indian economy to build up a larger volume of capital stock and at a faster rate.

(b) Heavy industries help to lay the foundation for a strong and self-reliant economy, partly through rapid expansion of all the sectors of the economy and partly by eliminating the dependence of the country on imports of essential machinery and equipment.

The Planning Commission rejected the alternative strategy of emphasising light industries producing consumption goods. True, this alternative approach would have the advantage of helping the Indian economy to produce a larger volume of consumption goods and this would have helped the people to have a higher standard of living in the short period and also combat inflationary pressures in the country. But this could be achieved by neglecting the accumulation of capital stock in the country. The Planning Commission rejected the short period availability of consumption goods in favour of production of capital goods which, in fact, would help, after a certain critical stage, to produce a larger volume of consumption goods. The capital goods approach based on the Russian experience, expected people to sacrifice in the short period in favour of a high level of living in the long period. Besides, this approach would enable the country to have a large volume of the capital goods in the short period and a large volume of both capital and consumption goods in the long period.

Implications of heavy industry strategy

The important implications of this strategy may be noted here.

Small scale industries and supply of consumer goods. The planners of the Nehru era were clear in their mind that the growth of heavy industries would be limited by the growth of consumer goods in the household sector. Naturally, they did not ignore or neglect the growth of small sector for instance, the Second Plan framework stated: "The greater the marketable surplus of consumer goods in the household or hand industries, the greater will be the possibilities of investments in heavy industries without any fear of inflation."[16]

For one thing, the growing population has to be fed and clothed; actually, the demand for consumer goods will increase with the growth of population. For another, increasing rate of investment on heavy industries with long gestation periods would be responsible for increase in money supply with the general public and in the absence of matching supply of consumer goods will result in inflationary pressures. The Nehru-Mahalanobis model, gave active encouragement to cottage and small industries producing consumer goods. It was asserted that the input-output ratio would be low in small-scale and cottage industries and the gestation period was also very short and obviously, the small sector was ideally suited to increase the supply of consumer goods. Besides, Professor Mahalanobis argued that the cost of production in the cottage and small sector need not be higher than that of the factory sector since the small sector would also be making use of modern machinery and electricity.

Nehru also gave due importance to small-scale industries and agriculture which were the sources of consumer goods. In his own words, "The test of a country's advance in industrialisation is heavy industry--not the small industries that may be put up. That does not mean that small industries should be ignored. They are highly important in themselves for production and for employment."[17] The framework of the Second Five Year Plan stated : "The strategy requires all-out efforts for the maximum utilisation of capacity in existing industries and for the development of additional production in the capital light or small sector of industries."[18]

Place of Agriculture in the development strategy. On agriculture, Nehru stated : "We shall find that this industrial progress cannot be achieved without agricultural advance and progress . . . Everyone knows that unless we are self-sufficent in agriculture we cannot have the wherewithal to advance in industries. If we have to import food, then we are doomed so far as progress is concerned. We cannot import both food and machinery."[19]

It is thus clear that the Mahalanobis strategy of self-sustained growth based on heavy industries did not ignore or neglect the growth of small and cottage industries for increasing the supply of consumer goods.

In spite of many favourable factors for increasing the supply of consumer goods, Professor Mahala-

16. *Second Five Year Plan—The Framework*, p. 15.
17. Government of India, *Problems in the Third Plan, A Critical Miscellany*, p. 51.
18. *Second Five Year Plan—The Framework*, p. 63.
19. Government of India, *Problems in Third Plan—A Critical Miscellany*, pp. 35-36.

nobis did anticipate shortage in supply of consumer goods and possible rising prices and costs endangering the planning process. In his strategy of development, therefore, he provided for fiscal and physical controls including rationing to keep the prices in check.

Role of the Public Sector. The Mahalanobis investment strategy assigned a dominant role to the public sector. As investment in the heavy sector was very high and as the gestation period was too long and that too with low profitability, the Government felt that heavy industries should be, by and large, in the public sector. Except in isolated cases, the private sector too was not keen on providing infrastructural facilities. Besides, the control of the public sector would vest the control of the commanding heights with the Government and this would help the development of a socialist economy. Above all, the public sector would prevent the rise of monopoly ownership and exploitation which are inherent in the private sector. It was for these reasons that from the Second Plan onwards, the Government went in a big way for the expansion of the public sector.

The role of the private sector. While giving direct responsibility to the public sector for infrastructure investment and the development of heavy industry, the development strategy expected the private sector to develop and expand its activities in a large area of economic activity. In fact, the private sector was given an important place in the mixed economy of India. But the activities of the private sector were seen to be essentially complementary to a rapidly growing public sector. The private sector was also expected to function in harmony with the overall aims and policies of economic planning. The planners anticipated a growing trend towards concentration of economic power in the private sector and to counter this trend, the planners provided larger opportunities for new entrants for medium and small-sized units and also for extensive use of controls and regulations and also use of appropriate fiscal measures.

Role of foreign trade and foreign aid. Initially, the Planning Commission relied considerably on foreign aid to meet India's requirements of capital goods, as our foreign exchange earnings were inadequate. At the same time, the planners had to provide for foreign aid, since the rate of domestic savings was inadequate to match the planned higher rate of investment. They also emphasised that the creation of export surplus and export promotion should go hand in hand with rapid industrialisation. However, this aspect of the strategy was forgotten in practice even during the first decade of planning. The Third Plan clearly brought out this point : "One of the main drawbacks in the past has been that the programme for exports has not been regarded as an integral part of the country's development effort."

Development strategy and employment objective

The Mahalanobis strategy of planning was essentially to *achieve the objective of self-sustained long-term growth via investment in the heavy sector.* For "rapid industrialisation and diversification of the economy", the Mahalanobis strategy considered the development of "basic industries and industries which make machines to make machines needed for further development as the crucial element. This strategy naturally came in conflict with the employment objective of our plans. For, a fast and self-sustained economic growth could be ushered in only through emphasis on capital-intensive production, namely, "by building of economic and social overheads, exploration and development of minerals and promotion of basic industries like steel, machine building, coal and heavy electricals". To solve the conflict between rapid growth on the one side and immediate increase in employment opportunities on the other, Mahalanobis strategy adopted a "policy of encouraging labour-intensive techniques in consumer goods industries even as the capital-intensive sector of heavy industry was being expanded rapidly."

Strategy to achieve social objectives : Use of fiscal policy

The Mahalanobis investment strategy broadly implied that increase in production would be accompanied by better and more equal distribution of income and wealth. Apart from this assumption, Indian planners relied on Fabian socialist strategy of using fiscal policy of taxation and public expenditure to achieve the two social objectives of planning, viz., the removal of inequalities of income and wealth on the one hand and the establishment of a socialist society based on equality and justice, on the other.

Fiscal policy aiming at the reduction of inequality of income and wealth had two aspects. Highly progressive income tax was to be imposed to lop off the high incomes beyond a certain level (marginal rate of income tax at one time was 97.25 per cent). Estate duty was to be highly progressive so as to remove a portion of large fortunes; other taxes falling exclusively on affluent sections of the community included wealth tax, capital gains tax and gift tax. While direct taxes attempted to transfer part of the income and wealth of the rich to the Government,

public expenditure was specifically used to promote the welfare of the lower income groups and weaker sections of the community.

A fast and concerted development of education was to be an important means for ensuring greater equality of opportunity to different sections of the population. Public expenditure on public health and sanitation, housing, etc. was used to achieve "a measure of redistribution in the consumption of basic necessities such as health and medical care, sanitation, water supply and cheap housing. Tribals, Dalits and other backward classes were to receive favoured treatment under special programmes."

Apart from the use of fiscal policy, the planners did not adopt any measures for direct redistribution of property and wealth to achieve reduction of disparities of income and wealth and to prevent concentration of economic power. The only exception was the half-hearted attempts at land reforms and ceiling on land holdings in rural areas.

Appraisal of the Heavy Industries Development Strategy

The "heavy industries" investment strategy formulated during the Second Plan was the basis of the development of the Indian economy during the last five decades, except for the short period of two years or so — 1977-79 when the Janata Party attempted a shift in favour of small industry and consumer goods.

The heavy industries strategy was hailed during the Second and Third Plans but came in for considerable criticism later. It was commended for the smart rise in saving and investment rates in the country, for the impressive development of economic infrastructure specially in irrigation, energy, transport and communication, etc., considerable expansion in the capital goods sector via the dominant role of the public sector, self-sufficiency in consumer goods and in basic commodities, diversification and expansion of industrial capacity and impressive growth of science and technology. However, this development strategy was severely criticised for its inadequate emphasis on agriculture and small-scale and cottage industries, for the emergence of continuous trade deficits, for growing unemployment in the country and above all, for growing inequality of incomes and wealth on the one side and very slow reduction of of poverty on the other.

5. MODELS OF ECONOMIC DEVELOPMENT : NEHRU Vs. GANDHI

Nehru-Mahalanobis model of development emerged as the driving force of the strategy of development adopted in the mid-fifties at the time of formulation of the Second Five Year Plan. This strategy has continued right upto the eighties with a short interregnum of about 2-3 years when Janata Party was in power during 1977-80. Nehru-Mahalanobis model was based on long-run development strategy which accorded greater preference to the long-term goals of development, rather than succumbing to the immediate and short-term goals. The strategy, therefore emphasised

(a) a high rate of saving so as to boost investment to a higher level,

(b) it preferred a heavy industry bias to develop the industrial base of the economy,

(c) it opted for the protectionist path so as to safeguard infant industry,

(d) it encouraged import-substitution so as to achieve self-reliance, and

(e) it aimed at enlargement of opportunities for the less privileged sections of the society. Growth with social justice was thus the goal of Nehru-Mahalanobis model since it intended to foster a self-generating path of development with an assurance to the common man that poverty, unemployment, disease and ignorance would be removed so that individuals could realise their potential with the extension of social and economic opportunities. Since it was the credo of the fifties that market mechanism could not bring about judicious allocation of resources to meet the objective of growth with social justice, a much greater role was assigned to the State. The principal functions of the State in the economic sphere were the development of economic and social infrastructure. The economic infrastructure was concerned with enlargement of irrigation, power, transport and communications so as to expand markets as also to remove constraints in the form of power on industrial development and irrigation for agricultural development. By increasing social infrastructure in the form of education and health, the State intended to develop skilled manpower so that it could provide the necessary skills needed for the functioning of the new industries. To channelise investment into socially desired lines of production, the State nationalised major banks. Thus, in the Nehru-Mahalanobis model the ***State controlled the commanding heights of the economy through the public sector***

The Janata Sixth Plan (1978-83) acknowledged the achievements this strategy: "It is a cause of legitimate national pride that over this period a stagnant economy has been modernised and made more self-reliant." The achievements which could be the cause of legitimate pride were :

(i) An increase in the rate of saving from a low level of 7 per cent of GDP in 1950-51 to a high level of about 22 to 24 per cent.

(ii) To finance the process of development upto the end of the Seventh Plan largely by domestic savings. Foreign saving inflow formed merely 1.5 per cent to make up the gap in the planned investment.

(iii) To develop an industrial base of the economy in the form of heavy industry and infrastructure.

(iv) To train a large pool of scientific and technical manpower.

However, success in these areas was also accompanied by certain fundamental failures :

While massive investments were made in the public sector enterprises, no serious effort was made to run them on commercial lines. Their socio-economic character was used to plead for continued losses in some and very poor level of profits in others. Consequently, the Government continued to meet the losses out of the general exchequer. Three serious mistakes were committed in their administration. First the positions at the top were given to general administrators rather than to professional experts. Thus the administrative bureaucracy of the country took charge of the PSUs and acted in collusion with the political bosses who used PSUs as their fiefs. The second costly mistake was the failure to develop work-ethics among the employees. As a result, the PSUs developed huge wage-bill without commensurate increase in productivity. Thirdly, to satisfy certain lobbies — big farmers, urban consumers etc., irrigation, fertiliser and electricity charges were kept below costs and huge subsidies were paid and as a result the state level public enterprises incurred heavy losses and these losses mounted further as years rolled by.

Nehru model of growth exhibited other weaknesses too. It failed to provide a national minimum level of living despite five plans. Nearly 40 per cent of the population lived below the poverty line. The number of unemployed and under-employed was quite high and was increasing continuously. Inequalities of income and wealth had worsened and there was a growing concentration of economic power in the hands of a few. Land reforms were not properly implemented, resulting in much dissatisfaction in rural areas. It was in this context that the Janata Party in 1977 adopted Gandhian Socialism as the main objective of development and the Janata Party's Sixth Plan (1978-83) was boadly based on the Gandhian Model of economic growth.

The Gandhian Model of Growth

Acharya S.N. Agarwala brought out the 'Gandhian Plan' in 1944 and re-affirmed it in 1948. These publications form the basis of Gandhian planning or 'Gandhian model of growth. The basic objective of the Gandhian model is to raise the *material as well as the cultural level* of the Indian masses so as to provide a basic standard of life. It aims primarily at improving the economic conditions of the 5.5 lakh villages of India and therefore, it lays the greatest emphasis on the scientific development of agriculture and rapid growth of cottage and village industries.

Agriculture

The Gandhian model aims at the reform of agriculture as the most important sector in economic planning in India. The primary objective of agricultural development is national self-sufficiency in foodstuffs and maximum regional self-sufficiency in food. This has to be achieved not only by larger and better inputs but also through land reforms--change in the system of tenure, abolition of the proprietary rights on land, consolidation of holdings, organisation of co-operative farms, etc. Money-lending should be abolished, and there should be increased credit facilities for the farmers. The Gandhian model lays special emphasis on dairy farming as an occupation and as an auxilliary to agriculture.

Cottage and Village Industries

The primary aim of the Gandhian plan is the attainment of maximum self-sufficiency in village communities. Hence, the plan emphasises the rehabilitation, development and expansion of cottage industries side by side with agriculture. Spinning and weaving are given the first place. The manufacturing of khadi is important and it is almost on the same level as the production of rice and wheat. "Just as villagers cook their own roti (bread) and rice so must they make their own khadi for personal use. The surplus, if any they may sell."[20] The Gandhian plan outlines a scheme for making every village self-sufficient in cloth. At the same time, the Gandhian plan wants the State to consider the revival and expansion of rural cottage industries as the main plank of its industrial planning.

Gandhi emphasized the conflict between village industries and capital-intensive pattern of industrialisation based on high degree of urbanisation. E. Haribabu of the Indian Institute of Technology (Kanpur) writes : "The twin compulsions of reconstructing the economy and achieving rapid economic development after Independence, prompted India's rulers to adopt a model of development based on the experience of the West : the implicit emphasis on capital-intensive industrialisation and urbanisation. Over a time a distinct bias became apparent towards urban settlements in general and big cities in particular". Explaining the role of rural areas in the process of industrial development of India in the post-Independence period, the late Annasaheb Sahasrabudhe wrote : "The rural areas were encouraged to start such industries which provide urban population with things like milk, vegetables, oil seeds, cotton and foodgrains and purchase from the urban areas items such as cloth,

20. *Gandhian Plan.*
21. Quoted by Claude Alvares, Gandhi's Second Assassination, *Indian Express*, January 29, 1984.

oil and other manufactures"[21]. The villagers have thus been turned into second class citizens to supply cheap raw materials and semifinished products to the urban organised sector. The principal element in this strategy is the transfer of all but most primitive jobs to the cities. In 1910, village industries constituted 40 per cent of the labour force. By 1946, this had decreased to 10 per cent. Today, they remain at two per cent." Claude Alvares, therefore, questions in a very incisive manner : "How long can we continue to assume the illusion that when the British destroyed local industries, that was wicked, but that when we do so, it is desirable."[22]

Basic industries

There is a general misconception about Gandhi being against the development of large-scale industries. Actually, ***the Gandhian Plan recognises the need for and the importance of certain selected basic and key industries in India***, especially defence industries, hydro-electric and thermal power generation, mining and metallurgy, machinery and machine-tools, heavy engineering, and heavy chemicals. The Gandhian Plan would like the development of basic industries not to interfere with or to hinder the growth of cottage industries. The most dynamic scientific aspect of the Gandhian model is that the basic and key industries will be owned and managed by the State--they will be in the public sector. On this point there is no difference between Nehruvian and Gandhian models of growth.

Generally, people assume that Gandhi's emphasis on cottage industries and handicrafts is a clear indication of his opposition to modern machinery. This is wrong. Gandhi is not against all machinery, for the spinning-wheel itself is a piece of machinery. He protests, however, against the craze for machinery and its indiscriminate multiplication. He believes that the factory system using extensive machinery has become the source of exploitation of labour by a few capitalists. He welcomes machinery and modern amenities wherever they lighten the burden of the villagers without displacing human labour. ***Machinery is good when it operates in the interests of all; it is evil when it serves the interests of the few.***

If we carefully analyse the Gandhian model, we will find that the aim is to develop agriculture and industries side by side and to integrate them. The handicrafts and cottage industries are emphasised from the point of view of production as well as that of employment. After Independence, Nehru dominated the Indian scene and Gandhi and his economic ideas were forgotten. During the short period of the Janata rule 1977-79 as well and as in the Draft Sixth Plan some of these ideas were incorporated. In concrete terms the Gandhian model of growth calls for the following changes in the present system of planning.

(a) Employment-oriented planning to replace production-oriented planning. The basic premise here is that unemployment is our greatest enemy and that in its solution lies the key to the problems of poverty and inequality. It would, therefore, be advisable to replace production-oriented planning with employment oriented planning. This would necessitate demarcation of areas of high employment-potential which also ensures high and efficient production.

(b) Agriculture and employment potential. Agriculture offers great scope for enlarging employment in : (i) agriculture including animal husbandry, compost-making, sanitation and gobar gas; (ii) rural works such as irrigation projects, soil conservation, land reclamation, afforestation etc. and (iii) rural or cottage industries.

Under intensive cultivation--land can support a much larger number of workers. According to an estimate, in 1971, 39 workers were employed per 100 acres in India and as such India was classified as a low-performance country but in Japan, South Korea, Taiwan and Egypt during 1965, the number of workmen employed per 100 acres was between 87 and 71. These countries are high-performance nations with models of small farms and highly labour-intensive pattern. The experience of these countries shows how another 50 to 60 million people can be employed in agriculture in India and at the same time increase total output. The employment potential in the newly-irrigated areas can be increased by 60 per cent provided there is only limited mechanisation i.e., the adoption of machines which supplement human effort and ease or lighten its burden rather than supplant it--"the Japanese style of farm machinery."

(c) Large Vs. Small Industries. The Gandhian model of growth is in favour of small-scale and cottage industries and it is against large scale industries producing consumer goods. Charan Singh, an ardent supporter of the Gandhian model of economic growth, states : "No medium or large-scale enterprise shall be allowed to come into existence in future which will produce goods or services that cottage or small-scale enterprises can produce and no small scale industry shall be allowed to be established which will produce goods or services that cottage enterprise can produce."[23]

(d) Equitable distribution. Growing concentration of economic power in the hands of a few and

22. *Claude Alvares, Gandhi's Second Assassination, Indian Express, January 29, 1984.*

23. Charan Singh, (1978) *India's Economic Policy*, p.105

inequality of incomes are the two major economic ills of the Indian economy despite the profession of Socialism under Nehru model of economic growth. Accumulation of wealth and the concentration of economic power are directly due to centralisation of the means of production and centralised large-scale production. Gandhi has got probably the best and the most natural solution to the problem of distribution. The natural solution is decentralised small-scale production--this will cut at the very root of accumulation of wealth. And wherever large-scale production is inevitable (as in basic and key industries), it should be left to Government ownership and management. In the Gandhian model, the problem of distribution is tackled at the production end and not at the consumption end.

The Gandhian model of growth hopes to achieve a national minimum level of living within the shortest possible time and aims at removal of concentration of income and wealth and growth with stability.

Reconciliation of the Nehru and Gandhian Models–The only solution

While Nehru wanted to give prime importance to heavy industries, the Gandhian model attempts to give primacy to agriculture supported by handicrafts and cottage industries. Nehru model of growth based on heavy industry was probably the only suitable model in the 1950's and 1960's as the development of heavy industry was the instrument for making the country militarily strong to face external aggression, for laying the foundation for further industrial expansion and for freeing the country from foreign dependence. Now that defence has been sufficiently developed and a strong foundation has been laid for self-sustained growth, it would be advisable to shift emphasis from heavy industries to capital-light consumer goods industries of the small-scale and cottage industries type.

True, small-scale and cottage industries have a very useful role to play in India from the point of view of production and employment. But it would be unwise to neglect the development of heavy industry in future. In spite of the commendable progress that India has made since 1951 and despite its status as the tenth most industrialised country of the world, India has not reached a fairly high level in the per capita output of steel and electric energy--both of which are also needed to expand small-scale and cottage industries. The scale of output of steel and electricity generation is too low to merit a sharp slowing down of investment in heavy industry. Besides, the goals of self-reliance and defence-preparedness are as important, if not more, as those of removing grinding poverty, mounting unemployment and reducing disparities in wealth and income. In the name of the Gandhian model of growth, it would indeed be suicidal to neglect or slow down investment in heavy industry. But as emphasised earlier, Gandhi was not against the development of all large-scale industries; in fact, Gandhian Plan (1944) recognised the need and importance of certain selected basic industries such as power, iron and steel, machinery and machine tools, heavy engineering and heavy chemicals.

A good case can, however, be made to shift investment from medium and large-scale enterprises producing consumer goods to cottage and small-scale industries. The Nehru-Mahalanobis model also gives importance to cottage and small-scale units. Even on the question of high costs of production of small-scale units, Prof. Mahalanobis argued that with the extension of cheap electric power throughout the country, there was no reason why cost of production in small units should be higher as compared to large units. But in the process of implementation of the Nehru-Mahalanobis model, small-scale and cottage industries were given a step-motherly treatment by the government and large-scale and medium sized units were allowed in the consumption goods sector to stifle small units. By the Industrial Policy Statement of 1977, the Janata Government wanted to rectify this mistake. However, the Congress Government which returned to power in 1980, reversed the 1977 industrial policy and continued Nehruvian policy in favour of large-scale industries and multi-nationals, in the name of rapid economic growth and export promotion.

Active support and encouragement of cottage and small sector does not imply that the existing large and medium units in the consumer goods sector should either be closed down or should be permitted to continue only on the condition that the entire output should be exported. These are unwise and unrealistic suggestions. Units which have been set up and which have been producing for the market for many years--both domestic and international--should not and cannot be closed down. But these units may be encouraged to diversify to new lines of production and increase exports as much as feasible. At the same time, the small sector should be helped to improve the quality of its products, reduce its cost of production and make goods available at competitive rates.

China is said to have followed the Gandhian path and has fed and clothed her people better than India has done. Charan Singh writes : "Various reports from unimpeachable sources indicate that not only had Mao Tse-tung given first priority to agriculture since 1962 but he had relied more on human labour and decentralised labour-intensive enterprises in building

his country than on large-scale mechanised projects and industries."[24] Charan Singh, however, ignores the fact that China gave first priority to heavy industries and not to agriculture. Only later, she started developing agriculture and industry simultaneously--the Chinese called it "the theory of walking on two legs." Further, it is important to note that China did not neglect the importance of heavy industry even when she gave first priority to agriculture, particularly heavy industry for defence and infrastructural base. China has become a first rate military power capable of challenging the mightiest powers of the world. The success of China is due basically to combining admirably the Soviet model with the Gandhian model. The weakness of the Indian planners was not in the formulation of Nehru-Mahalanobis investment strategy but in the poor implementation of the same, viz., implementing the heavy industry base to a large extent but failing to implement successfully the agricultural content of the plans and those relating to small-scale and cottage sector.

To conclude it is wrong to indict the Nehru-Mahalanobis model of growth on the ground that it had neglected agriculture and the small sector and that this had resulted in all the economic problems faced by the country, viz. inflationary rise in prices, acute shortages of essential goods, industrial sickness, growing inequalities, mounting poverty, etc. It would be wrong to ignore the development of heavy industry and put all the emphasis on agriculture and the small-scale sector. Let us not forget that infrastructural investment is also needed for agricultural development. In fact there is no conflict between the heavy industry and the agricultural sector in the use of human and material resources. Both can be developed simultaneously. If the approach of balanced growth was valid in 1950's, it is all the more so even now.

6. LIBERALISATION, PRIVATION AND GLOBALISATION (LPG) MODEL OF DEVELOPMENT

The LPG Model of development which was introduced in 1991 by the then Finance Minister Dr. Manmohan Singh with a big bang was intended to charter a new strategy with emphasis on liberalisation, privatisation and globalisation. (LPG) Several major changes at the domestic level were introduced.

Firstly, areas hitherto reserved for the public sector were opened to private sector. The Government intended to transfer the loss-making units to the private sector, but it failed because there were no takers for them. Instead, the Government started disinvestment of the highly profit-making PSUs and the proceeds were used to reduce fiscal deficits. Thus, due to various social constraints the Government could not carry forward its programme of privatisation, though it did succeed in liberalising the economy to the private sector — both domestic and foreign.

Secondly, by permitting the private sector to set up industrial units without taking a licence, the Government removed certain shackles which were holding back or delaying the process of private investment.

Thirdly, by abolishing the threshold limit of assets in respect of MRTP companies and dominant undertakings, the Government freed the business houses to undertake investment without any ceiling being prescribed by the MRTP Commission. Obviously, considerations of promoting growth were more dominant with the Government and such issues as concentration of economic power were assigned a back seat.

Fourthly, with a view to facilitate direct foreign investment, the Government decided to grant approval for direct foreign investment upto 51 per cent in high priority areas. The Government could also consider proposals involving more than 51 per cent equity, but such proposals would require prior clearance of the Government. No permission was required for hiring foreign technicians, foreign testing of indigenously developed technologies, etc.

Fifthly, chronically sick public sector enterprises were referred to the Board for Industrial and Financial Reconstruction (BIFR) for the formulation of revival/rehabilitation schemes. A social security mechanism was introduced to protect the interests of workers likely to be affected by such rehabilitation packages.

Sixthly, to improve the performance of public sector enterprises, greater autonomy was given to PSU managements and the Boards of public sector companies were made more professional.

Lastly, the economy was opened to other countries to encourage more exports. To facilitate the import of foreign capital and technology and other allied imports, reduction in import duties and other barriers were brought about.

LPG Model of development emphasises a bigger role for the private sector. It envisages a much larger quantum of foreign direct investment to supplement our growth process. It aims at a strategy of export led growth as against import substitution practised earlier. It aims at reducing the role of the State significantly and thus abandons planning fundamentalism in favour of a more liberal and market driven pattern of development.

24. Charan Singh, *Op. cit.*, p. 69

Critics have pointed out certain fundamental weaknesses of the LPG Model of Development.

(a) This has a very narrow focus since it largely concentrates on the corporate sector which accounts for only 10 per cent of GDP.

(b) The model bypasses agriculture and agro-based industries which are a major source of generation of employment for the masses. It did not delineate a concrete policy to develop infrastructure, financial and technological support, particularly the infrastructural needs of agro-exports.

(c) By permitting free entry of the multinational corporations in the consumer goods sector, the model has hit the interests of the small and medium sector engaged in the production of consumer goods. There is danger of labour displacement in the small sector if unbridled entry of MNCs is continued.

(d) By facilitating imports, the Government has opened the import window too wide and consequently, the benefits of rising exports are more than offset by much greater rise in imports leading to a larger trade gap.

(e) Finally, the model emphasises a capital intensive pattern of development and there are serious apprehensions about its employment-potential. It is being made out that it may cause unemployment in the short run but will take care of it in the long run. But how long is the long-run is not specified. Moreover, an economy in which the growth of labour force is taking place at the rate of about 1.8 per cent per annum, the implications of the model in terms of slowing down the rate of growth of employment are of serious nature.

Some have argued that the LPG Model has followed the East Asian Miracle which was demonstrated by Japan, South Korea, Taiwan and to some extent Indonesia Malaysia and China. This is not correct. Japan did not follow the IMF - World Bank Model based on free market economy, open door policies and liberalisation. Japan, in fact, practised limited operation of market mechanism with the State playing an active role in guiding the economy for the welfare of the community. This independent path followed by Japan was imitated by South Korea and Taiwan. Malaysia and Indonesia also succeeded on this path for a few years.

The Chinese growth model, for instance, is rooted in its own traditions and its decision to globalise is motivated by the desire to use foreign markets as an instrument to resolve numerous internal bottlenecks. China still follows the path of self-reliance, though it is not a closed economy. For China self-reliance is the motor of growth; and China experimented a simple balanced two-way flow of goods and services and capital with the rest of the world. Chinese Model, therefore, cannot be classified as a neo-classical liberalisation model. It is a model of its own kind which combines an open economy with self-reliance and avoids an excessive dependency syndrome.

LPG Model has followed the IMF-World Bank prescription of stabilisation and structural adjustment. When considered in the light of the experiences of Latin America, Africa and East Asian Countries, it raises serious doubts in the minds of the people whether we are following the correct path of development. Dudley Seers has rightly suggested three parameters by which the stage of development of a country can be measured. They are : What has been happening to poverty? to unemployment? and to inequality? The experience of a decade or more of LPG Model does not provide conclusive evidence of substantial improvement of these parameters. Rather some of them have become worse.

7. PURA — A NEO-GANDHIAN APPROACH TO DEVELOPMENT

Dr. A.P.J. Abdul Kalam, ever since he became the President of India has been advocating his Vision 2020, and, to eradicate poverty from India, he has been emphasizing the adoption of PURA (Providing Urban Amenities in Rural Areas). In his address to the Food Security Summit on 5th February 2004, he outlined the concept and strategy of PURA as the lever of economic upliftment of the villages. India currently has 260 million people living below the poverty line. The GDP growth has been on the average 6 per cent per annum during the last decade. It has to be gradually increased up to 10% and to be sustained for several years. Then it is possible for India to get the status of a developed nation. To achieve this, the roadmap involves integrated action on the following five areas:

(*i*) ***Agriculture and food processing***—The country should target for 360 million tonnes of food and agricultural production by 2020. Other areas of agriculture and agro-food processing would bring prosperity to rural people and speed up economic growth.

(*ii*) ***Reliable and quality electric power*** for all parts of the country.

(*iii*) Education and health care for all.

(*iv*) Expansion of information and communication technology to rural areas to promote education and create national wealth.

(*v*) ***Development of strategic sectors***—growth in nuclear technology, space technology and defence technology.

All these areas have to be developed into missions such as rural roads, availability of high quality uninterrupted power, providing urban amenities in rural areas (PURA), Second Green Revolution, Information

and Communication Technology (ICT) transforming into knowledge products and tourism.

PURA Model

PURA model involves four connectivities: physical, electronic, knowledge and thereby leading to economic connectivity to enhance the prosperity of cluster of villages in the rural areas.

Under physical connectivity, a group of 15 to 25 villages will be linked to each other by road. These villages connected by roads will also have a ring road so that each one of them can make use of it. Besides roads, provision of electricity and transport facilities have also been included.

Second is digital connectivity which aims to link villages with modern telecommunication and information technology services, e.g. Public call offices, cyber cafes, etc.

Thirdly, knowledge connectivity tries to establish on every 5 to 7 kms. of the circular ring road a school, a higher education centre, a hospital, etc.

Fourthly, economic connectivity aims to establish within this group of villages good marketing facilities so that all the commodities and services of daily use can be procured and the rural people can sell their produce in these markets.

Depending upon the region and the State of present development, PURA can be classified into three different categories, namely Type A, Type B and Type C—Pura clusters. The characteristics of these types are:

Type A cluster is situated closer to an urban area having minimal road connectivity, limited infrastructure, limited support—school, primary health centre.

Type B cluster is situated close to urban area but has sparsely spread infrastructure and no connectivity.

Type C cluster located far interior with no infrastructure, no connectivity and no basic amenities.

At the CEO Summit organised on the occasion of the *Fifteenth birthday celebrations of Mata* Amritanandmayi (Amma), President A.P.J. Abdul Kalam said: "PURA is one of the mechanisms which will be utilized for transforming our villages into productive economic zones."

Government Action on the PURA Model

The Union Cabinet in its meeting on 20th January 2004 accorded in principle approval for the execution of PURA within the existing gross budgetary support for bridging the rural-urban divide and achieving balanced socio-economic development. The Government envisages development of over 4,000 rural clusters located in backward regions. A sum of ₹ 3 crores for each cluster was provided and thus, ₹ 12,000 crores were to be spent on the development of 4,000 PURAs.

Assessment of PURA Model of Rural Development

It was Mahatma Gandhi who underlined the exploitation of rural society by its urban counterpart. Gandhi wrote in Village Swaraj: "The British have exploited India through its cities. The latter have exploited the villages. The blood of the villages is the cement with which the edifice of the cities is built. I want the blood that is today inflating the arteries of the cities to run once again in the blood vessels of villages." (p. 25) As a policy statement, Gandhi stated: "The cities are capable of taking care of themselves. It is the villages we have to turn to." (p. 26) Gandhi to develop a harmonious relationship between the cities and villages categorically mentioned: "It is only when the cities realize the duty of making an adequate return to the villages for the strength and sustenance which they derive from them, instead of selfishly exploiting them, that a healthy and moral relationship between the two will spring up." (p. 29)

There is no doubt that the planning process did make an effort to develop the villages through community development projects. Irrigation facilities were enlarged and green revolution did provide an opportunity to the rural people to increase their share in national and per capita income, but still the rural-urban divide continues and there is a migration of population from rural to urban areas. Urban population which was 17.3 per cent of the total in 1951 has increased to 27.8 per cent in 2001. In absolute terms, as against 62 million persons living in urban areas in 1951, the numbers crowding in them have shot up to 285 million—an increase by 357 per cent. This has crated problems of congestion and growth of slums.

The objective of PURA is to propel economic development without population transfers. To put in the words of late Prof. A.M. Khusro: Instead of moving human beings where infrastructure exists, it is better to take infrastructure to villages where human beings live. The PURA concept is the response to the need for creating social and economic infrastructure which can create a conducive climate for investment by the private sector to invest in rural areas.

But a mere provision of ₹ 3 crores per cluster as against the need for ₹ 100 crores is too meagre. The best way to shelve a proposal is to accept it in principle and make a modicum of investment towards its implementation. Such a move is likely to kill the proposal. In fact, there was need for giving a more serious thought to the proposal and to support it to achieve success. But such a thin layer of the investment as proposed by the Cabinet is not going to achieve the objectives of PURA.

A more pragmatic approach would have been to select nearly 600 blocks in the backward areas and invest at least ₹ 25 crores per block to provide the needed infrastructure to Block Development Committee during

the Tenth Plan, the remaining 35 per cent and 40 per cent should be provided in the Eleventh and the Twelfth Plan. Those states which promise to provide 20 per cent out of their revenues should receive 80 per cent grant from the Central Government. This would have necessitated the Centre to contribute ₹ 20 crores and with the present level of support of ₹ 12,000 crores, the PURA concept could have made a dent in developing the backward regions.

Secondly, the PURA proposal envisages three types—A, B and C. Type C being in the interior required much greater initial push, type B relatively less and type A can attract even private sector investment. Government should, therefore, develop a vision 2020 for the PURA development clusters and grade the degree of financial and other support consistent with the level of development achieved in a particular cluster. To overcome inertia, we need a big push and if the process begins to move, relatively lesser effort is needed to give it a momentum. Thus, a higher level of state support is needed for Type C cluster.

Ongoing programmes of rural development can be re-oriented so that roads, electricity and water are made available. Once the social overheads are created, it will be possible to attract private sector investment. It is abundantly clear that private sector invests only in areas and projects which yield a high rate of return. It will, therefore, hesitate to move in the remote interior clusters unless the Government provides necessary infrastructural support and some incentives for the purpose.

The major impediment to the PURA mission will be the on demand side. This can be achieved by undertaking such activities which create wage employment and thus, enlarge demand potential of the rural population. If PURA can become a catalyst for another green revolution in the backward rural areas in the less prosperous states, the Vision 2020 of the President to achieve a food production of 400 million tonnes can be achieved. For this purpose, it is necessary to develop synergy among the different constituents in the fulfillment of the PURA mission. Only then can we have the dream of development of rural India without population transfers realized.

Although PURA draws its inspiration from the Gandhian model of development which emphasises rural development as a fundamental postulate, yet in the prescription, it is neo-Gandhian in the sense, that it intends to bring rural regeneration with the avowed objective of taking modern technology and modern amenities to the rural areas. In this sense, it does not enter into the controversy of labour intensive versus capital intensive measures. However, it does emphasize the enlargement of employment as the sole objective to make use of rural manpower in various development activities. In this sense, it does not think of a second grade status for rural citizens and thus can become more acceptable to them. In other words, the PURA model attempts a reconciliation between employment and GDP growth objectives.

The Eleventh Plan has provided ₹ 248 crores for implementing the PURA scheme in compact rural areas in public-private partnership mode. The sum is very inadequate to provide urban amenities in PURA clusters to bridge the rural - urban divide.

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CHAPTER

11

INDUSTRIAL POLICY AND INDIAN PLANNING

"Taking a good hard look at what in fact has happened in India over the last decade and a half, it is evident that public and private enterprises have not remained in the categories prescribed by the industrial policy resolution."

– Gunnar Myrdal in *Asian Drama.*

The concept of "industrial policy" is comprehensive and it covers all those procedures, principles, policies, rules and regulations which control the industrial undertakings of a country and shape the pattern of industrialisation. It incorporates fiscal and monetary policies, the tariff policy, labour policy and Government's attitude not only towards external assistance but the public and private sectors also.

Industrial Policy Resolution, 1948

The Industrial Policy Resolution of April 1948 contemplated a mixed economy, reserving a sphere for the private sector and another for public sector. The industries were divided into four broad categories—

(a) The manufacture of arms and ammunition, the production and control of atomic energy, and the ownership and management of railway transport were to be the ***exclusive monopoly of the Central Government***.

(b) The second category covered coal, iron and steel, aircraft manufacture, ship-building, manufacture of telephone, telegraphs and wireless apparatus etc. New undertakings in these industries could henceforth be undertaken only by the State.

(c) The third category was made up of industries of such basic importance that the Central Government would feel it necessary to plan and regulate them.

(d) ***A fourth category, comprising the 'remainder of the industrial field', was left open to private enterprise, individual as well as co-operative.***

The main thrust of the (1948) Industrial Policy was to lay the foundation of a mixed economy in which both private and public enterprises would march hand in hand to accelerate the pace of industrial development.

1. INDUSTRIAL POLICY RESOLUTION, 1956

Since the adoption of 1948 Resolution, significant development took place in India. Economic planning had proceeded on an organised basis and the First Five-Year Plan had been completed. Parliament had accepted 'the socialist pattern of society' as the basic aim of social and economic policy. These important developments necessitated a fresh statement of industrial policy. A second Industrial Policy Resolution was adopted in April, 1956.

replacing the Resolution of 1948. Important provisions of the 1956 Resolution were :--

(i) New classification of industries. The resolution laid down three categories which bear a close resemblance to the earlier classification, but were more sharply defined and were broader in coverage as to the role of the State. These categories were :-

(a) Schedule A : those which were to be an exclusive responsibility of the state;

(b) Schedule B : those which were to be progressively state-owned and in which the state would generally set up new enterprises, but in which private enterprise would be expected only to supplement the effort of the state; and

(c) Schedule C : all the remaining industries and their future development would, in general be left to the initiative and enterprise of the private sector.

Under Schedule A were listed seventeen industries : arms and ammunition, atomic energy, iron and steel, heavy castings and forgings of iron and steel; heavy machinery required for iron and steel production, for mining, for machine tool manufactures; etc., heavy electrical industries; coal; mineral oils, mining; iron ore and other important minerals like copper, lead and zinc; aircraft; air transport, railway transport, shipbuilding; telephone, telegraph and wireless equipment; generation and distribution of electricity.

Under Schedule B, twelve industries were : other mining industries, aluminium and other non-ferrous metals not included in Schedule A; machine tools, ferro-alloys and tool steels, the chemical industry; antibiotics and other essential drugs; fertilizers; synthetic rubber, carbonization of coal; chemical pulp; road transport and sea transport.

The Schedule 'C' category industries which consisted of the rest had to fit into the framework of social and economic policy of the state and be subject to control in terms of the Industries (Development and Regulation) Act and other relevant legislations.

It spite of this clear-cut grouping of industries under three schedules, these categories were not water-tight compartments and room for exceptions could be made. In appropriate cases, private units might produce an item in category A for meeting the industry's own requirements or as by-products. Further, heavy industries in the public sector could obtain some of their requirements of higher components from the private sector while private sector in turn would rely for many of its needs on the public sector. Moreover, the State reserved the right to enter category C, which would normally be reserved for the private enterprise, when the needs of planning required or for other important reasons. Though the State was now to act as the senior partner unlike under the 1948 policy, the public and the private sector were still expected to work closely together. The basic objective was to create a mixed economy in India.

(ii) Fair and non-discriminatory treatment for the private sector. In order that the private sector may feel confident and function efficiently, the State was to facilitate and encourage the development of industries in the private sector by ensuring the development of transport, power and other services, and by appropriate fiscal and other measures. The State would continue to foster institutions to provide financial aid to these industries, and special assistance would be given to enterprises organised on co-operative lines for industrial and agricultural purposes. When there exist in the same industry both private and publicly owned units, it would continue to be the policy of the state to give full and non-discriminatory treatment to both of them.

(iii) Encouragement to village and small-scale enterprises. The State would support cottage and village and small-scale enterprises by restricting volume of production in the large-scale sector, by differential taxation, or by direct subsidies. The state would concentrate on measures designed to improve the competitive strength of the small scale producer by constantly improving and modernising the technique of production.

(iv) Removing regional disparities. The Resolution stressed the necessity of reducing the regional disparities in levels of development in order that industrialisation may benefit the country as a whole. The resolution fully supported the idea that only by securing a balanced and coordinated development of the industrial and the agricultural economy in each region, can the entire country attain higher standards of living.

(v) Attitude towards foreign capital. The government recognised the need for securing the participation of foreign capital and enterprise particularly as regards industrial technique and knowledge so as to foster the pace of industrialisation of the Indian economy. The Resolution, made it amply clear, "that as a rule, the major interest in ownership and effective control, should always be in Indian hands. In all cases, however, the training of suitable Indian personnel for the purpose of eventually replacing foreign experts will be insisted upon."[1] Thus, while recognising the need for foreign capital in the industrialisation of the economy, the government insisted upon the progressive Indianisation of foreign concerns.

2. INDUSTRIAL POLICY STATEMENT, 1977

In December 1977 the Janata Government announced a New Industrial Policy by way of a Statement in the Parliament.

1. *Report of the Fiscal Commission* (1949-50), p. 14

For the past 20 years, the Government policy in the sphere of industry had been governed by Industrial Policy Resolution of 1956. This industrial policy, despite some desirable elements, had resulted in certain distortions viz. "Unemployment has increased, rural-urban disparities have widened and the rate of real investment has stagnated. The growth of industrial output has been no more than three to four per cent per annum on the average. The incidence of industrial sickness has become widespread and some of the major industries are worst affected."

The main elements of the new policy were :

1. *Development of Small-Scale Sector--the main thrust of the policy*--The Janata policy statement categorically mentioned : "The emphasis on industrial policy so far has been mainly on large industries, neglecting cottage industries completely and relegating small industries to a minor role . . . The main thrust of the new industrial policy will be on effective promotion of cottage and small industries widely dispersed in rural areas and small towns. *It is the policy of the government that whatever can be produced by small and cottage industries must only be so produced*". The small sector was classified into three categories :

(a) Cottage and household industries which provide self-employment on a wide scale;

(b) Tiny sector incorporating investment in industrial units in machinery and equipment up to ₹ 1 lakh

(c) Small-scale industries comprising industrial units with an investment up to ₹ 10 lakhs and in case of ancillaries with an investment in fixed capital up to ₹ 15 lakhs.

The purpose of the classification was to specifically design policy measures for each category:-

(i) As against 180 items in the list of reservations operating earlier, the Government expanded it further to 807 items by May, 1978.

(ii) The Government set up in each district an agency called 'District Industries Centre' (DIC) to serve as the focal point of development for small-scale and cottage industries. This agency would provide under a single roof all the services and support required by small and village entrepreneurs.

(iii) The Government revamped the Khadi and Village Industries Commission with a view to enlarge its areas of operation, so as to progressively increase the production of footwear and soaps in the small sector.

In the programme of development of village industries, the Government intended to give special place to Khadi, with a view to improve the productivity and earnings of Khadi spinners and weavers.

2. *Areas for Large-Scale Sector*. According to the 1977 Industrial Policy Statement, the role of large-scale industry would be related to the programme for meeting the basic minimum needs of the population through wider dispersal of small-scale and village industries and to the strengthening of the agricultural sector. The Industrial Policy, therefore, prescribed the following areas for large-scale sector :

(a) basic industries, essential for providing infrastructure as well as for development of small-scale and village industries, such as steel, nonferrous metals, cement, oil refineries;

(b) capital goods industries for meeting the machinery requirements of basic industries as well as small-scale industries;

(c) high technology industries which require large-scale production, and which were related to agricultural and small-scale industries development such as fertilizers, pesticides, and petrochemicals, etc. and

(d) other industries which were outside the list of reserved items for the small-scale sector, and which were considered essential for the development of the economy such as machine tools, organic and inorganic chemicals, etc.

3. *Approach towards large business houses*--The Industrial Policy Statement stated in unequivocal terms : "The growth of Large Houses has been disproportionate to the size of their internally generated resources and has been largely based on borrowed funds from public financial institutions and banks. This process must be reversed." To ensure that no unit of business group acquired a dominant or monopolistic position in the market, large industrial houses would have to rely on their own internally generated resources for financing new projects or expansion of the existing ones. The funds of the public sector financial institutions would be largely available for the small sector. Further, even in the case of capital-intensive fields where these large industrial houses were dominant, preference would be given to medium entrepreneurs and the public sector corporations so that further concentration of economic power might be restricted."

4. *Expanding role for the public sector*--The 1977 Industrial Policy Statement specified that the public sector would not only be the producer of important and strategic goods of basic nature, but it would also be used effectively as a stabilising force for maintaining essential supplies for the consumer. The public sector would be charged with the responsibility of encouraging the development of a wide range of ancillary industries and contributing to the growth of decentralised production by making available its expertise in technology and management to small-scale and cottage industry sectors.

5. *Approach towards foreign collaboration*.--The Industrial Policy stated : "In areas where foreign technological know-how is not needed, existing collaborations will not be renewed."

The Policy statement further elucidated : "As a

rule, majority interest in ownership and effective control should be in Indian hands though the Government may make exceptions in highly export-oriented and/or sophisticated technology areas. In hundred per cent export-oriented cases the Government may consider even a fully owned foreign company."

6. Approach towards sick units.--The Policy Statement suggested a selective approach on the question of sick units. It mentioned : "While the Government cannot ignore the necessity of protecting existing employment the cost of maintaining such employment has also to be taken into account. In many cases, very large amounts of public funds have been pumped into the sick units which have been taken over but they continue to make losses which have to be financed by the public exchequer. This process cannot continue indefinitely."

Evaluation of 1977 Industrial Policy Statement

Really speaking, the Janata Policy Statement was a mere extension of the Industrial Policy of 1956, it was directed merely towards the removal of certain distortions. In this sense, Janata Industrial Policy was a continuance of the 1956 Industrial Policy, with some difference in emphasis on detail.

The main thrust of the Janata Party's Industrial Policy Statement (1977) was to encourage small-scale and cottage industries as against the large-scale industries dominated by big industrial houses and multinationals. Such an encouragement of the small industries would, on the one hand, lead to extension of employment and on the other, lead to a reduction in concentration of economic power.

The Janata's industrial policy failed to impose a ban on multinationals or Indian big business to produce ordinary items like bread, biscuits, toffees, footwear, leather products, etc. which should have been legitimately reserved for the small sector.

The Industrial Policy Statement of 1977 relating to the large industrial houses was not relished, particularly the categorical statement that the large units would have to rely on their own internally generated resources for financing new projects or expansion of their existing units. This was a big blow to them, for it was only through using funds of public sector financial institutions and banks that the large business houses built their industrial empires.

Many of the proposals of the 1977 Industrial Policy Statement were welcomed by well-meaning critics--the new thrust in favour of cottage, tiny and small sectors, measures to contain the growth of monopoly capital, workers' participation in ownership and management, the increasing role to be assigned to the public sector and the steps to improve and tone up their working etc. Before the policy could be put into practice by making necessary changes in industrial licensing, the Janata Government fell.

3. INDUSTRIAL POLICY OF 1980

The Congress government announced its industrial policy in July, 1980. Outlining the philosophy behind the Industrial Policy of 1980, the Minister for Industry stated : "The Industrial policy announcement of 1956 in fact reflects the value system of our country and has shown conclusively the merit of constructive flexibility. In terms of this resolution, the task of raising the pillars of economic infrastructure in the country was entrusted to the public sector for reasons of its greater reliability, for the very large investments required and the longer gestation periods of the projects crucial for economic development. The 1956 resolution, therefore, forms the basis of this statement." It, therefore, suggested the following measures:

(i) Effective operational management of the Public Sector.--The 1980 statement accepted that there has been an erosion of faith in the public sector in recent years. For this purpose, Government decided to launch a drive to revive the efficiency of public sector undertakings.

(ii) Integrating industrial development in the private sector by promoting the concept of economic federalism.--The Policy statement categorically asserted : "It will be Government's endeavour to reverse the trends of the last three years towards creating artificial divisions between small and large-scale industry under the misconception that these interests are essentially conflicting. While making all efforts towards integrated industrial development, it proposed to promote the concept of economic federalism with setting up of a few nucleus plants in each district, identified as industrially backward, to generate as many ancillaries and small and cottage units as possible."

(iii) Redefining of small units : In order to boost the development of small-scale industries, Government decided :

(1) to increase the limit of investment in the case of tiny units from ₹ 1 lakh to ₹ 2 lakhs;

(2) to increase the limit of investment in case of small-scale units from ₹ 10 lakhs to ₹ 20 lakhs; and

(3) to increase the limit of investment in the case of ancillaries from ₹ 15 lakhs to ₹ 25 lakhs.

(iv) Regularisation of unauthroised excess capacity installed in the private sector.--The 1980 statement further simplified the procedure for regularisation of unauthorised excess capacity. For instance, while regularising installed capacities in excess of the 'licensed capacities,' FERA and MRTP Companies would be considered on a selective basis. This facility would

not be given in respect of items reserved for the small sector.

(v) *Automatic Expansion.* --Another important concession to the large-scale sector pertained to the extension and simplification of the facility to automatic expansion to all industries specified in the First Schedule of the 1951 Industrial Development and Regulation Act.

(vi) *Industrial sickness*-- In the case of existing sick undertakings which showed adequate potential for revival, the government would encourage their merger with healthy units which were capable of managing the sick undertakings and restoring their viability. Management of sick units would be taken over only in exceptional cases on grounds of public interest where other means for the revival of sick undertakings were not feasible.

An Assessment of Industrial Policy (1980)

The Industrial Policy Statement (1980) endorsed the 1956 Industrial Policy and intended to follow a 'pragmatic' approach.

The major thrust of the 1980 Industrial Policy was to regularise the excess capacity installed over and above the licensed capacity. Not only that, the Government also proposed to allow the privilege of automatic expansion of capacity to all industries. All this was sought to be justified in the name of full utilisation of capacity and maximization of production. Big business naturally welcomed the liberalisation of capacity proposed in 1980 Industrial Policy.

The Industrial Policy (1980) was guided merely by considerations of growth. It liberalised licensing for large and big business but by blurring the distinction between small-scale and large-scale industries it sought to promote the latter at the cost of the former. Broadly speaking, the Industrial Policy chose a more capital-intensive path of development and thus, it underplayed the employment objective.

4. INDUSTRIAL LICENSING POLICY

Industries (Development and Regulation) Act, 1951

The Industries (Development and Regulation) Act was passed in 1951 to implement the Industrial Policy Resolution of 1948. The important provisions of the Act were :--

(i) No new industrial units could be established or substantial extension to existing plants made without a licence from the Central Government, and while granting licence for new undertakings, government could lay down conditions regarding location, minimum size, etc., if necessary.

(ii) Government could take under its own management undertakings which failed to carry out its instructions for improvement in management and policies.

(iii) This Act also empowered the government to prescribe prices, methods and the volume of production and channels of distribution.

Industrial units employing less than 100 workers and having fixed assets of less than ₹ 10 lakhs were not required to obtain any licence whatsoever.

Hazari Report on Industrial Licensing Policy[2]

Dr. R. K. Hazari reviewed the working of industrial licensing under the Industries (Development and Regulation) Act, 1951 and made some sensational disclosures.

(i) Some leading houses, especially the Birlas, followed the practice of multiple applications for the same product, and for a wide variety of products which were meant to foreclose licensable capacity.

(ii) For the purpose of sanctioning licences, the principle of chronological selection, i.e., first come, first served basis was adopted. This resulted in big industrial houses to maintain offices in Delhi and put in their applications at the earliest opportunity so that they could stand first in the queue. This procedure helped the big industrial houses to foreclose capacity.

(iii) Industrial licensing did not bring about balanced regional development. "The gains in terms of balanced regional development and wider distribution of entrepreneurs are, at least, moderate. That licensing has served to channelise investment appears extremely doubtful."[3]

(iv) The most disappointing feature of industrial licensing was the absence of follow-up action once the licences were issued. The Birlas did not utilise even 50 per cent of licences issued to them. The authorities concerned were not even aware of the total investment and foreign exchange commitments of licences issued or those under implementation at any particular period of time.

To sum up, the licensing policy encouraged foreclosure of licensed capacity by influential and powerful industrial houses who could afford to sit tight on unutilised licences. In the absence of a policy of revocation of licences issued, the large industrial houses prevented the entry of new entrepreneurs while they did not fulfil the targets laid down in the plans. Consequently, industrial licensing which was supposed to act

2. R. K. Hazari : *Industrial Planning and Licensing Policy, Final Report* (1967).
3. *Ibid.*, p. 17.

as an instrument of industrial development became an impediment.

Subimal Dutt Committee Report

Following a discussion of the Hazari Report in Parliament, the Government of India appointed a committee under the Chairmanship of Mr. Subimal Dutt in July, 1967--known as the Industrial Licensing Policy Inquiry Committee--to inquire into the working of the licensing system in India. The Committee submitted its report in July, 1969.

The Dutt Committee accepted the concept of 'Large Industrial Houses' which "should include those business concerns over which a common authority held sway. The Dutt Committee identified 20 Larger Industrial Houses, 53 Large Industrial Houses and 60 large independent concerns. The licencing authorities ignored the objectives of the industrial policy (1956) and the reasons for the adoption of licensing system.

The Committee came to the following conclusions on the grant of industrial licensing :--

(i) The licensing authorities were bought over by large industrial houses. For instance, 73 large industrial houses accounted for 56 per cent of the total proposed investment on machinery by the entire private corporate sector. Similarly 60 per cent of the value of import of capital goods by the entire private corporate sector was accounted for by these 73 large industrial houses.

(ii) The licensing authorities ignored the objectives of the Industrial Policy (1956) and the reasons for the adoption of licensing system. The Committee stated : "It was not, however, necessary to grant multiple licences to the same House in a given industry. It was also not necessary to grant capacities much higher than necessary on techno-economic grounds and thereby concentrate licensed capacity among a few units belonging to the Large Industrial Sector . . . A consideration of preventing monopoly does not seem to have entered the picture at all"[4]

(iii) The areas reserved for the public sector under the Industrial Policy Resolution of 1956 were opened to the private sector under one pretext or the other. For instance, the development of aluminium was to be the responsibility of the public sector, but in practice, the entire development was permitted in the private sector. Similarly, in the Machine Tools industry, as against 9 licences given to HMT, 226 licences were issued to the private sector. In fertilizers, as against 12 licences granted to the public sector, private sector obtained as many as 42 licences. In drugs and pharmaceuticals, as against 184 licences to private sector, the public sector received only 12 licences.

4. Government of India : *Report of the Industrial Licensing Policy Inquiry Committee*, July 1969, p. 12

(iv) The four industrially advanced states, viz., Maharashtra, West Bengal, Gujarat and Tamil Nadu were able to acquire 62 per cent of the total licences issued. Obviously, the licensing system was unable to help the industrially backward states.

(v) One of the saddest features of licensing was the use of foreign collaboration even in non-essential consumer goods such as refrigerators, radio receivers, cameras, transmitters, record changers, thermometers, toilet soap, sewing thread, ball point pens, loud speakers, etc. Out of 720 products in which foreign collaborations were permitted, not less than 70 were consumer goods.

(vi) Out of the total assistance provided by public sector term lending institutions during the period 1955 to 1966, 73 large industrial houses accounted for 44 per cent and 20 larger houses for 17 per cent. As against this, public sector companies received only 9 per cent of totals financial assistance.

Public sector investment institutions like the LIC and Unit Trust of India favoured large industrial houses. The 20 larger industrial houses received nearly 43 per cent of the total funds loaned out by these institutions. Banking institutions also showed a heavy preference for large industrial houses.

Thus the industrial licensing system, specifically meant to implement the Industrial policy of the Government, failed miserably to achieve the objective of planned economic development. Besides, it failed to prevent concentration of economic power in the hands of a few large industrial and business houses. As the Dutt Committee observed : "When there was a choice between the public sector on the one side and the private sector on the other, the licensing authorities in some important cases took decisions in favour of the private sector."[5]

The Dutt Committee recognised the fact that industrial licensing was a negative instrument and as such could only play a limited role in industrial development. The Committee, while accepting the fact that other monetary and fiscal instruments be pressed into service to achieve the goal of development, still voted for the continuance of the licensing system so as to make it a positive instrument of industrial growth.

Liberalisation of Industrial Licensing after 1980

The Industrial Policy of 1980 made a sea-change in terms of liberalisation of licensing policy in favour of large business houses, particularly in terms of making them free from the provisions of MRTP Act and FERA. The major changes introduced were as under:

5. *Ibid.*, p. 184.

(a) Liberalisation of licensed capacity— Automatic increase was granted to units wanting to achieve economies of scale and a 49 per cent rise in capacity due to modernisation was allowed.

In January 1986, the Government delicensed 23 industries for MRTP and FERA companies, provided the industrial undertaking were located in any of the Centrally-declared backward areas.

(b) Concept of broad-banding introduced -- To encourage production and to provide flexibility to the manufacturers to adjust their product-mix depending on the market demand, the concept of broad-banding was introduced in a large number of items. Some of these were machine tools, motorised two wheelers, motorised-four-wheelers, paper and paper pulp, chemical, pharmaceutical, petro-chemical and fertilizer machinery industry and entertainment electronics.

The basic advantage of broad-banding was that licences issued in terms of broad categories would enable a given undertaking to manufacture any type of item covered so long as total production did not exceed the overall licensed capacity.

(c) Raising the asset limit of MRTP Companies. The threshold asset limit for companies under MRTP Act was raised from ₹ 20 crores to ₹ 100 crores. As a consequence, 112 companies came out of the purview of the MRTP Act. The Government also announced its decision to exempt 49 industries from the Section 22A of the MRTP Act and FERA.

(d) Relaxation of industrial licensing. The number of industries requiring compulsory licensing was reduced from 56 to 26.

5. INDUSTRIAL POLICY (1991)

The Congress Government led by Mr. Narasimha Rao announced the new industrial policy in July 1991. The main aim of the new industrial policy was:-

(a) to unshackle the Indian industrial economy from the cobwebs of unnecessary bureaucratic control,

(b) to introduce liberalisation with a view to integrate the Indian economy with the world economy,

(c) to remove restrictions on direct foreign investment as also to free the domestic entrepreneur from the restrictions of MRTP Act, and,

(d) the policy aimed to shed the load of the public enterprises which have shown a very low rate of return or were incurring losses over the years.

All these reforms of industrial policy led the government to take a series of initiatives in respect of policies in the following areas : a. Industrial licensing; b. Foreign investment; c. Foreign technology policy; d. Public sector policy; and e. MRTP Act.

Industrial Licensing Policy

(A) Industrial Licensing to be abolished for all projects except for a short list of industries related to security and strategic concerns, social reasons, hazardous chemicals and overriding environmental reasons and items of elitist consumption Industries reserved for the small scale sector will continue to be so reserved.

List of Industries in Respect of which Industrial Licencing will be Compulsory

1. Coal and Lignite. 2. Petroleum (other than crude) and its distillation products. 3. Distillation and brewing of alcoholic drinks. 4. Sugar. 5. Animal fats and oils. 6. Cigars and cigarettes of tobacco and manufactured tobacco substitutes. 7. Asbestos and asbestos-based products. 8. Plywood, decorative veneers, and other wood based products such as particle board, medium density fibre board, block board. 9. Raw hides and skins, leather, chamois leather and patent leather. 10. Tanned or dressed furskins. 11. Motor cars. 12. Paper and Newsprint except bagasse-based units. 13. Electronic aerospace and defence equipment; all types. 14. Industrial explosives, including detonating fuse, safety fuse, gun powder, nitrocellulose and matches. 15. Hazardous chemicals. 16. Drugs and Pharmaceuticals (according to Drug Policy). 17. Entertainment Electronics (VCRs, Colour TVs, C.D. Players, Tape Recorders). 18. White goods (Domestic Refrigerators, Domestic Dish Washing Machines, Programmable Domestic Washing Machines, Microwave ovens, Airconditioners).

The compulsory licensing provisions would not apply in respect of the small-scale units taking up the manufacture of any of the above items reserved for exclusive manufacture in small scale sector.

(B) Areas where security and strategic concerns predominate, will continue to be reserved for the public sector

List of Industries to be Reserved for the Public Sector

1. Arms and ammunition and allied items of defence equipments, Defence aircraft and warships. 2. Atomic Energy. 3. Coal and lignite. 4. Mineral oils. 5. Mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamond. 6. Mining of copper, lead, zinc, tin, molybdenum and wolfram. 7. Minerals specified in the Schedule to the Atomic Energy (Control of production and use) Order, 1953. 8. Railway transport.

(C) In projects where imported capital goods are required, automatic clearance will be given in cases where foreign exchange availability is ensured through foreign equity; or if the CIF value of imported capital goods required is less than 25% of total value (net of taxes) of

plant and equipment, upto a maximum value of ₹ 2 crore.

In other cases, imports of capital goods will require clearance from the Secretariat of Industrial Approvals (SIA) in the Department of Industrial Development according to availability of foreign exchange resources.

(D) In locations other than cities of more than 1 million population, there will be no requirement of obtaining industrial approvals from the Central Government except for industries subject to compulsory licensing. In respect of cities with population greater than 1 million, industries other than those of a non-polluting nature such as electronics, computer software and printing will be located outside 25 kms of the periphery, except in prior designated industrial areas.

Existing units would be provided a new broad banding facility to enable them to produce any article without additional investment.

The exemption from licensing would apply to all substantial expansions of existing units.

Foreign Investment

In order to invite foreign investment in high priority industries, requiring large investments and advanced technology, it was decided to provide approval for direct foreign investment upto 51 per cent foreign equity in such industries.

For the promotion of exports of Indian products in world markets, the government would encourage foreign trading companies to assist Indian exporters in export activities.

(i) Approval would be given for direct foreign investment upto 51 per cent foreign equity in high priority industries. There shall be no bottlenecks of any kind in this process. Such clearance will be available if foreign equity covers the foreign exchange requirement for imported capital goods.

(ii) While the import of components, raw materials and intermediate goods, and payment of know how fees and royalties would be governed by the general policy applicable to other domestic units, the payment of dividends would be monitored through the Reserve Bank of India so as to ensure that outflows on account of dividend payments are balanced by export earnings over a period of time.

(iii) To provide access to international markets, majority foreign equity holding upto 51% equity would be allowed for trading companies primarily engaged in export activities.

Foreign Technology

With a view to injecting the desired level of technological dynamism in Indian industry, government would provide automatic approval for technology agreements related to high priority industries within specified parameters. No permission will be necessary for hiring of foreign technicians, foreign testing of indigenously developed technologies.

Public Sector Policy

Public enterprises have shown a very low rate of return on the capital invested. This has inhibited their ability to regenerate themselves in terms of new investments as well as in technology development. The result is that many of the public enterprises have become a burden rather than being an asset to the Government. The original concept of the public sector has also undergone considerable dilution. The most striking example is the ***take-over of sick units*** from the private sector. This category of public sector units accounts for almost one-third of the total losses of Central public enterprises. Another category of public enterprises, which does not fit into the original idea of the public sector being at the commanding heights of the economy, is the plethora of public enterprises which are in the ***consumer goods and services sectors.***

The 1991 Industrial Policy adopted a new approach to public enterprises. The priority areas for growth of public enterprises in the future would be the following :

(a) Essential infrastructure goods and services.

(b) Exploration and exploitation of oil and mineral resources.

(c) Technology development and building of manufacturing capabilities in areas which are crucial in the long term development of the economy and where private sector investment is inadequate.

(d) Manufacture of products where strategic considerations predominate such as defence equipment.

Government would strengthen those public enterprises which fall in the reserved areas of operation or are in high priority areas or are generating good or reasonable profits. Such enterprises will be provided a much greater degree of ***management autonomy*** through the system of memoranda of understanding. ***Competition*** will also be induced in these areas by inviting private sector participation. In the case of selected enterprises, part of Government holdings in the equity share capital of these enterprises will be disinvested in order to provide further market discipline to the performance of public enterprises.

There are a large number of chronically sick public enterprises incurring heavy losses, operating in a competitive market and serving little or no public purpose.

The following measures are being adopted:

(i) Portfolio of public sector investments will be reviewed with a view to focus the public sector on strategic, high-tech and essential infrastructure. Whereas some reservation for the public sector is being retained, some areas would be opened up to the private sector selectively. Similarly, the public sector would also be allowed entry in areas not reserved for it.

(ii) Public enterprises which are chronically sick and which are unlikely to be turned around would, be referred to the Board for Industrial and Financial Reconstruction (BIFR) for formulation of revival/rehabilitation schemes. A social security mechanism is to be created to protect the interests of workers likely to be affected by such rehabilitation packages.

(iii) In order to raise resources and encourage wider public participation, a part of the government's shareholding in the public sector would be offered to mutual funds, financial institutions, the general public and workers.

(iv) Boards of public sector companies would be made more professional and given greater powers.

(v) There would be a greater thrust on performance improvement and managements would be granted greater autonomy through Memoranda of Understanding (MOUs) and would be held accountable.

MRTP ACT

With the growing complexity of industrial structure and the need for achieving economies of scale for ensuring higher productivity and competitive advantage in the international market, the interference of the Government through the MRTP Act has to be resticted. Towards this end:

(i) The pre-entry scrutiny of investment decisions by so-called MRTP companies will no longer be required. Instead, emphasis will be on controlling and regulating monopolistic, restrictive and unfair trade practices rather than making it necessary for the monopoly houses to obtain prior approval of Central Government for expansion, establishment of new undertakings, merger, amalgamation and takeover and appointment of certain directors.

(ii) The thrust of policy will be more on controlling unfair or restrictive business practices.

Competition Act, 2002 Replaces MRTP Act

The Ministry of Corporate Affairs, Government of India has issued a Notification dated 28th August 2009, whereby the Monopolies and Restrictive Trade Practices Act (MRTP), 1969, has been finally repealed and replaced by the Competition Act, 2002, with effect from September 1, 2009.

After the new economic policy came into operation in 1991, several provisions of MRTP Act, dealing with restrictions on M&A activities were made inoperative. The MRTP Commission was expected to continue to handle all the old cases filed prior to September 1, 2009 for a period of 2 years. It will, however, not entertain any new cases from now onwards.

It would be important to note that the provisions relating to M&A transactions (Sections 5 & 6 of the new Competition Act dealing with regulation of combinations) are yet to be notified. As of now, there is no clarity as to when these provisions would be made effective.

The two major differences between the MRTP Act, 1969 (now repealed) and Competition Act, 2002 are as follows :

(i) The object of the MRTP Act was to prevent the economic concentration in one Common detriment, curbing unfair trade practices, and to check monopolistic activities, on the other hand the object of the new Act is to promote and sustaining Competition in the market and to ensure the freedom of trade and to protect the interest of the consumer in whole.

(ii) The MRTP Commission has advisory role only whereas the later has some effective role including that of initiating suo moto actions and impose punishments to the entities having some adverse effect in the market.

Further Liberalisation by de-reservation

The Government decided in April 1993 remove three more items from the list of 18 industries reserved for compulsory licensing. These three items were : motor cars, white goods (which include refrigerators, washing machines, air conditioners, etc.) and raw hides and skins and patent leather. The basic purpose for de-reservation of these items was to increase the flow of investment in these industries. With the growth of a large middle class, ranging between 100 to 150 million, the demand for white goods like washing machines, refrigerators, air conditioners etc. is growing and these items are no longer viewed as luxury goods. Similarly, the demand for motor cars by the upper middle class and the affluent sections is also growing, more especially when the Government is providing loans to business executives and other senior officials to buy cars. To provide a boost to the motor car and white goods industries, the Government decided to de-reserve these items so that their production improves as a response to the market, instead of remaining shackled by the bureaucratic process of licensing.

Regarding raw hides and skins and patent leather, the Government was motivated by the desire to push up exports. Leather and good quality shoes have a

tremendous export potential and the small scale units are ill equipped to provide quality goods for the international market.

In pursuance of the liberalisation policy towards foreign investment, the Government decided in December 1996 to include 16 categories of industries in respect of which automatic approval would be accorded to foreign equity participation upto 51 per cent. This additional list of industries eligible for automatic approval upto 51 per cent foreign equity covers a wide range of industrial activities in the capital goods and metallurgical industries, entertainment electronics, food processing industries, mining (upto 50 per cent), and those having significant export potential.

The government, however, also added another list of nine industries for which automatic approval upto 74 per cent would be allowed. The nine industries are mining services related to oil and gas fields services, basic metals and alloy industries, non-conventional energy sources, manufacture of navigational, meteorological, geophysical and related instruments and apparatus, electric generation and transmission, construction and maintenance of roads, ropeways, ports, harbours, construction and maintenance of power plants. Besides, land transport, water transport and storage and warehousing services have also been included.

The basic thrust of these changes is that there will be no case-by-case approval for various proposals lying before the government. The main aim of the major policy initiative is to facilitate foreign direct investment in infrastructure sector, core and priority sectors, export-oriented industries, linkage with agro and farm sectors.

Evaluation of the Industrial Policy (1991)

The Industrial Policy announced by the Government of India in July 1991 fulfilled a long-felt demand of the corporate sector for declaring in very clear terms that licencing was abolished for all industries except 18 industries. Besides this, the industrial policy proposed to remove the limit of assets fixed for MRTP Companies and dominant undertakings. Thus, business houses intending to float new companies or undertake substantial expansion were not required to seek clearance from the MRTP Commission. Numerous cases of bottlenecks created by the bureaucracy were struck down by this singular decision of the Government. In this sense, the industrial policy was welcome because it took the bold decision ***to end the licence-permit raj*** and save the entrepreneurs from the clutches of the bureaucracy of the country to start an undertaking. This step enabled MRTP Companies to establish new undertakings, and effect plans of expansion, mergers, amalgamations and takeovers without prior government approval. In other words, the new industrial policy unshackled many of the provisions which acted as brakes on the growth of the large private corporate sector. All these provisions were welcomed by the business circles. There was thus an overall relief in the dismantling of industrial licensing and regime of controls.

However, several aspects of the industrial policy had come in for sharp criticism.

(a) *Policy Regarding Foreign Capital.* The industrial policy goes all out to woo foreign capital. It has been decided to provide approval for direct foreign investment upto 51% foreign equity in high priority industries. The Government had further clarified that it would permit 100% foreign equity in case the entire output was exported. All this was done in the belief that direct foreign investment was crucial to India's development. This ran counter to the Nehruvian Model in which foreign capital import was permitted only during the transitional phase in our goal of developing a self-reliant and self-generating economy. But events had not turned the way Nehru would have liked to build the Indian economy. The idea of free flow of foreign capital is now being sold with the understanding that it would provide the much-needed foreign exchange resources and that it would lead to injecting a heavy doze of investment in the high priority industries. The critics assert that, in our over-enthusiasm to welcome foreign capital, we may sell our sovereignty to multinationals.

Dr. Manmohan Singh, the then Finance Minister, and architect of the new policy, asserted that India should not be unnecessarily afraid of foreign capital inflow as an attack on Indian sovereignty. Actually India had very little foreign investment amounting to $ 425 million in 1989, while small countries like Indonesia ($ 735 million), Argentina ($ 1,028 million), Thailand ($ 1,650 million), Malaysia ($ 1,846 million) and Mexico ($ 2,241 million) had a much bigger quantum of foreign investment. Even China had foreign investment of the order of $ 1,400 million.

Critics base their judgement on past experience. Once foreign capital is permitted free entry, the distinction between high priority and low priority industries would gradually disappear over time and all lines of production would be opened to facilitate foreign investment. Experience of permitting Pepsi Cola is too recent to show that the Government sanctioned it in the least priority area.

Critics have also questioned the Government for assuring majority foreign equity holding upto 51% even for trading companies primarily engaged in export activities. According to them Indian trading companies would probe foreign markets effectively without foreign participation.

(b) Public Sector Policy. The industrial policy (1991) noted that public sector enterprises had shown a very low rate of return on capital invested. The result was that many of the public sector enterprises had become a burden rather than an asset to the Government.

It may be noted that enterprises accounting for a negative rate of return during 1989-90 were mostly in the consumer goods, textiles, contract and construction services and technical consultancy. All these accounted

for a total capital investment of ₹ 2,780 crores or about 3 per cent of total investment in the Central public sector. Those which accounted for a rate of return ranging between zero to 8 per cent accounted for an investment of ₹ 9,990 crores or 12 per cent of total investment. Thus, the total investment locked up in non-redeemable public sector enterprises was of the order of ₹ 12,770 crores or 15 per cent of total investment of ₹ 85,440 crores in the Central Public Sector in 1989. This being so, the Government should concentrate on improving the performance of the redeemable and surplus generating public sector enterprises which constitute 85 per cent of the investment. The Government intended to strengthen them through the instrument of Memorandum of Understanding. It also intended to introduce competition in these areas by inviting private sector participation.

(c) Social Security Policy. The real question which the Government has evaded is : What is the social security mechanism that the Government intended to create to mitigate the hardship of workers who were likely to be retrenched? The Industrial Policy statement only intended to refer these cases to the Board for Industrial and Financial Reconstruction (BIFR). In this regard, the Industrial Policy sidetracked issues and had generated a fear in the mind of the workers that the Government was not sincere in protecting the interests of the workers. It was also very difficult to comprehend why the Government was keen on passing on sick enterprises to big business. The capitalist classes were ready to buy these enterprises for the real estate value since the Government was prepared to transfer the assets at throw away prices. The dubious manner in which the UP Government passed on the ownership of UP State Cement Corporation (UPSCC) to the Dalmias for a paltry sum of ₹ 51 crores as against the net asset value of ₹ 306 crores only showed that the bureaucrat-cum-politician nexus was overbending to help the big private sector to gain from the wave of privatisation. Why was the Government not trying the experiment of full employee-ownership as was done in the case of Kamani Tubes which was a loss-making enterprise, but was nursed to health by the magic of employee-ownership. This experiment could be tried in a large number of loss-making public enterprises. This could instill new work ethics among the employees since their personal interest would be linked to the interest of the enterprise. Government of India could successfully go in for shedding its load of loss-making enterprises and help the working class to assume the ownership role and nurse these enterprises to health. The Government should provide financial and technical assistance. This would reduce trade union resistance to privatization.

(d) MRTP Policy. Lastly, the Government restricted the work of MRTP Commission to controlling and regulating monopolistic, restrictive and unfair trade practices. MRTP Commission was also authorised to initiate investigations *suo moto* or on complaints received from individual consumers or classes of consumers in regard to monopolistic, restrictive and unfair trade practices. MRTP Commission has actually failed in this respect and was not able to break the monopolistic or oligopolistic character of the Indian market. The very fact that despite privatization, cement or paper prices have skyrocketed and all talk of competition has been countered by combined action of manufacturers organisations, is ample proof of the fact that competition is only being used as a slogan for privatization, but in reality, competition is being systematically eliminated by big business.

In conclusion, it may be stated that the new Industrial Policy may be able to attract foreign investment and give a boost to domestic investment, but whether it will lead to more employment along with higher output growth is doubtful. Besides, excessive freedom to foreign capital may ultimately affect our economic sovereignty and as also push the country into a debt trap further. These are gloomy forebodings, but the recent East Asian economic crisis as well as the happenings in Russia and South American countries point out to the dangers of too much dependence on market mechanism, uncontrolled liberalisation and globalisation and unfettered freedom to import foreign capital.

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CHAPTER

12

PUBLIC SECTOR AND INDIAN PLANNING

"Sectors of economic activity which involve either monopoly conditions of strategic economic power or possession of large resources in private hands should be publicly owned and operated as public enterprises. It also means that public enterprise should make itself available for the building of economic overheads on the external economies like transport, power, fuel and basic capital goods without which increase in the production of consumption goods and services either on the required scale or necessary economic basis will not be possible . . . Without public enterprise, there can be no private enterprise. In fact, it is the former that enables the full growth of the latter."

—V.K.R.V. Rao

1. THE EVOLUTION OF THE PUBLIC SECTOR IN INDIA

Prior to 1947, there was virtually no "Public sector" in the Indian economy. The only instances worthy of mention were the Railways, the Posts and Telegraphs, the Port Trusts, the Ordnance and Aircraft Factories and a few State managed undertakings like the government salt factories, quinine factories, etc. The idea that economic development should be promoted by the State actually managing industrial concerns did not take root in India before 1947, even though the concept of planning was very much discussed by Congress governments in the Indian provinces. However, in the post-independence period, the expansion of public sector was undertaken as an integral part of the 1956 Industrial Policy.

The Industrial Policy Resolution 1956 gave the public sector a strategic role in the Indian economy. For one thing, at the time of independence, the country was backward and underdeveloped — basically an agrarian economy with a weak industrial base, heavy unemployment, low level of savings and investment and near absence of infrastructural facilities, Indian economy needed a big push. This push could not come from the Indian private sector, which was starved of funds and of managerial ability and was incapable of undertaking risks involved in large long-gestation period investments. It was assumed at that time that only the Government intervention in a big planned way could accelerate agricultural and industrial production, expand employment opportunities, reduce poverty, etc. In other words, the public sector was thought of as the engine for self-reliant economic growth to develop a sound agricultural and industrial base, diversify the economy and overcome economic and social backwardness.

To this basic argument for the expansion of the public sector, the Government added additional reasons over time, e.g.:

(a) to accelerate the growth of the core sectors of the economy;
(b) to serve the equipment needs of strategically important sectors like Railways, Telecommunications, Nuclear Power, Defence, etc.
(c) to exert countervailing power on the operation of private monopolies and multinationals in selected areas;
(d) to ensure easier availability of articles of mass consumption, to check prices of important articles etc. – the rationale behind setting up consumer-oriented industries;
(e) to protect employment, the Government was forced to take over sick industrial units.

In fact, over a period of time, the Government entered into many sectors for all types of good and bad reasons and in many cases for no reasons at all.

Central Government Enterprises

As on March 31, 2010, there were 217 Central Government undertakings, excluding banks, financial institutions and departmental undertakings like the Railways, Ports etc. The growth of investment in Central Government undertakings is shown in Table 1. It will be clear from the table that since 1951, the number of industrial and commercial undertakings of the Central Government had increased from 5 in 1950-51 to 239 units in 2005-2006 and the capital investment had increased from ₹ 29 crores to ₹ 6,66,848 crores on 31st March 2011. The investment is in the form of equity capital and long term loans.

Public Enterprises Survey, 2010-2011 gives some interesting information regarding the pattern of investment (Gross Block) (Table 2). Bulk of the investment is in manufacturing ; at the end of March 2011, over ₹ 3,35,634 crores, or 23.00 per cent of investment, was in these industries. Even here, bulk of the investment is in basic industries like Steel, Coal, Power, Petroleum, Fertilizers, etc. Nearly 24.54 per cent of investment is in enterprises rendering services.

Table 1 : Growth of Investment in Central Government Enterprises

As on March 31	*No. of Enterprises operating*	*Total Investment (₹ crores)*
1951	5	29
1961	47	950
1980	179	18,150
1990	233	99,330
2001	234	2,74,198
2007	216	4,21,089
2008	214	4,55,367
2009	213	5,13,532
2010	217	5,79,920
2011	220	6,66,848

Source : Government of India, *Public Enterprise Survey*, (2010-11).

Table 2 : Pattern of in Terms of Gross Block Investment in CPSEs

(₹ in crore)

SL.. No	*Sector*	*Investment in term of Gross Block (13.03.2010)*	*% Share in total Real investment*
1	Agriculture	119	0.01
2	Mining	2,90,600	23.00
3	Manufacturing	3,51,634	27.83
4	Electricity	3,17,908	25.15
5	Services	2,93,167	23.20
6	Under Construction Enterprises	10,237	0.81
	Total	**12,63,665**	**100.00**

Source : Government of india, *Public Enterprises Survey*, 2010-11: Vol-I

Table 1 given above provide information on total of financial investment in Central Public Sector Enterprises. This means aggregate of paid-up, share application money pending allotment and long term loans.

However there is another concept called Gross Block, which represents original cost of procuring and erecting fixed assets as appearing in the annual accounts of the CPSEs at the end of the accounting year and takes into account additions there to and deuction there from by way of sales and transfers Public Enterprises Survey 2008-09 which gives breakup of Real Investment in Central Public Sector Enterprises, which is given in Table 2.

The gaint top 10 enterprises in the Central Public Enterprises account for ₹ 8,70,431 crores of total Real Investment, as on 31st March, 2011 (Which was 69% of total Real Investment of ₹ 12,63,665 crores in 220 Enterprises).

As a result of the deliberate policy of encouraging public sector, heavy investment was made in the public sector, so as to facilitate the process of industrialisation in the country, by establishing heavy and basic industries and create infrastructure of power, electricity and transport. Except for the short span of five years (1968-69 to 1973-74) in which growth rate of investment was about 10 per cent, throughout the rate of growth of investment averaged between 16 and 19 per cent per annum.

Total Investment in Public Sector

Central Government Public Sector Enterprises recorded a total investment of ₹ 6,66,848 crores in 2010-11. The State level Public enterprises acounted for ₹ 2,59,180 crores as on 31.3.2005. Besides them , departments like Railways, Posts and Telegraphs and other departments accounted for an investment of nearly ₹ 50,000 crores. If all these are included, then the total public sector investment in the entire country, in all kinds of enterprises (departmental and non-departmental), at the Centre, State and local level, would be around more than rupees 10 lakh .

Objectives of Public Sector

We conclude this section by broadly summarizing the objectives of setting up public enterprises in India:

(i) To promote rapid economic development through creation and expansion of infrastructure;
(ii) to generate financial resources for development;
(iii) to promote redistribution of income and wealth;
(iv) to create employment opportunities;
(v) to promote balanced regional growth;
(vi) to encourage the development of small scale and ancillary industries; and
(vii) to promote exports on the one side and import substitution, on the other.

Table 3

Top Ten Enterprises in Tems of Real Investment/Gross Block During 2010-11

(₹ in crore)

Sl. No.	CPSEs	Investment in terms of Gross Block	% Share in total Real Investment
1	Oil & Natural Gas Corporation Ltd.	1,95,770	15.50
2	Bharat Sanchar Nigam Ltd.	1,72,338	13.64
3	NTPC Ltd.	1,11,026	8.78
4	Indian Oil Corporation Ltd.	1,05,785	8.37
5	Power Grid Corporation of India Ltd.	76,976	6.09
6	Steel Authority of India Ltd.	60,489	4.79
7	NHPC Ltd.	39,997	3.17
8	Air India	37,337	2.95
9	Nuclear Power Corporation of India Ltd.	37,265	2.94
10	Hindustan Petroleum Corporation Ltd.	33,447	2.65
	Total Top Ten Enterprises	8,70,431	68.88
	Total Gross Block	**12,63,665**	**100.00**

SOURCE : Government of India, *Public Enterprises Survey*, 2010-11 : Vol-I

2. ROLE OF THE PUBLIC SECTOR IN INDIA

After the attainment of independence and the advent of planning, there has been a progressive expansion in the scope of the public sector. The passage of Industrial Policy Resolution of 1956 and the adoption of the socialist pattern of society as our national goal further led to a deliberate enlargement of the role of public sector.

To understand the role of the public sector, we must have a comprehensive view of the entire public sector. We should include besides autonomous corporations, the departmental enterprises. While doing so, not only the enterprises owned and run by the Central Government be covered, but the enterprises run by the State Governments and local bodies should also be included.

It would not be appropriate to use any single measure to estimate the role of the public sector in the Indian economy, rather it would be desirable to use a few indicators, e.g., employment, investment, value of output, national income generated, savings, capital formation and capital stock.

Share of Public Sector in Employment

There are two important categories of public sector employment : (a) Government administration and defence and other government services like health, education, research and various activities to promote economic development; and (b) public sector proper, *i.e.*, economic enterprises owned by the Centre, State and Local Government. Table 5 shows the size and growth of employment in the organised sector since 1971. The total number of workers employed in the public sector in 1971 was 111 lakhs, but by March 2006, their number grew to about 182 lakhs before falling to 179 lakhs in 2010. Since employment in the public sector is confined to the organised sector, public sector employs 62.4 per cent of the workers employed in organised sector of the Indian economy.

TABLE 4 : Public and Private Sector Employment in India

(In lakhs)

	Public Sector (1)	Private Sector (2)	Total (3)	1 as % of 3 (4)
1971	111	67	178	62
1981	155	74	229	68
1991	190	77	267	71
2001	191	87	278	69
2005	180	84	264	68
2006	182	88	270	67.4
2007	180	93	273	65.9
2008	177	98	275	64.4
2009	178	103	282	63.1
2010	179	108	287	62.4

SOURCE : Compiled from *Economic Survey*, (2009-2010)

From Table 6, it may be noted that 51 per cent of the total employment (i.e., 180 lakhs) in the public sector was in Government administration and community and personal services and the balance 49 per cent was spread in other economic enterprises run by the Centre, State and local governments. The biggest chunk of employment in economic enterprises was in transport, storage and communications of the order of about 25.3 lakhs and next in importance was manufacturing (10.7 lakhs). About 4.8 lakh persons employed in agriculture and other allied activities reflect employment under Employment Guarantee Scheme rather than any productive activity in the normal sense.

The share of public sector in total employment in the organised sector (public plus private) reveals that

in transport and communications, electricity, gas and water and construction, the share of the public sector is in the range of 95-98 per cent, a situation of total dominance. These are the traditional areas which have been the exclusive preserve of the public sector since the days of the British rule. However, in manufacturing, the share of the public sector was about 27 per cent of the total since its entry in this area is of recent origin. With the nationalisation of coal mines and takeover of 20 major commercial banks, there has been a significant improvement in the position of the public sector. In an overall sense, the public sector is a big employer (62.4 per cent of total) in so far as the organised sector of the Indian economy is concerned.

TABLE 5 : Employment in the Public Sector by Industry 2010

	(Lakhs)
1. Agriculture, huriting etc.	4.78
2. Mining and quarrying	11.03
3. Manufacturing	10.66
4. Electricity, gas and water	8.35
5. Construction	8.59
6. Wholesale and retail trade	1.71
7. Transport, storage and communication	25.29
8. Finance, insurance and real estate etc.	14.13
9. Comminity social and personal services	90.51
Total	175.05

SOURCE : Compiled and computed from Government of India, *Economic Survey* (2009-2010)

Share of the Public Sector in GDP

During the last five decades, the share of the public sector in gross domestic product (GDP) has shown a steady improvement. Measured at current prices, public sector accounted for 7.5 per cent of GDP in 1950-51, its share in 1993-1994 had risen to 23.6 per cent. However, it declined to 21.2 per cent in 2009-10. Public sector, therefore, accounts for about one-fourth of national output. This is largely due to a rapid expansion of the public sector enterprises.

TABLE 6 : Share of the Public Sector in GDP (at current prices)

	1999-00	2000-01	2009-10
1. Gross Domestic Product	23.6	23.2	21.2
a. Administrative Departments	8.7	10.1	9.5
b. Departmental Enterprises	3.0	3.2	2.5
c. Non-Departmental Enterprises	11.9	9.9	8.4
d. Autonomous institutions			0.8

SOURCE : CSO, *National Accounts Statistics* (2011).

Note : From 2009-10 contribution of Autonomous institutions is seperately given

There is a a big increase in the share of public administration and defence from 4.5 per cent to 9.5 per cent between 1950-51 and 2009-10. The share of public sector enterprises, however, rose from 3 per cent in 1950-51 to 10.9 per cent in 2009-10. Despite this fact, the private sector still occupies a dominant position in the economy. There are some sectors such as agriculture and small-scale sector in which the share of the state is almost zero. However, in insurance, defence equipment, indigenous crude oil production, etc., government ownership is cent per cent. Increasingly, industries of strategic and national importance are being brought under state ownership.

Share of the Public Sector in Saving and capital Formation

Gross domestic capital formation has increased from 10.7 per cent of GNP during the First Plan to 24.6 per cent during the Eighth Plan. (Refer Table 6).

TABLE 7. Share of Public and Private Sectors in Gross Domestic Saving and Gross Domestic Capital Formation

Averages for Plan Periods	As % of GDP at market prices		
	Public sector	Private sector	Total
Gross Domestic Savings			
First Plan : 1951-56	1.7	8.7	10.4
Second Plan : 1956-61	2.0	10.4	12.4
Third Plan : 1961-66	3.4	10.9	14.3
Fourth Plan : 1969-74	3.0	14.4	17.4
Fifth Plan : 1974-79	4.6	17.0	21.6
Sixth Plan : 1980-85	3.6	16.5	20.1
Seventh Plan : 1985-90	2.3	18.1	20.4
Eighth Plan (1992-97)	1.4	21.9	23.3
Ninth Plan			
1997-98	1.8	22.0	23.8
1998-99	–0.5	22.8	22.3
1999-00	–0.8	25.6	24.8
2000-01	–1.8	25.5	23.7
2001-02	–2.0	25.5	23.5
Tenth Plan			
2002-03	–0.6	26.9	26.3
2003-04	1.1	28.7	29.8
2004-05	2.2	29.5	31.7
2005-06	2.4	31.8	34.2
2006-07	3.3	32.4	35.7
2007-08	5.0	31.4	35.4
2008-09	1.4	31.1	32.5
2009-10	2.1	31.6	33.7
Gross Domestic Capital Formation			
First Plan	3.5	7.2	10.7
Second Plan	6.6	8.8	15.4
Third Plan	8.4	8.3	16.7
Fourth Plan	7.2	10.9	18.1
Fifth Plan	9.5	11.7	21.2
Sixth Plan	11.1	10.5	21.6
Seventh Plan	10.7	12.1	22.8
Eighth Plan	9.2	15.4	24.6
New Series base year 1999-2000			
2001-02	6.9	16.3	22.9
2002-03	6.2	19.0	25.2
2003-04	6.8	21.2	28.0
2004-05	6.9	23.4	31.6
2005-06	7.6	26.1	34.8
2006-07	8.0	27.2	36.4
2007-08	8.9	28.6	37.5
2008-09	9.4	26.1	35.5
2009-10	9.2	27.0	36.1
2010-11	8.8	27.0	35.8

NOTE : Difference in total in accounted for by valualler.

SOURCE : CMIE, *Basic Statistics Relating to the Indian Economy*, Vol. I, All India, August, 1994 and *Economic Survey (2011-12)*.

However, the share of the public sector improved from 3.5 per cent during the First Plan (1951-56) to 9.2 per cent during the Eighth Plan. The share of the public sector which accounted for one-third of capital formation during the First Plan gradually increased to about one-half during the Sixth Plan, and has thereafter declined to about 25 (8.8 percent of GDP) per cent in 2010-11.

However, the share of savings by the public sector has not undergone a similar change. The share of the public sector in gross domestic saving rose from 1.7 per cent of GDP during 1951-56 to merely 4.6 per cent during the Fifth Plan but declined thereafter and touched a low of 1.4 per cent during the Eighth Plan. This share became negative during 1999-00 and 2003-04. In relative terms, the share of public sector improved marginally from 17 per cent during 1951-56 to 21 per cent during 1974-79 (Fifth Plan period) and thereafter declined continuously till it touched a low level of 1.4 percent during the Eighth Plan. But by 2007-08 it improved to 5.0 percent of Gross domestic product. But in 2009-10 it again declined to 2.1 percent.

Three basic causes for the decline of the share of the public sector in total savings.

(i) Rapid increase in state expenditure at a rate higher than increase in state revenues.

(ii) The inefficiency of the government and the public sector enterprises and their consequent failure to generate internal surplus commensurate with the increase in their capital stock.

(iii) The self-defeating efforts of the government to make up the shortfall in resources through excessive borrowings from the banking sector (better known as deficit financing).

Accordingly, the savings of the private sector had to be diverted to the public sector so that it can meet its expanding obligation in the process of development. This fact, however, does not absolve the public sector to generate adequate internal surplus by improving its efficiency.

Share of the Public Sector in Gross Fixed Capital Formation

The term capital stock refers to the total stock of plant and machinery, equipment and tools and other capital goods available at a point of time for further production. However, the term investment (or gross capital formation) refers to annual flow of goods partly to meet the needs of depreciation of the capital stock and partly to increase the size of the total capital stock on a net basis.

But the amount of capital employed per unit of output in the public sector is far greater than in the private sector. This is largely due to the differences in the nature of investment in the public sector. The important differences are :

(i) A good part of the public sector investment goes into economic infrastructure (roads, buildings, irrigation works, bridges, etc.) which is essential for economic development but does not contribute to output in the normal sense of the term.

(ii) Public sector has played a significant role in developing the key sectors of the economy, e.g., railways, iron and steel, power, oil exploration, irrigation, etc. By their very nature these are areas of high capital intensity.

(iii) The projects in the public sector have longer gestation periods. Partly this is due to the technological nature of investment in heavy and basic industries and partly it is due to the inefficiencies in public agencies in the installation of these projects.

(iv) Areas of higher output– capital ratios fall largely or wholly in the private sector. This includes consumer goods industries, small-scale and cottage enterprises and agriculture.

TABLE 8. Public Sector Fixed Capital Formation at Current Prices

Year	*Value in ₹ crores*	*As per cent of GDP*
	(1999-2000 Series)	
1950-51	259	2.6
1960-61	1,172	6.7
1970-71	2,690	5.8
1980-81	12,920	8.9
1990-91	54,899	9.6
2000-01	1,35,699	6.5
	(2004-2005 Series)	
2004-05	2,24,108	6.9
2005-06	2,71,342	7.3
2006-07	3,39,617	7.9
2007-08	4,01,326	8.0
2008-09	4,80,698	8.5
2009-10	5,43,337	8.4
2010-11	6,19,923	8.1

SOURCE : *CSO, National Accounts Statistics*, (2009) and *Economic Survey* (2011-12).

Data given in Table 8 reveals that gross fixed capital formation (GFCF) increased from 2.6% of GDP in 1950-51 to 6.7% in 1960-61. This was the natural conseuqence of the enthusiasm generated in the Second Plan to undertake massive development of heavy and basic industries. However, this process of acquiring new plants and machinery into hitherto unexplored areas did continue up to 1965-66 when GFCF shot up to ₹ 2,112 crores i.e. 6.8 per cent of GDP, but the drought and recession of 1965-66 and 1966-67 reversed the trend and it declined to 5.8 per cent of GDP in 1970-71. Later it picked up in seventies and eighties and reached the peak level of 9.6 per cent in 1990-91. Thus public sector made a tremendous contribution in increasing Gross Fixed

Capital Formation and thus laid the foundations of a strong industrial base in India. With the onset of new economic reforms, the emphasis shifted towards encouraging the private sector investment. As a consequence, public sector contribution to GFCF declined to a level of 6.0 per cent of GDP in 1999-00 on the basis of 1999-00 series.

Since the process of economic reforms has been pushed thereafter, public sector contribution to GFCF was of the order of 9.4% of GDP in 2008-09. During 1999-00 and 2004-05, this has hovered around 6.5 to 6.9% of GDP (New Series with base year 1999-00) since many areas of heavy and basic industries were opened to private sector investment. The public sector is using its internal resources for increasing investment, but the state push for GFCF in the public sector vanished in the post-reform period. Share of Public Sector in fixed capital formation has again started showing an upward trend since 2004-05 and by 2010-11, it was 8.1 percent of GDP.

Volume of Sales/Income of the Public Sector

Table 10 explains the trend of growth of sales in Central public enterprises. In 1987-88, percentage of sales to capital employed (CE) was 146 and this ratio declined to 116 per cent in 1990-91. But it again started showing upward trend and it reached 155 in 2008 - 09. Between 1990-91 and 2010-2011, the annual average growth rate of sales was 13.42 per cent, while that of capital employed was 11.80 per cent. This is an "eloquent measure of the dynamic expansion of the public sector in India."

Table 9. Growth of Sales and Capital Employed in Public Sector enterprises

(₹ crores)

Year	*Sales Turnover*	*Capital Employed*	*% Sales to CE*
1987-88	81,270	55,620	146
1990-91	1,18,680	1,02,080	116
2009-10	12,44,805	9,09,285	137
2010-11	14,73,319	9,50,449	155
Annual Average Growth Rate between 1990-91 and 2009-2010	13.42	11.80	—

SOURCE : *Public Enterprises Survey*, 2009-10.

Infrastructure Development by the Public Sector

Rapid industrialisation of a backward but developing country like India depends upon the creation of infrastructure or economic overheads such as transportation, communication, power development, basic and key industries, etc. Unless the infrastructure is created, it is not possible for other industries to come into existence or to develop fast enough. But the development of basic and capital goods industries and creation of infrastructure involves heavy investment, low yield and long gestation period. These investments were, therefore, not attractive to the private sector nor could the private sector raise such huge resources in the Fifties and Sixties. Naturally, it was left to the Government to develop them and most of the public enterprises were set up in these industries. The private sector welcomed government investment in developing these industries, as it stood to gain directly.

In fact, the basic rationale of public enterprises soon after India launched ambitious economic plans was to create and expand the infrastructure and this they have done quite successfully, by and large. Their contribution to the Indian economy should, therefore, be judged from this angle and not from the point of view of profit alone.

Strong Industrial Base in India

Despite many criticisms against the public sector enterprises, there is no denying the fact that rapid industrialisation in the first three decades after independence was mainly due to the public sector. The Industrial Policy Resolutions reserved certain industries – atomic energy, ammunition and armaments, aircraft, etc.– with the government in the interest of national security. The state also took the responsibility for the development of key industries such as coal, iron and steel, aircraft, ship-building, etc. The rest of the industries were left to the private sector. But the experience of the first three Plans showed clearly that the private sector had inherent handicaps and that it was not suitable for rapid industrial development. At the same time, the Planning Commission realised that a much more diversified development in the field of industries was necessary if Indian economy had to become self-generating. Naturally, the government had to come in a big way to undertake the development of basic and strategic industries, capital goods industries and even some consumer goods industries. A strong industrial base has been laid, though there are still many weaknesses and gaps in the industrial structure of the country. Credit has to be given to the public sector for this achievement. Even after the introduction of economic reforms, private sector investment has not increased as expected and it is being suggested that the public sector should take up the responsibility of infrastructure development.

Dominance of Public Sector in Critical Areas

Public sector has entered into a wide spectrum of industries and products. Its operations extend from basic and capital goods like steel, coal, copper, zinc, and other minerals, heavy machinery on the one hand and on the other, we find drugs and chemicals, fertilizers, consumer goods like textiles, hotel services, watches, bread, etc. Most of these industries have a strategic importance in the Indian economy since they have high linkages.

In highly critical areas such as copper, lead, coal, petroleum products, hydro and steam turbines the share of public sector is 100 per cent. In quite a large number of products, it ranges between 50 and 95 per cent.

Role of Public Sector in Export Promotion

Most of the public sector enterprises have been started keeping in mind the requirements of the Indian economy, in the fields of production and distribution. However, some public enterprises have done much to promote India's exports. The State Trading Corporation (STC) and the Minerals and Metals Trading Corporation (MMTC) have done a wonderful job of export promotion in all parts of the world, specially in the East European countries. That metal ores have become the second largest single item on our list of exports, has been due to the pioneering efforts of these organisations. Considerable success has been achieved in pushing up the exports of Indian handicrafts, light engineering goods and many other new items of exports. Hindustan Steel Ltd., the Bharat Electronics Ltd., the Hindustan Machine Tools, etc. are some of the public enterprises which are exporting increasing proportion of their output and earning foreign exchange. For instance, the BSL has made huge strides in the field of exports.

The foreign exchange earnings of the public sector enterprises have been rising from ₹ 35 crores in 1965-66 to ₹ 5,830 crores in 1984-85 and finally to ₹ 43,576 crores in 2005-06. There is no denying the fact that the export performance of the public sector enterprises has been quite creditable.

Role of the Public Sector in Import Substitution

Some public sector enterprises were started specifically to produce goods which were formerly imported and thus to save foreign exchange. The entry of Hindustan Antibiotics Ltd. and the Indian Drugs and Pharmaceuticals Ltd. (IDPL) into the manufacture of drugs and pharmaceuticals so as to remove the monopolistic stranglehold of foreign concerns in this field helped India save foreign exchange used for importing these items. Likewise, the Oil and Natural Gas Commission and the Indian Oil Corporation Ltd. are public enterprises which attempt directly to increase self-reliance of the country and reduce our dependence on imports. The Bharat Electronics Ltd. had saved foreign exchange by way of import substitution. Complete self-sufficiency may not be possible at present, but a determined effort should be made to achieve this goal in the shortest possible time.

Role of Public Sector in Raising Internal Resources

The generation of internal resources by the public sector has assumed greater importance because, in addition to financing their own planned expansion and development, they are also expected to generate surplus for financing the needs of other priority sectors.

Internal resources consist of depreciation and retained profits. With every five year plan, the public secor was able to mobilise larger internal resources. During the Seventh Plan internal resources of the order of ₹ 29,750 crores were generated. During the Eighth Plan, PSUs generated internal resources of the order of ₹ 1,01,212 crores—a creditable record indeed. During the Tenth Plan, (2002-03 to 2006-07) total internal resources generates by the CPSEs were of the order of ₹ 3, 95,686 crores. It is really encouraging to note that Central public enterprises have succeeded in increasing their internal resource generation over the years. This trend should be welcomed.

Contribution to the Exchequer

Apart from generation of internal resources and payment of dividend, public enterprises have been making substantial contribution to the Government exchequer through payment of corporate taxes, excise duty, customs duty and other duties; in this way they help in mobilizing funds for financing the needs for the planned development of the country. Table 11 illustrates the growth of contributions of public sector enterprises to Central exchequer. We include here (a) corporate tax (b) Central excise duty (c) customs duties and (d) other duties.

1. V. V. Ramanadham : *The Structure of Public Enterprises in India*, p. 56.
2. *Ibid.*, p. 57.
3. *Second Five-Year Plan*, p. 23.

TABLE 10 : Contribution of Public Enterprises to Central exchequer

(₹ crores)

Year/period	Amount Contributed Total	Average *
Seventh Plan (1985-90)	69,410	13,880
Eighth Plan (1992-97)	1,33,780	26,760
Ninth Plan (1997-2002)	2,69,110	53,822
2002-03	81,867	
2003-04	89,035	
2004-05	1,10,604	
2005-06	1,25,456	
2006-07	1,48,789	
Tenth plan (2002-07)	5,55,745	1,11,149
2007-08	1,65,994	
2008-09	1,51,728	
2009-10	1,39,918	
2010-11	1,56,124	

* Figures rounded

Source: *Public Enterprises Survey*, 2010-11.

It is clear from Table 11 that public enterprises contributed ₹ 27,570 crores during the Sixth Plan but as much as ₹ 1,33,780 crores during the Eighth Plan. From an annual average of ₹ 5,510 crores during the Sixth Plan, the contribution of public enterprises has increased to ₹ 53,822 crores during the Ninth Plan. It has further increased to ₹ 1,11,149 crores for the period 2002-03 to 2006-07, (Tenth Plan), on the average. In 2010-11, Public sector contributed ₹ 1,56,124 crores to exchequer.

Thus, from every angle, the public sector has grown in importance and has come to occupy a prominent place in the Indian economy. What we have described above relates mostly to enterprises in the Central sector. We do not, however, have adequate statistics for state public sector enterprises and the little information we have of them is not flattering to the states.

3. CAUSES FOR THE EXPANSION OF PUBLIC ENTERPRISES

In a developing economy like India, some industries had to be brought within public ownership and control, for otherwise rapid growth of the economy was thought to be impossible. Nationalising some of the industrial, banking and insurance units and starting new units was expected to help in speeding up the rate of economic growth. Therefore, public enterprises became an essential part of the economic development programme of India. In this section, we shall study the need for or the rationable of public enterprises in the context of economic planning in India.

(i) ***Rate of Economic Development and Public Enterprises.*** The justification for public enterprises in India was based on the fact that the rate of economic development be planned by the government was much faster than could achieved by the private sector alone. In other words, the public sector was essential to realise the target of the high rate of development deliberately fixed by the government.

To fulfil this ambitious plan target, the government had to resort to compulsory saving through taxation. In the words of Professor Ramanadham, "Having gathered the resources, the government and other important policy making bodies like the Planning Commission are under the normal human temptation to use the funds under the government's own aegis and it appears to be an avoidable botheration for the administration to offer the money to private enterprises in the first instance and then go about instituting the necessary checks and balances for the sake of ensuring the safety and proper use of funds. Instead it appeals as preferable to Parliament as well as the administrative bodies to launch industrial enterprises in the public sector."[1]

(ii) ***Pattern of Resource Allocation and Public Enterprises.*** In Professor Ramanadham's words, "The main reason for the expansion of the public sector lies in the pattern of resources allocation decided upon under the plans."[2] In the Second Plan the emphasis was shifted to industries and mining, mainly basic and capital goods industries to be developed under the aegis of the public sector. Thus more resources for industrialisation were funnelled through the public sector. Under these circumstances, "It is inevitable. that the public sector must grow not only absolutely but also relatively to the private sector."[3]

(iii) ***Removal of Regional Disparities through Public Enterprises.*** Another important reason for the extension of the public sector was the anxiety for balanced development in different parts of the country and to see that there were no serious regional disparities. Public enterprises of the Central Government were set up in those regions which were underdeveloped and where local resources were not adequate. Good examples are the setting up of the three steel plants at Bhilai, Rourkela and Durgapur and the Neyveli Project in Chennai which were meant to help industrialise the regions surrounding the projects. In certain cases, the State Governments were unable to raise adequate resources for development of their regions. The only alternative available was the setting up of projects by the Central Government or to start enterprises which were financed by the Centre.

4. *Ibid.*, p. 45.

5. Rao, V.K.R.V., "The Public Sector in Indian Socialism", *Indian Economic Development and Policy*, ed. P.R. Brahmananda and others (1979), pp. 26-27.

(iv) *Sources of Funds for Economic Development.* Initially, state was an important source of funds for development. The surplus of government enterprises could be re-invested in the same industries or used for the establishment and expansion of other industries. It may be noted that private sector industries can also plough back whole or substantial amounts of their profits for expansion. However, profits in private enterprises are declared as dividends among shareholders. This would only create inequalities among people. But profits of public sector industries can be directly used for capital formation.

(v) *Socialistic Pattern of Society.* The socialistic pattern of society calls for extension of public sector in two ways. For one thing, production will have to be centrally planned as regards the type of goods to be produced, the volume of output and the timing of their production. It may be comparatively easy to achieve this through the public sector rather than through private sector. We may quote the Second Five-Year Plan here : "The adoption of the socialistic pattern of society as the national objective, as well as the need for planned and rapid development, require that all industries of basic and strategic importance, or in the nature of public utility services, should be in the public sector. Other industries which are essential and require investment on a scale which only the state, in present circumstances, could provide, have also to be in the public sector."[4]

Besides, one of the objectives of the Directive Principles of the Indian Constitution is to bring about reduction of the inequalities of income and wealth and to establish an egalitarian society. The Five-Year Plans have taken this up as a major objective of planning. The public enterprises were used as major instruments for the reduction of inequalities of income and to bring about a more equitable distribution of income in several ways : (a) The profits of public enterprises would go to the government unlike those of private enterprises which go to enrich private pockets. (b) There could be effective regulation of income of top executives in public enterprises, taking, of course, steps to maintain high managerial efficiency. (c) The public enterprises could be asked to adopt discriminatary price policies which would benefit the low-income consumers; and (d) they, generally, make it easy to raise wage income of the low-paid staff.

Explaining the importance of the public sector in a mixed economy and its role in the establishment of a socialist pattern of society, Professor V.K.R.V. Rao opined, "Sectors of economic activity which involve either monopoly conditions of strategic economic power or possession of large resources in private hands should be publicly owned and operated as public enterprises. It also means that public enterprise should make itself responsible for the building of the economic overheads on the external economies like transport, power, fuel, and basic capital goods without which increase in the production of consumption goods and services either on the required scale or necessary economic basis will not be possible, irrespective of whether it is to be in the private or public sector. It also means that the extension of the public sector in economic enterprise will be followed by a substantial growth in the volume of national saving and investment as well as the funds available for government outlay on social services... Without public enterprise, there can be no private enterprise. In fact, it is the former that enables the full growth of the latter."[5]

(vi) *Limitations and Abuses of the Private Sector.* The behaviour and attitude of the private sector itself was an important factor responsible for the expansion of the public sector in the country. When the Americans insisted on the Bokaro Project to be set up in the private sector, Mr. J.R.D. Tata openly confessed that the private sector was not in a position to mobilise resources to the tune of ₹ 700 crores. Thus, the private sector did not want to move into certain sectors or if it wanted to move in, it did not have the necessry resources. This was understandable but the private sector was unwilling to take even the normal risks of business. During the Second Plan period and later, many of the licences issued to the private sector for setting up fertiliser units were surrendered when the need for fertiliser production was paramount for the country to push an agricultural breakthrough. To give another example, the business recession of 1966-67 frightened the private sector cement industry from expansion, even though it had given an undertaking to the Government to expand. To safeguard the long-term prospects of the economy, the Government had to set up the Cement Corporation of India to boost the production of cement. The failure of the private sector drug industry to manufacture antibiotics and at the same, its tremendous exploitation of the consumers--to the extent of holding them to ransom--was responsible for the entry of the Government in drugs and pharmaceuticals industry.

In a number of cases, the Government was forced to take over a private sector industry or industrial units either in the interest of workers or to prevent excessive exploitation of consumers. The private sector Life Insurance companies were taken over by the Government to protect the interest of the insured from the short-sighted and rapacious private exploiters. The top 20 commercial banks were nationalised, among other things, to prevent bank funds being used for building up private industrial and commercial empires. The takeover of sick cotton mills was due to the failure of the private sector. The point to note here is that often the private sector did not function as it should and did not carry out

its social responsibilities. Accordingly, the Government was forced to take over or nationalise the private sector units.

To sum up, the expansion of the public sector was aimed at the fulfilment of our national goals, viz., the removal of poverty, the attainment of self-reliance, reduction in inequalities of income, expansion of employment opportunities, removal of regional imbalances, acceleration of the pace of agricultural and industrial development, to reduce concentration of ownership and prevent growth of monopolistic tendencies by acting as effective countervailing power to the private sector, to make the country self-reliant in modern technology and create professional, technological and managerial cadres so as to ultimately rid the country of dependence on foreign aid.

4. PERFORMANCE OF PUBLIC SECTOR UNDERTAKINGS

While the Government has been pushing ahead with more and more public sector undertakings, there has been considerable criticism about the poor performance and in some cases utter failure of government undertakings in the country. Some economists have argued that profit should not be used as a criterion for judging the performance of public enterprises According to them, public enterprises are guided by a variety of considerations in determining prices and it would not be appropriate to use profit as a criterion of their efficiency. This is particularly so in social utility services, like railways, posts and telegraphs, supply of water, electric energy, etc. The State should not raise the prices of these services, even though costs may have risen. Similarly, the public enterprises have a bulk of their investment in heavy and basic enterprises. Such enterprises have long gestation period and a part of the investment may be under construction. It would, therefore, be appropriate to calculate the rate of return on effective capital employed and thus not include the capital employed in undertakings under construction or in expansion or capital work-in-progress. In other words, "*profitability*" *of the running concerns alone should be the index of their performance*.

Besides, the term 'profitability' should not always be used in a business or a pure commercial sense with reference to public enterprises which are not permitted to manipulate depreciation or other payments to show higher rate of return. Moreover, PSUs offer much better reward for labour in terms of wages and salaries and other perquisites in comparison with small and medium enterprises in the private sector. To judge their performance, an adjustment should, therefore, be made for a higher social rate of return. The concept of total surplus generated in the form of declared profits, retained profits and depreciation becomes more relevant in the case of private sector enterprises and not for PSUs. This is not to suggest that profitability should not be considered as an index of efficiency, but to emphasize that the problem should be viewed in a proper perspective.

Although profit maximisation (or in the case of public enterprises, the generation of surplus) may not be the sole criterion to judge their performance, yet it cannot be denied that it would be a folly to ignore it altogether. It has been aptly pointed out that profit maximisation may not be treated as a positive virtue but it may well be a 'good whip' to prevent the public enterprises from misbehaving. Thus the principle of profit maximisation has a negative virtue that it impels enterprises to reduce wastes of resources and inefficiency arising therefrom. From this point of view, the argument for generation of surplus by public enterprises to be used for economic development has a great force.

'Net Profit After Tax' as a Measure of profitability

The usual criterion for measuring the profitability is the ratio of 'profit after tax' to the shareholders' funds (viz., paid-up capital and reserves).

The Public Enterprises Survey gives financial performance of all running Central PSUs excluding insurance companies. Table 12 gives total capital employed, gross profit before tax and net profit after tax since 1980-81. The following facts can be highlighted from Table 12:

(i) It was only after 1981-82 that the Central PSUs turned the corner and started yielding positive net profit after tax – from about ₹ 50 crores in 1981-82 to about ₹ 13,582 crores in 1997-98. In percentage terms, the net profit after tax ranged between 2 per cent and 5.4 per cent of total capital employed between 1982 and 1998. In most of the years, however, net profits after tax used to average around 2 to 3 per cent only.

(ii) It is useful to remember that the capital employed in the Central PSUs was generally raised by way of long-term loans from the market and from financial institutions and banks at a much higher rate of interest. Accordingly, *the yield rate of Central PSUs represented by net profit after tax was pitiably low*.

(iii) A very interesting point about the financial performance of the Central PSUs is that the major part of the profits was contributed by the petroleum sector enterprises. For instance, in 2005-06 net profit after tax came to ₹ 70,288 crores of which about ₹ 26,181 crores (or 37.2 per cent) came from petroleum enterprises alone.

(*iv*) **Public Enterprises Survey** estimates the net

profit by the profit-making enterprises along with the losses suffered by loss-making enterprises. In 2005-06, 157 profit making enterprises earned a total net profit of about ₹ 76,240 crores and only 58 loss making units incurred a total loss of ₹ 5,952 crores. In recent years, an attempt has been made by the Government of India to study each loss-making enterprise to determine the factors responsible for the persisting situation and initiate remedial action.

Although the Government of India has been presenting a rosy picture about the performance of public sector enterprises, still two observations need to be made.

Firstly, a very narrow range of profit-making enterprises account for bulk of the total net profit. Petroleum industries, financial services, power and telecommunication services contribute bulk of the profits. Among the principal loss incurring enterprises are consumer goods, engineering goods, fertilizers and chemicals and pharmaceuticals.

Secondly, the Government is achieving a higher profitability ratio by increasing the administered prices of goods produced in the public sector, rather than through reducing costs, improving efficiency and capacity utilisation.

(v) As a result of the criticism of the public sector,

TABLE 11 : Financial Performance of Centre's Public Enterprises

(Running Enterprises excluding insurance companies)

₹ Crores

Year	*No. of operating enterprises*	*Capital employed*	*Gross profit before interest & tax*	*Net profit before tax*	*Net profit after tax*	*Rate of Return*	
						Gross profit to capital employed (%)	*Net Profit after tax to capital employed (%)*
						6=(3 ÷ 2)	7=(5÷2)
	1	2	3	4	5	6	7
SIXTH PLAN							
1980-81	168	18,207	1,418	19	-203	7.8	-1.1
1981-82	188	21,935	2,654	1,025	446	12.1	+2.0
1982-83	193	26,590	3,469	1,547	618	13.1	+2.3
1983-84	201	29,856	3,565	1,480	240	11.9	+0.8
1984-85	207	36,382	4,628	2,099	909	12.7	+2.5
SEVENTH PLAN							
1985-86	211	42,965	5,287	2,173	1,172	12.3	+2.8
1986-87	214	51,835	6,521	3,101	1,771	12.6	+3.4
1987-88	220	55,617	6,940	3,353	2,030	12.5	+3.6
1988-89	226	67,629	8,572	4,404	2,993	12.7	+4.4
1989-90	233	84,760	10,622	5,293	3,789	12.5	+4.5
1990-91	236	1,01,702	11,359	3,820	2,368	11.2	+2.3
1991-92	237	1,17,991	13,675	4,003	2,355	11.6	+2.0
EIGHTH PLAN							
1992-93	239	1,40,110	15,957	5,076	3,271	11.4	+2.3
1993-94	240	1,59,836	18,555	6,654	4,544	11.6	+2.8
1994-95	241	1,62,451	22,630	9,768	7,187	13.9	+4.4
1995-96	239	1,73,948	27,587	13,621	9,574	15.9	+5.5
1996-97	236	2,31,178	30,915	15,378	10,188	13.4	+4.4
NINTH PLAN							
1997-98	236	2,49,855	37,206	19,216	13,582	14.9	5.4
1998-99	235	2,65,093	39,727	19,702	13,203	15.0	5.0
1999-00	232	3,02,947	42,270	22,037	14,331	13.9	4.7
2000-01	234	3,31,372	48,767	24,967	15,653	14.7	4.7
2001-02	231	3,89,934	63,190	38,233	25,978	16.2	6.7
TENTH PLAN							
2002-03	226	4,17,160	72,539	48,616	31,119	17.4	7.5
2003-04	230	4,52,336	95,039	71,144	49,010	21.0	10.8
2004-05	227	5,04,407	1,08,420	85,550	63,889	21.5	12.7
2005-06	226	5,85,484	1,14,422	90,714	66,344	19.5	11.3
2006-07	217	6,61,338	1,39,008	1,11527	77,175	21.0	11.7
2007-08	214	7,24,009	1,52,579	1,20,453	79,704	21.1	11.0
2008-09	213	7,92,232	1,42,395	1,03,095	69,267	18.0	8.7
2009-10	217	9,09,285	1,60,017	1,23,957	83,939	17.6	8.7
2010-11	220	9,50,449	1,70,625	1,31,627	86,324	18.0	9.2

Note : Gross Profit before tax = (Net profit + interest + corporate tax paid)
Total capital employed = (Fixed assets minus depreciation plus working capital)

SOURCE : *Public Enterprises Survey,* (2010-2011), Vol. 1., and Earlier Issues

an effort has been made to improve its performance. Data reveal that gross profit before tax has improved from 14.9 per cent in 1997-98 to 21.0 per cent in 2006-07. Similarly, net profit after tax has also improved from 5.4 per cent in 1997-98 to 8.7 per cent in 2009-10. However gross profit as percent of capital employed hovered around 21 percent for most of the years since 2002-03. This was despite the problem faced by the oil CPSEs who were not allowed to raise the selling price in the same proportion as the increase in input/crude prices and had to share the impact of rise in input price alongwith the subsidy burden of the Government. These are healthy developments which have improved the image of the public sector in terms of profitability.

Employees' Welfare in Public Enterprises

While evaluating the performance of the public sector it is necessary to refer to the gains to the employees in the form of a steady improvement in their emoluments, provision for housing, medical care and educational facilities. A close perusal of table 13 reveals that the real wage (with 1982 prices as base) (emoluments) per employee in the public sector went up from ₹ 28,820 in 1986-87 to ₹ 77,745 in 2010-11. The annual growth rate of real wages works out to be 4.5 per cent during this period.

This indicates the social benefits in terms of raising the wage levels of the working class. A total expenditure of ₹ 3,060 crores in the form of maintenance of houses, educational facilities, medical care etc., was spent in 2001-02 for the benefit of the employees.

Table 12. Trend of Emoluments in Public Enterprises

	1986-87	*2010-11*
Average emoluments of public sector employees (₹ per annum at current prices)	28,820	6,66,276
Consumer Price Index of industrial workers (1982=100)	137	857
Average Real emoluments (1982 prices as base)	21,036	77,745
Index of growth in real emoluments	100	370

Note : Computed on the basis of the data provided in *Public Enterprises Survey*, (2010-2011), Vol. 1.

As on March 2005, public sector enterprises spent ₹ 6,163 crores on townships for workers' housing. As a result of it, 8.4 lakh houses (including those under construction) have been provided to 51 per cent of the workers. This is creditable achievement. In this sense, the public sector has acted as a pace setter in providing amenities to labour. The private sector should certainly follow the public sector in this regard.

The image of the public sector has started looking up. Had the public sector been not called upon to act as an orphanage for the "sick units" of the private sector especially textile mills, its performance would have been still better. These mills were virtually on the brink of a total collapse. The public sector by assuming responsibility of rehabilitation for these sick units had to bear a burden to save 1.6 lakh employees from the spectre of unemployment. This social responsibility would certainly lead to a lower level of profits. This explains why it is not appropriate to treat profits as the sole criterion of efficiency of the public sector.

The good and improving performance of the public sector has been acknowledged by the Government and informed intelligentsia. They are now providing a very commendable rate of return on capital employed. During 2007-08, Central Public Sector Enterprises earned a gross profit before tax of the 18.0% on capital employed and a net profit after tax of the order of 8.7% which is really creditable. Moreover, the number of loss making enterprises has come down from 110 in 2000-01 to 54 in 2008-09. In absolute terms, the losses of loss making enterprises which were of the order of ₹ 12,841 crores in 2000-01 have however increased to ₹ 14,424 crore in 2008-09. They contributed a total net profit of the order of ₹ 68,952 crores in 2008-09. Appreciating the significance and improving performance of the public sector, the *Approach Paper of the Eleventh Five Year Plan* observed : "Public Sector Enterprises have made a major contribution to the economic growth of the country by creating a diversified industrial base. Some of the CPSEs have had strong financial results over many years and recently some more have turned the corner." (p.37).

Performance of state Level Public Enterprises (SLPEs)

Unlike the Central PSUs survey regularly brought out every year, there is no regular survey of state level public enterprises. According to a study conducted by the Institute of Public Enterprises (Hyderabad), as on 31st March 2005, there were 1,129 SLPEs. More than 50% of these enterprises are in manufacturing and the remaining are utilities, Promotional and Welfare Enterprises.

From table 14, it would be evident that the total turnover of SLPEs showed an increase from ₹ 42,986 crores in 1991-92 to 2,39,453 crores in 2007-08, indicating an average annual growth rate of 11.3%, the corresponding increase in capital employed was also at the average annual rate of 8.6% (from ₹ 83,277 crores in 1991-92 to ₹ 2,71,164 crores in 2007-08). But during the same period, accumulated losses mounted up from ₹ 8,754 crores in 1991-92 to ₹ 60,517 crores in 2004-05, indicating a much sharper annual average growth of 16 percent. As a result of the sharp increase in accumulated losses, there was an adverse impact on fiscal deficits of the states. This only implies that the costs for providing goods and

Table 14 : Performance Indicators of State Level Public Enterprises (SLPEs)

Year	*No.of operating SLPEs (No)*	*Turnover*	*Total Investment*	*Capital Employed*	*Accumulates Losses*	*Profit/Loses (–)*
1991-92	–	42,986	90,983	83,277	8,754	N.A
1996-97	–	86,681	1,44,471	1,50,291	13,122	N.A
2001-02	–	87,375	2,80,116	1,79,831	23,764	N.A
2002-03	–	86,284	2,85,564	1,79,627	27,353	N.A
2003-04	–	1,13,208	2,47,676	2,32,889	64,486	N.A
2004-05	1,219	1,27,150	2,59,184	2,44,770	60,517	N.A
2006-07	837	3,21,056	3,33,411	N.A	N.A	–8390
2007-08	579	2,39,453	2,98,844	2,71,164	N.A	N.A

Source : Compiled and computed from the study by Institute of Public Enterprises, Hyderabad National Survey of State Level Public Sector Enterprises 2007–08, Vol I.

services have been mounting at a much higher rate resulting in inefficiency and continuing losses of SLPEs.

Restructuring of SLPEs – Some states have taken measures at restructure sick PSEs. According to the information collected by Institute of Public Enterprises (Hyderabad), up to 2004-05, 30 units including co-operatives have been privatized in Andhra Pradesh, Gujarat, Haryana, Orissa, Punjab and Rajasthan. It may be mentioned that in West Bengal, out of 82 PSEs, 18 were profit-making and 63 were loss-making at the end of 2004-05. West Bengal Government undertook measures to restructure 34 units in the first phase. As a consequence, 4 units were successfully restructured under government ownership, 3 have been converted into joint ventures and 23 units have been closed. To reduce manpower in these units, the government offered early retirement benefits and retraining for the redundant employees.

5. SHORTCOMINGS OF THE PUBLIC SECTOR

It would be unreasonable to argue that all is well in the public undertakings. There is much scope for improving the efficiency and working of public sector enterprises. The main points which merit consideration are:

(i) Mounting losses. A review of the working of public sector enterprises reveals that either the profits earned have been deplorably low or that they have been making losses. As compared with the performance of the Central Government, however, the State Governments are having perennial loss-makers like irrigation works, State Electricity Boards and State Road Transport. The biggest losses are made by SEBs. It is estimated that the losses incurred by SEBs rose from ₹ 4,117 crores in 1991-92 to ₹ 30,606 crores in 2005-06– these losses were incurred because power was supplied at a mere 240 paise per unit as against the production and distribution cost of 350 paise per unit.

The losses of State Road Transport Undertakings (STRUs) were of the order of ₹ 1,282 crores in 1997-98. The situation has been summed up ably by CMIE in the following words : "It is the losses of the Central Government enterprises which have generally received maximum publicity. It is not realised, however, that the worst culprits in this respect are to be found among state governments. There, the State Electricity Boards, the irrigation works, the Road Transport Corporations and other State Government-owned enterprises have the most scandalous record of making losses."

So far as the Central Government is concerned, the public sector enterprises have shown a net profit of ₹ 81,550 crores in 2006-07, as against a loss of ₹ 203 crores in 1980-81. This indicates overall improvement. But 41 per cent of the total profit is contributed by petroleum enterprises only crude oil mining and petroleum (market and refining) contributing ₹ 41,000 crores in 2006-07 as net profits (41% of total not profit of all CPSEs). The Government should, therefore, make a case-by-case study of the loss incurring enterprises and take remedial action. It is heartening to note that number of loss marking units has decreased from 105 in 1999-00 to only 59 in 2006-07. The losses have come down from ₹10,302 crores in 1999-00 to only ₹ 8,223 crores in 2006-07.

(ii) Political factors influence decision about location. It has been noted that in many situations, political factors influence decisions about location of projects. Powerful ministers in the ruling party make promises about the future location of projects in a state irrespective of the results of the feasibility study about costs. This approach leads to a considerable wastage of capital resources. A classic instance of this political but irrational approach is the decision of the Central Government to break up the MIG aircraft project into two parts to be located in two separate states. These two

locations--Nasik and Koraput—are over 900 km apart. This was done to satisfy two powerful political bosses from two states.

(iii) Delays in completion and increase in costs of construction. Many reports on the working of public sector projects have pointed out that many of the projects took longer time to complete than was initially envisaged. Not only that, the cost of the projects was also revised upwards. For instance, in the case of Trombay Fertilizer Project, it took 6-7 years to complete against the original estimate of 3 years. Most of the delay in construction time-schedule and increase in costs can be traced to poor and inadequate project planning. It is very necessary to prepare comprehensive construction plans so that the avoidable delays and increases in costs should not put additional burden on the scarce resources.

(iv) Over-capitalisation. Public sector projects are charged with over-capitalisation. In other words, the input-output ratio obtaining in many projects was unfavourable. The Study Team found several undertakings, viz., Heavy Engineering Corporation, Hindustan Aeronautics, Fertilizers Corporation (Trombay Projects), etc. over-capitalised. In this connection the Study Team mentioned: "The causes leading to over-capitalisation can be traced to inadequate planning, delays and avoidable expenditure during construction, surplus machine capacity, tied aid resulting in the compulsion to purchase imported equipment on a non-competitive basis, expensive turn-key contracts, bad location of projects and the provision of housing and other amenities on liberal scale."[6]

(v) Price Policy. The pricing policies of the public sector undertakings are not guided solely by the profit maximisation principle, but are under the regulation and control of the Government. Most of the public enterprises produce products which serve as inputs for other sectors of the economy. It would be suicidal from the point of view of the overall growth of the economy if the prices of steel, oil, fertilisers or coal are fixed very high. The public sector has to keep in mind the social implications of its price policy. In this connection, it is important to remember that in many cases, under public pressure, prices are kept low even when costs and prices have been rising. This naturally affects commercial profitability.

In most public sector enterprises, pricing policies are not rational. They have no declared price policy, except perhaps that they have some departmental directives and ad hoc piecemeal orders. It is being gradually realised in the country that profit should be recognised as an index of efficiency and that the profit motive is not inconsistent with the broad objective of the socialist pattern of society. There can, however, be no hard and fast rule on the question of price policy for public sector undertaking. There are some enterprises which are run by the Government mainly to protect the interests of consumers and considerations of profit should be the least important. But there are some public enterprises which are basic to others and public operations can help in all-round economic development only when prices are fixed without regard to high profits. There is yet a third group of public enterprises in which high profit policy can safely be adopted. It is necessary that the Government classifies its enterprises under these three groups and acts accordingly.

(vi) Use of manpower resources in excess of actual requirements. It has been brought out that in most public enterprises, manpower is in excess of actual requirements. There is poor manpower planning and this is clearly reflected in the inadequate arrangements for training and education of workers. The unsatisfactory salary and wage rates and the absence of incentives to staff have resulted in the flight of personnel from the public sector to the private sector. The Sixth Pay Commission has Substantially raised the emoluments of executives and thus prevent their shift to private sector. It has been suggested that top position in a public sector undertaking should also be opened to its employees. Besides, professional and technical persons of an undertaking should be trained and induced into management.

The Government has been shedding the load of surplus workers in PSE. As a result of this policy, total number of employees in Central PSEs declined from 19.92 lakhs in 2001-02 to 16.14 lakhs in 2006-07 — a reduction of 3.78 lakhs. This has reduced the wage cost of CPSEs.

(vii) Capacity utilisation. During 2005-06, out of 203 units, 103 units or 51 per cent of all manufacturing producing units had recorded capacity utilisation of more than 75 per cent. On the other hand, 33 public sector enterprises operated in the capacity utilisation range of 50 to 75 per cent and 67 functioned below 50 per cent utilisation of rated capacity. This is certainly not an optimum situation. It is very necessary to find the causes of low capacity utilisation and thus remedy the situation by appropriate measures.

(viii) Inefficient management. Managerial effectiveness and efficiency are crucial factors in improving the overall performance of the public enterprises. For efficiency in business and industrial enterprises it is necessary that operational decisions are prompt. This necessitates a large measure of autonomy and flexibility of operations in the Government enterprises. Again, delegation of authority and elasticity in working are needed in a high degree. Within the enterprise itself the delegation of authority from the top management to lower levels is another essential condition for efficiency in operation. Every officer should know what he is required to do and what result he is expected to produce. Unfortunately, there has been general failure to define responsibilities and duties in public sector enterprises in India. Finally, the successful operation of public enterprises is dependent upon the availability of experienced persons to fill up top positions. Public enterprises are

6. ***Report of the Study Team on Public Sector Undertakings*** (1967), p. 200.

sarcastically referred to as 'colonies for bureaucrats'. In the initial stages, the officers of the ministry who provided funds for the projects also pre-empted the right of management. In this way they infused 'bureaucratic blood' in the system. An unfortunate practice has been to use bureaucrats as chairmen, managing directors and managers of public enterprises. Many of them are not really qualified to run industrial enterprises. The government has been progressively shifting to professionalised management in these enterprises. This is a healthy development.

In conclusion, it may be pointed out that the picture of the public sector generally painted by the Federation of Indian Chambers of Commerce and Industry, Forum of Free Enterprises and such other organisations is too black. It is equally true that all the public sector enterprises are not functioning efficiently. The competitiveness of the private and public sector projects should act as the motivating mechanism for improving efficiency in both the sectors.

6. NEW DIRECTIONS OF POLICY ON THE PUBLIC SECTOR

To improve the performance of the public sector, the Government of India announced in July 1991 the new Industrial Policy which contained the following decisions pertaining to the public sector:

(i) Portfolio of public sector investments will be reviewed with a view to focus the public sector on strategic, hi-tech and essential infrastructure. Whereas some reservation for the public sector is being retained, there would be no bar for area of exclusivity to be opened up to the private sector selectively. Similarly, the public sector will be allowed entry in areas not reserved for it.

(ii) Public enterprises which are chronically sick and which are unlikely to be turned around will, for the formulation of revival/rehabilitation schemes, be referred to the Board for Industrial and Financial Reconstruction (BIFR), or other similar high level institutions created for the purpose. A social security mechanism will be created to protect the interests of workers likely to be affected by such rehabilitation packages.

(iii) In order to raise resources and encourage wider public participation, a part of the government's shareholding in the public sector would be offered to mutual funds, financial institutions, general public and workers.

(iv) Boards of public sector companies would be made more professional and given greater powers.

(v) There will be a greater thrust on performance improvement through the Memoranda of Understanding (MOU) system through which managements would be granted greater autonomy and will be held accountable.

Revival of Sick PSUs

In pursuance of the policy announced in 1991, the Government brought out a monograph on the Performance of the Central Public Sector Enterprises and decided to refer the chronically sick enterprises to the BIFR for the formulation of revival/rehabilitation schemes. Till the end of October 2006, 66 PSUs have been referred to BIFR which has so far sanctioned revival packages in respect of 36 PSUs. The Government has approved the proposals of 21 CPSEs involving a total cost of ₹ 5,610 crores.

The Government has also been opening out certain important and strategic areas to the private sector. The power sector is being opened to the foreign companies. Similarly, the Government has to invite multinationals in the telecommunication sector. As there is very strong resistance by the trade unions to moves of privatization, the Government pushes its policy of opening out areas hitherto reserved for the public sector to private sector — indigenous or foreign — cautiously.

VRS to Shed the Load of Excess Workers

Secondly, the Government had been making an effort to shed the load of excess workers in the public sector. It initially toyed with the idea of exit policy but abandoned it due to the strong resistance by the trade unions. It followed a policy of offering a package for voluntary retirement scheme (VRS) and it has succeeded. As a result of the VRS, the number of regular employees which stood at 22.19 lakh in 1990-91 has been brought down to 16.14 lakh in 2006-07. The National Renewal Fund (NRF) was abolished in February 2000. The Government is now concentrating on retraining and redeployment of VRS workers. During 2001-02 to 2006-07, nearly 1.27 lakh were retrained and 40,480 were re-deployed.

Memorandum of Understanding (MOU)

The Government on the recommendations of the "Committee to Review the Policy for the Public Enterprises (Arjun Sengupta Committee (1985) has entered into Memoranda of Understanding (MOUs) with a number of PSUs. The main aim of the MOU is to bring about a balance between autonomy and accountability. Leaving the public enterprises which were to be referred to the BIFR, the Industrial Policy (1991) extended the scope of Memorandum of Understanding (MOU) to all public sector enterprises (PSEs). The main goal of the MOU Policy is to reduce the "quantity" of control and increase the "quality" of accountability. This is sought to be done by specifying in clear terms the measurable goals and giving each PSE greater operational autonomy to achieve them. The real purpose of MOU is to manage PSEs by ***management by objectives rather than management by control.***

By holding them accountable for procedures. not only has the scope of MOU Policy enlarged significantly but the focus of MOU Policy has also become market-oriented and in tune with other reforms initiated by the Government. For the first time since the inception of the public sector, an attempt has now been made to free them from the administrative control of the Ministries and permit them to operate autonomously in a competitive environment.

125 Public sector enterprises (PSEs) had signed MOUs for the year 2008-09. According to the ***Public Enterprises Survey*** (2008-2009) on the basis of the self-evaluation by 125 PSEs, 47 were rated excellent, 35 very good, 25 good and 18 fair.

To conclude : It may be stated that Public sector Enterprises have turned the corner. *The Approach to the 11th Five Year Plan* notes : "Public Sector Enterprises have made a major contribution to the economic growth of the country by creating a diversified industrial base. They have been major providers of organized sector employment. Some of the Public Sector Enterprises (CPSES) have had strong financial results over many years and recently some more have turned the corner. In 2008-09, the number of profit making CPSEs increased to 158 from 119 in 2002-03 and aggregate profit rose to ₹ 98,652 crores from ₹ 43,316 crores. The number of loss making enterprises declined from 105 in 2002-03 to 54 in 2008-09. Indicating the new directions of policy, The Approach mentions : "The necessary conditions for further improvements in the performance of the PSEs are ensuring autonomy, delegation of more powers to PSE Boards, Freedom from informal levers of control exercised by the administrative Ministries and a clear statement on future ownership. If these conditions are met, CPSEs do not need to the supported by measures such as administered prices, or price or purchase preference in government purchases or any type of *de jure* or *de facto* favourable treatment *vis-a-vis* the private sector."[8]

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CHAPTER 13

DISINVESTMENT OF PUBLIC ENTERPRISES

"I believe that the objective for disinvestment should be to benefit the public, the consumer and the investor, and at the same time, to improve competitiveness and eliminate monopoly . . . Our Disinvestment Policy should therefore, be to offer these companies to the public of India. The current system of strategic sale is tantamount to handing over the entities created with the wealth of the people of India to further enrich the already rich . . . In the transfer of VSNL and IPCL we have created monopolies with Tata and Reliance. Cases of rich becoming richer with people's money. If we pursue the strategic sale route in the aluminium and petroleum sectors, it is very likely that we will create monopolieis within these vital sectors of the economy. State monopolies will become private monopolies. Is this good for the Indian consumers?"

— George Fernandes

Former Defence Minister of India

1. RATIONALE OF DISINVESTMENT

The term 'disinvestment' is used to indicate the process of privatisation. Since the beginning of 1980s, the functioning of the public sector began to be questioned. It was held that the public sector performed well only when protected through state monopolies, entry reservations, high tariffs and quotas etc. Since quite a large number of public enterprises incurred losses year after year, it was argued that the State should not be called upon to meet the losses of these enterprises out of tax payers money since in our country, the public sector had entered into too many areas, the question of withdrawing from these areas was also raised. Consequently, the question of privatisation of the public sector was debated. ***Disinvestment is the process through which privatisation could take place.***

The collapse of the Soviet Union towards the end of the eighties followed by several East European countries eroded the faith in the public sector still further. The Chinese government also pleaded for market socialism. Since in the erstwhile socialist economies, disinvestment of state owned enterprises was undertaken on a big scale, the critics of the public sector argued for reducing the area of operation of the public sector.

Giving the rationale for disinvestment, the Ministry of Disinvestment outlined the following as the ***primary objectives:***

1. Releasing the large amount of public resources locked up in non-strategic PSEs, for redeployment in areas that are much higher on the social priority, such as basic health, family welfare, primary education and social and economic infrastructure;

2. stemming further outflow of these scarce public resources for sustaining the unviable non-strategic PSEs;

3. reducing the public debt;

4. transferring the commercial risk to the private sector wherever the private sector is willing and able to step in; and

5. releasing other tangible and intangible resources, such as, large manpower currently locked up in managing PSEs, and their time and energy, for redeployment in high priority social sectors that are short of such resources.

2. EVOLUTION OF THE DISINVESTMENT POLICY

The policy of the Government of India on disinvestment has evolved over a period and it can be briefly stated in the form of following policy statements made in chronological order.

(i) Industrial Policy Statement of 24th July 1991

The Industrial Policy Statement of 24th July 1991 stated that the government would divest part of its holdings in selected PSEs, but did not place any cap on the extent of disinvestment. Nor did it restrict disinvestment in favour of any particular class of investors. The objective for disinvestment was stated to be to provide further market discipline to the performance of public enterprises.

(ii) Report of the Committee on the Disinvestment of Shares in PSEs (Rangarajan Committee) April 1993.

The Rangarajan Committee emphasised the need for substantial disinvestment. It stated that the percentage of equity to be divested could be up to 49% for industries explicitly reserved for the public sector. It recommended that in exceptional cases, such as the enterprises, which had a dominant market share or where separate identity had to be maintained for strategic reasons, the target public ownership level could be kept at 26%, that is, disinvestment could take place to the extent of 74%. In all other cases, it recommended 100% divestment of Government Stake Holding.

(iii) Strategic & Non-Strategic Classification

On 16th March 1999, the Government classified the Public Sector Enterprises into strategic and non-strategic areas for the purpose of disinvestment. It was decided that the Strategic Public Sector Enterprises would be those in the areas of :

- Arms and ammunitions and the allied items of defence equipment, defence air-crafts and warships:
- Atomic energy (except in the areas related to the generation of nuclear power and applications of radiation and radio-isotopes to agriculture, medicine and non-strategic industries);
- Railway transport

All other Public Sector Enterprises were to be considered non-strategic. For the non-strategic Public Sector Enterprises, it was decided that the reduction of Government stake to 26% would be worked out on a case-to-case basis.

(iv) Budget speech : 2000-2001

For the first time the Government made the statement that it was prepared to reduce its stake in the non-strategic PSEs even below 26% if necessary, that there would be increasing emphasis on strategic sales and that the entire proceeds from disinvestments/privatisation would be deployed in social sector, restructuring of PSEs and retirement of public debt.

There are many PSUs, which are sick and not capable of being revived. The only remaining option is to close down these undertakings after providing an acceptable safety net for the employees and workers. Resources under the National Renewal Fund have not been sufficient to meet the cost of Voluntary Separation Scheme (VSS) for such PSUs. At the same time, these PSUs have assets, which if unbundled and realised, can be used for funding VSS.

(v) Budget Speech for 2002-03

Other than Modern Food Industries (India) Limited, only minority stakes in different PSEs were sold before the year 2000. The Government has since modified its policy to emphasise on strategic sale. The disadvantages of sale of minority stakes by the Government have been found to be as follows:

- Lower realisations because the management control is not transferred.
- With the limited holding remaining with the Government after minority sales, only small stakes can be offered to the strategic partner, if it is decided to go for a strategic sale subsequently. This depresses the possibility of higher realisations from the strategic partner.
- The minority sales also give the impression that the main objective of the Government is to obtain funds for reducing its fiscal deficit, and not to improve performance of government.

TABLE 1: Targeted and Actual Disinvestment from April 1991 onwards

(₹ crores)

Year	*Targeted Receipts*	*Actual Receipts*
1991-92	2,500	3,038
1992-93	2,500	1,913
1993-94	3,500	Nil
1994-95	4,000	4,843
1995-96	7,000	168
1996-97	5,000	380
1997-98	4,800	910
1998-99	5,000	5,371
1999-00	10,000	1,860
2000-01	10,000	1,871
2001-02	12,000	5,658
2002-03	12,000	3,348
2003-04	14,500	15,547
2004-05	4,000	2,765
2005-06	No target	1,570
2006-07	No target	nil
2007-08	No target	4,181
2008-09	No target	nil
2009-10	No target	23,553
2010-11	40,000	22,144
2011-12	40,000	1,145*
Total	**82,200**	**1,00,265**

* Till January 2012. (minor)

SOURCE: Government of India, *Central Public Enterprises Survey, 2008-09*., Economic survey 2011-12, Central Public Sector Enterprises survey 2010-11.

The Government finalised the privatisation/disinvestment of 12 companies through strategic sales and 18 hotels of ITDC and 3 of HCI through demerger/slump sale (till 15th July 2002).

(vi) Disinvestment Policy since 2004-05

After UPA government took over the reign of power in 2004, due to opposition from the left parties, the government has been pursuing very modest disinvestment policy and we find only ₹. 5751 crores of total proceeds from disinvestment by the UPA government since 2004, till 2008-09.

(vii) Current Policy of Disinvestment since November 2009

The current policy on disinvestment was approved by the Government of 5th November, 2009. The objective of the disinvestment policy is to develop people's ownership of Central Public Sector Enterprises to share in their wealth and prosperity while ensuring that Government equity does not fall below 51 percent and Government retains the management control.

Keeping in view the policy on disinvestment, the following approach to disinvestment in CPSEs has been adopted:

(a) Already listed profitable CPSEs (not meeting the mandatory shareholding of 10 percent) are to be made compliant by 'Offer for Sale' by Government or by the CPSEs through issue of fresh shares or a combination of both.

(b) Unlisted CPSEs with no accumulated losses and having earned net profit in three preceding consecutive years are to be listed.

(c) Follow-on public offers would be considered in respect of profitable CPSEs having 10 percent or higher public ownership, taking into consideration the needs for capital investment of CPSE, on a case-by-case basis and Government could simultaneously or independently offer a portion of its equity shareholding in conjunction.

(d) Disinvestment is to be considered on merits and on a case-by-case basis as each CPSE has a different equity structure; financial strength; fund requirement; sector of operation and factors that do not permit a uniform pattern of disinvestment.

Major disinvestment receipts, since 2004-05 have come from sale of equity shares of National Thermal Power Corporation Limited (NTPC) [₹. 2684.07 crore, July 2004]; Maruti Udyog Limited (MUL) (Not a CPSU) [₹. 2277.62 crore, September 2005], Power Grid Corporation of India (PGCIL) [₹. 994.82 crore, February 2007], Rural Electrification Corporation Limited (REC) [₹. 819.63 crore February 2007], NHPC Limited [₹. 2012.85 crore, February 2007], Oil India Limited [₹. 2247.046 crore, August, 2007], National Thermal Power Corporation Limited (NTPC) [₹. 4480.10 crore, February 2010], Rural Electrification Corporation Limited (REC) [₹. 882.52, March 2010], NMDC Limited [₹. 9930.40 crores, March 2010], ONGC Limited [₹. 1062.74 crore, May 2010], Engineers India Limited (EIL) [₹. 960 crore, July 2010], Coal India Ltd. (CIL) [₹. 15,199 crore, October 2010], Power Grid Corporation of India Ltd. (PGCIL) [₹. 3,721.17 crore, November 2010], MOIL Limited (MOIL) [₹. 618.74 crore], Shipping Corporation of India Limited (SCIL) [₹. 582.45 crore], Power Finance Corporation (PFC) [₹. 1144.55 crore].

National Investment Fund

In January 2005, the Government decided to constitute a "National Investment Fund" (NIF) into which the realization from sale of minority shareholding of the Government in profitable CPSEs would be channelised. The Fund was to be maintained outside the Consolidated Fund of India. The income from the Fund would be used for the following broad investment objectives:

(a) Investment in social sector projects which promote education, health care and employment;

(b) Capital investment in selected profitable and revivable Central Public Sector Enterprises that yield adequate returns in order to enlarge their capital base to finance expansion/diversification.

Corpus of NIF : The corpus of the Fund has remained at ₹. 1814.45 crore being the proceeds from the disinvestment in Power Grid Corporation and Rural Electrification Corporation. The income generated on the same during 2009-10 was ₹. 110.57 crores and during 2010-11 was ₹. 128.95 crores. The average return on the corpus, during 2009-10, was 7.03 percent.

Use of Disinvestment Proceeds: In view of the difficult economic situation caused by the global slaowdown of 2008-09 the Government in November 2009 decided to give one time exemption for utilization of proceeds from disinvestment of CPSEs for a period of three years – from April 2009 to March 2010 – i.e. disinvestment proceeds during this period would be available in full for investment in specific social sector schemes decided by the Planning Commission/Department of Expenditure. The status quoante will be restored from April 2012. However, the existing corpus of the NIF shall remain untouched and continue to be managed by the Fund Managers. The disinvestment proceeds are being used for funding the capital expenditure under the social sector schemes of the Government, namely:

i. Mahatma Gandhi National Rural Employment Guarantee Scheme

ii. Indira Awas Yojana

iii. Rajiv Gandhi Gramin Vidyutikaran Yojana

iv. Jawaharlal Nehru National Urban Renewal Mission

v. Accelerated Irrigation Benefits Programme

vi. Accelerated Power Development Reform Programme.

Total Investment in PSUs

PSUs operate at two levels – Centre Level PSUs and State Level PSUs. Data about Central Government PSUs is compiled annually in ***Public Enterprises Survey*** is very authentic. As per information provided, during the 17-year (1990 to 2007), investment in Central Government PSUs has risen from ₹ 99,330 crores on 31st March 1990 to ₹ 6,66,848 crores as on March 31, 2011, indicating an annual average growth rate of 9.5 %. Total

proceeds realised from disinvestments is of the order of ₹ 1,00,265 crores, i.e. 15.03% of total investment in CPSUs.

According to the Ministry of Disinvestment, estimated total investment in State Level Public Enterprises was of the order of ₹ 1,62,063 crores as on 31st March 2000. Six states, viz., Gujarat, Maharashtra, Karnataka, Uttar Pradesh, West Bengal and Punjab accounted for a total investment of ₹ 1,03,084 crores, accounting for 63.6% of total investment in all SLPEs.

Disinvestment has also been undertaken in States. As per information compiled by Institute of Public Enterprises, Hyderabad, out of 222 State Level Public Enterprises (SLPEs) identified for disinvestment/winding up/Restructuring, the process of disinvestment/privatisation has been initiated in 124 enterprises, 30 SLPEs have been privatised and 68 SLPEs have been closed down, as per information available at the Website of Ministry of Disinvestment upto 25.12.2002. However, the information is highly inadequate, because it does not provide the total amount realised, the extent of privatisation/disinvestment and the share of equity retained by the state government.

3. CRITIQUE OF DISINVESTMENT

Since the announcement of Industrial Policy 1991, the coalition forms of different Governments that came to power adopted the disinvestment policy with minor modifications here and there.

The NDA Government had seen a vertical split on the issue of privatisation of PSUs. Among those who attacked the Disinvestment Ministry's over-enthusiam for privatisation were Mr. George Fernandes, Mr. Ram Naik, Mr. Murali Manohar Joshi and Ms. Uma Bharati. All these Union Ministers lined up against Mr. Arun Shourie, the Disinvestment minister under the NDA Government, to oppose the policy of disinvestment, more especially the disinvestment of highly profitable PSUs and also raised issues pertaining to the procedures and methodology of disinvestment. Former Defence Minister George Fernandes felt so strongly against the reckless pursuit of disinvestment that he even wrote a letter to the Prime Minister on August 27, 2002 giving concerete reasons for his stand. It would be worthwhile to reproduce the excerpts from his letter:

"I believe that the objective for disinvestment should be to benefit the public, the consumer and the investor, and at the same time, to improve competitiveness and eliminate monopoly…"

"Our Disinvestment Policy should, therefore, be to offer these companies to the public of India. The current system of strategic sales is tantamount to handing over the entities created with the wealth of the people of India to further enrich the already rich.

"I understand that virtually the entire privatisation in the UK was to the public at large i.e. the Airlines, the Steel Industry, the Telecom Industry, the Automobile Industry, the Gas & Petroleum Sector etc. were privatised by offerings through the stock markets. Likewise I believe the privatisation of the same sectors in France including the Banking and Oil sectors were disinvested to the French public and not through strategic sales. Malaysia, China, South Africa, Spain and Germany have also followed suit."

"In the transfer of VSNL and IPCL we have created monopolies with Tata and Reliance. Cases of the richer becoming the richest with peoples's money. If we pursue the strategic sale route in the aluminium and petroleum sectors, it is very likely that we will create monopolies within these vital sectors of the economy. State monopolies will become private monopolies. Is this good for the Indian consumer?"

"Another issue of concern is that even if strategic sales are allowed, the PSUs will not be allowed to bid. Even though they are currently buying into or taking control of joint sector companies such as Mangalore Refineries (ONGC), Haldia Petrochemicals (GAIL), they are likely to be prohibited from buying into HPCL and BPCL. Strengthening the PSUs through strategic amalgamations/purchases of each other prior to sales to the public could be a worthwhile route to consider" (Refer ***Young Indian***, October 19-25, 2002, p.9).

Besides George Fernandes, Swadeshi Jagran Manch had also been critical of the disinvestment policy of the NDA government.

Various issues raised by the critics were :

(i) Is the Government classification of 1999 into strategic and non-strategic sectors correct?
(ii) Is it desirable to disinvest profit-making public enterprises,while keeping the loss-making PSUs under state ownership?
(iii) What should be the procedure for disinvestment—public offering through stock exchange or strategic sale to a private party?
(iv) Should disinvestment create private monopoly in place of public monopoly?
(v) What should be the method of valuation of a PSU before a bid for disinvestment is made?
(vi) Should PSUs be allowed to participate in the bids for disinvestment of PSUs?
(vii) How should the proceeds from disinvestment be utilised?
(viii) How should the interests of workers and employees be safeguarded?

Issue of Strategic and Non-Strategic Sector

The advocates of disinvestments argue that it is not the business of the Government to be in business. Thus, they believe that but for a small strategic sector like arms and ammunitions, defence equipment, atomic energy and railway transport, the Government should not run any public sector enterprise in a non-strategic area. This view has been challenged by the critics of disinvestment policy. They argue that even in USA, the chief pillar of the capitalist enterprise system, the oil sector is considered strategic. That being so, it would be really advisable to reconsider the areas which deserve to be included in the strategic sector. It may be that certain other industries may be vitally important for the economy

and their continuance in the public sector may be justifiable. Power generation may be another area which may be considered strategic. BHEL — a public sector PSU has beaten world leaders like ABB, Siemens and GEC. The company contributes 25.8 per cent to the total power generation in the country. After our disappointing experience with ENRON — an MNC which was contracted to enhance power generation, to consider PSUs like BHEL as non-strategic would not be wise.

Privatisation of profit-making public enterprises

The question of privatising profit making PSUs had been another issue for debate. It would be of relevance to understand the logic of disinvestment and the wisdom of taking the decision about the disinvestment of highly profitable public sector enterprises like the VSNL (Videsh Sanchar Nigam Limited). Another firm disinvested was the IBP.

The first question that needs an answer is : Were these two firms loss-making organisations and did the government, to ward off the impending danger of avoiding loss, undertake disinvestment?

Had it been a case of an inefficient concern, the Tatas would not have given a bid for a price per share at 30 per cent premium over the share market price. The government in the name of 'big ticket' while arguing against state monopoly, is moving in the direction of creating 'private monopoly'. All this is being done with one objective: to reduce fiscal deficit by selling the family silver. The entire policy of privatisation of the VSNL, a highly profit-making public sector giant, was, therefore irrational.

The IBP, another public sector concern, has been taken over by the IOC for the highest bid of ₹ 1,154 crores to acquire 33.6 per cent stake. It is being argued that this is not privatisation. In other words, privatisation appears to be the end itself, whereas it is only a means to achieve certain ends. All this is based on the belief that the efficiency of the private sector is taken for granted. Conversely, it is also believed that the sub-standard performance of the public sector is an unquestioned hypothesis. S.R. Mohnot, who very meticulously compared the performance of the public and the private sectors in the study commissioned by SCOPE, stated:

"A comparative analysis of the financial results of the top 50 and top 100 public and private sector companies in 1997-98 shows that the two segments came close to each other. In a number of cases, the public sector logged better results Against RONW (return on net worth) of 11.9 per cent of the top 50 private sector companies, the comparative top public sector enterprises registered 13.0 per cent return, a full one per cent higher. The divergence gets reduced with the extension of the horizon from top 50 to top 100 corporates, and yet it is the public sector which scores higher—11.9 per cent to 11.3 per cent".

As many as 1,452 (or about 60 per cent) of the companies listed in the stock exchange did not declare any dividend during 1998-99. The comparative share of non-dividend declaring companies in the two sectors was: PSEs 24 per cent, private sector 60.5 per cent. Nearly 62 per cent public sector companies had declared dividends exceeding 10 per cent; in the case of the private sector companies, only 35 per cent had declared dividends exceeding 10 per cent.

There is conclusive evidence to show that in the post-liberalisation period, the performance of the Central Public Sector Enterprises (CPSEs) has been progressively improving. Gross Profit before tax, since tax is the government's share from these enterprises, has also improved sharply from 11.2 per cent in 1990-91 to 20.9 per cent in 2006-07. What is important and worthy of mention is that these results include even the adverse performance of sick and bankrupt companies taken over from the private sector. Net profit after taxes of the CPSEs was 5.4 per cent in 1997-98 and has risen to 12.3 per cent in 2006-07. This performance is commendable as compared to the private sector which did not do better.

The upshot of the analysis is that the public sector of the post-reform era is no longer the public sector of the seventies and eighties. It has become more professional than the private sector. Some of the PSEs like Indian Oil Corporation have become global giants with excellent record of performance.

Another contentious issue is about the privatisation of public sector oil giants HPCL and BPCL. The Department of Disinvestment was of the view that co-operatives like IFFCO and KRIBHCO should not be allowed to bid for these oil giants. Neither should public sector giants like Gas Authority of India Ltd (GAIL) and Indian Oil Corporation be allowed to participate in the bid. By eliminating the PSUs and co-operatives, the Department of Disinvestment intended to permit private sector—Indian or Foreign--alone to participate in the sale of HPCL and BPCL. The main argument of the Disinvestment Ministry was that the sale of a PSU to another government-owned enterprise goes against the grain of privatisation, which implies change of ownership. This view was challenged by many Ministers even within the NDA government. They believe that competition should be allowed between the public, private and co-operative sectors. It is really strange that on the one hand, the Government is passing Competition Law to promote efficiency and restrict monopoly, on the other hand, by denying the PSUs and co-operatives to join the open bid for HPCL and BPCL, it is guilty of violating the spirit of Competition Law passed by the Parliament.

However, there is no opposition to the privatisation of loss-making units. The Government should shed their load and rid itself of the donkey-burden of these enterprises.

Under the various categories, 25 profit-making PSUs were listed. It passes ones comprehension why National Aluminium Co. Ltd. (NALCO) has been taken for disinvestment when it shows a profit of ₹ 656 crores in 2000-01. Similarly, profit earned by Shipping Corporation of India was ₹ 383 crores, Engineers India Ltd. ₹ 124 crores, BPCL ₹ 820 crores and HPCL ₹ 1,088 crores. Neyveli Lignite Corpn-Ltd. ₹ 726 crores and IRCON

International ₹ 66 crores in 2000-01. Some of the PSUs mentioned above have been designated as Navratnas or mini-navratnas. Why should the Government privatise such PSUs with good track-record? There is no logic to push their sale except to raise revenue.

The advocates of privatisation have always held that the magic of private property can turn sand into gold. In other words, mere change of ownership can bring about sea-change in the culture of an organisation. If this statement is taken at its face value, the logic follows that the private sector should take over the loss making concerns and convert them into profit-making organisations. If past is any guide, the private sector has shown its keenness to take charge of PSUs which are highly profit-making leaving weak and sick PSUs in the lap of the public sector. The Disinvestment Ministry should be wary of transferring PSUs which are milch-cows, to the private sector by acquiring strategic partnership to the extent of 26 per cent. Mr. Jyotiraditya Scindia, wrote in this connection: "We should provide flexibility to companies to raise funds and grow, rather than sell them off so cheaply. The government can't throttle companies with the dilution argument and then blame them for inefficiency. This is grossly unfair" (***Hindustan Times***, 8 October 2002).

Methodology for Disinvestment

The Government did not seem to have a clear policy on the methodology of disinvestment. The Government followed the policy of open auction sale and allowed NRIs and other persons legally permitted to hold equity to participate. This method gave excellent results in 1994-95 and as against the target of ₹ 4,000 crores, the realisations jumped to ₹ 4,843 crores. But later in 1999-00, the Government shifted to strategic sale. It was argued by the Disinvestment Ministry that the public offer method is dilatory and thus would take very long to complete the process of disinvestment of all PSUs. In this context, it may be pointed out that in case, public offering could succeed in the UK, France, Malaysia, China, South Africa, Spain and Germany, what prevents its adoption in India. This method is transparent and thus liable to much less abuse. It was also successful in India during 1994-95. Thus when national and international experience give support to a transparent methodology of privatisation, there is no reason why it should not be accepted as the method in future. But it is really intriguing that in the case of HPCL and BPCL both oil giants, the Government adopted two approaches —In case of BPCL it adopted the public offering methodology and in case of HPCL to a strategic investor. ***Business Line*** in its editorial dated December 10, 2002 criticising the Government decision stated: "It is indeed strange why there should be two approaches for two companies that are otherwise similar and in the same business. If the logic for not selling Bharat Petroleum to a strategic investor is that it is a company in the "core sector", as some in the Government have been claiming, then so is the case with Hindustan Petroleum. Again, if the objective of offering equity in Bharat Petroleum is to stimulate the capital market, then it can be equally argued for a similar treatment to Hindustan Petroleum. Can such a blatant disregard of principles bring credit to the Government? Need it be mentioned that the Government by public offering of shares can unload a part of the equity and still continue its hold over the PSU, but by the strategic partner route, it transfers the management of a company to a private investor even when he owns a minority stake in the company. Obviously, the public offering methodology has logical superiority and the Government should shed its policy of strategic partner, once and for all, to save itself from public criticism"[2]. Late Dr. Mahbub-ul Haq, UNDP expert has been advocating: "Don't sell through discretionary non-transparent procedures, which invite allegations of corruption and nepotism."

Creation of Private Monopoly in place of Public Monopoly

By accepting Tatas as strategic partners in VSNL and Reliance in IPCL, the Government substituted State Monopolies with Private Monopolies. Monopoly, whether in the public sector or in the private sector is undesirable, but a public sector monopoly is relatively less harmful than a private sector monopoly, the reason being that a public sector monopoly is accountable to the Parliament, but a private sector monopoly is not accountable and can exploit the consumer to a much greater extent.

Valuation of PSUs slated for disinvestment

The problem of valuation of PSUs slated for disinvestment has been engaging the attention of the Government and the Public Accounts Committee ever since the process was started. Although the Government raised till March 1993, ₹ 4,950 crores by disinvestment of PSU shares, the Public Accounts Committee (PAC) held the then Union Finance Minister Dr. Manmohan Singh and the then Industry Secretary, Mr. Suresh Kumar, responsible for under-realisation of the value of the shares divested in 1991-92 and quantified the loss to be of the order of ₹ 3,000 crores in 1991-92.

Although efforts have been made to streamline procedures for valuation of PSUs, yet the vested interests within the Government have been manipulating valuation process to the benefit of private companies by privatising a number of profit-making PSUs at prices that are well below the intrinsic worth of assets which used to belong to the people of India. Mr Paranjoy Guha Thakurta, a well known journalist in his very well documented article "Selling Silver for a Song" (***Hindustan Times***, dated November 19, 2002) provided some examples in this regard.

1. The Comptroller and Auditor General of India in his report has estimated that the value of assets of the recently privatised Bharat Aluminium Company (BALCO) was underestimated to the extent of ₹ 300 crores.

2. The Birla-group-controlled Zuari Marco Phosphates Private Ltd., after having paid ₹ 151.7 crores to the government for purchasing 74 per cent shares of

2. ***Business Line***, Editorial, December 10, 2002.

Paradeep Phosphates Ltd. wanted almost the entire amount back on the ground that the government wrongly calculated the financial position of the former PSU in Orissa.

3. After having paid ₹ 105 crores for acquiring majority stake in Modern Food Industries in January 2001, the Hindustan Lever Ltd. (HLL) claimed ₹ 12.6 crores from the government on account of excess payment, but after detaining this amount, has put forth another claim of ₹ 4.8 crores from the government.

4. In June 2001, the government received ₹ 83 crores from Batra Hospitality for the sale of Centaur Hotel near Mumbai airport. Four months later, this hotel was sold to Sahara India Group for ₹ 115 crores—a hefty hike of 38.6 per cent. The question which needs to be answered by the Government is: why was the hotel under-valued and was there no lock-in period? This also raises suspicion about the role of bureaucracy which quietly but cleverly puts Government money into the private pocket of the so-called strategic partner.

These are some of the glaring examples. There may be many more still lying hidden in the cupboards of the Disinvestment Ministry. However, this raises several issues about the valuation of assets of PSU slated for disinvestment. One thing has become abundantly clear. It is no use to run at a high speed in the valuation process and realise later that some baggage was left unchecked.

But the real issue is: why have so sharp discrepancies appeared in valuation? In the case of Vadodara unit of the former PSU, Indian Petrochemicals Corporation Ltd. (IPCL), when there was talk about IOC going in for the bid of this corporation, KMPG valued it for ₹ 1,234 crores while Deloittes Harkins reckoned the asset value at ₹ 3,456 crores—180 per cent higher than that of KMPG. However, the Government permitted Reliance Petro-investments to acquire control over the company by paying ₹ 1,491 crores. In this way, the Ambanies were able to control 70 to 90 per cent of the Indian Market for a wide variety of Petrochemical products. Obviously, eyebrows are raised why a firm valued for ₹ 3,456 crores was sold out for merely ₹ 1,491 crores! Mr. Thakurta rightly states: "While the views of private merchant banker are given considerable weight, the fact is that not a single agency of the Union government has taken any responsibility for valuing the assets of PSUs." This seems incongruous and the charge levelled by critics is: The Government is selling PSU silver for a song.

Lastly, the most glaring drawback of the methodology of valuation of assets of PSUs is that lands belonging to the PSUs have been left completely out of the exercise of valuation on the false and patently unjustified plea that the large tracts of land owned by PSUs do not earn any 'income' and hence, they need not be valued. This is downright dishonesty. In this context, the Standing Committee on Finance in its report submitted in April 2002 categorically stated: "The asset valuation guidelines are inadequate and vague especially on the issue of land valuation of the disinvested PSU.... Though the government has taken the position that land value is computed in most of the cases when the PSU concerned is disinvested/sold to another party." It is really strange that 127 acres of land attached with VSNL in South Delhi has no intrinsic value since it does not, as stated by the merchant banking valuers, yield any income. Similarly, it would be blatantly wrong to ignore nearly a similar plot by VSNL in Chattarpur, besides 700 acres in Pune. If the market value of the land in these areas is taken as the basis of valuation of land, then the total asset value of the PSU would show substantial improvement—may be in the range of 50 to 100 per cent. Mr. Thakurta rightly concludes: "Until issues of valuation are sorted out, the government cannot expect political consensus on its controversial privatisation programme."

Utilisation of the Proceeds of Disinvestment

The Government so far has been putting the proceeds of disinvestment into a black hole known as the Consolidated Fund of India from which it met the budget deficit. A basic criticism of the disinvestment policy, therefore, was that funds raised by selling family silver were used to pay the butler. As such, it was a case of meeting budget deficit by selling PSUs. In this connection, the advice of the late Dr. Mahbu-ul-Haq, UNDP expert was : "Do not use sale proceeds to finance budget deficits—retire national debt." But all along, the Government has been ignoring this advice.

Conclusion

While the Congress initiated the process of economic reform with emphasis on privatisation and pushed it to some extent, the BJP-led NDA Government, blatantly and in a muddle-headed fashion carried forward the banner of privatisation, taking advantage of the fact that the Congress is not in a position to oppose it, being itself the architect of privatisation. In the process, the country had to pay enormous costs to meet the budget deficits by fleecing the healthy PSUs, the ***navaratnas are also not spared.***

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CHAPTER

14

REDEFINING THE ROLE OF THE STATE

"While the case for economic reforms may take good note of the diagnosis that India has too much government interference in some fields, it ignores the fact that India also has insufficient and ineffective government activity in many other fields, including basic education, health care, social security, land reforms and the promotion of social change. This inertia, too, contributes to the persistence of widespread deprivation, economic stagnation and social inequality."

– Jean Dreze and Amartya Sen

1. EXPANDING THE ROLE OF THE PUBLIC SECTOR TO ACCELERATE GROWTH (1956 TO 1990)

Soon after independence, there was a widespread belief that without increasing the role of the State, it was not possible either to accelerate the process of growth or to create an industrial base for sustained economic development of the country. The Second Five Year Plan stated in unequivocal terms: "The adoption of the socialist pattern of society as the national objective, as well as the need for planned and rapid development, require that all industries of basic and strategic importance, or in the nature of public utility services, should be in the public sector. Other industries which are essential and require investment on a scale which only the State, in the present circumstance, could provide, have also to be in the public sector. The state has therefore, to assume direct responsibility for the future development of industries over a wider area."[1] The Second Plan further emphasised: "The public sector has to expand rapidly. It has not only to initiate developments which the private sector is either unwilling or unable to undertake, it has to play the dominant role in shaping the entire pattern of investment in the economy, whether it makes the investment directly or whether these are made by the private sector. The private sector has to play its part within the framework of the comprehensive plan accepted by the community."[2] Outlining the strategy of development, the Second Plan further opined: "The use of modern technology requires large scale production and a unified control and allocation of resources in certain major lines of activity. These include exploitation of minerals and basic and capital goods industries which are major determinants of the rate of growth of the economy. The responsibility for new developments in these fields must be undertaken in the main by the State, and the existing units have to fall in line with the emerging pattern.... In a growing economy which gets increasingly diversified there is scope for both the public and the private sectors to expand simultaneously, but it is inevitable, if development is to proceed at the pace envisaged and to contribute effectively to the attainment of the larger social ends in view, that the public sector must grow not only absolutely but also relatively to the private sector."[3]

1. Government of India, Planning Commission, *Second Five Year Plan* (1956), p. 29.
2. *Ibid.*, pp. 22-23.
3. *Ibid.*, p. 23.

From the above citations, certain issues stand out clearly:

(i) The consensus on the eve of the Second Plan was that all industries of basic and strategic importance should be in the public sector.

(ii) The public sector was to act as a senior partner in the process of development and undertake investments in such areas in which the private sector was unwilling or unable to undertake such investments.

(iii) In the exploration of minerals and basic and capital goods industries and infrastructure, public sector has to undertake direct responsibility.

(iv) While accepting the framework of the mixed economy, public sector was expected to contribute effectively to the social ends in view and grow at a fast rate so that the share of public sector grows both absolutely and relatively to the private sector.

This was a welcome decision because at that time, the Indian private industrial sector did not either possess the capability or the resources to undertake lumpy investments in the capital goods sector. Private sector was also not willing to undertake responsibility of the infrastructure. Thus, to initiate the process of building an industrial base and to reduce our dependence on industrialised nations, it was considered desirable that the state should develop the capital goods sector which was a totally neglected area during the British period.

In our over-enthusiasm for expanding the public sector, the Government nationalised the Imperial Bank of India and named it as State Bank of India. It went in for nationalisation of Life Insurance and created the Life Insurance Corporation of India. A momentous decision which was hailed all over the country in 1969 was the nationalisation of 14 major commercial banks of the country. The Government decided to takeover coal mines and created Coal India Ltd. At a later stage, 113 sick mills of the private textile sector were taken over in the orphanage of the public sector. The Government further expanded public sector in telecommunications and thus continued to enlarge the scope of the public sector. By 1992-93, total investment in the Central Government Enterprises shot up to ₹ 1,46,971 crores. If we add to this investment in Railways, Posts and Telegraph and other departments and also take into account investment in State Level Public Enterprises, then total investment of a huge order of ₹ 2,50,000 crores was made in the public sector. Besides this, the public sector provided 71 per cent of employment in the entire organised sector of the economy. It accounted for about 25 per cent of NDP.

Shortcomings of the Public Sector

The operation of the public sector resulted in a number of state failures. These failures were highlighted by a number of Committees and economists. Principal failures were: Overmanning and low work ethics leading to low capacity utilisation, over–capitalisation due to substantial time and cost overruns, political and bureaucratic interference stifling the ability to innovate, take quick and timely decisions, burden of taken-over private sector sick units, excessive social welfare expenditure, absence of a rational pricing policy based on economic calculus. All these factors resulted in a low rate of return which tarnished the image of the public sector.

A serious charge against the operation of public enterprises was that they were used for private purposes deliberately ignoring the objectives for which they were established. Sudip Chaudhri has documented this charge by quoting a number of decisions and studies. One would have expected that when new plants are set up and existing plants are expanded in the public sector, the PEs would buy the available capital goods and technology from the sister PEs. In reality however imports of capital goods and technology continued despite the domestic availability. Secondly, in cases when foreign companies are appointed as contractors for public sector projects, they often choose international suppliers of plants, equipment and technology ignoring domestic sources. Mr. Sudip Chaudhri emphasising the manipulation of Public Enterprises for Private Purposes concluded: "There are reasons to believe that some top level decision–makers in the government have also used the PEs to further their own interests. Imports provide one such opportunity. Foreign manufacturers are naturally interested in pushing their products into India. Reportedly it is quite common for them to bribe influential persons to secure the order. Once this is realised it may not be difficult to understand why the capabilities of PEs were often not recognised or further developed, why indigenous efforts were often opposed and imports were preferred."[4] Among the glaring examples are the import of shipping vessels by Shipping Corporation of India, rather than buying them from Cochin Shipyard whose price was higher. In case of foreign aid agencies, power equipment was imported in the bilaterally aided projects, depriving BHEL the opportunity to supply it. Global tendering was resorted to either on the insistence of the World Bank or that of the financiers. Economic reasoning was not on many occasions the basis, but non-price factors such as delivery time, quality, reliability were advanced as arguments to defend imports.

The above analysis brings out that lack of autonomy in decision-making, use of PEs for furthering private interests, absence of a comprehensive policy for public enterprise sector in decision-making, use of PEs by ministers and bureaucrats to siphon off funds, low work ethics resulting in low efficiency, all these factors conspired to create an environment of low or in some cases, negative rates of return for public enterprises. Consequently, the movement for liberalisation got legitimacy and this prompted the late Prime Minister Rajiv Gandhi in his first broadcast to the nation in 1984 to

4. Sudip Chaudhri, Public Enterprises and Private Purposes, *Economic and Political Weekly*, Vol. XXIX, No. 22, May 28, 1994, p. 1345.

declare in unambiguous terms: The public sector has spread into "too many areas where it should not be. We will be developing our public sector to undertake jobs that the private sector cannot do. But we will be opening up more to the private sector so that it can expand and the economy can grow more freely."[5]

2. REDUCING THE ROLE OF THE PUBLIC SECTOR

The Government of India, therefore, thought of reducing the role of the public sector and started the process of opening more and more areas for the private sector. The Industrial Policy of 1991 started the process of delicensing and but for a small number of 15 industries, industrial licensing was withdrawn. This process of deregulation was aimed at enlarging competition and allowing new firms to enter the market. The main aim was to abolish the licence–permit Raj and establish the rule of the market.

Not only the market was opened to domestic entrepreneurs/industrialists, even foreign capital was provided free entry upto 51 per cent equity in hi-tech areas.

The area of the public sector was limited to the following in future:

(a) Essential manufactured goods

(b) Exploration and exploitation of oil and mineral resources

(c) Technology development and building of manufacturing capabilities in areas which are crucial in the long term development of the economy and where private enterprise is inadequate.

(d) Strategic areas — Defence equipment

3. AREAS OF MARKET FAILURE AND NEED FOR STATE INTERVENTION

While markets do act in a manner that they tend to encourage competition and thus bring about efficiency and increase in productivity, the market failure has been noticed in the following :

(i) In case of imperfect competition, markets generate situations in which state intervention becomes necessary to ensure competition.

(ii) In case of monopoly, market failure is obvious and the state must intervene to break monopoly by anti-monopoly legislation or other measures.

(iii) Market failure has also been noticed in public goods like education and health. In these areas, unless the state establishes schools, colleges, universities, primary health centres and hospitals, it would not be possible to take care of the weaker sections of the society.

(iv) Market failure has also been noticed in areas of economic infrastructure like irrigation, roads, railways, etc. Private sector loves to use infrastructure, but would not like to invest in infrastructure, more especially in remote areas, where the rate of return may be very small. Thus, it is generally expected that the public sector should develop infrastructures and thus create an environment which facilitates direct investment by the private sector.

The question arises: market failures necessitate state intervention so that the imperfections of the market mechanism can be corrected. For instance, markets set prices on the basis of demand and supply forces. But to quote Michael Lipton, setting prices right is quite different from letting prices come from state inaction. Obviously, the function of the State is to set right prices so that correct signals for allocation of resources can be made. State failures, however, do not justify the use of market in all situations. It is quite possible that there is a need to change policies or to take strong administrative measures to correct state failures.

This only underlines the fact that even if markets are to be used more extensively, this does not eliminate the role of the State. *Rather than arguing for minimal state intervention, it would be more prudent to argue for effective state intervention.*

World Development Report (1999-2000) has also stated that in development thinking so far as the regulatory sphere is concerned, "the focus has shifted from deregulation to building an effective regulatory framework."

Role of the state in socialist society

The socialists believed that a major factor which determined social welfare and also affected individual welfare is inequality in ownership of property or instruments of production. This resulted in inequality of incomes and thus the property owning classes exploited the propertyless classes. To improve social welfare, it was essential to abolish private property. So the socialists pleaded for nationalisation of the means of production.

The State was given the role of acting as the vanguard of the people and thus develop a new social order based on equality.

The Soviet Union and the East European countries after 1917 established socialist societies which eliminated the private sector and made the public sector solely responsible for total development of the society. Since

5. Quoted by Datt and Sundharam, ***Indian Economy*** 25th edition (1988), p. 233.

the state apparatus became all powerful, it led to bureaucratisation on the one hand and eroded democracy since even the press was nationalised. The disintegration of the Soviet Union after 1989 and other countries of eastern Europe again brought to the fore the question of new framework in which societies should function to achieve the objective of better level of living in an atmosphere of freedom so that the personality of the individual can find full growth.

Interaction of the developments in Capitalist and Socialist Economies

Keynes exposed the basic weakness of capitalism and called for an *end of laissez faire*. He argued in favour of strong public intervention in the form of public investment, especially during periods of economic crises so that macro-economic equilibrium could be maintained and the economy could operate in conditions of economic stability with unemployment being reduced to very low levels of 3 to 4 percent, approximating full employment.

The emergence of socialistic states had a profound impact on the capitalist economies as well as the mixed economies. Consequently, in economies of Western Europe and the USA, there was a sharp increase in the public expenditure on economic and social infrastructure, more especially in the form of expenditure on education, health, child welfare and social security. As a consequence, a very large proportion of the national income ranging from 30 to 40 per cent was devoted to economic and social infrastructure. This increased the element of equity coupled with growth in these economies.

C H Hanumantha Rao is, therefore, right when he asserts: "Capitalism has thus done a lot of introspection and has learnt a great deal from the socialist experiment."[6] This brought forth greater economic and social stability in the capitalist economies. Moreover, the institution of "political democracy" with adult franchise also kept a constant vigil on capitalist democracies not to throw the welfare activities into oblivion, rather it goaded the capitalist economies to rectify the failures of market mechanism through state intervention in a meaningful manner.

However, the socialist economies, due to the absence of a democratic spirit, developed an attitude of self-righteousness. The system of command economy developed in the Soviet Union and other East European economies failed to appreciate the role of market in resource allocation and promoting efficiency. They developed top heavy bureaucracies and an inefficient public sector which continued to be supported by subsidies from the general exchequer. Hanumantha Rao, therefore, stated : "Capitalism has been affected and modified more by the socialist experiment than socialism has learnt from the functioning of the market economies. The self-righteousness on the part of socialism is rooted in its strong moral appeal, rigid doctrines and the authoritarian political system which prevented feedback from the people and kept them isolated from the rest of the world. This has basically been responsible for the lack of resistance in the socialist system."[7] The late realisation by the socialist regimes of the role of markets in the socialist economies and induction of democratic system of government to act as a system of feedback and correction has brought convergence of the two systems. Mrinal Datta Chaudhri states in this connection: "The planned economies of the socialist world have learned that market institutions are not exclusive to the capitalist mode of production, and that the threat of entry and the fear of exit remain irreparable stimuli for cost and equality consciousness in production."[8] Pulin B Nayak rightly concludes the controversy of the State and the Market : "The real issue is not whether to have the market or the state. This is an empty dichotomy and no serious school of political economy would today credibly argue for only one or the other. The question however is one of striking the right balance."[9]

The Experience of Market Socialism in China

The term 'Market Socialism' was first coined by Professor Oscar Lange in the 50's but the Polish authorities at the time rejected the concept and its incorporation in the working of the socialist economy. Forty years later, the Chinese used Market Socialism as the philosophy of liberalisation. *Market Socialism connotes the use of market mechanism and the private sector within the broad parameters of socialism*. Some economists feel that among the socialist countries, Communist China is the single exception which while maintaining the authoritarian political system, voluntarily incorporated in recent years the features of the market economy under the label 'Market Socialism'. Consequently, the Chinese economy experienced very high growth rate during the period. During 1965-99, the average growth rate of GDP in China was of the order of 8.1 per cent per annum, and that of per capita GDP was 6.4 per cent. The economy introduced new property forms like co-operatives and also undertook privatisation by transferring state enterprises to individuals. The reform process facilitated the bureaucracy to transform its power base through privatisation by legitimately transferring the ownership of the formerly state–owned enterprises in their favour. Besides this, the economy was opened to foreign investment. Special economic zones were created where foreigners

6. Hanumantha Rao C H, Changing Roles of Planning and Markets : The Emerging Pattern in India, *Mainstream*, Annual 1994, p. 42.

7. Hanumantha Rao C H, op. cit., P. 42.

8. Mrinal Datta Chaudhri, Market Failure and Government Failure, *Journal of Economic Perspectives*, Vol. 4, No. 3, Summer 1990, p. 26.

9. Nayak, Pulin B., The State and The Market, *Economic and Political Weekly*, Jan. 27, 1996, p. PE 22.

could set up business establishments by freely hiring labour on contract basis as also recruiting workers on piece wages.

Under the newly liberalised economy, a new class of entrepreneurs has come up in China which only follows the philosophy 'get–rich–quickly' – a kind of consumerist culture which has contributed to material prosperity but with certain devastating side effects.

Firstly, as against an inflation rate of less than 1 per cent during 1970-80 in China, annual average the rate of inflation during 1985-95, according to *World Development Report* (1997) was 9.3 per cent in China.

Secondly, as a result of creation of special economic zones, regional economic disparities have widened. This implies that the growth impulses of liberalisation have been restricted to certain enclaves of development and have not percolated to the backward regions. In other words, growth is limited in its spread effects.

Thirdly, to provide urban and industrial infrastructure to attract foreign capital, the government imposed additional taxes on Chinese peasants to recover a part of the cost of infrastructure. The government acquired farmlands for industrial and other infrastructures, but paid very inadequate compensation to the peasants. This imposed serious burdens on the peasants, who in the communist tradition, had to bear the costs of liberalisation. This meant a forced transfer of 20 to 30 per cent of income of the peasantry to fund the process of urban and industrial infrastructure development. This process of exploitation of the peasantry led to organised resistance by the peasants in the form of demonstrations, leading to riots, and in extreme cases, beating up of policemen and business executives and disruption of factory production. In other words, injustices associated with the new path of development led to social turmoil.

Fourthly, the system of social security enjoyed by the average Chinese worker which guaranteed him minimum essential requirements of living was replaced by the new system adopted in 1986. Consequently, jobs were offered on five-year contractual basis and the right to hire and fire workers was introduced. The contractual system was also pursued in state enterprises for all new recruitment in place of permanent employment. In addition, piece work system has also been introduced in enterprises. Ironically, the contractual system has not been uniformly applied to all employees, but only to lower level workers, whereas degree holders who occupy senior executive positions and military-men continue to benefit from life employment scheme. Thus, the Chinese economy has created an elite class which is appropriating the benefits of development while ordinary worker in the name of competition and efficiency, has been forced to work under insecure conditions and accept lower wages. This dual labour market has been the cause of social discontent.

The Chinese brand of Market Socialism, a euphemism for large scale introduction of market prices, has survived because it permitted foreign investment only in special economic zones and did not permit wholesale and indiscriminate entry of multinationals. Secondly, a large part of foreign investment was financed by non-resident Chinese living in Hong Kong, Taiwan, Singapore, Japan, South Korea, North America and Europe. Thirdly, the Chinese continued with the public distribution of essential goods at affordable prices.

Lastly, as pointed out by Jean Dreze and Amartya Sen, "The accomplishments relating to education, health care, land reforms and social change in the pre-reform period made significantly positive contribution to the achievements of the post-reform period. This is so in terms of their role not only in sanctioning high life expectancy and related achievements, but also in providing firm support for economic expansion based on market reforms."[10]

But the reform process has brought out a major weakness. This is the sharp increase in prices of the order of 20 per cent per annum since 1986. Inflation distributes incomes in favour of the richer classes and erodes the real wages of labouring classes and the peasantry. If socialism is to be reckoned as a movement for social and economic justice for the poor, then the reform process by fostering a continuous and high degree of inflation in China has led to the worsening of distributive justice. It is this challenge which the new reforms have to face and thus the State must intervene to control inflation.

Three objectives of development have been recognised the world over. The are : *Democracy, growth and equity*. The reform process seems to be emphasising only the objective of growth, it has abandoned equity. So far as democracy is concerned, the Chinese system is characterised as an authoritarian regime. The market socialism of the Chinese brand, therefore, must address itself to issues of democratic reform and build equity in its pattern of distribution, lest the Chinese economy may have to face the charge that it is not operating within the broad parameters set by socialism.

In a seminar on China, Joseph Stieglitz commented, "As China's experience shows, partial and gradual privatization is more beneficial than sudden 100 percent privatization", the likes of which were witnessed in Russia and some of the countries of the eastern bloc. Even with partial and more gradual privatization in China, there was a massive dislocation of urban workers, substantial informalization of the urban labour market as well as several detrimental effects on the rural sector. Less and unequally distributed funds from the Central Government and the fragmentation of rural society led to declining public services: many irrigation canals and other water

10. Jean Dreze and Amartya Sen, (1995), *India : Economic Development and Social Opportunity*, p. 59.

works fell into disarray; public health care deteriorated; education became prohibitively expensive for many; and the crime rate went up several fold.

Although the Chinese economy, reached high level of GDP growth of 10.6 percent of during 1990-2000 and 9.8 percent during 2000-06, it is getting seriously affected by the current Global Economic Crisis. It is estimated that within two months (mid-October to mid-December 2008), more than 10 million workers have lost their jobs in the coastal export zone. It is good fortune that they still have a piece of land and thus can return to the village to eke out a living. The dismantling of collective ownership of land which provided a social safety net during the Mao era, and only a gradual development of the formal social protection system has left a large section of the population vulnerable to economic shocks. Even the President has warned that China was losing its competitive edge, calling for a reduction in dependence on exports, more sustainable forms of production and a rise in the consumption of the working classes. The closing of factories and a sharp decline in investment in the construction sector has led to a steep decline in the demand for steel, cement, glass and other related items; it has forced heavy industry to lay offs workers, in addition to the lay-offs in the export sector.

All these developments have forced the Chinese government to rethink its development strategy to bring about a better balance between social safety nets developed during the Mao era and the push to privatization and market socialism adopted under Deng Xiaoping.

It is now being realized that the market mechanism can be an economic accelerator, but it works ruthlessly to snap ties between individuals and social groups. The Government is realizing that markets may accelerate GDP growth, but they fail to take care of the distribution of GDP, more especially to the weaker section of the society. Marketisation cannot be treated as a goal in itself, it may a means of resource allocation but the Government should apply redistributive instruments to promote social justice.

4. REDEFINING THE ROLE OF THE STATE

For the purpose of redefining the role of the State in the Indian society, it would be relevant to consider the structure of Indian economy and polity. It must be clarified at the very outset that Keynesian perceptions of state intervention are not so relevant to a developing mixed economy like India, because Indian society had in 2004-05 about 27.5 per cent of its population living below the poverty line. As such this big segment of the Indian society comprising about 300 million persons is untouched by the market mechanism. The State has, therefore, to play a positive role in employment generation for the poor and to promote their social welfare. Hanumantha Rao highlighting the point mentions : "It is often said that markets bypass the poor and the underprivileged and that they cannot participate in the market-driven development. This is not an accurate statement. The poor and the underprivileged are very much driven into the market. The child labour and bonded labour are all participating in the market but at very unequal or unfavourable terms. ... Therefore, it has rightly been said that the market can be a good servant when it is intelligently utilised but a bad master when it is allowed to have a free play."[12] Obviously, markets cannot be trusted to ameliorate the condition of the poor. The State has to play a positive role in providing education and health to the poor as well as to have special programmes of employment generation, more especially in the rural areas so that employment opportunities are enlarged for the poor and the underprivileged.

Another important factor responsible for poverty is the low resource base of the poor. For this purpose, even in capitalist societies land reforms were carried out in several countries. In India, the process of land reforms did help to arrest further concentration of land holdings by imposing ceiling on land, but it failed in its objective of providing land to the landless. Indian society was not able to push land reform in the sense of transfer of ownership, but can certainly provide secure tenancy rights so that the landless can benefit from the gains of increase in agricultural productivity. In view of the large size of our population, it would not be possible to provide land to all the landless labourers. Besides providing secure tenancy rights, the State has, therefore, to take up massive programmes of rural infrastructure development as also provide credit at highly subsidised rate so that the poor can create assets and earn income. In other words, the promotional role of the State in providing rural infrastructure and extend credit to the poor at low rates of interest can become an effective instrument in poverty removal.

The second role of the state is to provide infrastructure — economic as well as social infrastructure. Economic infrastructure consists in the provision of roads and railways, hydro-electric works, irrigation dams, provision of drinking water etc. It has been observed that the private sector is not keen to invest in infrastructure. Some attempts are being made to involve the private sector in some areas of infrastructure as power generation, road construction, building highways and telecommunications, but by and large, the responsibility for infrastructure development rests with the state. The role of the State in providing "*hard infrastructure*" in the form of power, transportation, irrigation is accepted by all, though private effort can also supplement state effort. Yet the state can also help in providing "*soft infrastructure*". This can

11. Dale Jiajun Wen (2008), China's Rural Reform: Crisis and Ongoing Debate, Economic and Political Weekly December 27, 2008, p.95-96.

12. Hanumantha Rao C H, *op. cit.*, p. 44

take the form of organising market-outlets for the products of small scale sector and cottage industries. Since the small scale sector accounts for about 38 per cent of exports, the state can organise export promotion of small industry products. Such soft infrastructure can cater to the supply of market information, encouraging modern designs and undertaking research and development for SSI sector, besides undertaking the marketing of their products.

The other part of the infrastructure — social infrastructure is in the form of health and education. Investment in education helps human beings to acquire human capital formation. The provision of basic education to all has been accepted as the goal in all societies. For this purpose, the private sector will not be forthcoming to make investment in schools. At higher levels and specialised education in Medicine, Engineering, Technology, Electronics, the costs are beyond the reach of the lower middle and poor classes. Private schools, which go by the name of public schools – a misnomer – charge very heavy fees which the poor cannot afford. Yet to have vertical mobility in life, education is necessary. State has to play the role.

Similarly, provision of health facilities also requires considerable investment which the public sector must undertake so as to improve the health status of the weaker sections of the society because it is not possible for the poor to pay for expensive health care by the private sector.

Both education and health have been considered as important for human capital formation, thereby raising levels of productivity.

The third area which needs state intervention is macro-economic management of the economy. In this, the Government can intervene in a variety of ways, more especially for such sections of the population which are not covered by the market mechanism. In India, even in the year 2004-05, as per the findings of the 61st Round of the National Sample Survey, 27.5 per cent of the population was living below the poverty line. In other words, 300 million persons are not touched by the markets. The state has to intervene in a variety of ways to promote industries where these persons can seek employment and earn a better living. State may take steps to promote certain industries which are labour absorbing. The World Bank Study "The East Asian Miracle" (1993) about eight highly performing economies of Asia states: "In most of these economies, in one form or another government intervened – systematically and through multiple channels — to foster development, and in some cases the development of specific industries. Policy interventions took many forms: targeting and subsidising credit to selected industries, keeping deposit rates low and maintaining ceilings on borrowing rates to increase profits and retained earnings, protecting domestic import substitutes, subsidising declining industries, establishing and financially supporting government banks, making public investments in applied research, establishing firm and industry–specific export targets, developing export marketing institutions, and sharing information widely between public and private sectors. Some industries were promoted while others were not."[13]

In the Indian context, a number of other interventions such as providing financial assistance to small scale industries and to individuals to create employment in the informal sector have also helped the process of growth and employment generation. The priority sector loans, supported by better information about emerging areas, can be a positive intervention which can become people-friendly.

Another area which needs actives state intervention is the reform of the public sector. Many public sector enterprises have complained about absence of autonomy and quick decision-making as the principal factor responsible for their poor performance. Although Government has signed Memorandums of Understanding with several public sector enterprises, but still the chief executives complain that there is practically no change and they have still to obtain ministerial approval for every decision. The bureaucrats in the Government and the Ministers are not willing to part with their power and are treating the PEs as their colonies. Public sector reform can be certainly beneficial in improving their performance. The Government has intervened by signing MOUs, but has not intervened honestly and effectively. State intervention is needed in an honest manner.

There is a lot of wisdom in transferring some of the unimportant commercial enterprises to the private sector, but privatisation in the nature of selling five, ten or twenty per cent of the shares to cover the deficit of the Central Government shall be of no avail to the economy. It would be better to shed the load of these enterprises to the private sector on the condition that labour employed in them will not be retrenched (or rationalised, to use a more sophisticated term). But the trade unions may resist this transfer and the Government of a democratic state like India may not be able to push the reform process which results in a backlash of labour. The reform of the public sector, therefore, assumes greater relevance in this context. It may be pointed out that research has brought out the fact that ownership is not the most crucial determinant of the efficiency of an organisation. There are public sector units which are running as efficiently as private sector units and even better in some cases. There are also public sector units which are incurring losses year after year. The same is true of private sector. It is thus the organisation culture and the quality of management which determine efficiency of public sector units. The whole issue revolves round evolving a system of incentives and disincentives to improve work ethics of an organisation. Such a system was evolved by Kautilya by building accountability in State enterprises and enforcing the rules laid down for the purpose. The State has to act decisively in this regard and innovate measures to link wages with productivity.

13. World Bank, *The East Asian Miracle* (1993), pp. 5–6.

SUMMING U

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15. *Ibid.*, p. 2.

SUMMING UP

Joseph E Stiglitz, Nobel laureate states : "Some will argue for trickle-down economics: don't worry about the poor, eventually everybody will benefit from growth. And some will oppose competition policy and strong corporate governance laws: let Darwinian survival work its wonders. Growth arguments will be advanced to counter strong social and environmental policies."

"Market economies are not self- regulating. They cannot simply be left on autopilot, especially if one wants to ensure that the benefits are shared widely. But managing a market economy is no easy task. It is a balancing act that must constantly respond to economic changes."

Paul Streeten has rightly argued: "The World Bank has promulgated the need for market-friendly government interventions. But free markets are neutral institutions, which can work for good or ill. Whatever may be said for their efficiency, they are not tender-hearted towards their victims. As Joan Robinson said, the Invisible Hand can work by strangulation. The question (asked in the spirit of President Clinton "putting people first") should be on what conditions markets are people-friendly. Certain conditions have to be met to make markets work efficiently, and make them work for the benefit of people."[14]

The basic issue is to shed "soft state" attitude towards certain classes which intend to perpetuate status quo and do not permit percolation of the benefits of development to the poor. Paul Streeten bringing out the gap between professed goals and policies of the state mentions: "Soft states" also go in for military violence, both internal and external. Their "softness" lies in their unwillingness to coerce people in order to implement declared policy goals such as collecting taxes, punishing evaders ... implementing a land reform, and to resist the hard powers of caste, land ownership and cultural barriers. This lack of social discipline is not the result of gentleness or weakness but reflects the power structure and a gap between real and professed intentions."[15] The real issue is markets work according to the "law of the jungle" and in their case, the weaker must go to the walls. In other words, markets believe in the survival of the fittest, but civilisation implies survival of the unfittest. State intervention should, therefore, be on behalf of the unfittest or the weaker sections of the society. Kautilya's strong state was ruthless with anti-socials, criminals and others not obeying the state. In this context, the role of the state must change in favour of the weaker sections. State while considering any intervention should apply the touchstone provided by Mahatma Gandhi: "Whenever you are in doubt, or when the self becomes too much with you, apply the following test. Recall the face of the poorest, and the weakest man whom you may have seen, and ask yourself, if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?" In case, any state intervention on the basis of this touchstone, provides a positive answer, it is people-friendly. The most unfortunate part of our political system is that it has forgotten to apply this touchstone.

"While the case for economic reforms", according to Jean Dreze and Amartya Sen, "may take good note of the diagnosis that India has too much government interference in some fields, it ignores the fact that India also has insufficient and ineffective government activity in many other fields, including basic education, health care, social security, land reforms and the promotion of social change. This inertia, too, contributes to the persistence of widespread deprivation, economic stagnation and social inequality."[16] They further argue : "The cage that keeps the Indian economy well tamed is not only that of bureaucracy and governmental overactivity, but also that of illiteracy, undernourishment, ill health and social inequalities, and their causal antecedents : government neglect and public apathy."[17]

Jean Dreze and Amartya Sen, therefore, emphasise the need for going beyond liberalisation when they state: "While the removal of barriers to using markets can significantly enhance such opportunities, the practical usability of these opportunities requires the sharing of certain basic capabilities — including those associated with literacy and education (and also those connected with basic health, social security, gender inequality, land rights, local democracy). The rapid expansion of these capabilities depends crucially on public action of a kind that has been severely neglected in India — both before ad after the recent reforms. The real issue in 'uncaging' the tiger is the need to go well beyond liberalisation."[18]

World Development Report (1999/2000) captioned *'Entering the 21st Century'*, stated: "Governments play a vital role in development, but there is no simple set of rules that tells them what to do,"[19] Every country has therefore, to determine the areas and extent of market and state intervention depending upon its own stage of economic development, socio-political system and other historical factors.

In any economic system, the state can play three kinds of roles:

(i) As a producer of goods and services,

(ii) as a regulator of the system, and

(iii) as a supplier of 'public goods' or 'social goods' like education, health, drinking water, etc.

14. Paul Streeten, (1994) Markets and States: Against Minimalism and dichotomy, *Political Economy Journal of India*, Jan.–July, p.á3.1
15. *Ibid.*, p. 2.
16. Jean Dreze and Amartya Sen (1995), India : Economic Development and Social Opportunity, Oxford University Press, Delhi, p. 203.
17. *Ibid.*, p. 181.
18. *Ibid.*, p. 181.
19. World Bank (2000), *World Development Report (1999/2000), Entering the 21st Century*, p. 2.

As a producer of goods and services, the state made an attempt in India in the initial period of its development to create and expand the public sector through public sector undertakings. It also went in for nationalisation of banks and insurance, the commanding heights of the economy. The inefficiencies shown by the PSUs have forced the state not to expand its area any more. Rather there is a growing consensus on reducing the areas of direct investment by the state. This has meant permitting private sector to enter areas hitherto reserved for the public sector. It implies state withdrawal from areas in which private sector can operate more efficiently. It may also lead to transfer of ownership of public sector enterprises (partially or wholly). In India, this is being attempted by opening insurance to the private sector, by opening public sector investment in heavy and basic industries and even infrastructure. However, since private sector is not forthcoming in electricity generation in an adequate manner, the state has to continue. Fearing resistance by employees, the Government has not gone in for opening banking to the private sector. But the government has been making repeated attempts to reduce its area of direct investment. It is also being argued that if private monopoly is bad, state monopoly is also bad. Consequently, to infuse competition, which is considered as the chief instrument to promote efficiency, state monopoly is also sought to be broken.

The second function of the state is as a regulator of the system. The system of quantitative restrictions resulted in corruption and acted as a hindrance to enlarging productive capacities. The state as a regulator has to operate on the quality of economic performance by indicating the direction of change. In fact, this is a market complementary role to direct investment in socially desirable channels.

The third function of the state is to act as a supplier of 'public goods' or 'social goods', this is the role of a 'welfare provider'. For instance, private sector may not be interested in providing 'drinking water' at zero or very low cost to the entire population, but the necessity of doing so is highly justified on social considerations. The state may undertake this role by initiating direct investment in this area or may help panchayats in the rural areas by providing financial assistance and leave the question of operation and maintenance of such projects to local bodies. But the state cannot neglect the interests of the poor as well as people in remote and drought-prone areas and has to act. The state has the responsibility of providing social goods like roads, electric energy, other forms of transport and communications. Here again the state may undertake direct investment itself or enter into agreement with private sector (Indian or foreign), but it cannot escape the responsibility of providing physical infrastructure to the people which can help to enlarge capacities and production of goods and services.

Among the social goals are also included education and health. There is a total consensus that it is the duty of the state to provide education and health to its people. The rich may be able to arrange for education and health even at a higher level of private costs, but the poor cannot; yet the fact of the matter is that education and health enlarge the capabilities of the people and have got to be provided by the state. This will build the concept of 'equity' in the economic system.

Since ideology is taking a back seat even in the erstwhile communist societies, there is a convergence that is taking place in all political systems in the world. Nationalisation or privatisation are being viewed as the means and not the ends in themselves. The question that is relevant is not to use the state or the market, but to use the state and the market and strike a balance, which fulfils the three objectives outlined by Keynes. "The political problem of mankind is to combine three things: economic efficiency, social justice and individual liberty." Both the market and the state have to be harnessed in the fulfilment of these objectives.

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CHAPTER 15

PRIVATISATION AND ECONOMIC REFORMS

"In view of the historical background of public enterprise in India, it is inconceivable that privatisation in this country will be accepted by the society as an end in itself, since there is no concensus in favour of market solutions and property rights, nor are these considered as prime movers for much needed social and economic change. These real issues centre on the allevation of poverty and the upgrading of technology in a highly differentiated society of continental dimensions".

–V.V. Ramanadham

"India will only truly shine when it shines for one and all ".

–Dr. A.P.J. Abdul Kalam

1. PERFORMANCE ANALYSIS OF PUBLIC SECTOR

Indian economy is passing through a process of crucial change. For the first four decades, we have been pursuing a path in which the public sector was expected to be the engine of growth. However towards the middle of the seventies, disenchantment with the public sector had started, but the voices of protest were feeble and were sporadic and inarticulate. The failure of the public sector to fulfil the role assigned to it resulted in the protest becoming louder and more articulate. Although even in the beginning of eighties, the opening of certain areas hitherto reserved for the public sector was undertaken, but the Government was still hesitant to make a clear statement. The first clear pronouncement on the public sector outlining the change in policy was made by Prime Minister Rajiv Gandhi in his first broadcast to the nation in 1984 when he said : The public sector has spread into "too many areas where it should not be. We will be developing our public sector to undertake jobs that the private sector cannot do. But we will be opening up more to the private sector so that it can expand and the economy can grow more freely." The culmination of all these developments led to the announcement of new Industrial Policy 1991. The debate about public sector and privatization assumed great importance thereafter.

The principal charges against the public sector are: low rate of return on investment, declining contribution to national saving, poor capacity utilisation, over-staffing and bureaucratization leading to excessive delays and wastage of scare resources.

Rate of Return on Capital Employed

It was stated in various plan documents that PSUs should earn a rate of return of 12 per cent per annum. It may be noted that during 1969-70 to 1973-74, gross profit as a percentage of capital employed was in the low range of 4 to 6 per cent and the critics were justified in painting a very black image of the public sector. The situation did improve marginally during the Fifth Plan and the gross rate of return on PSUs ranged between 7 to 8 per cent till 1980-81. However from 1981-82, the situation did take a turn decidedly for the better and the gross rate of return ranged

between 12 and 13 per cent. Obviously, the situation in PSUs was turning from black to grey and the public sector undertaking indicated a better record of performance.

The fact that an overall gross rate of return to capital employed has been about 12-13 per cent during the entire Seventh Plan period and was in the range of 11 to 12% during 1990-91 and 1993-94 should not lull us into complacency that no effort is needed to improve the performance of the public sector. It is very heartining that during 2004-05, the rate of return peaked to 21.5%. A deeper analysis reveals very interesting information :

1. The petroleum sector which accounted for 25.2 per cent of capital employed provided 37.2 per cent of the total gross profit earned by all public sector undertakings. Obviously, the contribution of the petroleum sector is far greater than the capital employed in this sector.

2. The taken-over sector (such as textiles), accounted for –0.04 per cent of the total capital employed, but accounted for 0.4% of the total gross profits. In other words, the argument that the relatively poor performance of the PSUs is due to the burden passed on by the private sector sick undertakings to the public sector is overplayed. The weight of this sector is very small in total surplus generation.

From analysis of public sector undertakings on the basis of the rate of return to capital employed, it is evident that during 2004-2005, enterprises earning more than 12% rate of return account for ₹ 3,42,368 crores of investment or 67.9 per cent of total investment in all Central Government enterprises. In this group are petroleum, power, coal, engineering, transportation equipment, tourist services and financial services. Out of a total investment of ₹ 5,04,370 crores, enterprises earning less than 8% rate of return account for ₹ 54,680 crores of investment, i.e., 10.8 per cent of total capital employed. This, in our judgement is the non-redeemable area of the public sector. But the area in the range of 8-12% rate of return accounts for a total investment of ₹ 1,08,190 crores i.e., 21.45 per cent of total capital employed. This is a redeemable group of enterprises which can be resurrected to better health if proper methods of management and structural adjustment in operations are effected. In other words, the situation as it stands today indicates that about 89 per cent of total investment in PSUs is either above the norm prescribed by the Planning Commission or is in the redeemable area. The need of the hour is to initiate measures to salvage the group in the ROI range of 8-12 per cent. (Refer table 1).

State Government Enterprises

The operational efficiency of state government enterprises reveals that they are perennial loss- makers. The chief culprits among them are : state electricity boards, irrigation works and Road Transport Corporations. A study commissioned by the Planning Commission regarding the performance pattern of state government enterprises revealed that the net profits of the PSUs in all the States between 1990-91 and 1998-99 were negative except in 1994-95 and 1995-95. The net profits of all the States taken together averaged a negative 1.2 per cent of the total revenue earned over the period. The percentage of profit before interest and taxes to total revenue declined from 10.24 per cent in 1990-91 to 6.64 per cent in 1998-99 whereas the expected norm is 20 per cent. None of the states earned the bench mark profit before interest and taxes.

Dividend as a percentage of equity worked out to merely 0.58 per cent. This implies that the state Governments were heavily subsidizing these PSUs. The study concluded: If the State governments had simply parked the money in banks, it would have yielded a higher rate of return annually to the State Governments.

According to the Study conducted by the Institute of Public Enterprises (Hyderabad), between 1991-92 and 2004-05, there were 1,129 state-level enterprises. Investment in these enterprises increased from ₹ 90,983 crores in 1991-92 to ₹ 2,59,184 crores in 2004-05, but their accumulated losses increased from ₹ 8,754 crores in 1991-92 to ₹ 60,517 crores in 2004-05. This is a very distressing situation with regard to state level PSUs.

Uneconomical pricing policies, the rise of farm lobbies and political pandering of peasants and considerations of preserving vote banks have all contributed to the scandalous situation, besides operational inefficiencies.

2. COMPARISON OF THE PUBLIC AND PRIVATE SECTOR

Before undertaking a comparison of the public and the private sectors, it would be relevant to state that there is a considerable amount of misinformation about the role of the public sector. After the wave of dismantling of the public sector in the UK in the late 1970s, there have developed certain pre-conceived notions about the public and the private sector. Dr. S.R. Mohnot rightly mentions: "The efficiency of the enterprises in the private sector is taken for granted. Conversely, the substandard performance of the public enterprises is an unquestioned hypothesis. The make-believes go unchallenged."[3] It is, therefore, vitally necessary to examine empirical evidence about the performance of both these sectors so that the conclusions are arrived on the basis of facts rather than on pre-conceived notions. The relevant facts are presented as under :

Aggregate Gross profit (before taxes) earned by all Central Public Enterprises (CPEs) in 2008-09 was ₹ 91,129 crores which accounted for 11.2 per cent of equity capital, the base investment, a major part of which

3. SCOPE (2000), *Performance of Public and Private Sectors*, p.255.

Table 1 : Ratio of Gross Profit to Capital Employed in CPSUs (2008-09)

Rate of Profit	*Gross Profit (₹ Crores) (1)*		*Capital Employed (₹ Crores) (2)*		*GP/CE 3 = 1 / 2*100*
I. Negative					
1 Cheicals & Pharmaceuticals	-423.05	(-0.46)	1432.92	(0.18)	-29.52
2 Medium & Light Engineering	-107.39	(-0.12)	7854.09	(0.96)	-1.37
Sub Total I	**-530.44**	**(-0.58)**	**9287.01**	**(1.14)**	**-5.71**
II. 0 to 8%					
3 Telecommunication Services	888.56	(0.98)	149356.2	(18.33)	0.59
4 Tranmission	1709.09	(1.88)	40320.68	(4.95)	4.24
5 Consumer Goods	269.12	(0.30)	4964.22	(0.61)	5.42
6 Petroleum (refinery & Marketing)	8095.03	(8.88)	138397.9	(16.99)	5.85
7 Contract & Construction Service	279.68	(0.31)	4698.32	(0.58)	5.95
8 Transport Services	3450.7	(3.79)	50113.08	(6.15)	6.89
Sub Total II	**14692.2**	**(16.12)**	**387850.4**	**(47.60)**	**3.79**
III. 8 to 12%					
9 Generation	11662.37	(12.80)	129028.7	(15.84)	9.04
Sub Total III	**11662.4**	**(12.80)**	**129028.7**	**(15.84)**	**9.04**
IV. 12% and above					
10 Crude Oil	19730.67	(21.65)	156251.3	(19.18)	12.63
11 Coal & Lignite	6162.35	(6.76)	44248.45	(5.43)	13.93
12 Steel	7593.64	(8.33)	42184.26	(5.18)	18.00
13 Agro Based Industries	19.62	(0.02)	105.63	(0.01)	18.57
14 Tourist Services	55.95	(0.06)	296.21	(0.04)	18.89
15 Trading & Marketing	810.75	(0.89)	3128.92	(0.38)	25.91
16 Transportation Equipment	2290.09	(2.51)	7697.49	(0.94)	29.75
17 Other Minerals & Metals	6411.03	(7.04)	15882.94	(1.95)	40.36
18 Heavy Engineering	3022.93	(3.32)	5875.5	(0.72)	51.45
19 Industrial Development & Tech. Consultancy Services	635.72	(0.70)	849.34	(0.10)	74.85
20 Fertilizers	10633.55	(11.67)	10575.04	(1.30)	100.55
21 Textiles	3619.2	(3.97)	952.38	(0.12)	380.02
22 Financial Services	4319.54	(4.74)	606.55	(0.07)	712.15
Sub Total IV	**65305**	**(71.66)**	**288654.01**	**(35.43)**	**22.62**
Grand Total (I to IV)	**91129.2**	**(100.00)**	**814820.12**	**(100.00)**	**11.18**

Source : Compiled and computed from Government of India, *Public Enterprises Survey (2008-09)*

was provided by the national exchequer. This underlines the fact that this return on public enterprises was fairly good.

It may be noted that the net profit all of CPEs in 1999-00 was ₹ 14,555 crores as against only ₹ 2,272 crores in 1990-91. This implies a steady growth of net profit—an index of efficiency. This profit includes the losses of loss-making CPEs (including the taken over sick enterprises of the private sector). It also includes the non-commercial 25 companies. Despite these factors, the profits of CPEs are, judged by the standards of performance, quite healthy.

Profitability-based Comparative Performance

Dr. S R Mohnot on the basis of CMIE data has analysed the performance of the public sector and the private sector enterprises. Taking the two leading parameters, namely, net profit to turnover (NP/Turnover) and net profit to net worth, the following picture emerges:

On the basis of the net profit to turnover ratio, it may be noted that the public sector did not perform well during 1994-95 and 1995-96, but improved its position significantly during 1996-97 and 1997-98. It we exclude the taken over private enterprises, then during 1997-98, the NP turnover ratio of the public sector was 4.7 while that of Indian business houses was merely 2.3 per cent and the same percentage was observed for the total Indian private sector. Obviously, the record of the public sector enterprises on the basis of this criterion indicated better performance of this sector than that of the private sector (Refer table 2)

Table 2 : Net Profit to Turnover Ratio

	1994-95	1995-96	1996-97	1997-98
The Private Sector				
– Indian Business Houses	6.1	6.3	3.5	2.3
–Total Indian Private Sector	6.1	6.0	3.2	2.3
The Central Public Sector				
- Basic Public Sector	4.3	3.7	3.8	4.7
Taken over sick private enterprises	-27.3	-26.0	-34.6	-45.4

Source: Centre for Industrial & Economic Research, *Performance of Public and Private Sectors*, p.21.

On the basis of the other equally powerful financial parameter of net profit to net worth (NP/NW) which measures the return on investment and real shareholder value, the position was as follows:

Table 3 : Net Profit to Net Worth Ratio

	1994-95	1995-96	1996-97	1997-98
The Private Sector				
– Indian Business Houses	15.0	14.0	7.4	5.2
–Total Indian Private Sector	15.2	13.3	6.5	4.7
The Central Public Sector				
– Basic Public Sector	7.4	8.2	5.0	5.4
–Takenover sick private enterprises	Negative networth not amenable to computation			

Source: Same as for table 2

On the basis of this criterion as well, the public sector did not fare well during 1994-95 and 1995-96, but in 1997-98, it fared better than the Indian business houses as well as the total Indian Private Sector. (Refer table 3)

Other Financial Parameters

Centre for Industrial & Economic Research (CIER) undertook an analysis of 2,436 companies relating to dividends declared by public and private sector companies during 1998-99. The analysis revealed that "some 1,452 companies or about 80 per cent of the private sector companies did not declare any dividend during 1998-99. The comparative shares of non-dividend declaring companies in the two sectors were: PSUs 24 per cent, private sector 60 per cent. Nearly 62 per cent of the public sector companies in the tally had declared dividends exceeding 10 per cent; in the case of the private sector companies, only 36 per cent had declared dividends exceeding 10 per cent".

Another factual distortion about the public sectors performance relates to the savings by the public sector. "The negative shown against the public sector is only due to government administration. Disaggregated from government administration, the total public sector (including departmental and non-departmental public sector) shows positive numbers—which compare favourably with the private corporate sector. The contribution of the public sector in 1998-99 was 4.5 per cent and of the private corporate sector 4.2 per cent. Going 5 years back (that is 1993-94), it was 4.0 per cent for the public sector and 3.8 per cent for the private corporate sector, still higher for the public sector."[4]

Table 4 : Dividend Performance of Companies

		No dividend declared	Less than 10%	10% and above	Total
Private Sector	(No)	1,438	93	837	2,378
%		(60.5)	(3.9)	(35.6)	(100.00
Public Sector	(No)	14	8	36	58
%		(24.1)	(13.8)	(62.1)	(100.0)

Source: SCOPE (2000), *Performance of Public and Private Sectors*, p.30.

Comparative Financial Performance of Top 50 and Top 100 Companies

CIER's study of "the comparative analysis of the financial results of the top 50 and top 100 public and private sector companies in 1997-98 shows that the two segments came close to each other. In a number of cases, the public sector logged better results. Against RONW (Return on net worth) of 11.9 per cent of top 50 private sector companies, the comparative top public sector enterprises registered 13 per cent return, a full one per cent higher. The divergence gets reduced with the extension of horizon from top 50 to top 100 corporates, and yet it is the public sector which scores higher—11.9 per cent to 11.3 per cent."[5]

To sum up, it may be stated that there is a lot of misinformation about the performance of the public and the private sectors. It would not be correct to assume that public sector symbolises inefficiency and the private sector is the epitome of efficiency. Consequently, there is a lot of energy being spent on privatisation of the public sector, instead of sharpening the tools to further improve its functioning.

The comparison reveals that ownership is not the dominant factor in the operation of an enterprise. It is in fact the organisation culture which is more important. If by the grant of greater autonomy, bureaucratic and

4. Mohnot S.R. (2001), *Reinventing the Public Sector*, pp.11-12.
5. SCOPE (2000), op.cit., p.256

political control is reduced in public sector undertakings, they are likely to show much better results in the new economic environment, as has been shown by the results of PSEs in 2004-05. The need is to not to privatise public sector enterprises but to infuse private culture in PSEs to improve their efficiency and profitability.

3. PRIVATISATION WAVE IN THE WORLD

During the eighties, the disillusionment witnessed in the Socialist economies accelerated the process of disenchantment with the public sector in the mixed capitalist enterprise systems in the world. The wave of economic reform under *perestroika* started in the USSR swept the economies of Eastern Europe. Although Communist China suppressed the opposition move to introduce democracy in its polity, but it has itself introduced economic reforms since it was felt that the public sector did not optimize efficiency and productivity of capital. The socialist economies were operating in a system of monopolistic control and acted on cost plus pricing policies suggested by the plant managers. The virtual absence of market did not provide a competitive environment to develop a system of efficiency pricing. Quite a large number of enterprises in mixed capitalist economies worked under conditions of monopoly and thus were the victims of excessive bureaucratisation and centralisation in decision making, resulting in inordinate delays which also led to escalation of costs.

The major problems faced by the public sector enterprises could be summed up as under :

1. In socialist economies working under a command system of management, little initiative was left with the managers of public enterprises. In developing countries like India with a large public sector, freedom for decision-making by the managing directors was extremely limited. They had to depend on the ministers/ministries — in other words, the political masters. Consequently, inordinate delays resulting in inefficiencies, lack of capacity utilisation and low productivity took place.

2. Pricing policies in a number of public sector enterprises are not guided by rational economic considerations. Social and political constraints compel public enterprises to charge uneconomic prices resulting in losses. This is the the position specially in PSEs catering to infrastructure like power, irrigation, public transport, supply of milk etc.

3. Public enterprises can afford soft budget options because their losses can be met out of the general revenues. In view of the availability of this option and absence of competition, the pressure to take hard economic decisions is conspicuous by its absence.

4. The managers of public enterprises tend to become procedure-oriented rather than outcome-oriented and thus start playing safe and send even ordinary decisions for approval of top bosses in the ministries so that in the event of loss, they may not be held responsible.

As a consequence of all these factors, the element of subsidization of the public sector assumed intolerable proportions. For instance in Poland, the State-owned Enterprise Sector "received subsidies ... composed of direct budgetary transfers and quasi-fiscal subsidies through the banking system ... amounting to 5.5 per cent of GDP in 1988, rising to 9.2 per cent of GDP in 1989. In Yugoslavia, cumulative losses of the enterprises sector rose from 5.7 per cent GSP (Gross Social Product) in 1988 to between 8 to 9 per cent of GSP in 1989."[6]

In quite a large number of developing countries in Asia and Africa, the occurrence of continued losses in public enterprises forced governments to sit up and shed their cliches about the virtues of the public sector.

As a reaction to the inefficient working of the state-owned enterprises, the wave of privatization spread all over the world. The disequilibrium in the macroeconomic balance of the socialist economies as well as the developing countries led to disequilibrium in their balance of payments. The dependence of these economies on the advanced capitalist economies of the West, especially USA, hastened the process of economic reform. The unrelenting pressure from the USA and other capitalist economies on the World Bank, IMF and other international financial institutions to bail them out of economic crisis also forced them to accept privatization as the new philosophy for regeneration.

4. MEANING AND SCOPE OF PRIVATISATION

The term "Privatisation" connotes a wide range of ideas. It would therefore be appropriate to understand the meaning of the term.

In a narrow sense, privatization implies the induction of private ownership in publicly owned enterprises, but in a broader sense, it connotes besides private ownership (or even without change of ownership), the induction of private management and control in the public sector enterprises. Barbara Lee and John Nellis define the concept in this manner : "Privatization is the general process of involving the private sector in the ownership or operation of a state owned enterprise. Thus the term refers to private purchase of all or part of a company. It covers 'contracting out' and the

6. Barbara Lee and John Nellis (1990), *Enterprise Reform and Privatization in Socialist Economies*, World Bank Discussion Paper 104, p. 3.

privatization of management —through management contracts, leases, or franchise arrangements."[7] Thus privatization covers three sets of measures (a) Ownership measures, (b) Organizational measures and (c) Operational measures.

(a) ***Ownership measures*** : The set of measures which transfer ownership of public enterprises, fully or partially, lead to privatization. The higher the proportion of transfer of ownership to the individual, co-operative or corporate sector, the greater is the degree of privatization. This can take three forms :

(i) Total denationalization implies a complete transfer of ownership of a public enterprise to private hands.

(ii) Joint venture implies partial introduction of private ownership. The range of private ownership can vary from 25 to 50 per cent or even more, depending upon the nature of the enterprise and state policy in this regard.

(iii) Liquidation implies a sale of assets to someone who may use them for the same purpose or some other purpose depending upon the preference of the buyer.

(iv) Management buy-out is a special version of denationalization. It implies sale of assets to the employees. For this purpose, appropriate provision of loans from banks is also made to enable employees to take over ownership. The employees may form a co-operative to run the enterprise. In this case, employees become entitled besides wages to ownership dividend.

(b) ***Organizational Measures*** — A number of organizational measures are conceived to limit state control. They include :

(i) A holding company structure may be so designed that the government limits its control interventions to apex level decisions and leaves the operating companies within the arrangement to a sufficient degree of autonomy in decision-making within the framework of the market forces. Some times, a very big monolithic organization is split into smaller units without loss of economies of scale. Although the smaller units comprise of a family, but they become independent in certain product lines or regional operations. A big organization like Bharat Heavy Electricals Ltd. may adopt the holding company status by transfering a number of functions to smaller units, thereby reducing centralized managerial functions.

(ii) Leasing : A public enterprise while retaining ownership may lease out to a private bidder for a specific period for use. The Chinese government adopted the Asset Resposibility system (ARS) in which a tenderer becomes the general executive of an enterprise for a specified period of say 5 years. But before the appointment of the bidder is finalized, the tenderers have to give an undertaking of the profits they would pass over to the state and also give a convincing set of measures that they propose to undertake in this regard. The government enjoys the right of obtaining profits as per agreement, on the other hand, tenure ownership is expected to lead to improved efficiency or lower costs of operation. In case, a particular bidder fails to come up to the expectations of the government, the latter reserves the right to replace him with a more promising bidder.

(iii) Restructuring : To bring public sector enterprises under market discipline, it would be desirable to go in for two forms of restructuring : (a) ***Financial restructuring*** can be effected in the sense that accumulated losses are written off and capital composition is rationalized in respect of debt-equity ratio. (b) ***Basic restructuring*** may be effected by redefining the set of commercial activities which the enterprise will undertake henceforth. It may shed off some activities to be taken up by ancillaries or small scale units.

(c) ***Operational measures*** are intended to improve efficiency of the organization, even when full denationalization has not been undertaken. They, infact, inject the spirit of commercialization in public enterprises. The measures include grant of autonomy to PEs in decision making, provision of incentives to blue-collar as well as white-collar employees consistent with increase in efficiency or productivity, freedom to acquire certain inputs from the market by a system of "contracting" instead of producing them within the enterprise, development of proper investment criteria, permitting PEs to go to the capital markets to raise funds etc. The basic purpose of these measures of operational privatization is to bring about a drastic reform to reduce government control over the enterprise.

The upshot of the list of measures enunciated above is that while privatization is more often equated with transfer of ownership, the critical manifestation of privatization is the transfer of managerial control to private hands, individual or co-operative. Sometimes, even 'token privatization' in the sense of 'disinvestiture' has also been mentioned as a measure of privatization. The Finance Minister of India in his budget speech of 1988 announced that 5% of the capital issues would be reserved for employees for which banks would also render assistance. During 1991-92 budget, the Finance Minister declared that 20% of the equity of Central Public Sector Undertaking (CPSU) would be disinvested in favour of financial institutions and mutual funds. It is likely that such a measure may provide resources to the tune of ₹ 2,500 crores to the Government to reduce its deficit, but it does not in any way alter the cultural milieu of the organization. Similarly,

7. Barbara Lee and John Nellis (1990), *Op. Cit.*, p. 1.

the promise of reserving 5% equity for employee ownership is 'token privatization' because it can hardly make any dent on work ethos. These are half-hearted attempts at privatization.

5. ATTEMPTS AT PRIVATISATION IN INDIA

The privatisation wave that swept the world was bound to have its effect in India. The experience of economic reform in erstwhile Soviet Union and East European countries is not of much benefit for India on account of two reasons :

(a) There was absence of the market mechanism in these countries and the entire pricing system was based on cost plus pricing. The existence of total monopoly in production gave unbridled power to the state to determine prices of products in an arbitrary manner.

(b) The size of the public sector engulfing the entire economy required the dismantling of one system nurtured for over more than half a century and its replacement by a new economic order. This is a much more difficult process than introducing privatization in mixed economies like India which worked in an environment of co-existence of the public and private sectors and had the market system as a signalling mechanism in resource allocation.

But in India the wave of privatization did not have the determination displayed by Margaret Thatcher in U.K. No political party in India belonging to the rightist or centrist ideology has the courage to mention privatization as an article of faith as was done by the Conservative Party manifesto in 1987 in the U.K. It was claimed that the productivity and profitability had soared in the newly privatised companies; competition forcd the economy to respond to the needs of the consumer, it promoted efficiency and held down costs. To quote Ridley Report (1987) "where nationalised industries have the nation by the jugular vein, the only feasible option is to pay up." Political parties do speak of reform of public sector but do not intend to take a frontal position against the public sector. The New Industrial Policy (1991) only codified the intentions of the Congress Party. It limited the priority areas for the public sector in the future to

(a) essential infrastructure goods and services;

(b) exploration and exploitation of oil and mineral resources;

(c) technology development and building of manufacturing capabilities in areas which are crucial in the long term development of the economy and where private sector investment is inadequate; and

(d) manufacture of products where strategic considerations predominate such as defence equipment.

To sum up, the role of the public sector which was sought to be enlarged in the Industrial Policy of 1956 would henceforth be limited to essential infrastructure and defence and more and more areas would be opened to the private sector. Besides this, a more congenial environment would be built for foreign capital to seek avenues of direct foreign investment.

Rhetoric and the Reality

Although there is a strong case in favour of privatization, in reality it is becoming increasingly difficult to push through proposals of privatization.

Firstly, with the emergence of strong trade unions in India, privatization in the sense of denationalisation is not considered possible. Feelers have been sent by the Ministers by issuing statements regarding denationalisation of banks, insurance companies, power generation companies, coal mines, unviable public sector units, postal services etc., but they have aroused spontaneous and violent reactions from trade unions which are highly organized. Even INTUC which is affiliated to Congress had to fall in line with the CITU, HMS, AITUC and BMS in opposing all moves against denationalisation.

Two attempts were made : First, the Government decided to transfer the ownership of Scooters India — a loss making public sector concern to Bajaj Auto Ltd. but the intervention of INTUC that such a step would go against the interests of labour, forced the Government to withdraw the proposal. Second, the recent BALCO deal selling the profit making company at a price of ₹ 550 crores came up for sharp criticism. Bhartiya Mazdoor Sangh (BMS) leader Dattopant Thengadi criticising the Government's policy of disinvestment on 16th April 2001 said, "Modern food was sold at a throw away price and BALCO agreement is a fraud." He accused the then NDA Government of "killing the goose that laid golden eggs." The trade unions belonging to the left and even the right are all set against attempts to privatization of profit-making PSUs. The government is, therefore, slowing down the pace at which it wanted to go ahead with its policy of disinvestment.

Privatisation in a Democratic Society

What are the obstacles to privatization in a democratic society like India? Firstly, in a democratic set-up it would not be possible to carry out privatization in blatant disregard of the interests of workers. Secondly, it is a fraudulent practice on the part of the State to use book value of net assets. Thirdly, is the aim of privatization to encourage corporatization to benefit the big industrialists, or is it aimed at exploring the possibilities of other forms of privatization such as worker's co-operatives ? The example of Kamani Tubes — a loss-

making private sector corporation shows that the worker's co-operative experiment can lead to recovery and a sick PSE can become a profit making enterprise under worker's management. Such experiments should be given a fair trial. There should be a right of pre-emption for the workers to run a sick unit as an employees-owned corporation. If the workers refuse, the sick unit may be transferred to the corporate sector. Lastly, there should be complete transparency of transactions of privatization.

Another major resistance against privatization is the facile manner in which these proposals indicate retrenchment of workers. Some estimates reveal that there is 25-30 per cent over-staffing in public sector enterprises. So the first axe of privatization must fall on redundant workers.

Retrenchment of workers with a compensation or Voluntary Retirement Scheme (VRS) is not considered to be a solution by the workers. The bitter experience of workers in the payment of relief by the Textile Industry has been highlighted by Sanat Mehta who writes : "The workers who lost their job especially through closures have had in almost all cases, nothing to fall back on, not even their legal dues which have not been fully paid to them."[8] Although the Government of India established the textile workers rehabilitation fund in September 1986, but "the scheme in the first place could not give much relief because of its definition of a closed unit. Later on in May 1988, scheme was amended and workers of the mills under liquidation were made eligible and workers in self-employment were also made eligible." "Even after the amendment, it was observed that in the majority of the cases, the workers have had to wait for relief for a period of 1.5 to 4 years. Such a long wait period resulted in defeat of very purpose for which the scheme was formulated, namely to settle workers reasonably in the transitional period before they find alternative employment."[9]

The absence of a social security system in India, as against well-organised social security systems in the developed countries is another potent reason why the trade unions are against schemes of retrenchment or voluntary retirement. The employers consider the payment of compensation to workers as a burden and use all legal and non-legal methods to delay such payments as long as possible. This attitude of the employers and the bureaucratic delays in the State-owned enterprises have not been able to instil confidence among the workers that they would get the promised golden handshake.

Despite all resistance, the Government has been able to transfer the ownership of some public sector units to private sector. Notable among these attempts at privatization are: Allwyn Nissan — a public sector concern of Andhra Pradesh was handed over to Mahindra; Mangalore Chemicals and Fertilizers – a public sector undertaking of Karnataka was handed over to UB Group and Maharashtra scooters was handed over to Bajaj Auto (India).

6. PRIVATISATION — THE ALTERNATIVE MODELS

With an amount available of the order of ₹ 550 crores for workers' compensation in the Textile industry and ₹ 3,200 crores to provide compensation for 3.17 lakh redundant workers, would it not be more desirable either to convert all these ailing textile and other public sector units into employee-corporations and provide the amount of workers' compensation to the Corporations as a grant to modernize the mills on the condition that no workers will be retrenched. Such an experiment can smoothen the transition to privatization and also link workers' interest with the corporation's interest. If the workers can improve the capacity utilization of these enterprises, it would be possible not only to wipe out losses, but also generate profits. The shares of the sick companies may be gradually transferred to the workers on terms to be decided between the Government and the representatives of the employees' corporation. Even if the employees-corporation intends to set up a new enterprise with the money that would be placed at its disposal, it may be permitted because the capital-labour ratios indicate that ₹ 80,000 to ₹ 1,00,000 are sufficient to generate employment for 1 person. The emphasis should, therefore, be not on getting rid of redundant workers in one stroke, but of finding more productive avenues of employment or improving the capacity utilization of the existing units so that they continue in their jobs. In other words, employment policy should take precedence over a policy of retrenchment.

On this question, Mr. R. Ganpati, former Chairman of the Board for Industrial and Financial Reconstruction (BIFR) thinks "if more managements are divested of control of their companies and workers' co-operatives set up in their place, promoters may be galvanized into curing their sick units." Such schemes are in force in Kamani Tubes, New Central Jute and Mewar Textiles, and the BIFR is contemplating similar rehabilitation schemes in other companies such as — Mafatlal Engineering, IAEC India, Hoist O'Mech and Calcutta Chemicals etc.

Incidentally, the RBI conducted a study to determine the causes of industrial sickness. From the data provided by 378 large sick units, it was revealed that 66% of industrial sickness could be traced to mismanagement. Workers were held responsible in only 2% cases. That being so, does it sound reasonable that for

8. Sanat Mehta, Effect of New Industrial Policy on Labour, *Financial Express*, 7 November 1991.

9. *Ibid.*

purpose of punishment in the form of lay-off or retrenchement, workers should be singled out as the prime target and instead of altering management and substituting it by a more competent and effective management, the remedy be sought in getting rid of redundant workers ? This is socially unjust and inequitous.

Privatising loss making or profit-making units

The question arises : Which units should be privatized — profit making or loss-making units ? There does not seem to be enough *raison-d' etre* for privatising a profit-making unit, because the entire argument for privatization is based on the fiscal health of the unit measured by the rate of return. But the Government offered 20% equity in such units to the public so as to raise resources via the mutual funds/financial institutions to reduce the budget deficit. The Government of India raised ₹ 4,950 crore by the sale of PSU shares till March 1994. Some cities have described it as "Deficit Privatisation" because this is not consistent with the philosophy of privatisation. So far as it goes, it may sound all right. But there is an apprehension in the minds of the Trade Unions that the financial institutions would in turn sell it to the public which implies big business. Thus, this may act as a clever two-stage move to permit backdoor entry for the private sector. This needs to be avoided.

But a relevant question that may be raised is : Why should private sector be willing to take a loss-making sick unit ? Private sector is not interested in the sick unit. It is only an excuse to appropriate the real estate attached with these units so that it could make use of the land and other physical assets to start fresh undertakings in the premises available at a very low cost. This implies that the principal objective of privatization to infuse the commercial spirit in PSU may not be achieved and revival of the sick unit may not be the priority for the private sector. This explains the excessive emphasis on shedding the load of excess labour by making lumpsum payment in the form of voluntary retirement schemes or retrenchment. In some situations, the scheme can succeed also if very lucrative sums are paid to the workers as golden handshakes. This can provide a safety net for excess labourers who may make an effort to find an alternative job or set up some small scale unit of production to earn a living.

But there are certain large public sector undertakings like the Delhi Transport Corporation, State Electricity Boards, State Road Transport and State Irrigation Projects which the Government may find very difficult to privatize. The DTC is a perennial loss-maker and part of the explanation is the low tariff and theft of petrol and spare parts. The government should, therefore, raise tariffs on the one hand and reduce the loss due to theft of petrol and spare parts. The government also provided permits to private bus operators in an effort to introduce the private sector. But the experience of private bus operators has been very nasty, especially due to the heavy incidence of accidents on account of reckless driving to earn more profits. The common man has, therefore, again felt that DTC was a better alternative since the aspect of security of passengers was being looked after. Thus, all is not well with the policy of privatisation. But these attempts cannot be treated as privatization, since the essence of privatization lies in improving the quality of management and operation of enterprises.

Joint Ventures

The Government is also considering transfer of ownership by establishing joint ventures. This can be effected by the sale of equity. Three kinds of proposals, broadly speaking, have been put forward :

(i) 25% ownership by the private sector (banks, mutual funds, corporations or individuals) and workers also to be included to the extent of 5% equity to be transferred to them. This creates veto power by the public sector against the private sector.

(ii) Government retains 51% equity and sells 49% equity to the private sector. Keeping the essential character of the public enterprises, it introduces a big share for the private sector ownership.

(iii) 74% of equity is transferred to the private sector and Government retains 26% with the added proviso of Government's veto power and minority control over major corporate decisions.

The three variants of privatization indicate different degrees of ownership transfer from the public sector to the private sector. The basic assumption of these models is that ownership transfer will generate new forces which will impel joint ventures to improve productivity of the assets and make them more profitable. The first variant of 75% state-ownership, it is suspected, will not achieve the desired results, because despite minority participation by the private parties, which brings in some resources from the private sector, nothing appears to undergo a change in terms of bringing about operational efficiency.

However, since in the second variant, substantial ownership i.e. 49 per cent is transferred to the private sector, the impact of the private sector in decision-making can become significant.

It is, however, the third variant which brings about a basic restructuring of the enterprises and transfers 74% ownership to the private sector. In other words, it transfers decision-making power in all policy matters and operational control to the private sector, but keeps government veto power in major corporate decisions. In other words, micro-decision-making is totally privatized, but the power to regulate consistent with

macro-economic goals of the economy remains with the state.

But a mere change of ownership will not bring about the much-desired increase in productivity. Supporting measures like linking wages to productivity, introducing measures that lead to a more competitive environment so that efficiency pricing becomes a norm, have to be taken. (For a detailed discussion on Disinvestment, refer to Ch.12).

7. PUBLIC VERSUS PRIVATE SECTOR DEBATE — A NON-ISSUE

Empirical evidence about the functioning of the public and private sectors reveals that it would be incorrect to think that the working of the private sector is definitely superior to that of the public sector. The stark reality is that 1.7 lakh units were sick in the private sector by the end of March 2003, out of which 1.68 lakhs were in the Small Scale Sector and 3,396 units were in the non-SSI Sector. The total bank credit locked in these units was ₹ 34,816 crores. Obviously, both in relative and absolute terms, there is growth of industrial sickness in the private sector. Among the industries in which sickness prevailed, were engineering, iron and steel, cotton textiles, chemicals, sugar, jute textiles, rubber, cement, paper and electrical machinery. It would be prudent for the Government not to present the public sector as the index of inefficiency and the private sector as the epitome of efficiency.

It is generally believed that public sector is credited with the social welfare function. A large number of persons working in the public sector enjoy better pay scales, better perks, more in the form of leave and retirement benefits. As against it, the private sector has the image of exploitative efficiency. Very few firms in the private sector provide better working conditions, assured and reasonable pay scales and retirement benefits. Obviously, workers shudder at the very idea of privatization. On the other hand, it is equally true that work ethics in the public sector is at a low ebb and workers take undue advantage of the security of service enjoyed by them. The promotional policy only pays lip sympathy to merit-cum-seniority principle, but is based, more or less, on pure seniority principle. This saps the initiative to put in their best for the enterprise and the spirit of competition among the workers is destroyed. While trade unions have been resisting privatization of the public sector, they are guilty of not permitting the use of a policy of incentives for the efficient workers and of disincentives for the recalcitrants. The two sectors, therefore, by their very nature suffer from different kinds of weaknesses. *The private sector needs to be made more humane and the public sector which is more humane has to be made more efficient.*

In the initial phase of development when the private sector was not in a position to undertake investments in infrastructure and heavy industry, it was the public sector which acted as the leading sector. The public sector, despite all the inefficiencies associated with it, did provide irrigation, energy and power at subsidized rate by underpricing of public utilities and other intermediate goods produced by the public enterprises. In that sense, the public sector has contributed to the rapid growth of the private sector. As a consequence of five decades of development, the private sector has come of age, it has developed both technological and managerial capabilities and is in a better position to undertake investments in the areas hitherto reserved for the public sector. Obviously, the complementarity which existed in the last five decades with the public sector playing the role of the senior partner should undergo a change by opening areas reserved for the public sector to private sector. This will introduce an element of competition between the two sectors which is likely to produce a healthy effect on improving the overall efficiency of the economy.

It may be emphasized that even the newly industrialised countries which are often quoted as success stories of industrialisation did use state intervention as the principal instrument of fostering industrial growth. Irfan ul Haque writes in this regard: "Notwithstanding the weight of the theory and evidence, the most successful cases of industrialisation in the post-war period — notably Japan and Korea, but also other newly industrialised economies (NIEs) — do not seem to conform to the traditional model of specialization, and certainly did not follow the policies it prescribes. The emphasis in earlier industrialisation was on import substitution, which was fostered by all manner of government intervention, covering commercial policy, fiscal incentive, credit allocation etc. Japan is said to have "succeeded by doing everything wrong according to standard theory."[10] From this it follows, that there was nothing wrong on the part of India if she emphasized government intervention in industrialisation in a more conscious and deliberate manner in the early phase. "Protection of industry was a principal instrument of government policy in the early phase, but Japan graduated at a good time... Nevertheless, co-operation among firms and between government and private firms is a distinguishing feature

10. Irfan ul Haque (1991), International Competitiveness, Interaction of the Public and Private Sectors, Economic Development Institute of World Bank, EDI Seminar Series, World Bank, p.3.

of Japan, one that has been fostered by Government itself."[11] The problem of the public and private sectors has to be viewed "as one of managing the partnership between the two sectors, rather than one of resolving fundamental conflicts between two adversaries." The point which need to be emphasized is that the public and the private sectors should co-exist. It is quite possible that more areas may be opened for the private sector, but this is possible because the private sector has now developed capabilities that have made it more competent to handle new responsibilities. But the crucial issue in the Indian economy is how to make the economy more efficient. PHD Chamber of Commerce and Industry has put the problem in the correct perspective: "The point is that there is a serious crisis of management that has plagued the public as well as the private sector. Privatization of the PSUs would not be of any help so long as there is this crisis of good management. And if we succeed in evolving an efficient management culture and practices, probably the issue of privatization will be irrelevant, since in that environment both the public sector and the private sector would be working efficiently."[12]

The basic issue here is this: How can we free the private sector from excessive state control? Or, how can we bring about de-bureaucratisation ? This implies simplifying rules and procedures and speeding up approvals and wherever controls are not essential, they should be done away with. In the new environment, free of bureaucratisation, the private sector would be able to improve its economic performance.

Dr. C.H. Hanumantha Rao has indicated a major defect in our policy of pursuing marketisation in the name of liberalisation and paying much less attention to debureaucratisation. Dr. Rao writes :

"Curiously, in the name of liberalisation we have been pursuing marketisation with a greater zeal than debureacratisation. In the last decade, measures for liberalisation have distorted the industrial structure giving fillip to the consumption of durable consumer goods for the elite. Import liberalisation and reduction in tax burden resulted in balance of payments crisis and fiscal crisis. On the other hand, very little has been done during the same period to improve the efficiency in the working of public enterprises by debureaucratizing the management process."[13] For this purposes, it is important to honestly implement Memorandums of Understanding (MOUs) instruments signed with PE top executives.

In India, privatisation is not considered as a panacea for the present day ills of the economy. Neither do people have an excessive faith in the market forces. Quite a significant section of our society is opposed to privatization for a variety of reasons. Dr. V.V. Ramanadham places the issue in a very succinct manner : "In view of the historical background of public enterprise in India, it is inconceivable that privatisation in this country will be accepted by the society as an end in itself, since there is no consensus in favour of market solutions and property rights, nor are these considered as prime movers for much needed social and economic change. The real issues centre on the alleviation of poverty and the upgrading of technology in a highly differentiated society of continental dimensions."[14]

8. ECONOMIC REFORMS — A BRIEF REVIEW

Economic Reforms under Rajiv Gandhi Regime (1985-90)

Soon after taking over as Prime Minister in 1985, Mr. Rajiv Gandhi outlined the new trends in economic policy of the Government. The recipe suggested by him was: Improvement in productivity, absorption of modern technology and fuller utilisation of capacity must acquire the status of a national campaign. The basic thrust of the New Economic Policy was a greater role for the private sector.

To provide larger scope to the private sector, a number of changes in policy were introduced with regard to industrial licensing, export-import policy, technology upgradation, fiscal policy, foreign equity capital, removal of controls and restrictions, rationalising and simplifying the system of fiscal and administrative regulation. All these changes were directed towards creating an uninhibited climate for private sector so that private sector investment could get a big boost to modernize the economy and usher in rapid growth. Professor K. N. Raj rightly sums up the focus of new economic policy: "There has been however a general agreement that a very distinctive feature of these policy changes taken as a whole is the greater scope for unfettered expansion they offer to the private sector, particularly in the corporate segment of manufacturing industry and the opportunities opened up to multi-national enterprises."[15]

Consequently, the New Economic Policy focussed its attention on dismantling the edifice of controls so as to remove unnecessary hurdles in securing licences, in

11. *Ibid*, p. 11.
12. Privatisation : The Indian Context (1991), PHD Chamber of Commerce and Industry, New Delhi Economic Desk Note (Mimeo).
13. Hanumatha Rao, C.H., Public Vs. Private : Debating a non-issue, *Economic Times*, February 27, 1991.
14. Ramanadham V.V., *Privatisation in Developing Countries* (1990), Routledge, London, pp. 186-87.

adjusting output to administered prices and in denying industrial licensing to MRTP Companies. The Government initiated a number of measures in this regard.

Economic Reforms under P.V. Narasimha Rao Government — The Second Wave

Although economic reforms were introduced under Rajiv Gandhi regime, they did not yield the desired result. The balance of trade deficit, instead of narrowing down, increased. Whereas the average deficit in trade balance during the Sixth Plan (1980-85) was of the order of ₹ 5,930 crores, it jumped to ₹ 10,840 crores during the Seventh Plan (1985-90). There was also decline in the receipts on invisible account, from ₹ 19,070 crores during the Sixth Plan to ₹ 15,890 crores during the Seventh Plan. Consequently, the country was faced with a serious balance of payments crisis. Thus, India was forced to approach the World Bank and the IMF to provide a huge loan of the order of about $ 7 billion to bail India out of the crisis. While agreeing to provide assistance to India, the World Bank-IMF insisted that the Government must put its economy back on rails.

The Congress Government, soon after resumption of office on June 21, 1991, adopted a number of stabilisation measures that were designed to restore internal and external confidence. In his Memorandum on Economic policies submitted to IMF, Dr. Manmohan Singh, the then Finance Minister proposed: "The thrust will be to increase the efficiency and international competitiveness of industrial production, to utilize foreign investment and technology to a much greater degree than in the past, to improve the performance and rationalize the scope of the public sector, and to reform and modernize the financial sector so that it can more efficiently serve the needs of the economy."[16]

The major areas of the second wave of economic reform were:

Fiscal Policy

Our medium term objective was to progressively reduce overall public sector deficit from an estimated 12.5 per cent of GDP to about 4 per cent of GDP in the mid-1990s.

For achieving this target, the Government intended to strictly control public expenditure and aim at higher tax and non-tax revenues. The Government intended to impose fiscal discipline both on the Central Government and the State Governments. Reduction of subsidies was to be furthered by a movement to a more objective system of administered prices taking into account market developments and domestic supply conditions.

Besides, the Central Government would encourage the State Governments to streamline the working of their enterprises, more especially State Electricity Boards and Road Transport Corporations. The budgetary support to Central Public Enterprises would also be withdrawn and they would be strengthened to improve efficiency and profitability.

External Policies

The Government's stabilization and import compression measures were expected to reduce the external account deficit to 2 per cent of GDP.

Social Policies

The Government was of the view that whereas the process of macro-economic adjustment was bound to be painful, it was committed to adjustment with a human face, and therefore, a steadfast adherence to the objective of poverty alleviation was an integral part of our conception of adjustment process. With this principle in mind, the Government provided for higher outlays on elementary education, rural drinking water supply, assistance to small and marginal farmers, programmes for women and children, programs for the welfare of scheduled castes and scheduled tribes and other weaker sections of the society, as well as increased spending on infrastructure and employment-creation projects in the rural areas.

Industrial Policy Reforms

The regulatory framework which acted as a barrier to entry and growth was sought to be basically changed by the Industrial Policy announced on July 24, 1991. The measures introduced in this area along with other economic reforms were as under:

(i) Industrial licensing was abolished for all projects except for a list of 15 industries related to security, strategic or environmental concerns and certain items of luxury consumption that had a high proportion of imported inputs.

(ii) The Monopolies and Restrictive Trade Practices (MRTP) Act applied in a manner which eliminated the need to seek prior government approval for expansion of present undertakings and establishment of new undertakings by large companies. MRTP Act restriction was removed.

(iii) The set of activities henceforth reserved for the public sector was now much narrower than before, and

15. K.N. Raj, New Economic Policy — Engine of Growth, *Economic Times*, December 21, 1985.

16. Memorandum on Economic Policies for 1991-92 to 1992-93, submitted by the Finance Minister to IMF dated August 27, 1991.

there would be no ban on the remaining reserved areas being opened up to the private sector.

Foreign Investment Policy

The Industrial Policy (1991) also provided increased opportunities for foreign investment with a view to take advantage of technology transfer, marketing expertise and introduction of modern managerial techniques. It was also intended to promote a much-needed shift in the composition of external private capital inflows towards equity and away from debt-creating flows. The following measures were announced in this regard:

(i) Automatic approval would be given for direct foreign investment upto 51 per cent foreign equity ownership in a wide range of industries. Earlier, all foreign investment was generally limited to 40 per cent.

(ii) To provide access to international markets, majority foreign equity holdings upto 51 per cent equity would be allowed for trading companies primarily engaged in export activities.

(iii) Automatic permission would be given for foreign technology agreements for royalty payments.

Trade Policy

An important element of this strategy was the transition from a regime of quantitative restriction to price-based system. From Ist April 2001 quantitative restrictions on all items have been removed.

Public Sector Policy

To provide a solution to the problems of the public sector, Government decided to adopt a new approach, the key elements of which were :

(i) the existing portfolio of public investment would be reviewed with a greater sense of realism to avoid areas where social considerations were not paramount or where the private sector would be more efficient;

(ii) enterprises in areas where continued public sector involvement was judged appropriate would be provided a much greater degree of managerial autonomy;

(iii) budgetary support to public enterprises would be progressively reduced;

(iv) to provide further market discipline for public enterprises, competition from the private sector would be encouraged and part of the equity in selected enterprises would be disinvested; and

(v) chronically sick public enterprises would not be allowed to incur heavy losses.

9. ECONOMIC REFORMS IN INDIA — AN APPRAISAL

Economic Reforms in India were introduced in 1991 by the Congress government led by Mr. P. V. Narasimha Rao. There is near unanimity among major political parties on the implementation of economic reforms. The agenda of the two major political parties viz., the Congress and the Bhartiya Janata Party have shown a very large consensus about economic reforms. Janata Dal, CPI, CPI(M), though indicated some shades of difference, have also accepted the reform package. Some of the regional parties like DMK. AIDMK. Samata Party, Samajwadi Party, the Rashtriya Janata Dal also woo foreign capital to undertake investments in their respective states. In nutshell, it may be pointed out that a consensus has been achieved in the country to introduce and implement economic reforms so as to accelerate the process of development.

The reforms process has completed 17 years and this cannot be considered as too short a period to assess the impact of economic reforms. It would, therefore, be proper to undertake an appraisal of the achievements and shortcomings of economic reforms to understand as to whether the country is moving in the right direction, or alternatively, there is a need to reform the reform process undertaken during the nineties.

Before undertaking an appraisal of the economic reforms, it would be desirable to state the goals of the process of economic development. The reforms process while accelerating economic development should lead tus to the following ends:

(i) A higher rate of growth;
(ii) an enlargement of employment potential leading to full employment;
(iii) reduction of population living below the poverty line;
(iv) promotion of equity leading to a better deal for the poor and less well-off sections of our society; and
(v) reduction of regional disparities between the rich and the poor states of India.

It would be of interest to examine economic reforms in terms of goals of the society listed above.

1. GDP Growth and Poverty reduction

There is no doubt that economic reforms have been able to promote a relatively higher growth. After the teething troubles of the first two years viz., 1991-92 and 1992-93, the growth rate during 1993-94 to 1997-98 has

averaged to more than 7 per cent per annum. After 1991-92, the momentum of growth has been maintained providing increasing evidence that the growth potential has improved as a result of the reforms initiated in 1991.

If we compare the annual average growth rate during the pre-reform period (1980-81 to 1990-91) which was of the order of 5.2 per cent per annum, then the post-reform decade (1990-91 to 2000-01) also shows a little higher average annual growth rate of 5.8 per cent of real GDP. However, there is a distinct improvement in growth rate of GDP during the 5-year period (2000-01 to 2003-04) to an average of 6.0 per cent and further to 8.3 percent in next 6-years from 2004-05 to 2011-12. This is welcome.

TABLE 5 : GDP Growth at Factor Cost at 1999-00 Prices

Year	*GDP (₹crores)*
1980-81	6,41,921
1990-91	10,83,572
2000-01	18,64,301
2001-02	19,72,606
2002-03	20,48,286
2003-04	22,22,758
2004-05	29,67,599
2005-06	32,49,130
2006-07	35,64,627
2007-08	38,93,457
2008-09	41,54,973
2009-10	45,07,637
2010-11 (QE)	48,85,954
2011-12(RE)	52,02,514
GDP Growth Rate	
1980-81 to 1990-91	5.2
1990-91 to 2000-01	5.6
2000-01 to 2003-04	6.0
2004-05 to 2011-12	8.3

*Provisional ** Quick estimates, After 2004-05 at 2004-05 prices
Source: Central statistical Organisation

(a) Economic Reforms and Reduction of Poverty

Dr. Gaurav Datt of the World Bank in his article "Has Poverty Declined Since Economic Reforms?"[17] has compared the decline in head-count index, poverty gap index and squared poverty gap index for rural and urban India in the pre-reform and the post-reform period. The main conclusions of the study are as under:

1. Mid-1980s seems to be a significant watershed in the evolution of living standards in India. ... While there was a marked decline in both rural and urban poverty rates between 1973-74 and 1986-87, there is no sign of anything comparable.

2. For the rural sector, the results indicate that while there was a significant trend decline in all the three poverty measures up to mid-1991 (at an annual rate of 2.7 per cent for the headcount index, 4.5 per cent for the poverty gap and 5.9 per cent for the squared poverty gap index), the rate of decline since then is not significantly different from zero.

TABLE 6 : Percentage of People Below Poverty Line 1983-1997

	NSS Round	*Percentage* *Rural*	*Urban*	*Combined*	*Absolute Numbers (Million)*
1983	(38th) LS	45.65	40.79	44.48	322.8
1987-88	(43rd) LS	39.09	38.20	38.86	304.9
1989-90	(45th) TS	33.70	36.00	34.28	276.0
1990-91	(46th) TS	35.04	35.29	35.11	291.0
1992	(48th) TS	41.70	37.80	40.70	348.0
1993-94	(50th) LS	37.27	32.36	35.07	320.5
1994-95	(51st) TS	38.03	34.24	36.98	329.5
1995-96	(52nd) TS	38.29	30.05	36.08	328.0
1997	(53rd) TS	38.46	33.97	37.23	348.8
1998 six months	(59th) TS	45.25	35.48	43.01	406.3

LS= Large Sample
TS= Thin Sample
Source: *Household Consumption Survey*, NSSO, Government of India.

3. For the urban sector, in the pre-reform period (1973-74 to 1990-91), the results indicate a declining trend in all the three poverty measures upto mid- 1991 (at an annual rate of 2.2 per cent for headcount index, 2.8 per cent for poverty gap and 3.1 per cent for squared poverty gap), the same trend is continued even in the post-reform period (1990-91 to 1996-97) and all the three poverty measures register a decline (at an annual rate of 2.2 per cent for headcount index, 2.65 per cent for poverty gap and 3.7 per cent for squared poverty gap).

4. While the urban sector appears to have continued its trajectory of growth and poverty reduction through the 1990s, rural poverty reduction was choked off by lack of rural growth.

Poverty estimates during 1993-94 to 2004-05

On the basis of National Sample Survey (Large sample 61st Round), the Planning Commission has estimated poverty using uniform recall period (1993-94 to 2004-05). The results announced in March 2007 reveal:

- Overall poverty ratio declined from 36.0 percent in 1993 to 27.5 percent in 2004-05 – a decline by 8.5 percent during the 11-year period

17. Gaurav Datt (1999), Has Poverty Declined since Economic Reforms? *Economic and Political Weekly*, Dec. 11-17, 1999

- Rural poverty ratio declined from 37.3 percent in 1993-94 to 28.3 percent in 2004-05 – a decline of 9 percent during 11-year period.
- Urban poverty declined from 32.4 percent in 1993-94 to 25.7 percent in 2004-05 – a decline of 6.7 percent in the 11-year period.
- Annual average reduction of poverty during the 11-year period (1993-94 to 2004-05) was 0.74 percent.

Table 7: Comparison of Poverty Estimates on Uniform Recall period

	Rural	*Urban*	*Total*
1973-74	56.4	49.0	54.9
1987-88	39.1	38.2	38.9
1993-94	37.3	32.4	36.0
2004-05*	42.0	25.5	37.2
2009-10*	33.8	20.9	29.8

Source: Planning Commission, *Ninth Five Year Plan (1997-2002)* and Press Release March 2012
*Based on Tendulkar's Methodology

- However, the rate of reduction of poverty during 1973-74 and 1987-88 was from 54.9 percent to 38.9 percent – a reduction of 14 percentage points during the 14-year period. Obviously, the rate of reduction of poverty was at the rate of 1 percent per annum, which was higher than the rate of poverty reduction during the post-reform period, even though GDP growth rate during the post-reform period was much higher than in the pre-reform period.
- The number of persons below the poverty line or the total number of poor was estimated at 300 million in 2004-05 as against 320 million in 1993-94. The absolute number of poor declined very slowly during the post-reform period.
- Population below poverty line was reported to be low at 29.8 percent in 2009-10.

(b) GDP Growth, Employment Growth and Poverty

The question arises: Why is it that although GDP growth rates have been very high during the recent years (especially after 1993-94), they have not been accompanied by corresponding reduction in poverty. If poverty implies either unemployment or under-employment or absence of good quality employment, then it would be of interest to study the change in employment scenario before and after the economic reforms. Data provided in Table 7 reveals that total employment increased from 3,026 lakhs in 1983 to about 3,568 lakhs in 1990-91 and then improved to about 3,829 lakhs in 1997-98. The rate of growth of employment was of the order of 2.39 per cent per annum during 1983 and 1990-91, which was just equal to the rate of growth of labour force during this period. However, it was hoped that if this rate of growth of employment is sustained in the next decade, the country would be able to reduce the backlog of unemployment significantly. But unfortunately, the period of reforms (1990-91 to 1997-98) reveals that the overall growth rate of employment was only of the order of 1.0 per cent. It may also be noted that since the reform process is limited to the organised sector, more so to the large corporate sector, the growth rate of employment in the organised sector also decelerated to 0.60 per cent during 1990-91 to 1997-98 as against 1.73 per cent per annum witnessed in the 7-year pre-reform period of 1983 - 1990-91. This was just one-third of the growth rate of the employment witnessed earlier. There was also a substantial slowdown in the employment growth rate of the unorganised sector to merely 1.1 per cent during 1990-91 to 1997-98 as against employment growth rate of 2.41 per cent witnessed during the 7-year pre-reform period (1983 to 1990-91). This leads one to the natural conclusion that the trickle down effects of the growth process did not benefit the poor. Dr. S. P. Gupta, therefore, states: "All these trends make one rethink the utility of an exclusive policy on 'GDP growth' in resolving poverty or employment. In contrast, it has been observed that high growth in employment in India has almost always been associated with some reduction in poverty. For example, the period of high growth of employment in the 1980s with a comparatively lower GDP growth has witnessed a significant reduction in poverty. In the 1990s as hypothesized, a low growth of employment is seen to be associated with an increase in poverty."[18]

Table 7: Movement of Employment 1983-1997

In Lakhs

	Total	*Organised Sector*	*Unorganised Sector*
1983	3,026.0	240.1	2,785.9
1990-91	3,567.6	270.6	3,297.0
1997-98	3,828.5	282.5	3,546.0
Growth Rate of Employment	Annual Average (%)		
1983 to 1990-91	2.39	1.73	2.41
1990-91 to 1997-98	1.0	0.6	1.1

Source: Computed from data provided by *Household Consumption Survey*, NSSO, Government of India.

Trend of Employment in Organised Sector

Since the focus of the reform process is on organised sector employment, it would be desirable to examine the growth of employment in the organised sector.

18. Gupta S.P. (1999), *Trickledown Theory Revisited: The Role of Employment and Poverty*, V B Singh Memorial Lecture at the 41st Annual Conference of Indian Society of Labour Economics, November 18-20, 1999, p. 1.

Table 8: Annual Growth Rate of Employment in Organised Sector

In percent

	1983-94	*1993-2004*	*2004-09*
Public Sector	1.53	-0.60	-0.56
Private Sector	0.44	0.36	+3.58
Total	1.20	-0.3	+0.82

Source: Ministry of Labour

Data given in table 8 reveals that total growth of employment in the organised sector during the 10-year period (1993-2004) was negative, i.e., at the rate of - 0.3% per annum as against 1.20% during the pre-reform period (1983-94). The public sector employment decelerated from 1.53% during 1983-94 to -0.60 percent per annum during 1993-2004. Since public sector was rightsizing its employment by shedding the load of surplus workers, it was hoped that private organized sector would create more employment to compensate and reverse the trend of decelerating employment in the public sector. Despite the fact that GDP growth picked up during the post-reform period, more especially in manufacturing and organized service sector, there was smart increase in the growth rate of employment in the private organized sector to 0.36% during 1993-2004 as against 0.44 percent during 1983-94. Between 2004 and 2009, however decline in public sector employment continued at 0.56 percent per annum, but rate of growth of employment in private organised sector imporved to 3.58 percent annualy.

Taking the over-all economy, the data indicate the rate of unemployment (Usual Principal Status) increased from 2.62% in 1993-94 to 2.78% in 1999-00 and further to 3.1 percent in 2004-05.

But the Current Daily status (CDS) employment which is a more comprehensive measure of unemployment and underemployment indicates that unemployment increased to 8.3 percent in 2004-05 as against 7.3 percent in 1999-00.

It is, therefore, imperative that the causes of this increasing trend of unemployment despite GDP growth reaching a level of over 8 percent during 2003-04 and 2005-06 be analyzed and new strategy of strengthening employment, more especially in high employment generating sectors, such as agriculture, small and medium industries, retail trade, food processing, small and medium enterprises, health education and information technology etc, be developed.

Joseph Stiglitz, former Senior Vice-President of the World Bank criticising the approach of the World Bank mentions: "A comparative approach to development putting social justice, equality and the fight against poverty should be at the heart of the Bank's agenda, rather than following the so-called Washington consensus."

2. Economic Reforms and Impact on Labour

A review of Industrial relations in the pre-reform period (1981-90) reveals that as against 402.1 million mandays lost during the decade (1981-90), i.e. in the pre-reform period, the number of mandays lost declined to 230.2 million during (1991-2000) - the post-reform period. Looking at the aggregate level it may be stated that the loss of mandays in the aggregate declined and this can be treated as the index of improvement of industrial relations in the post-reform period. But if a further break-up of the mandays lost into strikes and lockouts is made, then it is revealed that as against 46.2 per cent of the total mandays lost during the pre-reform period by lockouts, the proportion jumped to 60.2 per cent in the post-reform period (1991-2000). In other words, whereas workers have resorted much less to strikes fearing the wave of privatisation and liberalisation, employers' militancy has become much more pronounced in the post-reform period. The situation has further worsened during 2001-06, and lockout accounted for 74.5 per cent of total mandays lost. Thus, the sharp decline in total mandays lost was more a consequence of the disciplining of the labour rather than a disciplining of the employers. Emboldened by the tilt in the attitude of the State, the employers have flexed their muscles and resorted to increased militancy against the workers.

Table 9: Mandays Lost in Strikes and Lockouts

Million

Period	*Total No. of Mandays Lost*		
	Strikes	*Lockouts*	*Total*
Pre-reform Period	216.4	185.7	402.1
(1981-90)	(53.8)	(46.2)	(100.0)
Post-reform Period	91.6	138.5	230.1
(1991-2000)	(39.8)	(60.2)	(100.0)
2001-2006	39.4	115.1	154.5
	(25.5)	(74.5)	(100.0)

Note: Figures in brackets are percentage of total mandays lost.

SOURCE: Calculated from data provided in the Ministry of Labour, *Annual Report* (2001-2002) and earlier issues and *Economic Survey 2007-08*.

Besides this as a result of 1,687 closures, a total of 1.20 lakh workers also lost their jobs. A deeper probe into closures has revealed that managements have used closures as a device to get rid of permanent workers at one location and started a similar unit at another location and recruit a smaller contingent of permanent workers and carry on production with large number of casual or temporary workers. In this sense, closure is used as a device to reduce the component of permanent workers, thereby downgrading the status of total workforce.

In addition, the production units have been resorting to layoff to cut down labour costs in the lean period. During the 7-year post reform period (1991-97), a total

of 4.91 lakh workers were laid-off. On the plea of redundancy, a total of 20,720 workers were retrenched during 1991-97. This retrenchment is another serious direct blow to the workers.

Table 10: Percentage Distribution of Total Workforce

	Self-employed	*Wage Employment*	*Casual Labour*
1988	53.6	15.2	31.2
1994	51.9	14.7	33.5
1996	52.4	15.9	32.8
1997	52.6	14.5	32.9
1998	50.7	12.3	37.0
2005	53.8	16.3	29.9
2010	51.0	15.6	33.5

Source: Ashok Mathur (2000), Economic Reforms, Employment and Non-Employment: Theory, Evidence and Policy in Hajela P. D. and Goswami M. P., *Economic Reforms and Employment*., NSSO 66th round

All these trends have increased the proportion of casual labour in total employment in the post-reform period. It may be pointed out that casual labour which stands lowest in terms of average income as well as security, has risen in proportion from 31.2 per cent in 1988 to 37 per cent in 1998. Growing casualisation of labour adversely impacts on the income of the labour. However situation improved in 2004 with casual labour at 29.9 percent. But is 2010, it shot up to 33.5 percent.

Although the government has not formally accepted an exit policy, but emboldened by the wave of economic reforms and pro-capitalist attitude of the State, the exit policy is being implemented in practice by various clandestine devices by the employers. By the scheme of voluntary retirement, the load of workers is being reduced, both in the public and the private sectors. Consequently, workers are being pushed from the organised to the unorganised sector from secure to insecure employment.

3. Increase in Productivity and Real Wage Earning

Industrialist lobbies have frequently charged labour for not raising labour productivity, but forcing an increase in the real wage of earnings of labour. Shariff and Gomber (1999) have studied the problem of increase in labour productivity and real earnings of regular wage/salaried employees. Their study reveals, whereas overall real labour productivity showed an increase during 1983-88 by 3.16 per cent and during 1988-94 by 3.32 per cent, the real earning of workers increased at the annual average rate of 7.0 per cent during 1983 and 1987-88, but showed a miserably low increase of 1.0 per cent during 1987-88 and 1993-94.[19] Though the post-reform period is not long enough to arrive at any definite conclusion, but it does give some indication of the straws in the wind that the gains of productivity increase during 1988-94 by 3.32 per cent were passed on to the workers by only 1.0 per cent and the rest were pocketed by the employers. This had an unhealthy impact on labour welfare.

The upshot of the analysis given above is that the basic problem with economic reforms is not to treat labour as an asset but as a mere instrument, which can be dispensed with when in the judgment of the employer, it is no longer useful. This is a very mechanical view of labour, which is resented by trade unions on the one hand, and judiciary on the other. For the employer, it is an attempt at downsizing leading to cost reduction, for the employee, it is the loss of job. In developed countries, where social security systems have been extensively developed, the process of downsizing is much less painful, because the worker can at least get some dole and thus is not deprived of a basic minimum essential for livelihood, but in a developing economy like India, this restructuring and downsizing leading to retrenchment or closure results in depriving the workers of their livelihood.

The demand of Industry Associations like FICCI, ASSOCHAM and CII for permitting labour flexibility—meaning thereby the right to hire and fire has been contested by the trade unions. The government also did not agree to scrap section 25N of the Industrial Disputes Act (1947). The Hon'ble Supreme Court in a series of judgments has pointed out the demoralising effect of retrenchment and closures on workers. The Supreme Court remarked:

> *"By requiring prior scrutiny of the reasons for the proposed retrenchment ... Section 25N seeks to prevent the hardship that may be caused to the affected workmen as a result of retrenchment, because, at the commencement of his employment, a workman naturally expects and looks forward to security of service spread over a long period and retrenchment destroys his hopes and expectations. The retrenched workman is, suddenly and without his fault thrown on the street and has to face the grim problem of unemployment."* (See: The Indian Hume Pipe Co. Ltd. V. The Workmen, 1960 (2) SCR3, *at pp. 36-37).*

The advocates of economic reforms try to justify labour flexibility by drawing attention to the provision of safety net to help laid-off workers. Joseph Stiglitz in his keynote address before the Industrial Relations Research Association (Jan 9, 2000) stated in a very sharp manner: "There is no safety net that can fully replace the security provided by an economy running at full employment. No welfare system will ever restore the dignity that comes from work." Stiglitz, therefore, urged, "Workers' rights should be a central focus of development."

19. Sharif A and Gomber A (1999), Employment and Wages in India, Pre and Post-Reform Scenario, *The Indian Journal of Labour Economics*, Vol. 42, No. 2.

4. Neglect of Agriculture — The Major Sin of Economic Reforms

A major criticism of the process of economic reforms is the neglect of agriculture. Data reveal that foodgrains production increased from 129.6 million tonnes in 1980-81 to 176.4 million tonnes in 1990-91 resulting in annual compound rate of 3.1 per cent. But during the 18-year period of economic reforms, foodgrains production increased from 176.4 million tonnes in 1990-91 to 234 million tonnes in 2008-09, indicating an annual average growth rate of 1.6 per cent, which was lower than the growth rate of population. Complacency on the foodgrains front can certainly cost the nation very dearly in the coming decade.

Various reasons have been assigned for this situation. Firstly, the reform process has emphasised the growth of manufacturing and service sectors and thus neglected agriculture.

Agricultural growth has stagnated around 2 percent during the last decade. It was 2.1 percent during the Ninth Plan (1997-2002) and is estimated to be 2.3 percent during the Tenth Plan (2002-07). *Economic Survey* (2006-07) explaining the situation states: " The structural weaknesses of the agriculture sector reflected in low level of investment, exhaustion of the yield potential of new yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post-harvest value addition were manifest in the lack luster agricultural growth during the new millennium." (p.160)

Table 11 reveals that total investment in agriculture as a percentage of GDP was only 2.8% in 1999-00. It fell to 2.4% of GDP in 2003-04 but improved marginally to 3.34 percent in 2008-09 but again fell to 2.9 percent in 2010-11. While the economy has indicated a sharp increase in investment to 36.5% of GDP in 2010-11, the share of investment in agriculture to a level of 2.9 % of GDP is too inadequate, more so when cognizance is taken of the fact that agriculture provides livelihood to 58 percent of population.

It may also be pointed that public sector investment in irrigation, flood control, water harvesting, rural infrastructure reclamation of degraded lands etc. has a much greater spread effect. In contrast, private sector investment in tube wells, tractors and harvesters increases the income of the landowning classes only. It has impacted to reduce employment.

This lack of development of irrigation infrastructure by withdrawing public sector investment with the hope that the private sector investment will expand irrigation, did not materialise. This was specially the case in backward states like Bihar, Madhya Pradesh and Orissa, which indicates very poor growth rates in foodgrains production - even lower than the national average. Last but not the least, whereas the green revolution states like Punjab, Haryana, Uttar Pradesh have reached a plateau, the country could not trigger higher yields in backward states. Dr. G. S. Bhalla and G. R. Singh (1997) in their study have pointed out "a sharp pick-up in agricultural growth experienced by the Eastern Region has been facilitated by a remarkable increase in area under irrigation triggered by a substantial private investment in pumpsets and tubewells."[20]

According to *Economic Survey (1999-2000)*, "The decline in public investment in agriculture is mainly due to the diversion of resources into current expenditure in the form of subsidies for food, fertilizers, electricity,

Table 11: Gross Capital Formation in Agriculture

At 1999-00 prices

Year	*Investment in Agriculture (₹ crores)*			*Share in investment in agriculture %*		*Investment in Agr. As % of GDP*
	Total	*Public*	*Private*	*Public*	*Private*	
1999-00	50,151	8,670	41,481	17.7	82.3	2.8
2000-01	45,186	8,085	37,101	18.5	81.5	2.4
2001-02	59,806	9,711	46,095	18.6	81.4	2.8
2002-03	55,668	8,733	46,935	17.0	83.0	2.7
2003-04	53,840	10,805	43,035	20.8	79.2	2.4
2004-05	78,848	16,183	62,665	20.5	79.5	2.66
2005-06*	93,121	19,909	73,211	21.4	78.6	2.87
2006-07	94,400	22,978	71,422	17.6	82.4	2.65
2007-08	1,10,006	23,039	86,962	20.9	79.1	2.83
2008-09	1,38,597	24,452	1,14,145	17.6	82.4	3.34
2009-10	1,31,139	N.A	N.A	18.0	82	2.97
2010-11	1,42,254	N.A	N.A	18.0	82	2.9

*Provisional estimates

Source: Central Statistical Organization

20. Bhalla G. S. and Singh G. R. (1997), Recent Developments in Indian Agriculture: A State Level Study, Sponsored by Planning Commission, *Economic and Political Weekly*, March.

irrigation, credit and other agricultural inputs rather than on creation of assets."[21]

If we study the implementation of the Water-Seed-Fertilizer technology (popularly known as the Green Revolution), then during the decade 1970-71 to 1980-81, irrigated area indicated an annual average growth rate of 3.6 per cent, which declined to 2.7 per cent during the decade 1980-81 to 1990-91 and further to merely 1.9 per cent during 1990-91 to 1997-98. Since irrigation is the basic input which helps the fuller utilisation other inputs - seeds and fertilizers, we also observe declining growth rates in the irrigated area under rice and wheat from seventies to eighties and nineties. In case of pulses, irrigated area growth experienced a negative growth rate of the order of 1.5 per cent per annum. A similar trend was observed in the case of extension of area under HYV in case of paddy and rice. Fertilizer consumption indicated a sharp decline from 8.5 per cent annual average growth rate during the eighties to just 3.7 per cent during the nineties.

In this connection, it is relevant to consider the trend in major and minor irrigation. Major irrigation acts as a supplement to minor irrigation in keeping the water table high, while minor irrigation provides water-security to the peasant in case of failure of rains. The slowing down of the growth rate of irrigated area under minor irrigation from 3.5 per cent during eighties to 2.3 per cent during nineties is another contributing factor to slow-down of over-all agricultural growth. Economic reforms did not pay adequate attention to expansion of irrigation and this is a major sin responsible for low growth of agricultural production and productivity during thenineties.

The upshot of the entire analysis is that the major sin of economic reforms is gross neglect of agriculture—the mainstay of livelihood of over 60% of the population. This is more so in view of the fact that though India had seven good monsoon years in succession, agricultural production indicated year-to-year fluctuations. This casts a shadow on sustainability of agricultural growth, unless there is a reorientation of priorities with much greater emphasis on agriculture and rural industrialisation. The state, instead of withdrawing from investment in agriculture, irrigation and rural infrastructure, has to strengthen public sector investment in these areas.

5. Economic Reforms and Industrial Growth

Economic Reforms were mainly intended to remove the bottlenecks, which acted as obstacles in industrial production. To pursue this goal, Industrial licensing was abolished in all but 18 Industries. Later the government delicensed several others. During 1998-99, three Industries viz., (i) Coal and Lignite, (ii) Petroleum (other than crude and its distillation products), and (iii) Sugar were delicensed. Accordingly, there are only six Industries now under compulsory licensing. Two Industries, viz., Coal and lignite were taken out from the list of Industries reserved for public sector. At present, there are only four industries reserved for the public sector. Put another way, it can be stated that the reform process dismantled the system of Industrial licensing which was considered to be a main roadblock in the progress of industrial development.

Table 12: Annual Average Growth Rate of Industrial Production

per cent

Sector	*1981-82 to 1990-91*	*1993-94 to 2009-10*	*1993-94 to 2004-05*	*2004-05 to 2011-12*
General Index	7.8	7.2	7.8	9.30
a. Manufacturing	7.6	7.7	8.3	10.2
b. Electricity	9.0	5.5	6.1	6.8
c. Mining & Quarrying	8.3	3.9	4.4	6.0

Source: RBI, *Handbook of Statistics on Indian Economy (2010-11)*

Despite all this, data provided in table 12 reveals where as the eighties (1981-82 to 1990-91), general index of Industrial production recorded an annual average growth rate of 7.8 per cent, growth rate of IIP improved to 9.3 per cent during 2004-05 to 2011-12. In manufacturing, it increased from 7.6 per cent in the '80s to 10.2 per cent, and in electricity it declined from 9 per cent to 6.8 per cent and in mining & quarrying it slumped from 8.3 per cent to just 6.0 per cent. Thus, the expectations that growth of IIP would be stimulated did not materialise. Further if we break the period from 1993-94 to 2011-12 in two parts namely 1993-94 to 2004-05 and 2004-05 to 2011-12, we find that in the second period growth in all industrial activities accelerated, which is a healthy trend level. However if we look at 2011-12 seperately, we get a dismal picture.

Table 13 provides growth rates of Industrial production on the basis of use-based classification. The data reveal that but for intermediate goods, which recorded a slightly higher growth rate of 7.4 per cent in post-reform period as compared to 5.9 per cent in the eighties, in all the other sectors, growth rates recorded in the eighties were higher In the capital goods sector, growth rate slipped to 8.9 per cent in the post-reform period as against a robust growth rate of 11.5 per cent in the eighties.

Even in consumer durables, a decline in annual average growth rate was observed 11.2 per cent as against a much higher growth rate of about 13.9 per cent in the eighties.

From the index of growth rates of industrial production, it becomes evident that the performance of the industrial production during 1993-94 and 2004-05, which is generally identified as a period of wide-ranging reforms in the industrial sector, was not up to the

21. Government of India, *Economic Survey (1999-2000), p 144.*

Table 13: Annual Average Growth Rate of Industrial Production — Use Based Classification

Per cent

Sector	*1981-82 to 1990-91*	*1993-94 to 2004-5*	*2004-05 to 2011-12*
a. Basic Goods	7.0	5.4	7.3
b. Capital goods	11.5	8.9	17.5
c. Intermediate Goods	5.9	7.4	5.4
d. Consumer Goods	6.7	7.9	10.7
(i) Durables	13.9	11.2	18.3
(ii) Non-durables	5.5	6.7	6.6
General Index	**7.8**	**7.1**	**7.9**

Source: Computed from RBI, *Handbook of Statistics on Indian Economy*, (2010-11)

mark. It failed even to equal the performance observed in the eighties, not to speak of improving the performance as a consequence of the reform process in post-reform period. The failure of the basic goods and capital goods sector really put a question mark on the success of the reform process.

However between 2004-05 and 2011-12, situation improved as evident from table 13.

6. Performance of Public Sector Enterprises

Information about the performance of the much-maligned Central Public Enterprises, reveals that gross profit as percentage of capital employed was 11.61 per cent in 1993-94, 15.88 per cent in 1995-96 and then to 21.5 per cent in 2004-05. A similar trend was observed in net profit, which was of the order of 2.84 per cent in 1993-94 but improved to 12.1 per cent in 2005-06. Value added per unit of capital which indicates the efficiency of capital employed also showed an improvement from 0.26 in 1993-94 to 0.44 in 2001-02. Obviously, Central Public Sector Enterprises have shown better performance during the 12-year period of reform (1993-94 to 2005-06). The basic question which needs to be raised is: If the ground realities indicate better performance of the Central Public Sector Enterprises, is it desirable to undertake disinvestment of these enterprises? Would it not be better to introduce reform of public sector enterprises so that they can improve their performance still further. By 2005-06, the Government had signed Memorandum of Understanding (MOU) with 102 PSEs. Evaluation of their performance reveals that 44 were rated as excellent, 36 very good and 14 as good. If 94 PSEs out of 102 have shown an improvement, there is a case for innovating measures to improve performance of PSEs, rather than giving them a bad name and hang them.

7. Economic Reforms and Movement of WPI and CPI

If we leave out the first two years of the post-reform period assuming them to be teething troubles and compare the relative movement of prices for the 11-years period (1993-94 to 2004-05), then the following objective reality is indicated.

Rise of prices affects the labour classes adversely as against the capitalist classes who gain disproportionately with a rise of prices. The movement of wholesale price index (WPI) reveals that in the pre-reform period (1981-82 to 1991-92), the annual average increase in WPI was of the order of 6.9 per cent and in the post-reform period (1993-94 to 2011-12), it was of the order of 6.5 per cent. Obviously, the situation in the rise of WPI improved during the post-reform period.

Table 14: Relative Movement of the Wholesale Price Index (WPI) and Consumer Price Index (CPI) in the post-reform period

	WPI (Base 1993-94=100)	*Consumer Price Index*	
		Industrial Workers (Base 1982=100)	*Agricultural Labourers (Base 1986-87=100)*
1993-94	100.0	267	189*
1994-95	112.6	293	204*
1995-96	121.6	319	237
1996-97	127.2	351	262
1997-98	132.8	330	272
1998-99	140.7	414	296
1999-00	145.3	434	306
2000-01	155.7	445	300
2001-02	161.3	468	309
2002-03	166.8	487	324
2003-04	175.9	504	332
2004-05	187.2	525	340
2005-06	195.6	551	358
2006-07	206.2	588	352
2007-08	215.8	634	423
2008-09	233.9	685	463
2009-10	244.1	787	536
2010-11	278.6	856	585
2011-12	310	931	625
Annual Average Increase (1993-94 to 2011-12)	**6.5**	**7.1**	**6.9**

* Figures have been derived by applying the conversion factor 5.89 with the earlier series

Source: Government of India, *Economic Survey (2011-12), RBI Bulletin June, 2012*

But a better index of measuring welfare would be to study the movement of Consumer Price Index (CPI). The data reveal that CPI for Industrial Workers (CPI-IW) indicated an annual average rise of 7.1 per cent for the period 1993-94 to 2011-12 which is higher than increase of WPI. Similarly, CPI for Agricultural labourers (CPI-AL) increased annually by 6.9 per cent in the post-reform period which also indicates a relatively higher increase than WPI.

The upshot of the analysis is that in the post-reform period (1993-94 to 2011-12), the movement of the CPI was slightly higher than the movement of WPI. This indicates that retail inflation in post-reform period was slightly higher than wholesale inflation.

8. Trend of Growth in Infrastructure

Table 15 provides information about the trend in the Index of Infrastructure Industries for the period 1980-81 to 2010-2011. The analysis reveals that in case of saleable steel and cement, the growth rates were higher in the post-reform period than in the pre-reform period. In case of steel, the growth rate of production increased by 10.2 per cent during 1993-94 and 2004-05 as against only 4.9 per cent in the pre-reform period (1980-81 to 1990-91). Similarly, the growth of cement production also indicated sharp increase by 7.8 per cent during 1993-94 to 2004-2005 as compared to only 4 per cent in the pre-reform period. However, it should be pointed out that the momentum gained in the post-reform period for acceleration in the production of cement was the consequence of introduction of dual pricing in the case of cement introduced in 1982 with progressive reduction in the percentage of controlled cement to eventually freeing cement prices from state control. This led to massive increase in the cement capacity and output. Similarly, gradual easing of steel price control was accepted by the Government in 1983. But all these measures were taken in the pre-reform period, which helped to provide an environment to these industries to raise their capacity and output without any bottlenecks.

However, other infrastructure Industries - electricity, coal and petroleum did not fare well in the post-reform period. In the case of electricity, whereas in the eighties growth rate of generation was of the order of 9.1 per cent, it was just 5.6 per cent in the post-reform period. Likewise, coal production declined from 6.4 per cent in the eighties to just 4.0 per cent during 1993-94 to 2004-05. In case of petroleum, growth rate dipped from 12.2 per cent in the eighties to just 2.1 per cent during 1993-94 to 2004-2005. While the state withdrew from these sectors and did not undertake investment in infrastructure, the private sector - Indian as well as foreign - failed to fill the vacuum. Obviously, excessive dependence on private sector in the post-reform period did not yield the much-trumpeted and desired results. (Refer table 15).

Situation deteriorated further between 2004-05 and 2011-12, as almost all infrastructure industries decelerated during this period (Table 15).

9. India's Foreign Trade and Balance of Payments

Although policies of liberalisation in foreign trade were initiated in 1985-86 but their impact though felt during the period 1986-87 to 1990-91 was slow and after 1991 the new economic reforms went in for a more rapid globalisation of the Indian economy by reducing and/or abolishing quantitative restrictions and also reducing tariff barriers which hindered trade. The main implications of reform measures were intended to boost exports as well so as to facilitate developmental imports or such imports, which were vital for increasing industrial production, may be of some raw materials. It would, therefore, be appropriate to compare trend of foreign trade in the pre-reform periods i.e. 1980-81 to 1990-91 (described as the eighties) and the period 1991-92 to 2004-2005 the post-reform period.

The Reserve Bank of India has revised the data of India's balance of payments in dollar terms recently. It would, therefore, be appropriate to review the position of foreign trade on the basis of this updated information.

Table 15: Trends in Index of Six Infrastructure Industries (1980-81=100)

	Index of Infrastructure				*Average Growth Rate*		
	1980-81	*1990-91+*	*2004-05**	*2011-12***	*1980-81 to 1990-91*	*1993-94 to 2004-05*	*2004-05 to 2011-12*
Electricity	100.0	238.9	181.6	147.9	9.1	5.6	5.8
Coal	100.0	185.7	153.1	126.3	6.4	4.0	3.4
Finished Steel	100.0	147.6	263.5	156.7	4.9	10.2	6.6
Cement	100.0	260.4	229.5	166.6	4.0	7.8	7.6
Petroleum	100.0	317.9	125.8	112.8	12.2	2.1	1.7
Petroleum Refinery Products	100.0	186.8	238.1	133.8	6.5	8.2	4.3
Composite Index	**100.0**	**215.0**	**193.0**	**139.7**	**8.0**	**6.2**	**4.9**

* with 1993-94 as base=100 + with base 1980-81. ** with 2004-05 as box

(Provisional , upto June 2010)

Source: Compiled and computed from RBI, *Handbook of Statistics on Indian Economy (2010-11).*

Tale 16 presents a picture of the India's foreign trade in the eighties. The decade has been divided into two sub-periods. During the first five years (1981-82 to 1985-86), India achieved a growth rate of 2.3 per cent in exports, but in imports, the growth rate was barely 2.0 per cent. India followed a restrictive import policy during this period. Consequently, as against the average annual exports of $ 9,514 million, average annual imports were of the order of $ 16,404 million. As a result, average trade deficit was $ 6,890 million. Since net invisibles were positive, the surplus from this head on the average was

Table 16: India's Exports, Imports, Trade Balance and Balance of Payment (Post-Reform period (1991-92 to 2009-10)

US $ million

	Exports	*Imports*	*Trade Balance*	*Net Invisibles*	*Balance of Payments on current account*	*1 as % of 2*	*4 as % of 3*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Annual Average (1981-82 to 1985-86)	**9,514**	**16,404**	**-6,890**	**3,474**	**-3,416**	**58.0**	**50.4**
Average growth Rate	**2.3**	**1.0**					
Annual Average (1986-87 to 1990-91)	**14,549**	**22,697**	**-8,148**	**1,362**	**-6,786**	**64.1**	**16.7**
Average Growth Rate	**14.3**	**10.0**					
1991-92	18,266	21,064	-2,798	1,620	-1,178	86.7	57.9
1992-93	18,869	24,316	-5,447	1,921	-3,526	77.6	35.2
1993-94	22,683	26,739	-4,056	2,898	-1,158	84.8	71.4
1994-95	26,855	35,904	-9,049	5,680	-3,369	74.8	62.8
1995-96	32,311	43,670	-11,359	5,449	-5,910	73.9	48.0
Annual Average (1991-92 to 1995-96)	**23,797**	**30,339**	**-6,542**	**3,514,**	**-3,028**	**78.4**	**53.7**
Average Growth Rate	**11.8**	**9.3**					
1996-97	34,133	48.948	-14,815	10,196	-4,619	69.7	68.8
1997-98	35,680	51,187	-15,507	10,007	-5,500	69.7	64.5
1998-99	34,298	47,544	-13,246	9,208	-4,038	72.1	69.5
1999-00	37,542	55,383	-17,841	13,143	-4,698	67.7	73.7
2000-01	44,894	59,264	-14,370	10,780	-3,590	75.7	75.0
Annual Average (1996-97 to 2000-01)	**37,309**	**52,465**	**-15,156**	**10,667**	**-4,489**	**71.1**	**70.4**
Average Growth Rate	**6.8**	**6.3**					
2001-02	44,703	56,277	-11,574	14,974	+ 3,400	79.4	129.3
2002-03	53,774	64,464	-10,690	17,035	+ 6,345	83.4	159.4
2003-04	66,285	80,003	-13,718	27,801	+ 14,083	82.8	202.7
2004-05	82,150	118,779	–36,629	31,229	–5,400	69.2	85.2
2005-06	105,152	157,056	–51,904	42,002	–9,902	66.9	80.9
Annual Average (2001-02 to 2005-06)	**70,413**	**95,316**	**24,903**	**26,608**	**1,705**	**74.9**	**108.0**
Average Growth Rate	**19.1**	**21.6**					
2006-07	1,28,888	1,90,670	–61,782	52,217	–9565	67.6	84.6
2007-08	1,66,162	2,57,629	91,467	75,731	–15,737	64.5	81.4
2008-09	1,89,001	3,07,651	–1,18,650	89,923	–28,728	59.5	75.0
2009-10	1,82,235	3,00609	–1,18,374	79,991	–38,383	60.6	67.3
2010-11	2,50,468	3,30,935	–1,30,467	86,186	–44,281	75.7	66.1

Source: Compiled and computed from RBI, *Handbook of Statistics on the Indian Economy* (2010-11)

$ 3,474 million. Thus, surplus from invisibles was able to neutralize the trade deficit by 50.4 per cent. Consequently balance of payment deficit on current account could be restricted to $ 3,416 million. (Refer table 16) During this period, exports as a percentage of imports were only 58 per cent and thus, the situation was highly unsatisfactory.

During the second half i.e., 1986-87 to 1990-91, as a result of the policy of export promotion, exports increased from $ 10,413 million in 1986-87 to $ 18,477 million in 1990-91 and recorded an average growth rate of 14.3 per cent. But during the same period, imports also increased from $ 17,729 million to $ 27,914 million recording a growth rate of 10 per cent. But since the initial level of imports was much higher, the average annual imports during the period was of the order of $ 22,697 million as against the average exports of $ 14,549 million and as a result, average annual trade deficit was of the order of $ 8,148 million which was more than double the level of trade deficit during the previous five years. (Refer table 16) A very distressing aspect of this period is the continuous decline witnessed in net invisibles and as a consequences, the average annual earnings from net invisibles slumped to $ 1,362 million which helped to neutralize the trade deficit by only 16.7 per cent. Thus, current account balance became adverse to the tune of $ 6,786 million per year. Exports as a percentage of imports averaged 64.1 per cent. This implies that the situation improved as compared with the previous five years, though even this was not satisfactory.

Post-reform period is divided into three sub-periods. During 1991-92 to 1995-96, the annual average growth rate of exports was of the order of 11.8 per cent, but as against it imports increased at the rate of 9.3 per cent per annum. During, this period, the annual average exports were of the order of $ 23,797 million, while imports averaged $ 30,339 million. Consequently, trade deficit averaged $ 6,542 million. In this period, surplus from net invisibles reached a level of $ 3,514 million, thus neutralizing the trade deficit by 54 per cent. As a result, the current account deficit was restricted to $ 3,028 million. Exports as a percentage of imports improved and reached level of 78.4 per cent.

During the 5-year period of 1996-97 to 2000-01, exports indicated an average annual growth rate of 6.8 per cent and imports increased at the average rate of 6.3 per cent. This implies that export promotion could not become effective. Thus, as against the annual average export of $ 37,309 million, imports were of the order of $ 52,645 million. Thus, trade deficit as on average reached a record level of $ 15,156 million. But a very encouraging aspect of this period is the sharp increase in surplus from net invisibles to an average level of $ 10,667 million which neutralized the trade deficit by 70.3 per cent. Consequently, the balance of payments on current account deficit was limited to $ 4,489 million. Exports as a percentage of imports showed a small decline and were of the order of 71 per cent.

During the 5 year period of 2001-02 to 2005-06, there was a big boost given to export promotion and the average annual growth rate of exports touched 19.1 per cent. As against them, import growth rate was of the order of 21.6 per cent. Thus, during these five years, as against the annual average exports of $ 70,413 million, imports were of the order of $ 95,316 million. Consequently, on the average, trade deficit was of the order of $ 24,903 million. The most outstanding achievement of this period is the big surge in net invisibles touching a record level of $ 42,002 million in 2005-06. The average annual surplus from net invisibles during the 5-year period was of the order of $ 26,608 million which neutralized the trade deficit by 108 per cent. A review of the last 25 years reveals that the balance of payments on current account turned positive in 2001-02 and its surplus which was $ 3,400 million in 2001-02 increased to $ 14,083 million in 2003-04.

On the whole it can be mentioned that during the post reform period, the situation pertaining to foreign trade was satisfactory. As against imports, exports have grown faster in percentage term. Although trade deficit has increased, but the massive increase in net invisibles has helped to contain current account deficit. During 2001-02 and 2003-04, the emergence of a positive balance on current account is a major achievement of the post-reform period.

The situation has taken a turn during 2006-07, because the rise of imports far exceeded the rise of exports. As a consequence, trade deficit became negative to the record extent of $ 61,782 million. Although net invisibles were positive to the extent of $52,217 million, they were unable to fully wipe out the trade deficit. The result was the appearance of a negative balance of payment on current account in 2006-07 to the extent of $ 9565 million. The situation became worst during 2007-08, 2008-09 and ultmately in 2010-11, deficit in balance of payment reached record level of $ 44,281.

There are several lessons that we have to learn from the BOP situation:

Firstly, after the East Asian Crisis, the advocates of full convertibility on capital account have suffered a retreat and the report on reaching full convertibility within the next three years has been shelved.

Secondly, India was able to show a surplus in the current account balance in during 2001-02 and 2003-04. This was a healthy development which needed to be strengthened further. Unfortunately, the emergence of a negative current account balance in 2004-05 to 2006-07 has again resulted in an adverse situation and India needs caution in this regard.

Lastly, with an unprecedented increase in oil prices witnessed during 2007-08 and with the revival of industry, imports are likely to increase. Consequently, India needs to be vigilant in pursuing a very liberal import policy.

10. Foreign Investment

Table 17 provides information about investment flows in India during the last 15 years (1991-92 to 2006-07). Data reveal that during the 16 year period, a total of US $ 136.5 billion was invested in India in the form of foreign investment, out of which $ 72.09 billion (52.8 per cent of total) was in the form of direct investment and $ 64.44 billion (47.2 per cent) was in the form of portfolio investment. Segregated data reveal that direct investment flows remained subdued during 1991-92 to 1994-95 and in this period portfolio investment accounted for a larger share, but in the later period 1995-96 to 2002-03, direct investment flows picked up and they accounted for quite a significant share and from 1997-98 and 1998-99, direct investment became dominant. It may also be noted that portfolio investment is of a very undependable and volatile nature. This is witnessed by the fact that portfolio investment slumped to a level of US $ 1.83 billion in 1997-98 as against 3.31 billion in 1996-97 and became negative in 1998-99. The sudden fall of portfolio investment to a negative level resulted in the total inflow declining from US $ 6.13 billion in 1996-97 to $ 2.40 billion in 1998-99. This only highlights the fact that although foreign investment is welcome, it would be more desirable to depend on inflows of foreign direct investment. The sharp decline of portfolio investment from $ 3,026 million in 1999-00 to a low level of 979 million in 2002-03 and then a sudden spurt to $ 11,377 million in 2003-04 and again a decline to $ 9,315 million in 2004-05 is indicative of its volatile and undependable nature. Portfolio invstment again sharply increased to in 2005-06 to $ 12,492 million (64%) to again decline to $ 7,003 million in 2006-07 accounting for merely 24 percent of total foreign investment, and further increased to $27,271 million during 2007-08. But due to economic crisis if became negative $13,855 million during 2008-09. In 2009-10 we find a record foreign investment of $ 70,139 million as portfolio investment reached its record and direct investment was also very high at $37,763 million. In 2010-11 provisional figures for foreign investment was put at $ 5,84,95 million.

Table 17: Foreign Investment inflow in India

US $ million

Year	*Direct Investment*	*Portfolio Investment*	*Total*
1991-92	129	4	133
1992-93	315	244	559
1993-94	586	3,567	4,153
1994-95	1,314	3,824	5,138
1995-96	2,144	2,748	4,892
1996-97	2,821	3,312	6,133
1997-98	3,557	1,828	5,385
1998-99	2,462	-61	2,401
1999-2000	2,155	3,026	5,181
2000-01	4,029	2,760	6,789
2001-02	6,130	2,021	8,151
2002-03	5,035	979	6,014
2003-04	4,322	11,377	15,699
2004-05	6,051	9,315	15,366
2005-06	8,961	12,492	21,453
2006-07	22,826	7,003	29,829
2007-08	34,835	27,271	62,106
2008-09	37,838	–13,855	23,983
2009-10	37,763	32,376	70,139
2010-11 (p)	27,024	31,471	58,495
Total (1991-92 to 2010-2011)	**2,10,347 (59.7)**	**1,41,702 (40.3)**	**3,52,049 (100.0)**

* Provisional

Source: Compiled and Computed from RBI, *Handbook of Statistics on Indian Economy* (2009-10), RBI Bulletine June 2011.

11. Reduction of Regional Disparities

One of the major objectives of development is to reduce regional disparities. With this end in view, State policies have been patterned to help the backward regions. It was also included as a part of the devolution of funds and higher allocations were made for the backward states so that regional disparities could be narrowed down.

The reform process initiated in 1991 has been emphasising the use of the market forces, which naturally attract investment to regions more developed in infrastructure - both economic and financial. It does not pay any attention to the question of regional imbalance.

TABLE 18 : Statewise Net State Domestic Product and Per Capita NSDP (1990-91 to 2003-04) at 1993-94 Prices

(₹ crores)	Net State Domestic Product (₹ crores)			Per Capita NSDP (₹)		
	1990-91	2004-05	Average Growth Rate (1990-91 to 2003-04)	1990-91	2004-05	Average Growth Rate (1990-91 to 2003-04)
Forward States						
1. Punjab	23,693	43,122	4.37	11,776	16,756	2.54
2. Haryana	18,215	37,983	5.37	11,125	16,872	3.00
3. Maharashtra	79,869	18,239	6.06	10,159	17,864	4.12
4. Gujarat	36,207	90,783	6.3	8,788	16,818	4.77
5. Tamil Nadu	43,937	90,138	5.26	7,864	14,000	4.20
6. Andhra Pradesh	45,131	97,699	5.65	6,873	12,352	4.27
7. Kerala	19,774	44,054	5.36	6,851	13,321	4.87
8. Karnataka	29,845	76,298	6.91	6,631	13,820	5.37
9. West Bengal	40,633	10,33,62	6.90	5,991	12,271	5.26
Backward States						
10. Rajasthan	29,713	59,911	5.11	6,760	9,853	2.74
11. Madhya Pradesh	41,833	53,534	1.78	6,350	8,228	1.85
12. Assam	12,299	19,041	3.13	5,574	6,721	1.37
13. Uttar Pradesh	74,791	10,97,68	2.79	5,342	6,138	1.0
14. Bihar	37,607	33,460	-0.83	4,474	3,773	-1.24
15. Orissa	13,450	27,562	5.26	4,300	7,176	3.73
All India	**6,23,407**	**11,69,793**	**5.4**	**7,430**	**11,013**	**3.3**
Ratio between Maximum and Minimum Per Capita NSDP				2.7	4.73	

Notes : States have been arrage in the descending order on the basis of per capita NSDP for 1990-91.

SOURCE : Compiled and computed from Ministry of Finance (2003), *Indian Public Finance Statistics (2004-05)* and CSO, *National Accounts Statistics (2005)*.

It would be, therefore, desirable to understand the impact of economic reforms on various states.

An analysis of the growth of the Net State domestic Product (at 1993-94 prices) for the post-reform period reveals that NSDP in forward states indicated an annual average growth rate of 5.6 per cent during 1990-91 and 2002-03, but as against them in the backward states, growth rate of NSDP was merely 1.7 per cent. This only underlines the stark reality that the reform process helped the forward states much more than the backward states and could be held responsible for widening regional disparities. It may also be noted that in Bihar, the per capita NSDP growth during 12-year period (1990-91 to 2002-03) was negative to the extent of (–) 0.9 per cent per annum and in Uttar Pradesh, it was barely 0.4 per cent. These two states which account for about 27 per cent of the population pulled down the average all-India growth of per capita NSDP. The ratio of maximum and minimum per capita NSDP which was 2.7 in 1990-91 increased to 4.73 in 2004-05 which also supports the fact that the reform process widened income disparities among the states.However period after 2004-05 shows some imoprovment in the performance of backward states and this ratio declined to 4.6 in 2010-11 (Table 19).

Dr. N. J. Kurian of the Planning Commission who made an extensive study of the 'Widening Regional Disparities in India'[22] has indicated that more than two-thirds of investment proposals (69.2 %) in the post-reform period were concentrated in the forward states

22. Kurien NJ (2000), Widening Regional Disparities in India, *Economic and Political Weekly*, February 12-18.

TABLE 19 : Statewise Net State Domestic Product and Per Capita NSDP 2004-05 and 2010-11 (At 2004-05 prices)

(₹ crores)	Net State Domestic Product (₹ crores)			Per Capita NSDP (₹)		
	2004-05	2009-10	Average Growth Rate	2004-05	2010-11	Average Growth Rate
Forward States						
1. Haryana	86,222	1,49,651	9.6	37,972	59,221	7.7
2. Punjab	86,108	1,29,933	7.1	33,103	44,752	5.2
3. Maharashtra	3,68,369	7,02,832	11.4	35,915	62,729	9.7
4. Kerala	1,04,776	1,71,897	8.6	31,871	49,873	7.7
5. Gujarat	1,72,265	3,09,409	10.2	32,021	52,708	8.7
6. Tamil Nadu	1,93,645	3,49,335	10.3	30,062	51,928	9.5
7. Andhra Pradesh	2,01,303	3,40,792	9.2	25,321	40,366	8.1
8. Karnataka	1,48,729	2,32,541	7.7	26,882	39,301	6.5
9. West Bengal	1,90,029	2,87,337	7.1	22,649	32,228	6.1
Backward States						
10. Assam	47,181	65,102	5.5	16,872	21,406	4.1
11. Rajasthan	1,12,636	1,78,184	8.0	18,565	26,436	6.0
12. Orissa	67,987	1,07,129	7.9	17,650	25,708	6.4
13. Madhya Pradesh	99,940	1,60,549	8.2	15,442	22,382	6.4
14. Uttar Pradesh	2,31,029	3,45,848	6.9	12,950	17,349	5.0
15. Bihar	70,167	1,32,488	11.2	7,914	13,632	9.5
Ratio between Maximum and Minimum Per Capita NSDP				4.80	4.60	

* 2007-08, ** 2008-09

Notes : States have been arrage in the descending order on the basis of per capita NSDP for 2004-05.

SOURCE : Compiled and computed from CSO National Account Statistics (2011)

and a similar situation prevailed in terms of financial assistance disturbed by All-India Financial Institutions as well as State Financial Corporations. The All India Financial Institutions viz., IDBI, IFCI, ICICI, UTI, LIC, GIC, IRBI and SIDBI disbursed 67.3 per cent of total financial assistance to forwards states upto 31st March 1997. Even among the 9 forward states, four states, namely Maharashtra, Gujarat, Tamil Nadu and Andhra Pradesh were able to appropriate about 51 per cent of total assistance. Even in the case of State Financial Corporations, 70 per cent of total assistance was received by forward states. This analysis underlines the fact that the reform process has favoured the forward states in terms of approval of investment proposals as well as financial assistance. Consequently, the already better-off states can further accelerate the growth process while the backward states being unfavourably treated face a retardation in growth. This explains the growing disparities in terms of growth of NSDP — both total and per capita.

Situation seems to have worsened later. Figure of per capita state domestic product at constant prices show that the ratio of per capita state domestic product of Haryana (highest per capita state domestic product of ₹ 62729) and that of Bihar (₹ 13632) was 4.6 even in 2010-11. Though rate of growth of some underdeveloped states has improved in the last few yeras, lot more is needed to be done to reduce regional inequalites.

12. Social Infrastructure and Human Development

Data on selected indicators of Human Development viz., life expectancy, literacy rate, infant mortality rate (IMR), death rate and birth rate is given in chapter 5.5. If the purpose of all development is to improve the quality of life, then human development indicators are the end-products of the development process.

Wide disparities are observed among different states. Kerala and to some extent Tamil Nadu have shown that it is possible to achieve higher levels of human development even with low levels of economic development. But, by and large, better levels of per capita NSDP are associated with higher levels of human development. To achieve higher levels of human development, it is necessary that investment in educational and health infrastructure be stepped up. Among the backward states, Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh have very poor record in terms of literacy, especially female literacy. They have also failed in investment in health infrastructure and consequently have lower life expectancy, higher infant mortality and higher birth rate. The private sector which is the torch-bearer of economic reforms my be setting up nursing homes or elite educational institutions with higher levels of charges or fees to meet the demand of the upper middle class and affluent sections, but it does not offer anything for the welfare if the poor. Either the private sector should assume a higher social purpose or the state should invest more in education and health infrastructure.

Mr. N. J. Kurian after making a detailed analysis of regional disparities after the initiation of economic reforms reaches the following conclusions:

"The accelerated economic growth since the early 1980s with increased participation by the private sector appears to have aggravated regional disparities. The ongoing economic reforms since 1991 with stabilisation and deregulation policies as their prime instruments and a very significant role for the private sector seem to have aggravated the inter-state disparities." He further states: " The better-off states are able to attract considerable amount of private investment, both domestic and foreign, to improve their development potential because of the existing favourable investment climate including better socio-economic infrastructure. The backward states are unable to attract private investment because of unfavourable investment climate including poor infrastructure. They are unable to improve the investment climate by improving the existing poor infrastructural facilities due to lack of resources. Their lack of resources is linked to their poor development. Thus, they are truly in a vicious circle."

Conclusion

It has to be acknowledged that the reform process will not be able to achieve its socio-economic objective, because the private sector is merely concerned with profit motive. Whereas the liberalisation process has reduced the role of the public sector investment, it has failed to fill the vacuum created by the withdrawal of public sector investment in infrastructure, more especially in the backward states. Obviously, this calls of a reform of the reform process. President W. J. Clinton while speaking in Hyderabad on March 24, 2000 on the need to harness new technologies like info-tech for eradicating poverty emphasised: "Millions of Indians are connected to the internet, but millions more are not yet connected to fresh water. India accounts for 30 per cent of the world's software engineers but also 25 per cent of the world's malnourished. So our challenge is to turn the newest discoveries into best weapons humanity has ever had to fight poverty." Mr. Clinton underlined the fact that while it was good that a lot of 25-year old multi-millionaires were being created and the latest Indian start-ups were shooting up the Nasdaq, "this whole enterprise cannot just be about higher profits, there must also be a higher purpose."

Most forthright criticism of the reform process came from the former President K R Narayanan on the eve of the Republic Day message on 25 January 2000 when he warned: "The fury of the patient and long-suffering people would be unleashed if the three-way fast lane of liberalisation, privatisation and globalisation failed to provide 'safe pedestrian crossings' for the unempowered in India." This indictment of the reform process only underlines the scant care the market forces show to the poor. Mr. Narayanan has drawn attention to the tragic contradictions in our society, particularly the great regional and social inequalities in the following words:

"We have one of the world's largest reservoirs of technical personnel but also the world's largest number of illiterates; the world's largest middle class but also the largest number of people below the poverty line; and the largest number of children suffering from malnutrition. One half of our society guzzles aerated beverages while the other has to make do with palmfuls of muddied water."

While justifying the trajectories of modern progress such as factories, dams and satellites, Mr. Narayanan, however, cautioned against ecological and environmental devastation leading to uprooting of human settlements, especially of the tribals and the poor. He, therefore, mentioned" "Ways and methods could be found for countering the harmful impact of modern technology on the lives of the populace both by the government and civil society."

Pointing to the regional and social inequalities accompanying the country's economic growth, Mr. Narayanan cautioned: "Many a social upheaval can be traced to the neglect of the lowest tier of society, whose

discontent moves towards the path of violence. Dalits and tribals are the most affected by all this".

Prime Minister Monmohan Singh also is of the view: "The challenge before us is to combine the Economics of growth with the Economics of equity and social justice. We have no option but to walk on two legs." [23]

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CHAPTER

16

GLOBALIZATION AND ITS IMPACT ON INDIA

"Our primary concerns are that globalization should benefit all countries and should raise the welfare of all people throughout the world. This implies that it should raise the rate of economic growth in poor countries and reduce world poverty, and that it should not increase inequalities or undermine socio-economic security within countries"

– World Commission on the Social Dimension of Globalization (2004)

"Globalisation means free movement of capital, goods, technology, ideas and people. Any globalisation that omits the last one is partial and not sustainable.

– Branko Milanovic

– Economist at the Carnegie Endowment for International Peace"

1. GLOBALIZATION AND ITS ADVOCACY

Globalization is the process of integrating various economies of the world without creating any hindrances in the free flow of goods and services, technology, capital and even labour or human capital. The term 'globalization' has, therefore, four parameters:

(i) Reduction of trade barriers to permit free flow of goods and services among nation-states;

(ii) Creation of environment in which free flow of capital can take place among nation-states;

(iii) Creation of environment, permitting free flow of technology; and

(iv) Last, but not the least, from the point of view of developing countries, creation of environment in which free movement of labour can take place in different countries of the world.

The advocates of globalization, more especially from developed countries, limit the definition of globalization to only three components, unhindered trade flows, capital flows and technology flows. They insist on developing countries to accept their definition of globalization and conduct the debate on globalization within the parameters set by them. However, several economists in the developing world believe that this definition is incomplete and in case the ultimate aim of globalization is to look upon the world as a 'global' village, then the fourth component, unrestricted movement of labour cannot he left out. But the entire issue whether debated at the World Bank, IMF or World Trade Organization (WTO) blacks out 'labour flows' as an essential component of globalization. More recently, the Report of the *World Commission of Social Dimension of Globalization* (WC SDG) set up by the ILO has taken note of the question of human capital flows and their role in helping developed countries. This has raised several questions which will be taken up later.

Thus, basically globalization signifies a process of *internationalization plus liberalization*. According to Stiglitz, "Globalization is the closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communications, and the breaking down of artificial barriers to the flow of goods and services, capital, knowledge, and (to a lesser extent) people across borders." (Stiglitz 2002b, pp. 9) Jagdish

Bhagwati defines globalization in the following words: "Economic globalization constitutes integration of national economies into the international economy through trade, direct foreign investment (by corporations and multinationals), short-term capital flows, international flows of workers and humanity generally, and flows of technology" (Bhagwati, p. 3)

Advocacy of Globalization

Globalization which is a more romantic word indicating the desire to integrate nation-states within the overall framework of WTO, is nothing but a modern version of the 'Theory of Comparative Costs Advantage' which was propagated by classical economists to provide the theoretical foundations of unrestricted flow of goods from Great Britain to other less developed countries – at that time colonies. It was argued that international specialization benefits both the countries which enter into trade relations. The same argument has been brought forth by the advocates of globalization now. They want an ***export-led-pattern of growth*** to replace import substitution policies followed earlier. The imperialist nations during the 18th , 19th and 20th century also emphasized 'capital and technology flows' into the colonial countries. But they could force their will at that time because they were the rulers. Historical evidence reveals that all these trade, capital and technology flows helped the imperialist nations to drain out resources from the poor colonial nations. Thus, the imperialist nations thrived at the cost of colonial countries who remained in stagnation and poverty.

Advocates of globalization support their defence of globalization on the following arguments:

(i) Globalization will promote direct foreign investment and, thus, it enables developing countries to raise capital without recourse to international indebtedness.

(ii) Globalization enables developing countries to make use of technology developed by advanced countries without investments in Research and Development.

(iii) Globalization widens the access of developing countries to export their produce in the developed countries. Simultaneously, it enables the consumers of developing countries to obtain quality consumer goods, especially consumer durables, at relatively much lower prices.

(v) Globalization introduces faster diffusion of knowledge and thus enables developing countries to raise their level of production and productivity. It, therefore, generates the momentum to reach international standards of productivity.

(vi) Globalization reduces costs of transport and communication. It also reduces tariffs and thus enlarges the share of foreign trade as a percentage of GDP.

In nutshell, globalization is considered as the engine of growth, technical advancement, raising productivity, enlarging employment and bringing about poverty reduction along with modernization.

2. GLOBALIZATION AND ITS IMPACT ON INDIA

The claims of the protagonists of globalization have been examined by various researchers in different countries. A very powerful critique of globalization has been made by Stiglitz, Nobel Prize winner for Economics (2001) and former Chief Economist of the World Bank. The World Commission on the Social Dimension of Globalization (WCSDG) set up by ILO has also considered the experience of globalization the world over and made certain very revealing observations.

The World Commission states: "The current path of globalization must change. Too few share in its benefits. Too many have no voice in its design and no influence on its course". (ILO, 2004, p.2)

"We wish to make globalization a means to expand human well-being and freedom, and to bring democracy and development to local communities where people live." (ILO, 2004, p.2).

Trade – One of the principal aims of globalization is to expand trade in goods and services. The World Commission in this context states." This trade expansion did not occur uniformally across all countries, with the industrialized countries and a group of 12 developing countries accounting for the lion's share. In contrast, the majority of the developing countries did not experience significant trade expansion. Indeed, most of the Least-Developed Countries (LDCs), a group that includes most of the countries in sub-Saharan Africa, experienced a proportional decline in their share of world markets – despite the fact that these countries had implemented trade liberalization measures." (WCSDG, 2004, p.25)

During the 15-year period (1995-2010), India's merchandise exports increased at the rate of 14.2 per cent per annum (from $ 30.63 billion to $ 255.5 billion), while that of China increased at the faster rate of 17.1 per cent and that of Mexico at the rate of 9.2 per cent. However, compared to the world average annual exports of 7.4 per cent during the period, India did benefit from globalization in increasing its export growth rate. But India's share in world merchandise exports improved only marginally from 0.59 per cent in 1995 to 1.50 per cent in 2010.

India's performance in service sector exports was relatively much better. Service exports increased from $10.0 billion in 1995 to $123.8 billion in 2010, indicating an annual average growth rate of 18.2 per cent during the period. Much of this increase was due to software exports as a consequence of outsourcing by developed

TABLE 1 : Exports of Merchandise and Services of Selected Countries of the World

MERCHANDISE EXPORTS	*Exports US$ million*		*% of World Exports*		*Average Annual Growth Rate (1995 to 2010)*
	1995	*2010*	*1995*	*2010*	
India	30,630	2,25,501	0.59	1.50	14.2 *
China	148,780	15,81,417	2.88	10.55	17.1
Brazil	46,506	2,01,915	0.90	1.34	10.3
Mexico	79,542	2,98,473	1.54	1.99	9.2
South Korea	125,058	4,64,300	2.42	3.09	9.1
World	**5,172,060**	**1,44,82,071**	**100.0**	**100.0**	**7.4**
EXPORT OF SERVICES					
India	10,062	1,23,762	0.82	3.25	18.2
China	24,635	1,71,203	2.02	4.49	13.8
Brazil	13,161	31,821	1.08	0.84	6.1
Mexico	9,021	15,435	0.74	0.40	3.6
South Korea	25,394	82,705	2.08	2.17	8.2
World	**1,220,158**	**3,804,827**	**100.0**	**100.0**	**7.9**
EXPORTS OF MERCHANDISE AND SERVICES					
India	40,692	3,49,364	0.63	1.86	15.4
China	15,58,053	17,52,620	2.71	9.36	17.5
Brazil	59,667	2,33,736	0.93	1.24	9.5
Mexico	88,563	3,13,908	1.38	1.67	8.8
South Korea	1,50,452	5,47,006	2.35	2.92	9.0
World	**6,392,218**	**1,87,16,574**	**100.0**	**100.0**	**7.43**

Source: Compiled and computed from the data provided in World Bank, *World Development Indicators* (2011) UNCTAD,Hand Book of Statistics 2009

countries, especially USA and to some extent the European Union countries. This singular achievement is very creditable. Compared to the world average growth of commercial services of the order of 7.9 percent, India did benefit substantially in the service sector exports.

If we pool together merchandize and service sector exports, it becomes evident that India's exports of goods and services increased from $40.69 billion in 1995 to $349.3 billion in 2010, indicating an annual average growth rate of 15.4 per cent. As a consequence, India's share in world exports of goods and services improved from 0.63 per cent in 1995 to 1.86 per cent in 2010. As against this, China's share improved from 2.7 per cent in 1995 to 9.36 per cent in 2010, and that of Mexico from 1.4 per cent to 1.67 per cent. The annual average export of goods and services from India increased by 15.4 per cent during this period, but the performance of China by 17.5 per cent was better than that of India. There is no doubt that India has gained as a consequence of globalization in improving its share of world exports of goods and services to 1.86 per cent, but considering the size of its economy, the gain is much smaller when compared with South Korea, Mexico and China.

Increase of Imports far greater than Increase of Exports

Globalizers advocated the acceptance of the new strategy of liberalization and globalization on the plea that India will be able to access foreign markets more effectively. It is of interest to examine this claim using data from Table 2. Exports rose from 5.8 per cent of GDP in 1990-91 to 9.1 per cent of GDP in 1995-96. Thereafter we find a gradual increase in exports to reach 14.4 percent of GDP in 2009-10. But if we examine the trend of imports, they increased from 8.8 per cent of GDP in 1990-91 to 23.1 per cent in 2009-10. Even when exports fell in 1996-97 and 1997-98, imports continued their forward march. During 2000-01, when exports increased to a level of 9.9 per cent of GDP, imports jumped to a level of 12.6 per cent of GDP. As a consequence, India's trade deficit during 1996-97 to 2000-01 ranged between 3.1 to 4.0 per cent of GDP. The situation has slightly improved during 2001-02 and 2002-03 and the trade deficit has come down to 2.4 per cent and 2.1 per cent of GDP respectively. However, the situation again deteriorated in 2008-09 and trade deficit sharply increased to 9.7 per cent of GDP. But in 2009-10, it was 8.7 percent of GDP.

This underlines the hard reality that foreigners have been able to penetrate the Indian market more

TABLE 2 : The external Sector and globalization of the Indian Economy

(As Percentage of GDP at market prices)

Year	*Exports*	*Imports*	*Total Trade (Exports + Imports)*	*Trade Balance*	*Net Invisibles Balance*	*Current Account*	*External Debt*
1990-91	5.8	8.8	14.6	-3.0	-0.1	-3.1	28.7
1995-96	9.1	12.3	21.4	-3.2	1.6	-1.7	27.0
2000-01	9.9	12.6	22.5	-2.7	2.1	-0.6	23.3
2001-02	9.4	11.8	21.2	-2.4	3.1	+0.7	21.2
2002-03	10.6	12.7	23.3	-2.1	3.4	+1.3	20.3
2003-04	11.1	13.3	24.4	–2.3	4.6	+ 2.3	17.8
2004-05	12.2	17.1	29.3	–4.9	4.5	–0.4	18.5
2005-06	13.0	19.5	32.5	–6.4	5.2	– 1.1	17.2
2006-07	14.0	20.9	34.9	–6.9	5.8	–1.1	17.9
2007-08	14.1	21.9	36.0	–7.8	6.3	–1.4	19.0
2008-09	15.4	25.1	40.5	–9.7	7.4	–2.4	20.5
2009-10	14.4	23.1	37.5	–8.7	6.4	–3.1	18.3
2010-11	14.8	22.6	37.4	–7.8	5.0	–2.7	17.8

SOURCE: Compiled from Government of India, *Economic Survey 2011-12*

effectively than Indians have been able to access foreign markets.

However, India's performance in achieving a net positive balance in invisibles has helped it to wipe out the large trade deficit. During 2003-04, net invisibles showed a positive balance of 4.6 percent of GDP which not only wiped out the trade balance deficit, but created a positive balance in current account to the extent of 2.3 percent of GDP. A major contributor to the present situation is a massive inflow of foreign exchange from the software service provided by India as a consequence of sharp increase in exports of IT-enabled and business process outsourcing (BPO) services. However, the situation deteriorated since 2004-05 and a negative balance on current account appeared, which continued and in 2010-11, negative BOP on current account was 2.7 per cent of GDP.

Foreign Investment Flows

It is often claimed that globalization leads to a greater flow of foreign investment, which should help to increase the productive capacity of the recipient economy. It is worthwhile considering this for India.

Foreign investment takes two forms – foreign direct investment (FDI) and foreign portfolio investment (FPI). Foreign direct investment helps to increase the productive capacity of the economy, while foreign portfolio investment is of a more speculative nature and is thus very volatile. A careful perusal of the data on foreign investment given in table 3 reveals that during the period 1990-91 and 1994-95, the share of FDI in total investment inflow was only 24.2 per cent and that of FPI was 75.8 per cent. In other words, only a quarter of the total foreign investment was available for increasing productive capacity while about three quarters was very volatile. For the 5-year period (1995-96 to 1990-00), the proportion of FDI in total foreign investment improved to 54.8 per cent. However, the share of FPI was still high at about 45 per cent. During the next 10-year period (2000-01 to 2010-11), the share of FDI was 60.8 per cent and that of FPI was 39.2 per cent.

However, a careful perusal of the yearwise data reveals that fluctuations in foreign portfolio investment were much sharper than those in foreign direct investment. For instance, FPI showed a continuous decline during 1995-96 to 1998-99 and it dipped from $3,824 million in 1994-95 to a negative level of $61 million in 1998-99. However, it recovered to a level of $3,026 million in 1999-00. This indicates its extreme volatility and revival. Thereafter, again FPI continued to decline and reached a low level of $979 million in 2002-03, but revived to an astronomical level of $11,377 million in 2003-04. The share of FPI which touched a low level of 16.3 per cent in total foreign investment in 2002-03 rose sharply to about 71 per cent in 2003-04. In 2008-09 are find a net outflow if FPI, mainly due to global recession. Obviously, FPI is very undependable.

Compared with this situation, the data about FDI shows a gradual upward growth from $129 million in 1991-92 to $1,314 million in 1994-95, to further rise to $3,557 million in 1997-98. Subsequently we find increase in FDI in leaps and bounds to $37, 763 million by 2009-10. During 2010-11, their was a decline in FDI in flow to $ 24024 million. It implies that as a matter of policy, the host country can depend on a regular inflow of FDI if it creates a conducive climate for the purpose.

TABLE 3 : Foreign Direct Investment Inflows in India by Different Countries

US $ million

Year	*Foreign Direct Investment (1)*	*Foreign Portfolio Investment (2)*	*Total*
1990-91	97	6	103
1991-92	129	4	133
1992-93	315	244	559
1993-94	586	3,567	4,153
1994-95	1,314	3,824	5,138
1995-96	2,144	2,748	4,892
1996-97	2,821	3,312	6,133
1997-98	3,557	1,828	5,385
1998-99	2,462	-61	2,401
	(102.5)	(-2.5)	(100.0)
1999-00	2,155	3,026	5,181
2000-01	4,029	2,760	6,789
2001-02	6,130	2,021	8,151
2002-03	5,035	979	6,014
	(83.7)	(16.3)	(100.0)
2003-04	4,322	11,377	15,699
	(27.5)	(72.5)	(100.0)
2004-05	6,051	9,315	15,366
2005-06	8,961	12,492	21,453
2006-07	22,826	7,003	29,829
2007-08	34,362	27,271	61,633
2008-09	37,838	–13,855	23,983
2009-10	37,763	32,376	70,139
2010-11	27,024	31,471	58,495
1990-91 to	**2,441**	**7,645**	**10,086**
1994-95	**(24.2)**	**(75.8)**	**(100.0)**
1995-96 to	**13,139**	**10,853**	**23,992**
1999-2000	**(54.8)**	**(45.2)**	**(100.0)**
2000-01 to	**191376**	**123209**	**314585**
2010-11	**(60.8)**	**(39.2)**	**(100.0)**

Note: Figures in bracket are percentages of the total in the row.
Source: *Reserve Bank of India Bulletin, Handbook of Statistics on the Indian Economy (2009-10)*, RBI Bulletin June 2011.
P – Provisonal

It would be desirable to understand the sectors in which FDI flows so as to analyze whether these inflows help to enlarge the productive capacity of the economy. Data provided in Table 4 reveals that there are 10 sectors which are attracting FDI inflows. Out of the total approved FDI from January 1991 to March 2004, nearly 69 percent pertained to five high priority sectors viz., energy, telecommunications, electrical equipment (including computer software and electronics), transportation and metallurgical industries. But actual inflows revealed a wide gap between FDI approvals and actual inflows. For instance, as against total approvals in the energy sector of the order of ₹ 77,825 crores, the actual FDI inflow was merely Rs, 9,802 crores (12.6 percent). The situation in telecommunication was equally dismal and the proportion of inflow was 18.7 percent. The performance in electrical equipment, transportation, chemicals and service sector was better and ranged between 42 to 53 percent. But as against the overall approved FDI of ₹ 2,51,431 crores in these 10 sectors, the actual inflow was only ₹ 67,462 crores i.e. 26.8 percent. There is no doubt that there is a gap between approvals and actual inflows, but this yawning gap only highlights the slow progress in the actual help rendered by FDI to promote development in India. If globalization has to make an impact and prove its effectivity, the gap between approved FDI and actual inflows must be reduced.

TABLE 4 : Sectors Attracting Highest FDI Approvals with actual Inflows (January 1991 to 1ST March 2004)

	Rank Sector	*FDI Approved (Rs crores)*	*Percentage of Total*	*FDI inflows (Rs crores)*	*Percentage of total FDI inflows*	*Percentage of inflows over approvals*
1.	Energy of which	77,828	26.62	9,802	10.21	12.6
	(a) Power	43,703	14.95			
	(b) Oil Refining	34,125	11.67			
2.	Telecommunication	57,328	19.61	10,725	11.17	18.7
3.	Electrical Equipment*	28,072	9.94	s13,930	14.50	47.9
4.	Transportation	21,966	7.51	11,517	11.99	52.4
5.	Service Sector	19,261	6.59	8,134	8.47	42.2
6.	Metallurgical industries	15,534	5.31	1,254	1.31	8.1
7.	Chemicals (other than fertilizers)	13,090	4.48	5,692	5.93	43.5
8.	Food & Food Processing	9,620	3.29	4,346	4.53	45.2
9.	Hotels & Tourism	5,215	1.78	899	0.87	17.2
10.	Textiles	3,517	1.20	1,163	1.21	33.1
	Total of 1 to 10	**2,51,431**	**86.33**	**67,462**	**70.19**	**26.8**

* (Including computer software and electronics)
SOURCE: Compiled and Computed form Ministry of Finance, Government of India, *Economic Survey (2003-04)*.

TABLE 5 : FDI Inflows and Outflows in India

US $ million

	India			China		
	Inflows 1	*Outflows 2*	*Net FDI Inflows 3 = 1-2*	*Inflows 1*	*Outflows 2*	*Net FDI Inflows 3 = 1-2*
1992-97*	1,676 (100.0)	96 (5.7)	1,580 (94.3)	32,799 (100.0)	2,846 (8.7)	29,953 (91.3)
1998	2,633 (100.0)	47 (1.8)	2,586 (98.2)	45,463 (100.0)	2,634 (5.8)	42,829 (94.2)
1999	2,168 (100.0)	80 (3.7)	2,088 (96.3)	40,319 (100.0)	1,775 (4.4)	38,544 (95.6)
2000	2,319 (100.0)	509 (21.9)	1,810 (78.1)	40,715 (100.0)	916 (2.2)	39,799 (97.8)
2001	3,403 (100.0)	1,397 (41.0)	2,006 (58.9)	46,876 (100.0)	6,884 (14.7)	39,994 (85.3)
2002	3,449 (100.0)	1,107 (32.1)	2,342 (67.9)	52,743 (100.0)	2,518 (4.8)	50,225 (95.2)
2003	4,269 (100.0)	913 (21.4)	3,356 (78.6)	53,505 (100.0)	1,800 (3.4)	51,705 (96.6)
2007	25,350 (100.0)	17,234 (68.8)	7,841 (31.2)	83,521 (100.0)	22,469 (26.9)	61,052 (73.1)
2008	42,546 (100.0)	19,997 (45.8)	21,919 (54.2)	108,312 (100.0)	52,150 (48.1)	56,162 (51.9)
2009	35,649 (100.0)	15,929(43.0)	19,716 (57.0)	95,000 (100.0)	48,000 (50.5)	47,000 (49.50)
2010	24,640 (100.0)	14,626 (59.4)	100,14 (40.6)	10,5,735 (100.0)	68,000 (64.3)	37,735 (35.7)

* Annual Averages

Note: Figures brackets are percentage of FDI Inflows.

SOURCE: Compiled and computed from UNCTAD (2004). ***World Investment Report (2011)***

FDI Inflows and Outflows

Whereas the Government of India has been initiating measures to attract FDI inflows into India, certain Indian firms have been undertaking investment projects in other countries. This has resulted in FDI outflows. Net FDI inflow is, therefore, the difference been FDI inflows ***minus*** FDI outflows. Table 5 provides data about India and China from 1992 to 2010 as given by the ***World Investment Report*** (2011). During 1992-97 and even upto 1999, FDI outflows from India formed a very small fraction of FDI inflow. However, since 2000, there has been increase in FDI outflows. The peak outflow took place in 2008 of the order of US$ 20 billion (45.8% of the FDI inflow). (Refer Table 5).

Regarding China, the situation has been very different. But for the year 2001, in which FDI outflow was of the order of $6.88 billion (14.7% of FDI inflow), till recently Chinese kept the outflow at a relatively lower level than India. Recently China has stepped up outflow of investment in the form of purchase of land and mineral resources, acquisition of foreign firms etc. The same is reflected by increasing outflow which was only 3.4 percent of inflow is 2003 to 64.3 percent of FDI inflow in 2010.

The consequence of the larger FDI outflows after 2000 has been a sizeable reduction in net FDI inflows. Ultimately, it is the net FDI inflow which increases the rate of investment and the productivity of the Indian economy. Moreover, the target of reaching $ 10 billion FDI inflow could be achieved only in 2008.

India's share in FDI inflows

A review of the world situation in FDI inflows reveals that 48.4 percent of the total inflows are made to the developed countries, 46.1 percent to the developing countries and only 5.5 percent to Central and East Europe in 2010. Out of this flow, India received 1.90 percent, Brazil got 3.9 percent, Mexico 1.5 percent, but China received a big share of 8.5 percent ($105.7 billion) in 2003. The point which deserves attention is that nearly, 54 per cent of the FDI inflows go to benefit Developed Countries and Eastern European economies and 46 provide assistance to developing countries. (Refer table 6).

TABLE 6 : FDI Inflows (2010)

US $ billion

FDI Inflows by Host Region and Economy		
World	**12,43,671**	**100.0**
Developed Countries	6,01,906	48.4
Developing Economies	5,73,568	46.1
Transition Economices	68,197	5.5
China	1,05,735	8.5
India	24,640	1.98
Brazil	48,438	3.9
Mexico	18,679	1.5

SOURCE: Compiled and computed from UNCTAD, ***World Investment Report (2011)***

TABLE 7 : Distribution of FDI Inflows to different countries (Upto 2010)

US $ billion

Country	*FDI Inflows by Host Region and Economy*	
		Percentage Share
India	1,97,947	3.33
China	5,78,818	9.73
Brazil	4,72,579	7.94
Mexico	3,27,239	5.50
China, Hong Kong	10,97,620	18.44
Singapore	4,69,871	7.89
Argentina	86,685	1.46
Malaysia	1,01,339	1.70
Chile	139,538	2.34
Thailand	127,257	2.14
Republic of Korea	127,047	2.13
Venezuela	38,022	0.64
Total (developing Economices)	59,51,203	
Total for 12 countries		**63.24**
Remaining 176 countries and Territories		36.76

SOURCE: UNCTAD, World Investment Report 2011

Although the number of developing countries receiving FDI flows has grown during the last decade, yet FDI investment remains concentrated in 12 of them accounting for 63.24 percent of total. The remaining 176 developing countries and territories receive only 36.76 percent of total FDI since 1990s. (Refer Table7). India could find a place among the 12 countries, very recently, though her population accounts for about 16 percent of world population. The unfair distribution of FDI becomes evident from the way FDI finds host countries.

Besides this, FDI investment is used to nullify the comparative cost advantage, more especially cheap labour as well as raw materials by transferring production processes to the developing countries. ILO Report (2004) mentioning the role of MNCs for using FDI to enhance their economic position states: "The information and communications technology (ICT) revolution, coupled with declining transport costs made the growth of far-flung, multicountry based production of goods and services both technically and economically feasible. Production processes could be unbundled and located across the globe to exploit economic advantage arising from differences in costs, factor availabilities and the congeniality of the investment climate. Components and parts can easily be trans-shipped across the world and assembled at will. The communications revolution has made feasible the coordination and control of these dispersed production systems." (***WCSDG (2004)***, p.27). FDI inflows are not all growth-oriented as advocated by pro-globalizers lobby, a big part of the inflows is used to destroy the comparative cost advantage of developing countries. For this purpose, 65,000 MNCs, with around 850,000 affiliates strengthen their stranglehold over the global production systems. The MNCs undertake outsourcing and insist on just-in-time delivery and thereby enhance their profits from the production processes established in developing countries.

Employment, Flexibility and Impact on Labour

World Commission on Social Dimension of Globalization in this regard states: "For the world as a whole the latest estimates show that open unemployment has increased over the last decade to about 188 million in 2003. However, employment performance over the past two decades has varied across regions. (Refer table 8). It is also noticeable that within the world unemployment rates have increased since 1990 in Latin America and the Caribbean and South East Asia, and since 1995 in East Asia. "(WCSDG 2004, p.40)

TABLE 8 : *Open Unemployment Rates for Various Regions of the World*

US $ billion

	1990	*1995*	*2000*	*2002*
Latin America and Caribbean	6.9	8.3	9.7	9.9
East Asia	—	3.1	3.2	4.0
South-East Asia	3.6	4.1	6.0	6.5
South Asia	3.6	2.9	3.4	3.4
European Union	8.1	10.5	7.8	7.6
USA	5.6	5.6	4.0	5.6
Japan	2.1	3.1	4.7	5.8
Sub-Saharan Africa	—	—	13.7	14.4
Middle East and North Africa	—	—	17.9	18.0

SOURCE: ***ILO, World Commission on Social Dimension of Globalization (2004), p.41.***

As a consequence of increase in unemployment, the share of self-employed, which for most developing regions is a proxy indicator for the size of the informal economy, has increased.

Employment situation in India during the era of Globalization

The employment situation in India has worsened in the era of globalization. The rate of growth of employment which was of the order of 2.04 percent per year during 1983-94 declined to a low level of 0.98 percent during the period 1994-2000. This was largely a consequence of a negative growth rate of employment in agriculture which absorbed about 65 percent of total employed workers as also a sharp decline in community, social and personal services to 0.55 percent during 1994-2000 as against 2.90 percent during 1983-94. This was largely the consequence of neglect of agriculture and shedding the load of excess employment in the public sector by imposing a continuous ban on recruitment and not filling up even the positions vacated by retirement of public sector employers.

TABLE 9 : Growth of Employment by Sectors in India

Sectors	*1983-94*	*1994-2000*
Agriculture	1.51	-0.34
Mining & quarrying	4.16	-2.85
Manufacturing	2.14	2.05
Electricity, gas & water supply	4.50	-0.88
Construction	5.32	7.09
Trade	3.57	5.04
Transport, storage and communication	3.24	6.04
Financial services	7.18	6.20
Community & personal services	2.90	0.55
Total	**2.04**	**0.98**

SOURCE: Government of India, Planning Commission (2001), ***Report of the Taskforce on Employment Opportunities, Table 3.2***

The organized sector which was considered as the engine of growth failed to generate enough employment. During 1994-2000, employment growth in the organized sector was merely 0.53 percent. The growth of employment in the public sector was negative (-0.03 percent) and that of the private sector was of the order of 1.87 percent. But since the share of the public sector in organized sector employment was of the order of 69 percent, enlargement of private sector employment failed to effectively offset the deceleration in the pubic sector. Consequently, the share of the organized sector which was 7.93 percent in 1983 declined to 7.08 percent in 1999-00. Between 1999-00 and 2004-05, this share further declined to 6.4 percent. Between 2004-05 and 2008-09, it improved to 6.9 percent, mainly on account of increase in employment in private organised sector. However growth of employment in public sector continned to the negative (–0.15 percent per annum).

Thus, Globalization pushed workers from the organized sector to swell the ranks of workers in the unorganized sector. It is common knowledge that workers in the organized sector are relatively better paid than those in the unorganized sector, they enjoy better job security and other benefits. Within the organized sector, jobs in the public sector receive much higher wages and accompanying benefits than those in the private sector for similar skills. Besides this, the public sector offers greater job security.

Globalization, therefore, increased the process of informalization of the economy. For instance, it has led to a process of casualization of workforce. Data provided by the National Sample Survey reveals that the proportion of casual workers which was 28.7 percent in 1983 increased to 33.2 percent in 1999-00. This process of casualization or informalization countinued and we find in 2009-10 share of casual labour force was found to the 33.5 percent. However we do find a decline in casual labour force between 1999-00 and 2004-05.

In the study on ***Lockouts in India***, Ruddar Datt has concluded that the employers by application of the instrument of lockouts have been able to achieve the following objectives in the era of globalization and liberalization : (i) to bring about reduction of surplus labour (downsizing); (ii) to increase workload per worker in order to raise overall production and productivity; (iii) to bring about greater casualization of work force, thereby reducing obligation to pay dearness allowance, provident fund, gratuity, ESI dues etc.; (iv) to force workers to accept, 'no work, no pay' for the entire period of lockout; (v) to force stringent norms of work even in violation of Industrial Disputes Act; (vi) to force agreements prohibiting labour to go on strike for three years; and (vii) to weaken trade unions.

Even in the organized sector, an increasing number of jobs are assuming characteristics of those in the unorganized sector as a consequence of policies of flexibilization of labour in the wake of globalization. In a study comprising about 1,300 firms, spread out over 10 states in India and covering 9 important manufacturing industry groups both in the public and the private sector in India, it was revealed that between 1991 and 1998 although the total employment increased by over 2 percent, most of the increase was accounted for by temporary, casual, contract and other flexible categories of workers. (Deshpande, *et. al.,* 2004).

Globalization has accelerated the process of proletarianization of labour. The problems of unemployment, casualization, lower wages, part-time jobs, less or no security in jobs have manifested themselves in a much greater degree. Consequently, the share of capital in value added has been pushed up by a process of cost cutting. Raising productivity by downsizing is only denominator management of productivity. A higher profit has been the result of exploitative efficiency, rather than basing globalization on enlarging growth opportunities for both the management and labour. The bargaining power of trade unions has been considerably reduced and they are to accept *'concession bargaining'*, instead of 'collective bargaining' earlier resorted to resolve labour disputes. To save the workers from job losses, the trade unions are forced to accept cuts in wages and salaries, freezing of dearness allowance and other benefits, a higher share of casual labour in employment, voluntary suspension of trade union rights for specific period, agreeing to the commitments of modernization and consequent reduction of labour force. The weakening of workers bargaining capacity has resulted in a rise in the militancy of employers and this process has manifested in a significant increase in the incidence of lockouts and a decline in strikes. In the pre-liberalization phase-between 1976 and 1990 – the mandays lost due to strikes were 54.9 percent and due to lockout were 45.1 percent; the corresponding figures for lockouts and strikes for the period 1991 and 2000 were 60.8 percent and 39.2 percent respectively. Not only that, the average duration of lockout was roughly 2.5 times the duration of strike. (Datt, 2003)

Inequality and Poverty

ILO Report (2004) in a very forthright manner states: "Income inequality has increased in some industrialized countries, reflected in an increase in the share of capital in national income as well as an increase in wage inequality between mid-1980s and the mid-1990s." (ILO, 2004, p.42). In United States, the chief flagbearer of globalization, the share of top 1 percent of income earners reached 17 percent of gross income in 2000, a level last observed in the 1920s. This increased concentration of wealth has been the prime factor in the rise of

inequality. Consequently, the share of the bottom 10 percent of wage earners has declined.

The widening inequality has been the result of the very high compensation (salaries and perks) paid by MNEs, the development of new businesses with a global reach and global "superstardoms". The public perception is that globalization has resulted in high degree of concentration of wealth.

The ILO Report (2004) identifying the people who have benefited most states: "As in the case of countries, the people who benefited most from globalization include those associated (as shareholders, managers, workers or sub-contractors) with successful MNEs and with internationally competitive national enterprises. More generally, those endowed with capital and other assets, entrepreneurial ability and education and skills are in increasing demand have all benefited." (ILO, *WCSDG,* p.46)

"Conversely, the adversely affected include those associated with uncompetitive enterprises that have been unable to survive in the face of trade liberalization or the entry of foreign firms. These enterprises include those previously highly protected by trade barriers, subsidized state enterprises, and small and medium sized enterprises that had a limited capacity to adjust to a rapid liberalization of the economy." (ILO, *WCSDG,* 2004, p. 46)

Cheap imports lead to the closure of a large number of vulnerable small enterprises, they have adversely affected the informal economy as well as agriculture. The upshot is that as a consequence of globalization, the poor, the assetless and unskilled workers were the losers, and the rich endowed with capital and human capabilities have been the winners. This is particularly true of employment in firms acting as sub-contractors to Multinational Corporations (MNCs) even in labour intensive industries such as garments and footwear. To protect fundamental rights of the workers, international action is necessary.

The situation in India on growing Inequalities

There is no doubt that poverty has declined from 36.0 percent in 1993-94 to 26.1 percent in 1999-00, though at a relatively decreasing rate in the post-liberalization period, there is unanimity among economists about a rise in inequality or relative deprivation. The estimates of growth rates in per capita expenditure between 1993-94 to 1999-00 point to a significant increase in rural-urban inequalities at the all-India level, as also in most of the states. There has been significant increases in differences in wage/salary incomes between those in rural and urban sectors. (Deaton and Dreze, 2003).

Regarding social deprivation, it is worthwhile to note that decline in poverty among scheduled castes (SCs) and scheduled tribes (STs) has been considerably slower than in other categories during 1993-94 and 1999-00. In the year 1999-00, the proportion of population below poverty line among SCs and STs were 36 and 44 percent as against 16 percent in the case of other categories. The natural rights of the tribals on forest land and forests are being progressively appropriated by Indian corporations and MNCs, thus causing serious disadvantage to both income and employment of tribals. As a result of globalization and liberalization, a systematic process of exploitation of tribal communities has been unleashed, for which the reform process provides legitimacy.

Slowing down of the process of Poverty Reduction

Based on the consumer expenditure data of the 55th Round of National Sample Survey, poverty ratio on 30-day recall basis has been calculated for 1999 –2000 as 27.1 percent for the rural areas, 23.6 percent in urban areas and 26.1 percent for the country as a whole.

Gaurav Datt, Valerie Kozel and Martin Ravallion of the World Bank in their paper "A model based assessment of India's" progress in reducing poverty in 1990's suggest that the key determinants of the rate of poverty reduction at the state level are agricultural yields, growth of non-farm sector (depending on the states initial conditions), development spending and inflation. The model has given the following findings :

1. The rate of average annual poverty reduction in 1990's was slightly lower than in the 1980's.
2. National: 0.8 percentage points against 1 percentage points.
3. Rural : 0.9 percentage against 0.7 percentage points
4. Poverty reduction in the 1990s is also slower than expected from historical (pre-reform) national elasticity of poverty with respect to mean consumption growth, that is 0.8 percentage points in the 1990s as against 1.6 percentage points in the earlier period.

It may be noted that the growth rate of GDP has

been estimated to be higher in 1990s than that in the 1980s. The paradox of higher growth of GDP and lower rate of poverty reduction is the direct result of the unequal distribution of income between the rich and the marginalized sections of the population. Moreover, the main reason for the slow decline in poverty reduction is the geographical pattern of growth promoted by the policies of liberalization, privatization and globalization. Policies of globalization helped the already industrialized states much more than the less industrialized states and this combined with agriculture has been responsible for the geographically skewed pattern of economic growth in post-reform period.

Double Standards of Developed Countries

Developed countries demand so many concessions and reduction of tariffs from developing countries, but are they encouraging free flow of trade, capital and technology across states; or are they using globalization to their advantage?

Stiglitz exposes the hypocrisy of Western countries: "The Western countries have pushed poor countries to eliminate trade barriers, but kept up their own barriers, preventing developing countries from exporting their agricultural products and so depriving them of desperately needed export income. The United States was, of course, one of the prime culprits.... It was not just that the more advanced industrial countries declined to open up their markets to the goods of developing countries – for instance, keeping their quotas on a multitude of goods from textiles to sugar – while insisting that those countries open up their markets to the goods of the wealthier countries; it was not just that the more advanced industrial countries continued to subsidize agriculture, making it difficult for the developing countries to compete, while insisting that developing countries eliminate their subsidies on industrial goods. Looking at the "terms of trade" – the prices which developed and less developed countries get for the products they produce – after the last trade agreement in 1995, the net effect was to lower the prices of some of the poorest countries in the world received relative to what they paid for their imports. The result was that some of the poorest countries in the world were actually made worse off". (Stiglitz, 2002b, pp. 6-7)

The large number of suicides committed by farmers in India was the direct result of the double standards adopted by the developed countries to sell their agricultural products like cotton in world markets at relatively much lower prices, thereby eliminating Indian cotton growers to export.

Feminization of labour in low wage jobs

The forces of globalization have resulted in an increase of women's employment into low paid jobs, in manufacturing, particularly in Asia. Guy Standing has drawn pointed attention to the fact that the decade spanning the late 1980s and 1990s is one of feminization of flexible labour in industries where profit margins are protected by reducing labour costs, extending hours and decreasing the number of formal production workers. (Standing, 1999) Since majority of women are working in the informal sector, they are most affected by the forces of free trade and are driven into low-end jobs. This can be seen in export-oriented low technology high-labour based industries, specially promoted in export processing zones (EPZs) like garments, shoes and electronics. Another category of degraded labour is the home-based labour with a rapidly growing share of females. Employers prefer to undertake contracts with home-based workers because they pay very low remuneration for the work done by them. By exploiting unorganized home-based workers, the employers are able to reduce their costs to the minimum. Thus, unskilled or low-skilled home-based workers, majority of whom are women, actually subsidise capitalist growth by providing infrastructure, tools and equipment. Feminization of workforce has enabled the capitalist class to increase its share in value-added, while paying workers below minimum wage. The unfair treatment of women labour which has been accerbated by globalization calls for remedial action.

Goal of full employment and decent work sidelined under Globalization

ILO has been pleading for the "promotion of opportunities for men and women to obtain decent and productive work, in conditions of freedom, equality, security and human dignity." The goal of decent work can be achieved by promoting growth along with the objective of full employment. The increasing casualization and feminization of labour under the slogan of globalization has led to indecent work and the process of proletarianization seems to be legitimized under globalization. ILO rejects the two step strategy of "first job creation and then to decent work." It rejects on the basis of ethical principles the view that "Bad jobs and bad wages are better than no jobs." Stiglitz in a very

forthright and forceful manner writes about the emergence of indecent work under globalization. "We must speak out more loudly against policies which work against the interests of workers. At the very least, we must point out the trade-offs, we must insist on democratic processes for determining how economic decision are made. We have remained silent on these issues for too long – the consequences have been grave." (Stiglitz, 2002a, p.27)

World Commission on Social Dimension of Globalization (2004) says in unambiguous terms: "The goal of full employment and achieving decent work for all receives low priority in current international policies." (ILO 2004, p.79). At a time, when state intervention was needed to move towards the goal of full employment and decent work, the globalization wave has sidelined these goals to build a better and humane society and is propagating competitiveness, a euphemism for cost-cutting and promotion of the share of capital in the process of development, adversely affecting the share of labour in national income.

The World Commission quoting a participant in the Philippines dialogue mentions: ***"There is no point to a globalization that reduces the price of a child's shoes, but costs the father his job."*** There was frequent reference to the difficulties faced by small enterprises in taking advantage of globalization – and yet that is where most employment is created. The rural and informal economies remain on the margins, and the result is persistent poverty." (ILO, 2004, p.13)

Weakening of the Welfare State in favour of markets

The advocate of globalization have been propagating a minimal role for the state accompanied with a maximum role for the markets. But there is an increasing trend towards erosion of sovereignty of nation-states. Pressure of multi-national corporations, the IMF and World Bank force governments to take decisions about privatization of public enterprises, opening of FDI in several sectors, such as retail trade, consumer goods like potato chips, hurting small and medium enterprises leading to their closure and resultant unemployment. Globalization has also resulted in widening inequalities between the forward and backward states in India and also within groups have helped to create an elite. As a consequence, exclusion of marginalized groups, the poor and the assetless is taking place. It has also led to declining earnings of unskilled labour, destruction of environment and deprivation of basic human rights including the right to work and rights at work-place. Globalization has led to more insecurity for workers, increased militancy of employers against workers and enhanced the phenomenon of lockouts.

Moreover, markets have failed to provide resources for the development of infrastructure, more especially in rural areas. Globalization has bypassed agriculture – the principal source of livelihood of over 60 percent of the population. Moreover, globalization triggered the process of privatization, but the entry of powerful MNCs replaced public monopolies with private monopolies. "Whether the privatized monopolies were more efficient in production than government, they were often more efficient in exploiting their monopoly position; consumers suffered as a result." (Stiglitz 2000b, p.56)

It is now well recognized that globalization lacks social responsibility. But to restore more social responsibility and the need to create conditions for decent work and a 'decent society' which cares for the poor, the weaker sections, the small entrepreneur, it is vitally necessary to strengthen the regulatory and promotional role of the state. The present situation in which 'government reigns, but global capital rules' has to be altered in a fundamental sense. D. Narasimha Reddy in his presidential address to the India Society of Labour Economics (2004) concluded: "That markets have a place but the task is to place the markets in their place. Markets should not be allowed to destroy the social fabric, which even the state cannot reconstruct easily. Markets need to be regulated in order to prevent them from causing social disruption. The task of ensuring 'decent work' in the third world is a task of restoring the state its rightful place in development." (Reddy, Narasimha D, 2004, p.16).

3. FAIR GLOBALIZATION AND THE NEED FOR POLICY FRAMEWORK

Outlining the objectives of globalization, ILO Report states: "Our primary concerns are that globalization should benefit all countries and should raise the welfare of all people throughout the world. This implies that it should raise the rate of economic growth in poor countries and reduce world poverty, and that it should not increase inequalities or undermine socio-economic security within countries." (*WCSDG*, 2004, p.35) In that sense, the world should move towards more "humane globalization."

This is a realizable vision. The resources exist to overcome the most pressing problems of poverty, disease and education. ***Mahatma Gandhi put it very simply: "There is enough in the world for everybody's need, but there cannot be enough for everybody's greed."***

However, globalization has not worked for the

interests of the world's poor. It has led to increase in inequalities across the countries as well as within the countries. It is not working to sustain environment. The transition from communism to market economy or from highly regulated states to market economy has been so badly managed that, but for China, Vietnam and a few other countries in Eastern Europe, poverty has soared as incomes have plummeted. ***The fault does not lie in globalization, but the way it has been managed***. ILO Report sums up the situation: "The economy is becoming increasing global, while social and political institutions remain largely local, national or regional." (*WCSDG*, 2001, p.3). The rules of world trade largely favour the rich and powerful countries and more often work against or ignore the interests of the poor or weak countries:

Wide international consensus exists on essentials which all countries must strive for:

- Good political governance based on a democratic political system, respect for human rights, the rule of law and social equity.
- An effective state that ensures high and stable economic growth, provides public goods and social protection, raises the capabilities of the people through universal access to education and other social services, and promtes gender equity.
- A vibrant civil society, empowered by freedom of association and expression, that reflects and voices the full diversity of views and interests. Organizations representing public interests, the poor and other disadvantaged groups are also essential for ensuring participatory and socially just governance.
- Strong representative organizations of workers and employers are essential for fruitful social dialogue.

The highest priority must be gives to policies to meet central aspiration of women and men for decent work, to raise the productivity of the informal economy and to integrate it into the economic mainstream; and to enhance the competitiveness of enterprises and economies. So far globalization has helped to create an increasingly global economy, but it has not succeeded in creating a global community with commonly shared goals. Thus, there is a need for a more fair and inclusive globalization.

Agenda for a fair and inclusive growth

With the introduction of economic reforms in 1991, the government announced the New Industrial policy. It was feared that there are likely to be some adverse effects. The government made it clear that closure or retrenchments would be undertaken as a last resort. To reduce the hardship of the transition to a changed order, a National Renewal Fund (NRF) was created in 1992-93. Workers were to be paid Voluntary Retirement Benefits out of NRF. Besides this, the objective of the fund was to provide retraining and deployment of workers. However, in practice 93 percent of the NRF was used for Voluntary Retirement Scheme (VRS) and the other objectives were totally ignored. Besides this, the Government strengthened the public distribution system (PDS) to minimize to some extent the adverse effects of liberalization and globalization. But the fact of the matter is that during the decade of the 1990s, there was an increase in unemployment as also deterioration in the quality of employment. The poor did not benefit from policies of liberalization and globalization and only a small section of the population pocketed all its benefits.

The ILO Report recording the perception of globalization mentions: "In India, the message was more mixed, there had been winners and losers. The lives of the educated and the rich had been enriched by globalization. The information technology (IT) sector was a particular beneficiary. But the benefits had not yet reached the majority, and new risks had cropped up for the losers – the socially deprived and rural poor. Significant numbers of "non-perennial" poor, who had worked hard to escape poverty, were finding their gains reversed... Power was shifting from elected local institutions to unaccountable transnational bodies." (*WCSDG*, 2004, p.17) Obviously, such a perception of globalization needed remedial action so that it could fulfill the objectives given above.

Macro-Economic and Employment Generation Policy

Under globalization, macro-economic policy has been emphasizing acceleration of growth rates and it was presumed that employment generation would be a concomitant of growth. But unfortunately, this did not happen. Whereas the GDP growth was of the order of 6 percent during 1993-94 to 1999-00, employment growth slumped to a level of 1.0 percent per annum. It may be noted that during the ten-year period (1983 to 1993-94) employment growth rate was of the order of 2.0 percent per annum with relatively lesser growth rate of GDP. In the period following liberalization and globalization,

whereas the expansion of public sector employment was restricted due to the scheme of voluntary retirement and downsizing, private sector investment failed to fill the gap. Consequently, total growth of employment suffered a decline.

Agriculture which employed 60.4 percent of the labour force in 1993-94 accounted for only 56.7 percent in 1999-00. During 1993-94 and 1999-00, the employment growth rate in agriculture was barely 0.02 percent. Thus, the major source of employment, that is, agriculture, became dry. It had an impact on non-farm employment also. Since agriculture plays a dominant role in the creation of employment, public sector investment in agriculture will have to be revived so that infrastructure required for irrigation and water management, credit and marketing is strengthened. In India, it is vitally necessary to tap the high potential in agriculture by directing investment in backward regions. In rural sector, the potential for non-form employment in agro-industries is quite high. Once a revival of growth rate in agriculture takes place, it will certainly strengthen the growth of agro-industries like food-processing. However, care has to be taken that big multinationals are not allowed to appropriate a high share of agro-industries. The MNCs apply high level technology and thus, reduce the scope for enlarging employment. The job can be entrusted to indigenous medium-sized industries and/or co-operatives. There is a strong need to provide adequate credit, appropriate technology, marketing and other support for the purpose.

Improving the Productivity of Employment

In India, open unemployment is very small. The major problem of the Indian economy is under-employment. Out of the total unemployment of 7.32 percent, open unemployment was only 2.81 percent, whereas under-employment was of the order of 4.41 percent. It is very necessary that work should be provided to the already unemployed and new entrants to the labour force, and for this purpose, employment strategies have to be woven within the growth strategy. But bulk of the under-employed, especially those who are severely under-employed are living below the poverty line. Employment generation programmes like the Jawahar Rozgar Yojna and the Prime Minister's Gram Rozgar Yojana, do help to reduce under-employment. In that sense, these programmes do have a role in poverty reduction. There is a need to make these programmes better targeted so that the poor are helped in a genuine manner. But a more important action needs to be taken in integrating the growth objective and the employment objective. Though this is not an easy task to accomplish, yet it is vitally necessary. For this purpose, it would be desirable that those sectors of the economy which have relatively higher employment elasticities should be promoted. A judicious mix of sectors with high employment potential and those with moderate or low employment potential be made.

Care, however, has to exercised that the country does not end up with the outcome of 'jobless growth'. Economists believe that with appropriate policies, higher output growth and higher employment growth objectives can be simultaneously furthered. This will also raise the productivity level of the economy which can have a positive and significant impact on poverty reduction.

Balanced Regional Development

Most of the poor live in backward states. For instance, out of 260 million poor in India in 1999-00, 165 million (63.4 percent) were living in 5 states, viz., Uttar Pradesh, Madhya Pradesh, Bihar, Orissa and Maharashtra. At the same time, the rates of growth in these backward and poor states were lower than in the forward and richer states. Consequently, regional disparities widened and became a matter of grave concern. Moreover, these states were not able to attract foreign direct investment, bank credit and mobilize funds for infrastructure development. Left to the mercy of market forces, regional disparities will wider still further. Since these states have a larger population dependent on agriculture and living in rural areas, development strategy has to make a concerted effort to bring about agricultural modernization, rural industrialization and rapid human development (education, health and skill development). Basic infrastructure services like transport and communications, provision of electric energy have to be extended to remote rural areas. Besides this, both pubic and private sector investment has to be promoted to increase irrigation facilities and water management. For instance, the development of minor irrigation is Eastern India and watershed management in Central India coupled with better extension services can definitely help to improve the productive capacity in agriculture. If supported by programmes of rural industrialization, it can have beneficial effects on both employment and growth rates. This can also lead to expansion of industries and services gradually. But huge investments are required for the purpose which the backward states cannot manage. Obviously, the Central Government should provide the much needed resources for infrastructural development.

Once infrastructures are in place, it would be possible to attract private sector investment. Such a vision of development of backward states would help to achieve the goal of balanced regional development and lead to reduction in regional disparities.

Social Sector

Human capital formation helps in promoting capabilities of the people so that they can reap the benefits of globalization. For this, a country must increase its expenditure on education, health and poverty alleviation programmes. In case, the entire responsibility for financing health and education has to be borne by the individual, then left to the market forces, only the rich will be able to acquire human capital and the poor, by and large, will be excluded. Globalization, has further increased the need for acquiring skills, because the main drivers of globalization are the multinationals who use latest high level of technology. To save the poor from exclusion from the benefits of globalization, it is necessary for the state to increase public investment in social sector. At present, India spends 3.74 percent of GDP on education during 2003-04. Need it be mentioned that during 1990s practically the same level of public expenditure was incurred on these two major items pertaining to human capital formation. But to provide quality education and health, a much larger amount should be spent. It is now well-documented that human development is conducive to economic growth. Therefore, it is vitally important that to promote an integral approach to development, a much greater effort in terms of both monetary and non-monetary resources has to be made so as to promote employment growth and social security, education and health and an effective poverty reduction programme.

Employment Guarantee Programme

Poverty is only a manifestation of unemployment or low level employment, popularly referred to as under-employment. To alleviate poverty, a number of programmes were initiated by the Government, such as Jawahar Rozgar Yojana, Employment Assurance Scheme (EAS), Prime Minster's Rozgar Yojna (PMRY), Pradhan Mantri Gram Sadak Yojana (PMGSY) etc. There is no doubt that these schemes did help to provide employment, more especially, in the rural areas and consequently, alleviate poverty. However, there was no scheme which guaranteed employment to take care of the 'Right to work'. Recently, the Government by the passage of the National Rural Employment Guarnatee Act, 2004 has assured at least 100 days of employment on asset-creating public works programme every year at minimum wages to at least one able-bodied person in every rural household who volunteers to do casual manual labour in rural areas. There is no doubt that earlier only Maharashtra Employment Guarantee Scheme existed. This step of the UPA Government is the first national programme which provides universal assistance to all state governments to implement Employment Guarantee for the rural population. This step, according to the Act, is a 'major step towards the realization of the right to work'.

There is no doubt that the act is based on the inclusive concept of development and does not leave the provision of employment at the mercy of the market forces. In that sense, it is a step forward. However, there are several shortcomings pointed out by the critics. Firstly, the restriction of the Employment Guarantee to rural areas is unjustified, the Act should have been made applicable to rural as well as urban areas. Secondly, limiting guarantee for only 100 days in a year leaves the manual labourers to fend for themselves during the remainder part of the year. Moreover, only those who volunteer for ***Casual manual*** labour are covered under the Act. A large number of educated and trained workers who seek employment in better quality work are left in the cold. Thus, National Rural Employment Guarantee Act is a half-way measure in its present form. Its scope has to be universalized to include all unemployed, and the programme must continue throughout the year instead of being a lean season programme. The selection of assets should be carefully done so that really productive assets are created which in turn should accelerator agricultural growth as well as overall growth. If the target of poverty reduction with full employment has to be achieved, 1.5 to 1.7 percent of GDP is not a high cost for the objectives of the programme.

Raising the Productivity in Informal Sector

In most developing countries, the informal sector is a major source of employment. It consists of small manufacturing enterprises, services or vending in urban areas, domestic work and agricultural work on small plots of land. In India, it is also referred to as unorganized sector. The unorganized sector provided 63 percent of Net Domestic Product, but provided employment to 93 percent of workforce. The forces of globalization and liberalization have focused attention only on the

organized sector, but have excluded workers in the unorganized sector from the beneficent effects of globalization. ILO Report mentions: "While some informal workers provide low-cost inputs to global production systems, the majority are excluded from the opportunities of globalization and confined to restricted markets." (WCSDG, 2004, p.60)

The goal must be to make these informal activities part of a growing formal sector that provides decent jobs, incomes and protection and can trade in the international system. This will be an essential part of national strategy to reduce poverty. This implies that the assets of informal sector are increased, their technology improved and biases against this sector in the policy are removed. A greater access to public infrastructure can also be very helpful. All this should be intended to raise productivity of the informal sector and shift informal activities to the formal sector.

Promotion of Skill Development

New technologies are overtaking the earlier ones at a very fast rate. The situation of short-life-cycle of modern technology necessitates retraining of the existing employees and skill development of new entrants to the labour force. For this purpose, it is essential that new institutions be established to meet the growing needs of the market. These institutions, set up by the state, should be totally free from bureaucratic control so that they redesign the training programmes. Universities should also re-orient their courses to meet the needs of market. They should promote university industry partnership in designing new courses.

The Government has realized the need for skill development and set up a number of institutions. Similarly, private institutions have also been set up to impart training in computer courses, various kinds of management courses, technical courses etc. But the fee charged in private institutions is very high and as a consequence, the poor and lower middle classes are marginalized. To help the poor and lower middle classes to acquire training, the State and some socially motivated NGOs have to play a part so that younger boys and girls belonging to poorer sections of the society are enabled to develop their skills and rise up in the income ladder. The Government should pump in more resources for the purpose which it has not done so far.

Organizations of the Working Poor

To save labour from the exploitation by Indian capitalists and MNCs, the voice of labour should be heard both by the government and the employers. The weakening of trade unions has weakened the collective bargaining of labour. Moreover, trade unions have so far been limited among workers in the organized sector. Only recently, they have started paying attention to unorganized labour. The trend to create occupation-based trade unions should be strengthened, since the goal of decent work is still more difficult to achieve among them. So far, this major component of labour has not benefited from liberalization and globalization. Rather, by providing low cost labour inputs, they have helped exporting firms to appropriate more profits. Instead of having a conflict-ridden production, a harmonius structure should be evolved in which government, trade unions and employers are considered partners in production. Such a structure world be more conducive to the development of fair globalization.

The foregoing analysis has outlined the policy framework for a fair globalization which should integrate the objectives of growth, employment and equity. The goal of decent work in the era of globalization can be achieved only by reducing the adverse impact of globalization on labour. Besides this, to reduce regional disparities, it would be necessary to strengthen public programmes of building social and economic infrastructure in backward regions. These programmes should be specially targeted to improve growth rates in agriculture which has so far been neglected or adversely affected by the high level of subsidies given to the farmers in developed countries. Globalization has been unfair to underdeveloped and least developed countries. It has helped only the rich and the powerful. True need of the hour is to change its course so that it becomes inclusive and brings with in its fold the marginalized sections of the society. Only such a fair globalization can help to promote growth and employment, lead to decent work and balanced regional development. The spread effects of globalization have to be widened so that it becomes a real instrument of poverty-reduction.

Prof. John Haris, Director, Development Studies Institute, London School of Economics, speaking on 18th February 2005 in Chennai mentioned: Achieving growth with productive employment generation is the challenge India faces. India has been experiencing jobless growth over the last 15 years or so which means a large number of people have been marginalized even as the economy has grown. Pitching for globalization that is inclusive, Prof. Hariss said: "India has such a huge domestic market that it needn't rely on the overseas market for growth, but to realize that potential, people need to have incomes" (***Business Line***, 15 February 2005) India should, therefore, endeavour to achieve synergy between employment generation and growth.

4. GLOBALIZATION IN REVERSE GEAR - THE THREATENED RE-EMERGENCE OF PROTECTIONISM

The flag-bearers of globalization, the USA and EU countries who propagated free trade, pulling down of tariff walls and movement towards a borderless world so far as trade was concerned are making noises to isolate their economies by protectionist policies in the wake of the current global financial crisis and the economic slowdown. The US has been sending mixed signals. President Barrack Obama seems to have recently reversed his earlier stance of bringing jobs back to America, saying that he would rather focus on creating high-skill, well-paying jobs in the US. However, a 'Buy American' clause has been added in the stimulus package of $800 billion which imposes restrictions on the use of non-American material in all public works programmes that will be funded by the stimulus package. Similar restrictions are imposed on hiring foreign workers by banks and firms benefiting from the package. In Great Britain labour unions have been demanding 'British jobs for British Workers.' In a similar way, the French Government has directed its firms to reduce production abroad and increase production at home. Other EU countries intend to raise agricultural subsidies. The major thrust of these policies is to adopt inward-looking policies so that national economies are able to boost production and ensure jobs for their natives.

The question arises: Will this protectionism help economic growth and reduce the impact of recession? Neeraj Kaushal provides an answer: 'Alas, protectionism will not trigger economic growth nor bring an end to what has been widely labeled as the worst recession since the Great depression; the US government passed the Smoot Hawley Act that imposed high import duties on approximately 3,000 foreign goods. In response, European countries retaliated by imposing equally high tariff duties on goods manufactured in the US. The result was a deepening of recession in both US and Europe." (Neeraj Kaushal, Perils of Protectionism, Economic Times, February 24, 2009). Since foreign trade occupies an important component of the economies of various countries, what they gained on the swings may be lost on the roundabouts.

The principal danger of protectionist policies is that they protect inefficient industries that cannot face international competition, while the efficient ones will be the losers. It is true that steel manufacturers will benefit from native policies, but high-tech companies like Microsoft, Intel, Apple, General Electric and Boeing may have an adverse impact if China, India and other trading partners impose high tariffs on goods provided by them.

There is another danger which may arise if America's major trading partners, viz., China, India and Brazil who have not signed the 1995 WTO agreement on government procurement may retaliate. These countries may decide to move their high technology imports to Japan or Europe.

The answer to global recession is not isolationism. This may prove to be counter-productive. For instance, the US government has provided a huge stimulus package for the auto industry. Similarly, other countries, Germany, France and Sweden have also provided relatively small packages. But the fact of the matter is that most car manufacturers have worldwide businesses. So isolationism will certainly affect their international operations. It is, therefore, necessary that isolationism may be avoided, and recession be cured by overall measures of stimulating production and employment so that demand starts picking up.

Radical change in the structure of banking

Another step that is being mooted is to bring about a radical change in banking policy. Mr. Alan Greenspan, former chairman Federal Reserve who was considered to be the high priest of laissez-faire capitalism has suggested: " It may be necessary to temporarily nationalize some banks in order to facilitate a swift and orderly restructuring." In its Global Financial Stability Report for 2008 released on January 28, 2009, the IMF has estimated the losses incurred by US and European Banks from bad assets that originated in the US at $2,200 billion. The figure may rise further because the survey is not yet complete. Even US President Barrack Obama believes that a privately held banking system regulated by the Government is what should be the new framework in which US banks should operate.

In this context, the experience of banking in India after nationalization of 1969 is very valuable. During the last three decades, nationalized banks have enjoyed autonomy in their operations within the regulatory framework and the guidelines prescribed by the Reserve Bank of India. Recession has not hit any bank in India, though they are required to bring about changes in lowering interest rates on loans following rate cuts by the Reserve Bank of India. It has now been established that there is no automatic adjustment mechanism. Key components of the market system need effective regulation.

The upshot of this analysis that protectionist policies like 'But American' or no outsourcing of jobs only signify globalization in reverse gear. They will not salvage the world economy plagued by the recession of 2008 and are more likely to have a "beggar thy neighbour" effect. It is much more necessary to step up pubic investment and spending along the lines of what was recommended long ago by John Maynard Keynes.

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CHAPTER

17

PLANNING EXPERIENCE IN INDIA

"Planning is, not a once-for all exercise for a five-year period, it requires a continual watch on current or incipient trends, systematic observation of technical, economic and social data and adjustments of programmes in the light of new requirements."

– Planning Commission

We propose to study in this chapter the development plans of India and thereby understand whether economic development under planning is taking place at an adequate pace and in the right direction. In this chapter, we shall give a broad overview of the first nine five year plans.

1. FIRST NINE FIVE YEAR PLANS (1950-51 TO 2001-02)

Since 1951, India has completed nine five-year plans. The guiding principles of India's Five-Year Plans are provided by the *basic objectives of growth, employment, self-reliance and social justice*. Apart from these basic objectives, each five-year plan takes into account the new constraints and possibilities faced during the period and attempts to make the necessary directional changes and emphasis.

Approach to each Plan

At the time of the First Five Year Plan (1951-56) India was faced with three problems--influx of refugees, severe food shortage and mounting inflation. India had also to correct the disequilibrium in the economy caused by the Second World War and the Partition of the country. Accordingly, the First Plan emphasised, as its immediate objectives the rehabilitation of refugees, rapid agricultural development so as to achieve food self-sufficiency in the shortest possible time and control of inflation. Simultaneously, the First Plan attempted a process of all-round balanced development which could ensure a rising national income and a steady improvement in the living standards of the people over a period of time.

The Second Plan (1956-61) was conceived in an atmosphere of economic stability. Agricultural targets fixed in the First Plan had been achieved. Price level had registered a fall and, consequently, it was felt that the Indian economy had *reached a stage where agriculture could be assigned a lower priority and a forward thrust made in the development of heavy and basic industries of the economy for a more rapid advance in future.* The basic philosophy of the Second Plan was, therefore, to give a big push to the economy so that it enters the take-off stage.

Besides, the Government announced its Industrial Policy in 1956 accepting the establishment of a socialistic pattern of society as the goal of economic policy. This

necessitated the orientation of economic policy to conform to the ***national goal of "socialist economy"***. Accordingly, the Second Plan aimed at ***rapid industrialisation with particular emphasis on the development of basic and heavy industries***, such as iron and steel, heavy chemicals, including nitrogenous fertilisers, heavy engineering and machine building industry.

By the beginning of the Third Plan (1961-66) the Indian planners felt that the Indian economy had entered the "Take off stage" and that the first two plans had generated an institutional structure needed for rapid economic development. Consequently, the Third Plan set as its goal the establishment of a ***self-reliant and self-generating economy***. But the working of the Second Plan had also shown that the rate of growth of agricultural production was the main limiting factor in India's economic development. The experience of the first two plans suggested that agriculture should be assigned top priority. The Third Plan accordingly gave top priority to agriculture but it also laid adequate emphasis on the development of basic industries, which were vitally necessary for rapid economic development of the country. However, because of India's conflicts with China in 1962 and with Pakistan in 1965, the approach of the Third Plan was later shifted from development to defence and development.

The original draft outline of the Fourth Plan prepared in 1966 under the stewardship of Ashok Mehta had to be abandoned on account of the pressure exerted on the economy by two years of drought, devaluation of the rupee and the inflationary recession. Instead, three Annual Plans (1966-69) euphemistically described as "Plan Holiday" were implemented. India learnt a bitter lesson during Indo-Pakistan war when its so-called allies refused to supply essential equipment and raw materials for its economic development. The Fourth Plan (1969-74) set before itself the two principal objectives of ***"growth with stability"*** and ***"progressive achievement of self-reliance"***. The Fourth Plan aimed at 5.5 per cent average rates of growth in the national income and the provision of national minimum for the weaker sections of the community--the latter came to be known as the objectives of 'growth with justice' and "Garibi Hatao" (Removal of poverty).

The Fifth Plan (1974-79) was introduced at the time when the country was reeling under a veritable economic crisis arising out of a run-away inflation, fuelled by the hike in oil prices since September 1973 and failure of the Government take-over of the wholesale trade in wheat. But the Indian planners were concerned with the slogans of 'Garibi Hatao' (Removal of poverty) and the ***"growth with social justice"***. The original approach paper of the Fifth Plan prepared under C. Subramaniam in 1972 emphasised that "the main causes of abject poverty were open unemployment, under-employment and low resource base of a very large number of producers in agriculture and service sectors." The elimination of poverty could not be attained simply by acceleration in the rate of growth of the economy alone but the strategy should be to launch a direct attack on the problems of unemployment, under-employment and massive low-end poverty. But this approach was eventually abandoned and the final draft of the Fifth Plan prepared and launched by D.P. Dhar proposed to achieve the ***two main objectives***, viz., ***removal of poverty and attainment of self-reliance***, through promotion of higher rate of growth, better distribution of income and a very significant step-up in the domestic rate of saving. The Fifth Plan, however, was terminated by the Janata Party at the end of the fourth year of the Plan in March 1978.

There were two Sixth Plans. The Janata Party Sixth Plan (1978-83) openly praised the achievements of economy in terms of self-reliance and modernisation but held the Nehru model of growth responsible for growing unemployment, for the concentration of economic power in the hands of a few powerful business and industrial families, for the widening of inequalities of income and wealth and for mounting poverty. The Janata Sixth Plan sought to reconcile the objectives of higher production with those of greater employment so that millions of people living below the poverty line could benefit therefrom. The focus of the Janata Sixth Plan was enlargement of the employment potential in agriculture and allied activities, encouragement to household and small industries producing consumer goods for mass consumption and to raise the incomes of the lowest income classes through a minimum needs programme. After the defeat of the Janata Party, the Congress came to power in 1980 and decided to have a new Sixth Plan. When the new Sixth Plan (1980-85) was introduced by the Congress, the Planners rejected the Janata approach and brought back Nehru Model of growth by aiming at a ***direct attack on the problem of poverty by creating conditions of an expanding economy.***

The Seventh Five Year Plan (1985-90) was introduced in April 1985, after the country had enjoyed a reasonable rate of economic growth of the order of 5.4 per cent during the Sixth Plan. The Seventh Plan sought to emphasise policies and programmes which would accelerate the growth in foodgrains production, increase employment opportunities and raise productivity--all these three immediate objectives were regarded central to the achievement of long-term goals determined as far back as the First Plan itself.

The approach to the Eighth Five Year Plan (1990-95) was approved in September 1989 and the Eighth Plan

was to be introduced in April 1990. However, there were a series of changes in Governments at the Centre, necessitating constant reconstitution of the Planning Commission and preparation of a series of versions of the "approach" to the Eighth Plan. Finally, the fourth version of the Eighth Plan (1992-97) was approved at a time the country was going through a severe economic crisis caused by a balance of payments crisis, a rising debt burden, ever-widening budget deficits, mounting inflation and recession in industry. The Narasimha Rao Government initiated the process of fiscal reforms as also of economic reforms with a view to provide a new dynamism to the economy. The Eighth Plan (1992-97) reflected these changes in its attempt to accelerate economic growth and improve the quality of life of the common man.

The Ninth Plan prepared under the United Front Government was released in March 1998. The same was modified and approved by the National Development Council in February 1999, nearly two years after its implementation from April 1, 1997. The focus of the Ninth Plan was on *"Growth with Social Justice and Equality"*. It assigned priority to agriculture and rural development with a view to generating adequate productive employment and eradication of poverty. It aimed at achieving GDP growth of 7 per cent per annum, since during the eighth plan, already a GDP growth rate of 6.5 per cent had been achieved. Besides, it ensured food and nutritional security for all, particularly for the weaker sections of the society. However, the Plan failed to achieve the GDP growth target of 7 per cent and realized only 5.35 per cent average GDP growth.

It is, thus, clear that the short-term objectives of each plan--also called as the Approach to each Plan--reflect the current state of the economy and the economic thinking of the Party in power and of the planners in the Planning Commission.

Plan Outlays/Investments

For each Plan, the Planning Commission fixed an overall total outlay for economic growth, part of which was to be contributed by the private sector and the remainder by the public sector. Initially, the Planning Commission started with modest outlays but, with experience, the planned outlays on development programmes were raised substantially. Table 1 gives the proposed plan outlays, the share of private and public sector outlays and ***the actual public sector outlays in the different plans***.

The total outlay in the First Plan was quite modest – ₹ 3,870 crores and it was more than doubled during the Second Plan – ₹ 7,900 crores reflecting the tremendous sense of confidence which the planners acquired after the success of the first Plan. But because of resource constraints and specially due to severe foreign exchange shortage, the Third Plan outlay was only about 50 per cent more than that of the Second

TABLE 1: Plan Outlays in the Public and Private Sector

(*₹ crores*)

	Total proposed Plan Outlay 1=(2+3)	*Total private sector outlay* (2)	*Total proposed public sector outlay* (3)	*Actual public sector outlay* (4)
First Plan (1951-56)	3,870	1,800	2,070	1,960
	(100.0)	(46.5)	(53.5)	
Second Plan (1956-61)	7,900	3,100	4,800	4,600
	(100.0)	(39.2)	(60.8)	
Third Plan (1961-66)	11,600	4,100	7,500	8,500
	(100.0)	(35.3)	(64.7)	
Fourth Plan (1969-74)	24,880	8,980	15,900	15,900
	(100.0)	(36.1)	(63.9)	
Fifth Plan (1974-79)	53,410	s16,160	37,250	39,430
	(100.0)	(30.3)	(69.7)	
Sixth Plan (1980-85)	1,58,710	61,210	97,500	1,09,290
	(100.0)	(38.6)	(61.4)	
Seventh Plan (1985-90)	3,48,150	1,68,150	1,80,000	2,18,730
	(100.0)	(48.3)	(51.7)	
Eighth Plan (1992-97)	8,71,000	4,37,000	4,34,100	4,85,460
	(100.0)	(50.2)	(49.8)	
Ninth Plan (1997-2002)	23,03,200	14,44,000	8,59,200	7,05,820
	(100.00)	(62.7)	(37.3)	

Note : Figure in brackets are percentages of total outlay.
SOURCE : 1. Plan Documents of Five Year Plans. 2. *Economic Survey, 2005-06*.

Plan. From the Third Plan onwards, however, the increase in the total outlay was over 100 per cent compared to the previous plan and the Sixth Plan outlay in money terms was indeed more than 200 per cent of the outlay of the Fifth Plan. This was true for the Seventh and the Eighth Plans.The Plan outlays are obviously expressed in money terms at different price levels and, therefore, they reflect partly the inflationary rise in prices and partly the increased effort in enhancing development programmes. Even if we deflate the monetary investment to allow for rise in prices, the real outlay during the last three plans was really huge.

The Ninth Plan proposed a total public sector outlay of the order of ₹ 8,59,200 crores at 1996-97 prices for the plan period, but actually, it could realize only ₹ 7,05,200 crores, i.e., 82 per cent of the proposed outlay at 1996-97 prices. In this sense, there was a big shortfall in the proposed and actual outlay of the Ninth Plan. Out of the proposed total public sector outlay of ₹ 8,59,200 crores, the share of investment was of the order of ₹ 7,26,000 crores.

This huge increase in total outlay (or investment) with every five year plan was the result of the confidence of the Planning Commission that the country could absorb increasingly larger doses of investment and that the tempo of economic growth in the country warranted such a huge escalation of investment. The Government has also been successful in raising the rate of domestic savings and mobilise additional resources from foreign countries and institutions. To supplement these two sources, the Government regularly resorted to deficit financing. Occasionally, there have been serious constraints of resources as during the Second Plan when the Government could not raise the planned resources and was, therefore, forced to "prune" the plan.

The total outlay planned in a plan is divided into public sector outlay and private sector outlay. The Government is directly responsible for raising the public sector outlay. As regards the private sector outlay, it is ***only an estimate***, an ***anticipation*** and the Planning Commission does not have accurate figures to show whether the planned outlay fixed for the private sector materialised or not.

Table 1 clearly points out that the share of the public sector outlay showed a steady increase from about 54% in the First Plan to about 70% in the Fifth Plan. Thereafter, there was a steady decline and the share of the public sector was about 52 per cent in Seventh Plan and fell further to reach 50 per cent in the Eighth Plan. The dominance of the public sector was gradually declining and this was being replaced by the growing emphasis on the private sector (Refer table 1).

The really significant figure in Table 1 is the actual public sector outlay, given is the last column. This is different from the planned public sector outlay at the beginning of each plan. It would be clear from Table 1 that only during the first two plans, the actual public sector outlay was less than the planned public sector outlay. In the successive plans, the actual outlay exceeded the planned outlay— we ignore the Fifth Plan as it was terminated before its full term.

The real magnitude of actual public sector outlay can be briefly summarised as follows

	Total outlay (₹ crores)	*Outlay Per annum (₹ crores)*
First Plan (1951-56)	1,960	392
Fourth Plan (1969-74)	15,900	3,180
Eighth Plan (1992-97)	4,85,460	97,092
Ninth Plan (1997-2002)	8,59,200	1,71,840
Tenth Plan (2002-07)	15,25,639	3,05,128
Eleventh Plan (2007-12)	36,44,718	7,28,943

Priorities and Pattern of Investment in the Plans

During the first six plans, the Planning Commission distinguished between five sectors of development, viz. agriculture and irrigation, power, industry, transport and communication and social services. From the Seventh Plan onwards, there was greater refinement of the sectors of development. The distribution of public sector outlay on major heads clearly reflects the Commission's priorities of development in the different plans.

In Table 2 we observe that the Government outlay ***on each sector*** has continuously increased with every plan. For instance, the actual allocation on agriculture and irrigation was of the order of ₹ 600 crores in the First Plan, this had increased to ₹ 26,130 crores by the Sixth Plan and ₹ 2,01,442 crores by the Ninth Plan. Likewise, allocation on power, industries, transport and communications had increased considerably but the most significant increase was on industries--from ₹ 120 crores to over ₹ 60,362 crores between the First and the Ninth Plan. For a better understanding of the allocation pattern in the different plans, it would be better to study the figures in percentage terms.

Agriculture and Irrigation. This item "agriculture and irrigation" actually includes:

(a) agricultural and allied activities;
(b) rural development;
(c) special area programmes; and
(d) irrigation and flood control.

Except during the First Plan, when agriculture and irrigation was allotted 31 per cent of the total outlay, all other Plans allocated between 20 to 24 per cent of the

TABLE 2 : Sectoral Outlays during the Plans

(₹ *crores*)

	Agriculture and Irrigation (1)	*Power* (2)	*Industry* (3)	*Transport and Communications* (4)	*Social Services Science and Technology* (5)	*Total* 6 = 1 to 5
First Plan	600	260	120	520	460	1,960
	(31)	(13)	(6)	(27)	(22)	(100)
Second Plan	950	440	1,080	1,300	830	4,600
	(20)	(10)	(24)	(28)	(18)	(100)
Third Plan	1,750	1,250	1,970	2,120	1,490	8,580
	(21)	(14)	(23)	(25)	(17)	(100)
Fourth Plan	3,810	2,450	3,630	3,240	2,770	15,900
	(24)	(15)	(23)	(20)	(18)	(100)
Fifth Plan	8,740	7,400	9,580	6,870	6,840	39,430
(1974-79) Actuals	(22)	(19)	(26)	(18)	(17)	(100)
Sixth Plan	26,130	30,750	16,950	17,680	17,780	109,290
	(24)	(28)	(16)	(16)	(16)	(100)
Seventh Plan	48,100	61,690	29,220	41,000	38,720	2,18,730
	(22)	(28)	(13)	(19)	(18)	(100.0)
Eighth Plan	1,01,150	1,28,900	47,890	1,01,550	1,05,570	4,85,460
	(21)	(27)	(10)	(21)	(22)	(100.0)
Ninth Plan	1,76,217	2,22,375	65,148	1,66,653	2,28,807	8,59,200
	(20.5)	(25.9)	(7.6)	(19.4)	(26.6)	(100.0)
Tenth Plan	3,55,055	4,03,923	58,939	3,24,945	4,32,793	15,25,639
	(20.0)	(26.5)	(3.9)	(21.3)	(28.4)	(100.0)
Eleventh Plan	6,74,105	8,54,123	1,53,600	6,67,823	12,95,066	36,44,718
	(18.5)	(23.4)	(4.2)	(18.3)	(35.5)	(100.0)

Note : Figures in brackets are percentages of total in the respective plan.

SOURCE : Plan Documents, Planning Commission (Government of India) and ***Economic Survey*** (2008-2009), 2009-10

total outlay on agriculture and irrigation. The relatively lower percentage of funds allotted to agriculture and irrigation from the Second Plan onwards, has come in for serious criticism at the hands of the "Gandhian Economists" who have argued that the Indian strategy of development had ignored agriculture. During Tenth plan, and Eleventh plan allocation on agriculture and irrigation was 20.0 percent 18.5 percent respectively.

Power Programmes. Initially, the Planning Commission included only electric power under this item. Over the years, this item has been referred to as "energy" and is composed of :

(i) Power, (ii) petroleum, (iii)coal and lignite and, (iv) non-conventional sources of energy

The allocation on power development was unfortunately low during the first four Plans--between 10 to 15 per cent of the total outlay. The low priority given to power development was sought to be justified at that time, on the ground that industries had not come up so fast and that progress in rural electrification and in the use of electric power in the railway transport system was inadequate and did not need much investment. This proved to be a wrong judgment on the part of the planners. With rapid industrialisation and extensive demand for power both in rural and urban areas, the country has been reeling under severe power shortages and the country's production effort has been severely curtailed by load shedding almost in all parts of the country. It was only in the Seventh Plan that the allocation on power was raised rather steeply to 28 per cent of the total outlay. Even during the Ninth Plan, power sector was allocated 23 per cent of total outlay. But this has come too late and power shortage has become a serious constraint to economic development of India. Tenth and Eleventh plans again give 26.5 percent and 23.4 percent respectively as total outlay for power.

Industries and Minerals. The high priority given to agriculture and irrigation in public sector programmes in the First Plan was at the cost of low priority given to industries. On account of limitation posed by scarce capital resources, the development of large-scale consumer goods industries was left entirely to the private sector. But from the Second Plan onwards, the relative share of industries and minerals was raised sharply from 6 per cent in the First Plan to 24 per cent in the total plan outlay in the Second Plan. The allocation on industries has generally been around 24 per cent of the total public sector outlay till the Sixth Plan. In the next four plans, outlays on industries declined steeply and it was only 3.9 per cent in the Tenth Plan. In Eleventh plan it was maginally higher at 4.2 percent.

An important point to note here is that the Public

Sector outlay on industries was mostly on the large-scale industries and that too on heavy and basic sectors. Only a small token allocation was made for the development of village and small-scale industries. This was also a standing complaint on the part of Gandhian Economists who criticsed that only lip service was paid to the importance of small and cottage industries from the point of employment, decentralisation of income and favourable effect on production and the price level. In practice, however, nothing special was done for the tiny and small sector.

Transportation and Communication. The allocation on transport and communication was quite high during the first two plans, between 25 and 28 per cent but since then their share has declined (16 per cent in the Sixth Plan). The lower allocation since then did not mean that transport and communication sector had been fully developed and that it was adequate enough to support other sectors. In fact, the country had also been regularly facing serious transport bottlenecks and this was also one of the contributing factors for retarded output and income. Accordingly, the Ninth Plan pushed up the outlay to 25 per cent. Tenth Plan allocates 21.3 percent oulay for transport and communication. Eleventh Plan provided 18.3 percent on transport and communication

Social and miscellaneous services. These items include such vital services as education, health and family planning, housing, urban development, labour welfare and welfare of backward classes etc., A considerable amount of plan funds has been allotted in Plans for the provision of these services. These services are significant from the point of view of the poor and the economically backward whose low level of living could be raised with the help of these services. But for the First and the Third Plans which allocated 23 per cent and 24 per cent respectively for social services, the outlay on social services ranged between 15 to 20 per cent from the Second to the Eighth Plan. The advocates of human resource development have always argued that unless societies spend more on social services, rapid and sustained development is not possible. Consequently, Tenth Plan allocated 28.4 per cent of the total plan outlay to social services. Eleventh plan increased this allocation to 35.5 percent.

Development Targets in the Plans

Every Plan fixed clear targets of growth for each sector and sub-sector of the economy.

Targets for increase in production were fixed for foodgrains, oilseeds, sugarcane, cotton and jute. To realise these production targets, each Plan fixed targets of increase of various inputs such as irrigation, fertilisers, use of better and hybrid seeds, pesticides, land reclamation, provision of finance, etc.

In the field of industries targets were fixed for increase in production in such traditional industries as cotton, jute, sugar, cement, iron and steel etc. Besides, new industries were planned to be set up and expanded. The Second Plan, for instance, saw the setting up of the three steel plants at Durgapur, Bhilai and Rourkela, the expansion of the Chittaranjan Locomotive Works, the Avadi Integral Coach Factory, etc.

In the field of power, specific targets were fixed for generation and distribution of electricity from all sources. Initially, plan allocation for power was low, between 10 to 15 per cent, but it was increased to match the growth rate in industrialisation, transport and other sectors of the economy. From the Sixth Plan onwards, the Planning Commission enlarged the power sector and renamed it as energy sector and specific targets were fixed in each Plan for the growth and progress of electricity, oil, crude, petroleum and petroleum products, coal, non-conventional energy, and so on.

Likewise, growth targets were fixed in each five-year Plan under transport system which included targets of growth for railways, roads, ports, shipping, civil aviation, and so on. Growth of communications in general and telecommunications in particular, received considerable attention from the planners. With the growth of non-Plan expenditure in the last two decades and the consequent constraint of resources for development, the Planning Commission was forced to invite the private sector to enter the infrastructure sector in a big way — specially in power, road transport, civil aviation, and telecommunications — and help achieve the ambitious targets fixed by it.

Finally, the Planning Commission fixed specific targets of growth under each five year plan for diferent components of social services such as general and technical education, health and sanitation, housing, labour welfare, welfare of Dalits and tribals, etc. In the latter plans, the Planning Commission reclassified and regrouped these services into social services, economic services and general services.

Assessment of each of the Nine Plans

We shall briefly outline now the success or the failure of each of these plans. A general assessment of development planning in India in the last 55 years is attempted separately towards the end of this chapter.

The First Plan (1951-56) was a great success, as the production targets especially in the agricultural sector were more than fulfilled and the three short-term objectives, viz., rehabilitation of the refugees, food self-sufficiency and control of prices were more or less achieved. Though the success of the First Plan was partly due to the favourable climatic conditions of the period, the Planning Commission and the Government of India took the credit for the fulfilment of the various Plan targets.

The more ambitious Second Plan (1956-61) could not be implemented fully because of the acute shortage of foreign exchange. As a result the Planning Commission had to prune the development targets. Besides, the country started experiencing rise in prices. The Second Plan was only moderately successful.

The Third Plan (1961-66) was a realistic and more balanced plan and was based on the experience of the first two plans. However, the Third Plan was a thorough failure because the country suffered from one of the severest famines in a hundred years during the last year of the Plan (1965-66). Besides, India had to go through two major conflicts with China and Pakistan and during the Indo-Pakistan conflict, India was let down badly by the major aid-giving countries. The failure of the Third Plan led to suspension and postponement of the Fourth Plan by three years (1996–99) these three years were called as Annual Plans or were sarcastically called "Plan holiday".

The Fourth Plan (1969-74), when it was introduced after a gap of three years, was an ambitious plan as it aimed at an annual growth rate of 5.5 per cent (as against an average of 3.5 per cent during the previous plans). It proposed to attain self-reliance and provided a national minimum. The first two years of the Fourth Plan were quite promising, with record foodgrains production and equally rising industrial production. But the next three years of the Plan proved a great disappointment with successive failure of monsoons, decline in foodgrains production, failure on the industrial front due to power breakdowns and load shedding, transport bottlenecks, industrial unrest, etc. Above all, the price situation deteriorated to crisis proportions and the rapid rise in prices from the middle of 1972 completely upset the cost calculations of the Fourth Plan development projects. Above all, the country had to cope up with huge influx of refugees from Bangladesh and Indo-Pakistan war of 1972. The Fourth Plan, was able to achieve only 3.4 per cent GNP growth rate as against the target of 5.5 per cent and was, therefore, considered as a big failure.

The Fifth Plan (1974-79) was introduced in April 1974 when the country was in the throes of a serious economic crisis in the form of a run-away inflation. The Fifth Plan cost calculations based on 1971-72 prices proved to be completely wrong and the original public sector outlay of ₹ 37,500 crores had to be revised upwards to a little over ₹ 39,430 crores. Moreover, after the promulgation of emergency in 1975, the emphasis shifted to the implementation of the Prime Minister's 20-point Programme. The Fifth Plan was relegated to the background. When the Janata Party came to power at the Centre, it terminated the Fifth Plan in 1978.

This step was the most unfortunate since it made the constitution and working of the Planning Commission as well as the Plan formulation change with the assumption of every Government at the Centre. So much so, with the coalition governments coming to power at the Centre, the formulation of five year plans has become difficult and often a cruel joke. No one is really bothered about the formulation and implementation of the five year plans any more.

The Sixth Plan, for instance, was originally introduced by the Janata Party for the period 1978-83 but later it was replaced by a new Sixth Plan for the period 1980-85. During this period the Indian economy made an all-round progress and most of the targets fixed by the Planning Commission were realised, though during the last year of the Plan (1984-85) many parts of the country faced severe famine conditions and agricultural output was less than the record output of the previous year. Broadly, however, the Sixth Plan could be taken as a success since it achieved a growth rate of 5.5 of the GNP on the average.

The Seventh Five Year Plan (1985-90) attempted to accelerate the growth in foodgrains production, increase in employment opportunities and raise productivity. In other words, the focus of the Seventh Plan was on ***Food, Work and Productivity***. The Seventh Plan was heralded as a great success since the Indian economy recorded about 6 per cent rate of economic growth during this plan as against the targeted 5 per cent. The decade of the Eighties (the Sixth and Seventh Plans) witnessed a creditable average annual rate of growth of 5.8 per cent as against the average of 3.5 per cent in the previous five plans. The Indian economy, finally, crossed the barrier of what Professor Raj Krishna called sarcastically "the Hindu rate of growth"

The introduction of the Eighth Plan was postponed by two years because of political changes at the Centre, but once it was approved, it was implemented and the country witnessed a new take-off of high GDP growth and industrial resurgence. During the Eighth Plan (1992-97), India registered the highest annual rate of growth of 6.8 per cent and the interesting point was that this high order of growth rate could be achieved even though the share of the public sector in total investment had declined considerably to about 34 per cent. With the adoption of economic reforms and liberalisation, the importance of the private sector and movement towards market based economic system were both responsible for the higher rate of economic growth during the Eighth Plan.

The Ninth Plan (1992-97) initially set the target of GDP growth at 7 per cent. However, due to a low GDP growth of 4.8 per cent in 1997-98, the National Development council revised the target in February 1999 to 6.5 per cent on the average for the Ninth Plan. The development strategy envisaged an important role for the private sector and on market forces. Reliance on market forces did not mean that state has no role to play. But, the state instead of being a regulator should assure the role of a facilitator. However, the state must increase its involvement in the following areas :

(*a*) To provide education, health care and safe drinking water to the majority of population especially in rural areas.

(*b*) To provide economic infrastructure such as irrigation, power, roads, ports, railways, telecommunications etc. Public investment in infrastructure must continue to have high priority, especially in those areas where private sector's participation is likely to be limited.

Investment needs of the Ninth Plan were estimated at ₹ 21,70,000 crores, out of which the share of the public sector was projected at ₹ 7,26,000 crores (33.4%) and that of the private sector was estimated at ₹ 11,19,000 crores (51.6%). This leaves a gap of ₹ 3,25,000 crores. This gap was to be filled up by Foreign Direct Investment and disinvestment of Public Sector Enterprises. Obviously, the Ninth Plan aimed to depend predominantly on the Private Sector – Indian as well as foreign

2. PATTERN OF FINANCING THE FIVE YEAR PLANS IN INDIA

The most difficult part of planning in India, and for that matter, in any country of the world, is the mobilisation of financial resources. It is easy to plan and fix targets for various priority sectors of the economy but it is difficult to find the necessary finances to implement the planned projects. The Government of India taxes the public and uses the proceeds for economic development; it collects the savings of the public in various ways; it floats loans within the country and also raises funds from foreign sources. If all these sources are found inadequate, the Government resorts to deficit financing or uses created money to finance its projects. The sources of finance available to the government may broadly be divided into three categories; (a) domestic budgetary sources, (b) foreign assistance, and (c) deficit financing.

Domestic Budgetary Resources

Domestic budgetary resources are the funds raised by the Government within the country and they consist of :

(a) surplus from current revenues, that is, excess of current revenues over current expenditure;

(b) contribution of public enterprises;

(c) mobilisation of internal private savings, through market borrowings, small savings, provident funds, etc; and

(d) additional resource mobilisation in the form of additional taxes and additional revenue from public enterprises.

External assistance may consist of loans and grants from foreign countries, loans from international institutions such as the IMF, the World Bank and the IDA, etc.

If the domestic budgetary resources and external assistance are found inadequate to finance all the development projects, the Government will still decide to continue to implement all its development projects but without finding the necessary finances. This gap in expenditure over revenues is respectably called deficit financing and the excess of expenditure over income is financed through borrowing from the Reserve Bank of India or by using accumulated cash balances.

Resources for the Private Sector

So far we have given the sources of finance available to the public sector projects. We may mention the sources of finance available to the private sector also.

(a) The savings of the individuals and of the companies are available to the private sector either directly or through the banking system.

(b) The private sector gets funds from public sector financial institutions such as IFCI, SFCs, ICICI, IDBI, etc.

(c) The private sector may raise funds from the market through floating shares and debentures.

(d) Finally, it may get foreign funds in the form of equity capital or foreign collaboration, subscription to equities from non-resident Indian (NRIs), from the International Financial Corporation (an affiliate of the World Bank), loans from the World Bank, and so on.

In our analysis of "financing of Five-Year Plans", however, we will concentrate on the financing of the public sector only.

Table 3 indicates the share of the three sources of plan finance in all the five year plans. The figures mentioned under each Plan are actual and not the originally intended or planned amounts. Table 3 shows clearly that, of the three sources of Plan finance, the most important were the domestic budgetary resources. For instance, they accounted for 73 per cent of the total funds raised during the First Plan. However, they came down to 56 and 59 per cent during Second and Third Plans respectively. This reduction was due to the Government's attempt to rely increasingly on the other two sources of Plan finance. From the Fourth Plan onwards, however, budgetary resources have again become dominant source of Plan finance – as much as 86 per cent in the Eighth Plan .

TABLE 3. Sources of Plan Finance : First Eight Plans*

Plans	*Domestic Budgetary Resources*		*External Assistance*		*Deficit financing*		*Total*	
	Amount (₹ crores)	*%*	*Amount (₹ crores)*	*%*	*Amount (₹ crores)*	*%*	*Amount (₹ crores)*	*%*
First Plan	1,440	73	190	10	330	17	1,960	100
Second Plan	2,560	56	1,090	24	950	20	4,600	100
Third Plan	5,090	59	2,390	28	1,150	13	8,630	100
Fourth Plan	12,010	74	2,090	13	2,060	13	16,160	100
Fifth Plan	32,120	82	5,830	15	5,830	3	39,300	100
Sixth Plan	86,610	78	8,530	8	15,680	14	1,10,820	100
Seventh Plan	1,34,190	75	16,120	9	28,260	16	1,78,870	100
Eighth Plan	3,32,100	86	19,230	5	33,040	9	3,84,370	100

Shift in favour of foreign aid and deficit financing

Our planners were carried away by the success of the First Plan and the presence of such favourable factors at the end of the First Plan as the relative self-sufficiency in foodgrains, stability of prices in general and of foodgrains prices in particular, despite a high dose of deficit financing during the First Plan period and the enthusiasm and willing co-operation of foreign governments and international institutions (IMF and the World Bank to assist India in her planned economic development). Accordingly, our planners planned for (a) massive increase in our plans, (b) proposed to raise large financial resources by way of foreign aid and (c) leave large uncovered gap (deficit financing) during the Second and Third Plans. For instance, as against 10 per cent of external assistance in the First Plan, the Second and Third Plans had raised 24 and 28 per cent of the needed funds by way of foreign assistance. Deficit financing was raised to 20 per cent of all finances during the Second Plan but was brought down during the Third Plan to 13 per cent of the aggregate resources because of the emergence of inflationary pressures during the latter part of the Second Plan.

Total Plan resources in Table 3 differ from the total plan outlays as given in Table 1 and 2. From the Sixth Plan onwards, the Planning Commission distinguished between "current outlays of the public sector" and "public sector investment". In Table 3, total Plan resources exclude resources to meet current public outlay but include financial resources to meet public sector investment expenditure.

A careful consideration of data in table 3 reveals a clear shift in resource mobilisation from the Fourth Plan onwards. Long before the Fourth Plan was introduced in April 1969, the Government of India had already experienced the adverse effects of dependence on foreign Governments (American and British pressure against India during Indo-Pakistan conflict in 1965) and the undue pressure of international financial institutions (for example, the pressure of IMF to devalue the rupee in 1966). As a result, the Fourth Plan included self-reliance as a major objective of planning. External assistance was reduced from 28 per cent to 13 per cent during the Third Plan. External assistance was gradually reduced to 5 per cent during the Eighth Plan.

At the same time, the Government was fully alive to the adverse consequences of deficit financing in the form of pressure on prices. Even though deficit financing was kept at 13 per cent during Third and Fourth Plans, it was reduced to 3 per cent in the Fifth Plan, but rose sharply to 14 per cent in the Sixth Plan (as against the original estimate of 5 per cent) and 16 per cent during the Seventh Plan.

Reduced dependence on foreign aid and less recourse to deficit financing naturally forced the Government to rely increasingly on domestic budgetary resources. Accordingly, from 59 per cent in the Third Plan, domestic budgetary resources contributed 74 per cent of the aggregate finances during the Fourth Plan and 82 per cent during the Fifth Plan and 86 per cent during the Eighth Plan.

Domestic Budgetary Resources

Let us now consider the domestic budgetary resources in greater detail. As we have already indicated, domestic budgetary resources comprise of a surplus from current revenues, contribution from public enterprises, market borrowings, small savings, provident fund contributions, term loans from financial institutions, miscellaneous capital assets and finally, additional resource mobilisation (in the form of taxes or in the form of resources from the public sector enterprises). The relative importance of these components of domestic budgetary resources in the different plans is given in Table 4.

Balance From Current Revenues. The traditional view has always been that current revenue

TABLE 4. Relative Significance of the Components of Domestic Budgetary Resources in Various Plans

	Percentage of Total Plan Resources							
	First Plan	*Second Plan*	*Third Plan*	*Fourth Plan*	*Fifth Plan*	*Sixth Plan*	*Seventh Plan*	*Eighth Plan*
Domestic Budgetary Resources								
of which	73	56	59	74	82	78	75	86
(a) Balance from current revenues (BCR)	25	–1	–5	–2	13	2	–8	–10*
(b) Contributions from public enterprises	—	3	5	9	4	5	8	34*
(c) Domestic private savings	35	31	25	40	28	41	58	62
(d) Additional resource mobilisation (ARM)	13	23	34	27	37	30	17	—

* Include ARM also

SOURCE : Various *Five Year Plans*.

should be used for meeting current expenditure. However, as for back as 1950-51, the Planning Commission accepted the recommendation of the Taxation Enquiry Commission (Chairman: V.T. Krishnamachari) that ***the current revenue of the Government could and should be used partly to finance economic development***. The idea was to restrict current expenditure, create a surplus from current revenue and use the same for financing economic development. In theory, this was really praise-worthy and the Planning Commission dutifully provided for a certain amount of revenues as surplus from current revenues. In fact, the First Plan raised as much as 25 per cent of the total financial resources from this source. But for the next three plans (Second, Third and the Fourth), the surplus from current revenues was negative, indicating that, instead of restricting current expenditure and accumulating a surplus in the current account, the Government was having net deficits.

In spite of its best intentions to restrict its current expenditure, both the Central and State Governments were not able to do so, partly because of multiplication of ministres and departments and mindless expansion in the number of government servants and partly because of rise in salaries and dearness allowances. In the case of the Central Government, another important cause for rise in current expenditure was the rapid growth in subsidies, defence expenditure and interest payments.

Even the surplus shown in the Fifth Plan was not really a surplus but only an anticipated surplus. The Sixth Plan provided for a surplus in current revenues amounting to ₹ 14,480 crores or 14.9 per cent, could actually generate very small surplus of ₹ 1,890 crores, accounting for only 1.7 per cent of the aggregate resources. The Seventh and Eighth Plans showed huge negative balances from current revenues.

Contribution from public enterprises. The contribution from public enterprises was not much but as Table 4 shows, it has been rising steadily over the years : from about 3 per cent in the Second Plan, profits of public enterprises had risen to 9 per cent in the Fourth Plan. As a matter of fact, the contribution from public enterprises has always been much less than what was originally planned for.

Many of the Central Government enterprises have been running on losses and even the contributions of such departmental undertakings as the railways and posts and telegraphs have been minimal. The bright spots have been the Reserve Bank of India and other banking and financial institutions and some commercial enterprises like Indian Oil Corporation, which have been yielding regular profits to the Government. As far as State enterprises were concerned, the less said the better. The State Electricity Boards (SEBs) and the State Road Transport Corporations (SRTCs) which are the two major state enterprises have been running on losses throughout the planning period. The losses of SEBs are around ₹ 1,500 crores per year and the losses of SRTCs are around ₹ 200 crores per year. Further, states incur annual losses of ₹ 700 to 1000 crores on commercial irrigation. In spite of their poor record, the planners vainly expect increasingly larger contributions from the public sector enterprises in every Plan.

Domestic Private Savings. Market borrowings and small savings are the two components of domestic private savings in the country. These two sources have come to play an important role in raising finances for development. During the First Plan, domestic private savings contributed more than one-third of the aggregate resources, but in the next two plans, their importance was reduced marginally, as the Planners put more faith in external aid and deficit financing. In the Fourth Plan, however, the Government was so concerned about self-reliance and the need to reduce dependence on foreign aid, that it went in for a massive effort to raise financial resources within the country. During the Fourth Plan, domestic private savings accounted for 40 per cent of the total financial requirements.

In the Sixth Plan, the original estimate was that the domestic private savings should contribute ₹ 36,400 crores or 37 per cent of the aggregate planned investment. However, the Government succeeded in raising ₹ 45,930 crores or 41 per cent of the total investment. In the Seventh and Eighth Plans the importance of this source of Plan finance continued to rise due to two reasons :

(a) The Government has a good and extensive captive market in the form of nationalised banks, public sector financial institutions, public provident funds, etc. which are able to supply almost any amount of funds needed by the Government.

(b) With rise in national and per capita incomes, the ability and willingness to save among all sections of the people particularly the middle classes has been increasing and the Government has also been encouraging this tendency to save through appropriate tax incentives (as for example, interest income and dividend income is exempted from income-tax upto the value of ₹ 15,000).

Accordingly, domestic private savings contributed 58 per cent and 62 per cent respectively during Seventh and Eighth Plans.

Additional Resource Mobilisation (ARM). Under this head, we bring in two sources of raising funds for development. The first is additional taxation which has been an important source in all the plans. The second is the additional resource mobilisation through public sector enterprises by raising their prices (or what is now called, through raising the administered prices of goods). That additional taxation has become an important source of development finance would be clear from the fact that its contribution was 13 per cent in the First Plan, 23 per cent in the Fourth Plan and 30 per cent in the Sixth Plan. While the tax burden on the urban consumers seems to have reached the maximum, there is considerable scope for additional taxation on rural incomes. There is high degree of prosperity among the farmers due to the green revolution and part of the additional income of the farming community could be easily collected for development purposes.

The Government has found it easy to raise the administered prices of goods and services produced and sold by the public sector enterprises, such as petrol, steel, coal, etc. But the public opposition to the price hike in essential commodities in the beginning of 1986 was an eye-opener to the Government and it was hoped that public opposition would restrain the Government from raising additional resources by this method in the future. However the Government has continued to use this method even later.

As dependence on foreign assistance and deficit financing have serious adverse consequences for the country, the Government has been relying increasingly on domestic budgetary resources. All the different constituents of domestic resources, particularly additional taxation, market borrowings and small savings and contribution from public enterprises have their own importance. To the extent the domestic resources are used to meet Plan requirements, our dependence on deficit financing and foreign assistance will be reduced.

Financial Pattern of the Ninth Plan

Ninth Plan had projected a resource mobilisation by the Centre and States/UTs of the order of ₹ 8,59,200 crores at 1996-97 prices, but actual realisations were of the order of ₹ 7,05,818 crores or nearly 82 per cent of projection. Obviously, this has meant a reduction in the size of the public sector plan by 18 per cent. (Refer Table 10).

A close perusal of the data provided in Table 10 presents a comparison between plan projections and actual realisations. So far as balance from current revenues was concerned, as against the expectation of reducing the deficit under this head to (-) 0.2 per cent of total resource mobilisation, the actual realisations showed a deficit of (-) 37.4 per cent of the total requirement, i.e. of the order of ₹ 2,63,752 crores. This has shattered the entire resource projections of the Ninth Plan. So far as resources of public enterprises are concerned, as against the expectation of ₹ 3,40,409 crores, the actual realisation were of the order of ₹ 2,80,902 crores—₹ 59,507 crores less than the projection. However, their proportion to total resource mobilisation was of the order of 39.8 per cent. So far as net inflow from abroad is concerned, as against an expectation of ₹ 60,018 crores, the ralisation was a paltry ₹ 17,452 crores. As a result of serious slippages in resource generation from current revenues and net inflow from abroad, the Government was forced to resort to market borrowings. As against the projection of ₹ 460,179 crores from market borrowing, the actual realisation was of the order of ₹ 6,71,216 crores or nearly 95 per cent of total resource mobilisation. If market borrowing and net inflow from abroad are taken together, then nearly 98 per cent of the resources for the Plan were generated from them. The entire resource mobilisation projection exercise has gone haywire. It is a matter of deep dissatisfactin that the entire plan is being financed by external resources and this adds to burdens in the form of interest payments which eat into state revenues. The picutre of resource generation underscores total failure on the part of both the Centre and State Governments.

2. Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 24.

TABLE 10: Ninth Plan Pattern of Financing Resources

₹ crores at 1996-97 prices

	Projections			Realisations		
	Centre	*States*	*Total*	*Centre*	*States*	*Total*
1. Balance from current revenues	2,778 (-0.6)	1,372 (0.4)	1,406 (-0.2)	-1,56,790 (-38.6)	-1,06,962 (-35.8)	-2,63,752 (-37.4)
2. Borrowings including net MCR	3,16,761 (64.7)	1,43,419 (38.8)	4,60,179 (53.6)	4,55,624 (112.0)	2,15,592 (72.1)	6,71,216 (95.1)
3. Net inflows from abroad	60,018 (12.3)	—	60,018 (7.0)	17,452 (4.3)	—	17,452 (2.5)
4. Resources of Public Sector Enterprises	2,85,379 (58.3)	55,030 (14.8)	3,40,409 (39.6)	2,28,795 (56.3)	52107 (17.4)	2,80,902 (39.8)
5. Central assistance to States	-1,70,018 (-34.7)	1,70,018 (46.0)	—	1,38,394 (-34.0)	1,38,394 (46.3)	—
6. Resources for the Plan (1+2+3+4+5)	4,89,361 (100.0)	3,69,839 (100.0)	8,59,200 (100.0)	4,06,687 (100.0)	2,99,131 (100.0)	7,05,818 (100.0)

SOURCE: Compiled and computed from data provided by Planning Commission, *Tenth Five Year Plan (2002-2007)*, Ch. 3.

3. RELATIVE MERITS AND DEMERITS OF DIFFERENT SOURCES OF PLAN FINANCING

We have explained the various types of financial resources raised by the Union and the State Governments to finance planned development. We shall now discuss the consequences as well as relative merits and demerits of each one of these sources.

Taxation

Taxation was an important source of development finance in India. As mentioned earlier, the Taxation Enquiry Commission clearly advocated the use of taxation as a source of development finance : "Financing a part of development by budgetary surpluses is a legitimate form of development finance and does not cause any greater real burden on the current consumption of the community than would be done by an equivalent amount of public borrowing". There are two advantages claimed for taxation as a source of development finance in India :

(a) Taxation is a good instrument to increase the rate of saving in a country like India. On the one hand, it will bring about compulsory saving among the lower income groups and, on the other, it will help to increase voluntary savings of the higher income groups through tax incentives, tax holidays, etc.

(b) There is still scope for additional taxation, as majority of the rural people do not contribute to direct taxes and share very little of indirect taxes. This is particularly true of the more affluent farmers who have directly benefited from Government expenditures on agricultural development but without paying for them.

The economic consequences of taxation should be considered, taking direct and indirect taxes separately. Direct taxes – meaning income tax, corporation tax, wealth tax, estate duty and gift tax – fall heavily on the higher income groups and, being steeply progressive, they tend to affect adversely the ability and willingness to work, save and invest. In other words, direct taxes have an adverse effect on production and employment. The Government of India attempted to reduce the adverse effects of direct taxes through appropriate tax reliefs and concessions. At the same time, the Planners believed – at least during the 1950s and 1960s – that steeply progressive personal income tax, estate duty and wealth tax had an important place in India because of their ability to chop off high incomes and wealth in the country. It may be emphasised here that reduction of inequality of income and wealth was one of the major Plan objectives . Besides, steep direct taxes have the effect of reducing the volume of purchasing power in the hands of the general public and, thus, help to reduce their demand for goods and services – in other words, direct taxes could be used to control inflation in the country. In practice, however, steep direct taxes were extensively evaded and as such they were largely responsible for the emergence and perpetuation of black money in the country and for the steep decline in moral values among the people and for the general deterioration of the moral fibre of the nation.

Indirect taxes – meaning commodity taxes as a source of development finance were sought to be justified on the ground that only through them the lower income groups, and even the very poor, could be made to contribute to economic development. There is a serious flaw in this approach. For, regular hike in commodity taxes and administered prices was an important cause for pushing up the inflationary pressure in the country during the last four decades.

Unfortunately, the argument that taxation could be used to raise resources for financing economic development has lost its significance in India:

(a) the Government has been unable to control the ever-rising current expenditure;

(b) tax revenue which has also been rising, has been found hopelessly inadequate to pay for even current expenditure;

(c) for the last many years, the Government has been incurring huge revenue deficits; and accordingly

(d) the question of using surplus tax revenues to pay for economic development does not arise.

Profits of public undertakings

Depreciation and net profits of public enterprises could be used to finance expansion of these enterprises. Some public enterprises, have financed their expansion out of their own accruals. The experience of the public sector in the first 35 years of planning has been quite disappointing--the losses of the public sector had to be made good out of general tax revenues. This is an unhappy situation. Improvement in the performance of public sector undertakings is necessary to contribute more resources for development.

Every five year plan has been emphasising that one of the major functions of public sector enterprises is to generate surplus for financing further economic development. During the Sixth Plan, for instance, certain public enterprises could finance only 28 to 30 per cent of their development expenditure through their own internal resources. For the rest, they had to depend upon the Government (viz., the budget) The performance of State public enterprises was atrociously poor. It has been estimated that the SEBs (State Electric Boards) and SRTUs (State Road Transport Undertakings) could finance barely 3.5 per cent of their development expenditure and consequently they had to depend almost solely on budgetary support. It is, thus, clear that, as vehicles of resource mobilisation for financing development expenditure, the public sector has a miserable record in India.

It is, however, possible to tone up the management of the public sector enterises and make them contribute substantially for their expansion. In this connection, the States should either improve the working of the SEBs and SRTUs or should be prepared for shifting them to the private sector. It fact, the private road transport companies have invariably been yielding huge profits. Mobilisation of internal private savings and the mobilisation of addtional resouirces through additional taxation and through hike in administered prices have been the main source of funds for development in the country, but they may not be so in the years to come. Our experience during the Eighth and the Ninth Plan clearly indicates that the Government cannot raise adequate resources for planned development through budgetary resources any more and, accordingly, has to invite greater participation of the private sector in industrial and infrastructural development.

Market loans and small savings

The basic advantage of market borrowing is that it is voluntary and does not meet with public opposition as in the case of taxation. Besides, the Government has captive institutions who subscribe to the loans floated by the Government, as for example, the LIC, the General Insurance Companies, the nationalised commercial banks, the Unit Trust of India, etc. Again, the Government also raises increasing amounts of funds for development through mobilisation of small savings viz., through post office savings accounts, national savings certificates, etc. While mobilisation of public savings for development purposes is really useful and in certain respects better than taxation, it has one serious disadvantage as compared to taxation--the Government has to pay interest and return the principal also at a future date. These burdens have to be borne by the future generations in the form of higher taxation.

There is not much to choose between taxation and borrowing as regards the burden of an investment programme, for investment involves, in terms of real resources, the reduction in consumption of the general public and the diversion of the resources to investment. Whether this diversion will be done by taxation or through borrowing is immaterial since the present generation will in any case suffer (due to restriction of consumption). But taxes are better than public borrowing since they would impose no future burdens (as public borrowing and public debt would involve interest burden).

Foreign Assistance

A developing country such as India generally finds it difficult to expand its exports; at the same time, it does not like to reduce its imports, lest its rate of growth is reduced. Foreign loans and grants are, therefore, useful and constitute an important source of financing economic growth. But there are two intrinsic disadvantages : (a) lending countries may exert political pressure on the aid-receiving countries, and (b) the debtor country will have to find resources later to pay off interest and the principal. We have examples of developing countries which have been forced to borrow to pay off their annual interest. This is the notorious "debt trap" which India should avoid.

Deficit Financing

Deficit financing is handy when the Government is unable to raise finances from other sources. So much so, Governments frequently succumb to the temptation of deficit financing; without bothering much about mobilising resources through additional taxation. Deficit financing may be useful too, if adopted in small doses. For, it will raise the money supply in the country and raise the demand for goods and services. In fact, deficit financing does help to activise the economy and increase production, if it is kept within safe limits. However, deficit financing has an inherent danger. Once deficit financing is adopted by the government, it becomes cumulative. With every passing year, the volume of deficit financing increases. By raising money supply, deficit financing raises prices. Much of the inflationary pressure in India in recent years is due directly to deficit financing and it is for this reason that taxation is preferred to deficit financing.

A consideration of the various measures of raising resources for planned development clearly points out that the Government should avoid deficit financing at all costs, reduce dependence on foreign assistance to the unavoidable minimum and increasingly rely on domestic budgetary resources. Here too, if the Government could restrict its current expenditure and succeed in generating a surplus, it would be really good. Under the present era of coalition governments, however, this is not going to be easy.

4. REVIEW OF PLANNING EXPERIENCE IN INDIA

From what we have described above, it may be inferred that most of India's Five Year Plans more or less failed and did not produce any favourable results. But such a conclusion would obviously be wrong. When we say that a particular plan had failed or was not a success, it only means that the targets fixed during a given Plan *were not achieved fully*. But we should remember that with every five year Plan, India could start at a higher level of growth and development. We shall now describe the concrete achievements of the development plans since 1951.

Achievements of Planning in India

(i) Increase in national and per capita income. One of the basic objectives of economic planning in our country is to increase national and per capita incomes. As a direct consequence of economic planning, India's national income and per capita income rose, though not as rapidly as the planners planned and anticipated. Table 5 brings out clearly the rise in national income (i.e., net national product at factor cost) and per capita income, since 1950-51 at 1993-94 prices.

TABLE 5 : Growth of National Income and Per Capita Income

(at 1993-94 prices)

Year	*Net National Product (₹ crores)*	*Per capita (₹)*
1950-51	132,367	3,687
1960-61	192,235	4,429
1970-71	270,597	5,002
1980-81	363,417	5,352
1990-91	614,206	7,321
1996-97	852,085	9,007
2003-04	12,66,005	11,799
At 2004-05 Prices		
2004-05	26,23,995	24,095
2008-09	36,72,192	31,821
2009-10	39,29,853	33,588
Average Annual Growth Rates		
1950-51 to 1980-81	3.4	1.2
1980-81 to 1996-97	5.5	3.3
1996-97 to 2003-04	5.8	3.9
2004-05 to 2009-10	8.4	6.9

SOURCE : Government of India, *Economic Survey*, various issues, RBI Hand book of Statistics on Indian Economy, 2009-10

From Table 5, we find that national income at 1993-94 prices rose from ₹ 132,367 crores at the beginning of the First Plan to ₹ 852,085 crores at the end of the Eighth Plan.

On the other hand, the per capita income in real terms had, however, increased at a much lower rate indicating that part of the increase in real national income had been eaten up by the increase in population. Table 5 shows that per capita income at 1993-94 prices had risen from ₹ 3,687 to ₹ 9,007 between 1951 and 1997.

Between 1950-51 and 1996-97, the growth process of the Indian economy can be divided into two broad periods : (a) 1950-51 to 1980-81, and (b) 1980-81 to

1996-97. During the first period, Indian economy increased at an annual average growth rate of 3.4 per cent in NNP and 1.2 per cent in per capita NNP (contemptuously called the Hindu rate of growth by Prof. Raj Krishna) However, during the second period, (i.e., 1981 and 1997) the Indian economy crossed the barrier of the Hindu rate of growth and showed an average rate of growth rate of 5.5 per cent in NNP and 3.3 per cent in per capita income. However, during 1996-97 and 2003-04, NNP growth rate was 5.8 per cent and the per capita NNP increased by 3.9 per cent. Between 2004-05 and 2009-10 average annual growth of NNP and per capita NNP were recorded as 8.4 percents and 6.9 respectively.

From Table 6, it is clear that the actual growth rates have been fluctuating up to the Fourth Plan between 2.8 to 4.3 per cent. Besides, the actual growth rate was less than the target from the Second Plan onwards and particularly during the Third and Fourth Plans. But from the Fifth Plan onwards, there has been a steady improvement in GDP growth from 4.8 per cent per annum during the Fifth Plan to 6.8 per cent during the Eighth Plan. This was indeed a healthy development. However, GDP growth rate declined to 5.4 per cent in the Ninth Plan. During 10th plan and 11th plan we find higher GDP growth at 7.5 percent and 8.3 percent respectively. However it was lower than targetted percent growth.

TABLE 6. Growth Performance in the Five Year Plans (at 1993-94 prices)

NNP at Factor cost (per cent per annum)

	Target	*Actual*
1. First Plan (1951-56)	2.1	3.6
2. Second Plan (1956-61)	4.5	4.1
3. Third Plan (1961-66)	5.6	2.8
4. Fourth Plan (1969-74)	5.7	3.3
5. Fifth Plan (1974-79)	4.4	4.8
6. Sixth Plan (1980-85)	5.2	5.7
7. Seventh Plan (1985-90)	5.0	6.0
8. Eighth Plan (1992-97)	5.6	6.8
9. Ninth Plan (1997-2002)	6.5	5.4
10. Tenth Plan (2002-07)	8.0	7.5
11. Eleventh Plan (2007-12)	9.0	8.3

Note : The growth targets of the first three Plans were set with respect to national income. In the Fourth Plan, it was with the NDP. In all the subsequent plans, the GDP has been used.

SOURCE : Planning Commission, *Ninth Five Year Plan* (1997-2002), Vol. I and *Tenth Five Plan (2002-07)*, CSO, Press Release 31st May 2012

(ii) ***Progress in Agriculture.*** During the last 55 years, the Government had spent, on an average, 23 to 24 per cent of the Plan outlay in each of the Five Year Plans on the development of agriculture and allied activities and irrigation. This expenditure was *in addition* to the private sector investment on agriculture and minor irrigation. As a direct result of this Plan outlay, agricultural production increased considerably, though not to the extent planned by the Government. In the initial years of planning, additions to agricultural output were secured more from extension of the area under cultivation than from increases in production per hectare. Since 1960-61, the dominant trend was that of higher yields from the land cultivated. To increase agricultural productivity, efforts were made to enlarge the supply of water, fertilisers, pesticides, improved seeds, etc, in selected areas. This strategy was called by various names, such as the new Agricultural Strategy, Intensive Agricultural District Programme (IADP), high yielding varieties programme (HYVP), or Green Revolution. Table 7 outlines the progress of selected physical agricultural development programmes since 1951.

TABLE 7 : Progress in the use of agricultural inputs Since 1950-51

Programme	*1950-51*	*1970-71*	*2001-02*	*2009-10*
Consumption of chemical fertilisers (m. tonnes)	0.7	2.2	17.4	26.5
High yielding varieties prgramme (m. hectares)	Nil	15.4	76.4	N.A
of which,				
Paddy (m. hectares)	Nil	5.0	33.4	N.A
Wheat (m. hectares)	Nil	6.5	23.7	N.A
Irrigated area (m. hectares)	22.6	38.0	77.0	87*

SOURCE : Government of India, *Economic Survey*, 2010-11.

* 2007-08, NA - Not Avaialable

Table 7 clearly demonstrates the progress in the use of agricultural inputs. In the beginning of the First Plan, consumption of chemical fertilisers (consisting of nitrogenous, phosphatic and potassic fertilisers) was less than a million tonnes; this had increased to over 17 million tonnes by 2001-02. The high yielding varieties programme (HYVP) was started during the Third Plan (1961-66) but by the end of the Eighth Plan, over 76 million hectares of land had come under this programme – nearly 75 per cent of this area was under improved varieties of rice and wheat. Area under irrigation had gone up from nearly 23 million hectares to nearly 87 million hectares in 2007-08.

The progress in the use of agricultural inputs has been specially spectacular in the production of rice, wheat, potatoes, etc. An idea of the progress in agriculture under the Five Year Plans can be had from Table 8.

TABLE 8 : Agricultural Production under Five Year Plans (1951 to 2011)

	1950 -51	*1970 -71*	*2001 -02*	*2009 -10*	*Increase (%) between 1951 and 2010*
Foodgrains (m. tonnes)	51	108	213	218.2	328
Rice (m. tonnes)	21	42	93	89.1	324
Wheat (m. tonnes)	7	24	73	80.7	1052
Oilseeds (m. tonnes)	5	10	21	24.9	398
Sugarcane (m. tonnes of gur)	57	126	297	277.7	387
Cotton (m. bales)	3	5	10	23.9	697
Jute & mesta (m. bales)	3	6	12	10.7	257
Potatoes (m. tonnes)	2	5	24	34.4*	1,620

* 2009-10

SOURCE: Government of India, *Economic Survey*, 2010-11.

Table 8 shows clearly the spectacular agricultural progress India has made since 1950-51. Foodgrains production had gone up from 51 million tonnes at the beginning of the First Plan to 218.2 million tonnes by 2009-10 –increase by over four times. Likewise, in every crop, production had increased by three or four times. Of course, the most spectacular increase was in wheat and potatoes. All this has been made possible because of the use of the new agricultural strategy. Inspite of this progress, there have been many shortcomings, such as failure to fulfil the targets of production in many crops, shortfalls in the production of pulses and oilseeds in the face of continuous rise in demand for them and year-to-year fluctuations in the production of commercial crops such as sugarcane, cotton and jute.

(iii) Progress in Industry. Table 9 gives the progress in some basic industries only which is quite impressive. Equally impressive is the progress in metallurgical industries, chemical and allied industries, etc. A major achievement in the industrial sector has been the diversification of Indian industries.

During the first ten plans (1951 to 2007), the Government had invested heavily on the development of industries, on the expansion of transport and communications, generation and distribution of electricity, etc. Between 53 to 55 per cent of all planned outlay of the Government in each Five Year Plan was on these sectors. As a result, there has been considerable progress in such industries as steel, aluminium, engineering goods, chemicals, fertilisers and petroleum products.

Appreciating the progress and rapid development of industrialisation, the Janata Sixth Plan states : " A major achievement has been the diversification and expansion of India's industrial capacity with the public sector playing a leading role. The country is self-sufficient in consumer goods and in basic commodities like steel and cement, while the capacity of other industries like fertilisers is rapidly expanding. The growth of capital goods production has been particularly impressive., and India can now sustain the likely growth of most of her industries, whether textiles, food processing or cement or chemicals, metallurgical industries, power or transport, by the domestic production of capital goods needed with only marginal imports"[1]

TABLE 9 : Progress of Industrial Production (Selected industries)

	1950 -51	*1970 -71*	*2001 -02*	*2009 -10*
1. Coal (m. tonnes)	32	76	353	566
2. Iron ore (m. tonnes)	3	32	76	218.6
3. Fertilisers (m. tonnes)	0.02	1	15	16.7
4. Cement (m. tonnes)	3	14	107	200.7
5. Finished steel (m. tonnes)	1	5	31	59.7
6. Aluminium ('000 tonnes)	4	169	552	745.5
7. Petroleum, crude (m. tonnes)	0.3	7	32	33.7
8. Electricity (billion kwh)	5	56	579	768

SOURCE : Government of India, *Economic Survey*, 2005-06. 2010-11

As a direct consequence of the increase in planned production in agriculture, industry and in all other sectors of the economy, per capita availability and consumption of essential commodities had increased in India. Table 10 shows how the net availability of foodgrains, sugar and other basic necessities had increased since the beginning of the First Plan.

TABLE 10 : Net per capita availability of some essential consumer goods in India

Items	*1950 -51*	*1970 -71*	*2001 -02*	*2009 -10*
1. Cereals and pulses (kgs)	144	167	180	162
2. Sugar (kgs)	5.0*	7.4	16.0	18.6
3. Edible oils & vanaspati (kgs)	3.2*	4.5	10.2	14.3
4. Tea (grams)	362*	401	650	687@
5. Milk (kgs)	47	40	80	96
6. Eggs (number)	5	11	37	51
7. Cloth (metres)	14*	16	32	43.1
8. Electricity, domestic (khw)	2.4*	7.0	76.8	102.7**

* These figures relate the year 1955-56, that is, the last year of the First Plan. ** 2008-09@ 2006-07

SOURCE : Government of India, *Economic Survey*, 2005-06. 2010-11

1. Planning Commission, *Draft Sixth Five year Plan, 1978-83*, p. 1.

Table 10 shows that, between 1951 and 2008-09, per capita consumption of foodgrains (i.e., cereals and pulses) had increased considerably – between a modest 30 per cent in the case of cereals and pulses to296 per cent in the case of sugar, 860 per cent increase in the case of eggs and 44 times increase in the consumption of domestic electric power. The increase in per capita consumption of essential consumer goods would have been much greater ***if population had not risen*** from 361 million to an estimated 1,154 million between 1951 and 2008 or if population growth had been effectively controlled. It is also interesting to observe that despite increase in per capita consumption of essential consumer goods, savings as a proportion of GDP had inccreased from 10.4 per cent in 1950-51 to 32.5 per cent in 2008-09.

(*iv*) ***Development of economic infrastructure.*** Another achievement of great significance is the creation of economic infrastructure which provides the base for the programme of industrialisation. The expansion of roads and road transport has led to the enlargement of the market. Irrigation and hydro-electric projects have given a big boost to agriculture and also provided energy for installing factories and other modern establishments in small towns and cities. The infrastructure has opened the possibilities of modernising semi-urban and rural areas. The Janata Sixth Plan rightly mentions : "A large infrastructure has been built to sustain this sub-continental economy: the network of irrigation storage works and canals, hydro and thermal power generation, regional power grids, a largely electrified and dieselised railway system, national and state highways on which a rapidly growing road transport fleet can operate and telecommunication system covering the most urban centres and linking India with the world"[2]

(*v*) ***Diversification of exports and import substitution.*** As a consequence of the policy of rapid industrialisation, India's dependence on foreign countries for the import of capital goods has declined. Similarly, quite a good number of consumer goods imported earlier are being produced indigenously. This has led to import substitution. Consequently, the commodity composition of India's exports has changed in favour of manufactures, mineral ores and engineering goods.

(*vi*) ***Development of science and technology*** Another achievement of significance is the growth of science and technology and the development of technical and managerial cadres to run the modern industrial structure. This has significantly reduced our dependence on foreign experts. Being relatively more advanced than some of the other underdeveloped and developing countries, India has started exporting technical experts to middle East and African countries. This is a matter of legitimate pride for the country.

(*vii*) ***Development of a huge educational system.*** One of the great achievements of planning era is the development of a huge educational system - the second largest in the world. By 2004-05, the enrolment at the Primary (I to V) and Upper Primary (VI to VIII) was 18.2 crores. Similarly enrolment at the Secondary and Higher Secondary (IX to XII) was 3.7 crores. Taken together, total enrolment in school education (I to XII) was of the order of 21.9 crores - a matter of legitimate pride.

The country was able to achieve a Gross Enrolment Ratio (GER) of 96 percent at the primary level, though the drop-out rate for class I to VIII was 51 percent which is quite high.

At the secondary and higher secondary level, total enrolment for the age group 14-18 was about 40 percent though the drop-out rate for class I to X was as high as 62 percent.

The country developed a huge infrastructure in higher education with 378 universities and 18,064 colleges. 110 lakh students were enrolled in higher education institutions in 2005-06, as against only 34 lakhs in 1984-85. Of them, 89 percent are enrolled in undergraduate courses, 9 percent in post-graduate courses and only 0.6 percent in research and 1 percent in diploma and certificate courses. Gross Enrolment Ratio in higher education reached a level of 11 percent in 2004-05, though the world average was 23.2 percent. The country was able to establish institutions of excellence in the field of engineering, medicine and management. Besides this, national level research institutions in agriculture and science have been created. The result is that the country produces the second largest pool of educated and skilled manpower in the world - next only to China.

The development of a huge educational structure of 378 universities and 18,064 colleges, 1.52 lakh secondary and higher secondary schools, and 10.43 lakh schools of primary and upper primary schools, is an achievement the country can be proud of.

A similar opinion was expressed by Professor D.T. Lakdawala, while reviewing national achievements after 40 years of planning, wrote: "There has been some satisfaction with the economic progress made by India on several fronts – the rate and diversity of economic growth, the increase in savings and investment, the almost entire self-reliance realised in foodgrains production, the high transformation in the structure of industry, the capacity in training highly skilled manpower so as to lead to an exportable surplus in certain lines, the extension of normal and special banking facilities to hitherto unbanked areas and sectors, the unprecedented expansion of state, quasi-state and cooperative institutions in marketing and technical aid and guidance, etc. Some indicators of the quality of life like expectation of life at birth, death rate, infant mortality rate have also recorded a welcome change."[3]

From the credit side of the account, let us now turn to the debit side and focus attention on the fundamental failures of planning in India.

2. *Ibid.*, p. 1.

3. Lakdawala, D.T., ***India – The Socialist Republic***, *(1988)*, p. 1.

Fundamental Failures of Planning

In his book *"Development Planning – the Indian Experience"* late Professor Sukhamoy Chakravarty points out to three major weaknesses and failures of Indian planning.

(a) A major defect is the gross inefficiency of production in many of the public sector enterprises. There are many areas of production where inefficiency is fairly widespread. as in the generation of power, transport, steel, fertilisers, let alone high cost consumer durables. There is no inherent reason why plant load factors in thermal power stations have to be around 50 per cent. There is much greater scope for improving the efficiency of the integrated steel plants.

(b) India has not been able to employ proportionately larger population in industry. The occupational structure has remained more or less unchanged.

(c) The planners did not comprehend the full set of logical implications of the Mahalanobis strategy of accelerated growth in the context of a mixed economy. To quote Professor Chakravarty here : " This showed that the process of industrialisation had ignored certain important issues relating to the phasing of investment outlay. But probably and more importantly, the inability to carry out effective land reform in the early fifties when conditions had been reasonably opportune, along with the maintenance of largely unchanged input base of traditional agriculture, meant that the agrarian transition was left largely incomplete."[4]

For over five decades, the Congress Government at the Centre – and even the coalition Governments which came to power at the Centre, for brief periods in between – have been constantly impressing upon the people of India that development planning in India aims to build a socialist or socialistic pattern of society. The Governments have been proclaiming measures to achieve growth with justice, abolition of poverty (Garibi hatao), removal of exploitation and inequality of incomes, etc But then, it is not slogans or political catch-phrases that matter. The more relevant thing is whether we are moving towards socialism or drifting away from it. The crucial question, therefore, is : whether the lot of the underdog, the weak and the under-privileged has improved? In other words, have the benefits of development percolated down to the lower layers of Indian society or have they been appropriated by a small group of the rich and the higher middle classes? It is the contention of many economists and non-political observers that the poor in India have not really benefitted from economic planning and that, to a large extent, the rich have become richer while the vast majority of the poor – particularly the Dalits and the tribals – have remained hopelessly poor. Let us now spell out some of the basic failures of planning in India.

1. Failure to eliminate poverty. The basic objective of planning is the provision of a national minimum level of living. The " garibi hatao " (Remove poverty) slogan of Mrs. Indira Gandhi could be provided a meaningful content only if measures were taken to remove poverty. It was felt that growth rate *per se* would not be sufficient to remove poverty and, instead, it would be more desirable to undertake specific measures to remove poverty. Thus, poverty removal programmes were made an integral part of the Fifth Plan and subsequent plans. Prof. D.T. Lakdawala's Expert Group estimated that in 1973-74, about 55 per cent of population was living below the poverty line and in 1987-88, this proportion had come down to 39 per cent. Using a slightly modified methodology, the Planning Commission estimated that in 1993-94, 36 per cent of the population lived below the poverty line. In absolute terms, even after two decades, that is, between 1973-74 and 1993-94, the total number of poor remained around 320 million The fact that even after 4 decades of planning, 36 per cent of population lived under conditions of poverty is a sad commentary on our planning. In this connection, Professor P.R. Brahmananda wrote :

"Instead of attacking the problem of poverty directly through wage-goods model, the authorities preferred to initiate a number of anti-poverty and public distribution measures, which were simply in the nature of fire-fighting exercises with large leakages. No wonder that the magnitude of poverty continued to be close to 40 per cent even with a modest povertly line in 1993-94"[5]

As per the methodology suggested by Tendulkar Committee, 45 percent population was below poverty line in 1993-94, which gradually reduced to 37.2 percent and 29.8 percent in 2004-05 and 2009-10 respectively.

In other words, all through, India had followed a blood transfusion approach which provided temporary relief. It would have been much better if India had followed a blood generation approach by emphasising sustainable employment creation.

2. Failure to provide employment to all able bodied persons. Another basic failure of planning in India was the emphasis on growth rather than on employment and the adoption of capital-intensive production rather than labour intensive production. Despite the implementation of eight five year plans, unemployment has been on the increase. According to the Planning Commission, the backlog of unemployed persons was 5.3 million at the end of the First Plan and 7.5 million at the end of the Eighth Plan. The combined incidence of unemployment and underemployment would be about 10.5 per cent of the labour force at the end of 1996-97. Taking unemployed and under-employed together, at the beginning of the Tenth Plan i.e. 2001-02, 9.21 per cent of the labour force or 35 million persons were unemployed. As per 66th round of NSSO, we find all india unemployment rate of 6.6 percent. It is the considered opinion of experts that unless India adopts an employment-oriented strategy and aims at 3 to 4 per cent annual increase of employment at higher levels of productivity, the chances of reaching the goal of full employment and alleviating under-employment would defy solution.

4. Sukhamoy Chakravarty, *Development Planning, The Indian Experience (1987)*, p8.

5. Brahmananda P.R. *50 Years of Free Indian Economy (1997)*, p 13.

3. Failure to reduce inequalities of income and wealth. It is rather doubtful that during the last five decades of planned economic development, redistribution of income in favour of the less privileged classes has taken place. Between 1950-51 and 1973-74, per capita income rose by 1.5 per cent per annum. But even this small increase was unequally distributed. Prof. V.M.Dandekar and Neelkantha Rath concluded, from their study in 1971 that the condition of the bottom 20 per cent of the population had definitely deteriorated and for the next higher 20 per cent of the population had remained more or less stagnant. There was thus evidence of increased concentration of income and wealth in the hands of the propertied class. The Fourth Plan admitted this fact : "Another area where our effort so far has been feeble and halting is in narrowing the disparities in incomes and property ownership."[6]

Another method of judging social justice relates to the rise in prices and changes in price structure. Prices of foodstuffs and essential consumer goods rose at a much higher rate than the prices of luxuries and semi-luxuries. Between 1990-91 and 1996-97, the general price index (1980-81 = 100) moved up by 72 per cent but the index of foodgrains prices shot up by 87 per cent. The prices of other consumer goods like sugar, matches, kerosene, cloth, vegetables etc., also moved at a faster rate vis-a-vis articles consumed by the upper classes. In a socialist economy, failure to control the prices of food and essential consumer goods is the denial of economic justice to the masses. The situation has been worsening over the years.

4. Failure to check the growth of black money. There is no doubt that speculative gains, illegitimate incomes of various forms through illicit gains of contractors, windfall profits from protected markets, semi-monopolistic conditions created by import restrictions and capital issues and corruption generated by licences and quota system in various fields of economic activity have all resulted in illicit income shifts in favour of upper income classes. Inflation, controls and the vast expansion of the public sector have bred corruption, tax evasion and illicit speculative gains. Thus, the fruits of economic progress instead of being shared by the masses flow into the pockets of the traders, businessmen and industrialists. The highly placed civil servants and the active politicians are all busy spinning money.

Fiscal measures to unearth unaccounted money have failed, and have actually buried the unaccounted money still deeper. Whereas the Govenment tries to unearth black money, the capitalists, the businessmen and speculators are keen to devise ways and means to convert black money into private capital formation. So far in this tug-of-war, it is the capitalist class which has been successful in dodging the State. But unaccounted money has resulted in stimulating demand for prestige goods like scooters, cars, washing machines, television sets, air conditioners, etc. In other words, a part of the gains of illicit incomes is spent on conspicuous consumption.

5. Failure to reduce concentration of economic power. One of the main tenets of socialism as accepted by our planners is the reduction of concentration of economic power. But actually, monopoly has increased in India during the last 55 years, even though Jawaharlal Nehru had stated categorically: "Monopoly is the enemy of socialism". To reduce concentratiion of economic power and wealth in the hands of a few, the Government adopted fiscal and other measures regarding taxation, ownership of wealth and property, curtailment of luxurious consumption and provision of subsidies on necessaries. Although fiscal measures had a positive role to play, a near expropriatory tax rate structure remained only on paper and became the source of black money. Similarly, a system of heavy taxation on articles of luxurious consumption and provision of subsidies on necessaries was tried for many years as a part of a programme of social justice but without any result.

6. Failure to implement land reforms. One of the basic policy decisions to transfer ownership of land to the peasantry, for which efforts were made for four decades, was not properly implemented. It has been now admitted by the Government that progress of land reforms had been rather slow and that the State governments were not eager to implement them with a speed sufficient for a quick transition to progressive agriculture and socialism.

To sum up. The philosophical foundations of the planning policies and strategy were sound but there was crisis of implementation due to the existence of a gap between the theory and practice of socialist planning The planning process has been able to create social and economic infrastructure, provide an industrial base by fostering the development of heavy and basic industries and enlarge educational opportunities, it failed to provide employment to every able-bodied person, eliminate poverty and bring about institutional reforms leading to reduction in concentration of income and wealth. Moreover, the benefits from economic development have accrued largely to the relatively affluent and those in urban areas.

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CHAPTER

18

TENTH FIVE YEAR PLAN (2002-2007)

Although growth has strong direct poverty reducing effects, the frictions and rigidities in the Indian economy can make these processes less effective, and the Tenth Plan must therefore be formulated in a manner which explicitly addresses the need to ensure equity and social justice.

— Planning Commission

1. TENTH PLAN: OBJECTIVES, TARGETS AND STRATEGY

Background of Developments in 1990's

The Tenth Plan (2002-07) was prepared against a backdrop of high expectations arising from some aspects of the recent performance. GDP growth in the post-reforms period improved to an average of about 6.1 per cent in the Eighth and Ninth Plans from an average of about 5.7 per cent in the 1980s, making India one of the ten fastest growing developing countries. Encouraging progress was also made in other dimensions.

The percentage of population in poverty continued to decline, even if not as much as was targeted. Population growth decelerated below 2 per cent for the first time in four decades. Literacy increased from 52 per cent in 1991 to 65 per cent in 2001 and the improvement was evident in all States. Sectors such as software services and IT enabled services have emerged as new sources of strength creating confidence about India's potential to be competitive in the world economy.

Weakness Observed in the Economy

These positive developments are, however, clouded by other features that give cause for concern. There are several aspects of development where the progress is clearly disappointing.

(i) Growth in the 1990s has generated less employment than was expected. (ii) The infant mortality rate has stagnated at 70 per 1,000 for the last several years. (iii) As many as 60 per cent of rural households and about 20 per cent of urban households do not have a power connection. (iv) Only 60 per cent of urban households have taps within their homes, and far fewer have latrines inside the house. (v) Land and forest degradation in the rural areas, and over-exploitation of groundwater are seriously threatening sustainability of food production. (vi) Pollution in the cities is on the increase.

The Tenth Plan provides an opportunity, at the start of the new millennium, to build upon the gains of the past but also to address the weaknesses that have emerged.

The Development Strategy

An important aspect of the redefinition of strategy that is needed relates to the role of the Government. An all pervasive government role may have appeared necessary at a stage where private sector capabilities were undeveloped, but the situation has changed dramatically. India now has a strong and vibrant private sector.

The public sector is much less dominant in many critical sectors and its relative position is likely to decline further as government ownership in many public sector enterprises is expected to decline to a minority. It is clear that industrial growth in future will depend largely on the performance of the private sector and the policies must therefore provide an environment that is conducive to such growth.

This is not to say that the Government has no role to play or only a minimalist role, in promoting development. On the contrary, it has an important role but a different one from that envisaged in the past. There are many areas such as the social sectors, where its role will clearly have to increase. There are other areas like infrastructure development, where gaps are large and the private sector cannot be expected to step in significantly. In these areas the role of Government may have to be restructured. It will have to increase in some areas of infrastructure development that are unlikely to attract private investment, such as rural infrastructure and road development.

In others like telecommunications, power and ports, the private sector can play a much larger role provided an appropriate policy framework is in place. Here, the role of the Government needs to change to facilitate such investment as much as possible while still remaining a public sector service provider for quite some time. In all these areas, the role of Government as a regulator ensuring a fair deal for consumers, transparency and accountability, and a level playing field is also extremely important.

Objectives of the Tenth Plan

Traditionally, the level of per capita income has been regarded as a summary indicator of the economic well being of the country and growth targets have therefore focused on growth in per capita income or per capita GDP. In the past, the growth rates of GDP have been such as to double the per capita income over 20 years or so. Recognising the importance of making a quantum jump compared with the past performance, the Prime Minister directed the Planning Commission to examine the feasibility of doubling the per capita income in the next ten years. With population expected to grow at about 1.6 per cent per annum, this target requires the rate of growth of GDP to be 8 per cent over the Tenth Plan and 9.3 per cent during the Eleventh Plan.

The Approach Paper proposed that the Tenth Plan should aim at an indicative target of 8 per cent GDP growth for 2002-07. It is certainly an ambitious target, especially in view of the fact that GDP growth has decelerated to around 6 per cent during the last two years of the Ninth Plans.

Even if the deceleration is viewed as a short term phenomenon, the medium term performance of the economy over the past several years suggests that the demonstrated growth potential over several years is only about 6.5 per cent. The proposed 8 per cent growth target therefore involves an increase of at least 1.5 percentage points over the recent medium term performance, which is very substantial.

Economic growth cannot be the only objective for national planning and indeed over the years, development objectives are being defined not just in terms of increases in GDP or per capita income but more broadly in terms of enhancement of human well being. This includes not only an adequate level of consumption of food and other types of consumer goods but also access to basic social services, especially education, health, availability of drinking water and basic sanitation. It also includes the expansion of economic and social opportunities for all individuals and groups and greater participation in decision making.

Key targets

To reflect the importance of these dimensions in development planning, the Tenth Plan must establish specific and monitorable targets for a few key indicators of human development. It is proposed that in addition to the 8 per cent growth target, the following targets should also be considered as being central to the attainment of the objectives of the Plan

Monitorable Targets

- Reduction of poverty ratio by 5 percentage points by 2007 and by 15 percentage points per cent by 2012;
- Gainful employment to the addition to the labour force over the Tenth Plan period;
- Universal access to primary education by 2007;
- Reduction in the decadal rate of population growth between 2001 and 2011 to 16.2 per cent;
- Increase in literacy to 75 per cent by 2007.
- Reduction of infant mortality rate (IMR) to 45 per 1000 live births by 2007 and to 28 by 2012;
- Reduction of maternal mortality ratio (MMR) to 2 per 1000 live births by 2007 and to 1 by 2012
- Increase in forest and tree cover to 25 per cent by 2007 and 33 percent by 2012.

- All villages to have access to potable drinking water by 2012.
- Cleaning of all major polluted rivers by 2007 and other notified stretches by 2012.

The social targets mentioned above would require a substantial allocation of resources to the social sector and major improvements in governance to make effective use of these resources.

Feasibility of 8 per cent Growth

At an aggregate level, any acceleration in growth requires some combination of an increase in gross domestic fixed capital formation and an increase in efficiency of resource use. The latter requires policies that will increase the productivity of existing resources and also increase the efficiency of new investment. There can be little doubt that we cannot hope to achieve 8 per cent growth relying entirely, or even largely, on increased investment.

With the average ICOR in the Eighth and Ninth Plans amounting to around 4.0, the investment increase needed to achieve a 1.5 percentage point increase in growth is 6 percentage points. While some part of this could come from an increase in foreign direct investment, it is unrealistic to expect this source to contribute more than 1 to 1.5 percentage points. This means that if the entire acceleration in growth has to come from additional investment with an ICOR of 4.0, it would be necessary to mobilise between 4.5 and 5 percentage points of GDP through additional domestic savings. An increase of this order may not be feasible. A substantial part of the additional growth targeted must therefore come from increased efficiency.

The principal reason why 8 per cent growth may be feasible in the Tenth Plan is that the scope for realising improvements in efficiency is large in the public and private sectors. However, this can only be realised if policies ensure such improvement. The Tenth Plan must therefore give high priority to identifying efficiency enhancing policies at macro and also at sector levels.

It is important to emphasise that the equity-related objectives of the Plan which are extremely important are intimately linked to the growth objective and attainment of one may not be possible without the attainment of the other. For example, high rates of growth are essential if we want to provide a sufficient expansion of sustainable high quality employment opportunities to the expanding labour force and ensure a sufficient increase in incomes of the poor and the disadvantaged. However, the relationship is not just a one way relationship.

It is also true that sustained high growth rates may not be sustainable if they are not accompanied by a dispersion of purchasing power that can provide the demand needed to support the increase in output without having to rely excessively on external markets. External markets are an extremely important source of demand and we would emphasise that they need to be tapped much more aggressively for many sectors. However, given the size of the economy and the present relative size of exports, much of the demand needed to support high growth will have to come from the domestic economy itself.

Although growth has strong direct poverty reducing effects, the frictions and rigidities in the Indian economy can make these processes less effective, and the Tenth Plan must therefore be formulated in a manner which explicitly addresses the need to ensure equity and social justice. There are several ways in which this can be achieved.

First, agricultural development must be viewed as a core element of the Plan as growth in this sector is likely to lead to the widest spread of benefits especially to the rural poor.

Second, the growth strategy of the Tenth Plan must ensure rapid growth of those sectors that are most likely to create high quality employment opportunities and deal with the policy constraints which discourage growth of employment. Particular attention must be paid to the policy environment influencing a wide range of service sectors which have a large employment potential. These include sectors such as construction, tourism, transport, SSI and modern retailing, IT enabled services and a range of other new services which need to be promoted through supportive policies.

Third, there will be a continuing need to supplement the impact of growth with special programmes aimed at special target groups that may not benefit sufficiently from the normal growth process. Such programmes have long been part of our development strategy and they will have to continue in the Tenth Plan.

Employment Generation and Poverty Reduction

Tenth Plan has indicated that the current backlog of unemployment is around 35 million persons, i.e. 9 per cent of the labour force. The Prime Minister's vision of creating 100 million employment opportunities over the next 10 years cannot be realised, if we depend merely on the growth process pushing it to 8 per cent level. The Special Group on Targeting 10 million employment opportunities per year has indicated that over the Tenth Plan, if 8 per cent growth is achieved, an additional 30 million employment opportunities will be created. For this purpose, special employment generation programmes will have to be focussed on high employment generating sectors so that an additional 20 million jobs are created over the Tenth Plan period. If this combined target is achieved, unemployment rate is likely to decline significantly to 5 per cent by the end of the Tenth Plan.

TABLE 1: Macro-Parameters for the Tenth Plan (2002-07)

		IX Plan	X Plan	2001-02	2006-07
1.	Domestic Saving Rate (% of GDPmp)	23.31	26.84	23.52	29.41
2.	Current Account surplus (% of GDPPmp)	0.90	1.57	0.90	2.85
3.	Investment Rate (% of the GDPmp) [1 + 2]	24.21	28.41	24.42	32.26
4.	ICOR	4.53	3.58		
5.	GDP Growth Rate (% per annum) [3 ÷ 4]	5.35	7.93		
6.	Export Growth Rate (% per annum)	6.91	12.38		
7.	Import Growth (% per annum)	9.80	17.13		

Note: GDPmp implies Gross Domestic Product at market prices.

SOURCE: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I.

Similarly, the targeted reduction in poverty rate of 5 percentage during the Tenth Plan and another 10 percentage points by the Eleventh Plan, will still leave more than 11 per cent of the population, or about 130 million people, below the poverty line in 2012.

2. GROWTH TARGET, SAVING AND INVESTMENT

Taking into account, the target of 8 per cent GDP growth as mandated in the Tenth Plan approach, the macro-parameters for the Tenth Plan have been estimated. A close perusal of Table 1 reveals that the achievement of the Tenth Plan target hinges critically upon an expected reduction in the incremental capital output ratio (ICOR) from 4.53 during the Ninth Plan to 3.58 in the Tenth Plan. For this purpose, policies will have to be focussed on areas and factors which will bring about a reduction in ICOR. Incidentally, it may be mentioned that ICOR was even lower during the Eighth Plan period at 3.43.

For achieving 8 per cent growth rate, domestic saving rate will have to increase from 23.52 per cent to 29.41 per cent of GDP. With the help of the current account surplus, investment rate or gross capital formation will have to increase from 24.42 per cent in 2001-02 to 32.26 per cent in 2006-07. Increase in investment is conditioned by our ahicevement to step up additional domestic saving by about 6 per cent during the Tenth Plan.

The overall picture regarding the magnitude and pattern of domestic saving is given in Table 2. Saving of the public sector during the Ninth Plan was negative to the extent of 0.82 per cent of GDP. During the Tenth Plan, it has to turn positive to the extent of 0.44 per cent. The decline in public sector saving was largely the consequence of the negative saving of the Government Sector during the Ninth Plan of the order of 4.29 per cent. Although the surplus from public enterprises contributed 3.47 per cent of GDP, but still it could not nullify the deficit of the Government Sector. The government has been undertaking downsizing of the public administration and also introduced economies in public sector spending. The Government hopes that the saving of Government sector which was negative to the extent of 4.29 per cent of GDP during the Ninth Plan would decline to (-) 2.41 per cent GDP during the Tenth Plan. Since the Government has undertaken the disvinestment of public enterprises, the savings of the public sector are likely to decline from 3.47 per cent to 2.85 per cent of GDP. Taken together, public sector overall savings are expected to turn positive during the Tenth Plan. As can be observed from Table 2, public sector savings have to rise from (-) 1.7 per cent of GDP in 2001-02—the base year to nearly 2.1 per cent in the terminal year (2006-07). This implies a total turn around of 3.8 per cent of GDP.

Private sector savings are composed of two components: (1) Saving by the household sector; and (2) saving by the private corporate sector. It may be mentioned that household sector comprises not only of households in the common understanding, but also of all unincorporated enterprises. Private sector savings are expected to increase from 24.1 per cent to 26.4 per cent

TABLE 2 : Composition of Gross Domestic Saving

(As per cent of GDP at market prices)

	IX Plan	X Plan	2001-02	2006-07
1. Public Sector of which:	-0.82	0.44	-1.71	2.08
(a) Government sector	-4.29	-2.41		
(b) Public Enterprises	3.47	2.85		
2. Private Corporate Sector	4.90	6.10		
3. Household Sector	19.23	20.30		
4. Private Sector (2 + 3)	24.13	26.40	25.22	27.33
5. Gross Domestic Saving (1 + 4)	23.31	26.84	23.52	29.41

SOURCE: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I.

during the Tenth Plan. Nearly half of this increase will come from increase in private corporate sector saving from 4.9 per cent to 6.1 per cent of GDP and the remaining half will be contributed by household sector rising from 19.2 per cent to 20.3 per cent of GDP.

The Tenth Plan, therefore, concludes: "The more important issue that emerges is that the government sector will be required to reduce its dissavings by nearly 2 percentage points of GDP over the Tenth Plan period in order to meet the aggregate domestic saving target. In the absence of such an improvement, it is very unlikely that the growth target for the Plan will be achieved primarily due to a resource constraint towards the latter part of the Plan."[1]

Sectoral Growth Rates and Corresponding ICORs

Tenth Plan seeks to bring about a reduction in ICOR for the economy to 3.58 as compared 4.53 in the Ninth Plan. The Tenth Plan intends to bring about a sharp decrease in the ICOR for agriculture to 1.99 as against 4.05 in the Ninth Plan. It also proposes to increase public investment in agriculture so as to reduce ICOR as also to push up growth rate of the agriculture from nearly 2 per cent during the Ninth Plan to double the level i.e. 4 per cent during the Tenth Plan. Even in manufacturing, ICOR is sought to be reduced from 18.4 to 7.8 during the Tenth Plan. This can be achieved only if within manufacturing sector, small scale industries which have high employment generating potential with low ICOR are encouraged. *The Tenth Plan, therefore, seeks to reduce the ICOR by shifting emphasis on agricultural growth as well as small enterprises.* (Refer Table 3).

Table 3 : Sectoral Growth Rates and ICORs

	Ninth Plan		*Tenth Plan*	
	Growth rate %	*ICOR*	*Growth Rate %*	*ICOR*
1. Agriculture & allied activities	2.06	4.05	3.97	1.99
2. Mining & Quarrying	3.81	5.44	4.30	7.99
3. Manufacturing	3.68	18.37	9.82	7.77
4. Electricity, Gas and Water supply	6.46	15.43	7.99	14.97
5. Construction	6.82	1.00	8.34	0.99
6. Trade	5.86	1.09	9.44	0.91
7. Rail Transport	4.70	9.87	5.40	14.66
8. Other Transport	5.63	6.09	7.54	5.37
9. Communication	17.14	5.28	15.00	8.33
10. Financial services	8.93	1.35	11.69	1.56
11. Public Administration	9.21	4.09	6.43	5.45
12. Other services	8.19	3.70	9.26	3.53
Aggregate for the Economy	5.35	4.53	7.93	3.58

Source: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I.

1. Planning Commission, *Tenth Five Year Plan (2002-03)*, Vol. I, p. 33.

3. PUBLIC SECTOR PLAN: RESOURCES AND ALLOCATIONS

Tenth Plan has estimated the required level of public sector investment consistent with 8 per cent growth of gross domestic product (GDP). These estimates reveal that at 2001-02 prices, public sector plan requires mobilisation of ₹ 15,92,300 crores. At comparable prices, it amounts to an increase of 67.4 per cent over the Ninth Plan realisation of resources. Obviously, Tenth Plan makes a big step-up of resources to boost the growth rate to 8% of GDP. Out of the total resources required for the public sector, the share of the Central Government is of the order of ₹ 9,21,391 crores or 57.9% of the total and that of the States and Union Territory Governments is ₹ 6,71,009 crores or 42.1 per cent of the total (Refer Table 4).

The data given in Table 4 reveals that balance from current revenues (BCR) are likely to generate (-) 0.7% of the total resources or a negative contribution of ₹ 6,385 crores. The rest is contributed by public borrowing ₹ 6,85,185 crores or 74.4% of total and net inflow from abroad ₹ 27,200 crores or 2.9% of the total. Thus, gross budgetary support of the Centre amounts to ₹ 7,06,000 crores or 76.6% of total. As per the guidelines provided by the Finance Commission, the Central assistance to states will be of the order of the ₹ 3,00,265 crores. This leaves a net balance of ₹ 4,05,735 crores or 44.0 per cent of total as net budgetary support available for the Central Plan. To this are added the Resources of Public Enterprises amounting to ₹ 5,15,536 crores or 56 per cent of total. Taking net budgetary support and adding to them the contribution of the public enterprises, the total contribution of the Centre to the Tenth Plan will be of the order of ₹ 9,21,291 crores.

The position regarding States and UTs is different. The State are expected to contribute ₹ 26,578 crores or 4.0 per cent of total as balance from current revenues. Market borrowings will contribute ₹ 261,482 crores or 39.0 per cent of total. To these are added the Central Assistance to States and UTs amounting to ₹ 3,00,265 crores or 44.7% of total. Thus, gross budgetary support of States will aggregate to ₹ 5,88,325 crores or 87.7 per cent of total. The balance will be provided by resources of public enterprises run by State & UT Governments amount to ₹ 82,684 crores, i.e. 12.3 per cent of the total. Out of the total resources generated by States for the Tenth Plan, borrowings from the market and Central Assistance account for nearly 84 per cent of total resources. Obviously, the real contribution of internal resources whether due to BCR or resources of public enterprises will be of the order of 16 per cent.

Taking Centre and State together, for the total requirements of ₹ 15,92,300 crores for the Tenth Plan, balance from current revenues will contribute ₹ 20,193

TABLE 4: Tenth Plan Projections of Resources for the Public Sector Plan

(₹ crores at 2001-02 prices)

	Centre		States		Total	
	Amount	*%*	*Amount*	*%*	*Amount*	*%*
1. Balance from Current Revenues	-6,385	-0.7	26,578	4.0	20,193	1.3
2. Borrowings including net MCR	6,85,185	74.4	2,61,482	39.0	9,46,667	59.4
3. Net Inflow from Abroad	27,200	2.9	—	—	27,200	1.7
4. Gross Budgetary Support (1+2+3)	7,06,000	76.6	2,88,060	43.0	9,94,060	62.4
5. Central Assistance to States & UTs	-3,00,265	32.6	+3,00,265	44.7	—	—
6. Net Budgetary Support (4-5)	4,05,735	44.0	5,88,325	87.7	9,94,060	62.4
7. Resources of Public Enterprises (a+b)	5,15,556	56.0	82,684	12.3	5,98,240	37.6
(a) Internal Resources	4,09,000	44.4	-7,760	-1.2	4,01,240	25.2
(b) Extra-budgetary Resources	1,06,556	11.6	90,444	13.5	1,97,000	12.4
8. Resources for Public Sector Plan (6+7)	**9,21,291 (57.9)**	**100.0**	**6,71,009 (42.1)**	**100.0**	**15,92,300 (100.0)**	**100.00**

Note: Figures in brakcets indicate the relative share of Centre and States & UTs in the Public Sector Plan.
MCR indicates Miscellaneous Capital Receipts.

SOURCE: Compiled and computed from *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 85.

crores or 1.3 per cent of total requirements. Market borrowings will contribute ₹ 9,46,667 crores or 59.4 per cent and net inflow from abroad a paltry sum of ₹ 27,200 crores, i.e. 1.7 per cent of total. Adding all these three, net budgetary support is likely to contribute 62.4 per cent of total plan needs. The balance of ₹ 5,98,240 crores or 37.6 per cent will be contributed by the internal and extra-budgetary resources (IEBR) of public enterprises.

The Tenth Plan, after presenting an analysis of financial resources concludes that the these resource generation projections can be realised only if the following measures ae taken:

1. Improving tax/GDP ratio of the Centre and States/UTs through inclusion of service tax in the tax base, removal of tax exemptions and concessions, tightening of tax administration and adopting an integrated value added tax (VAT) regime.

2. Reduction of subsidies by raising user charges of departmental services, expenditure by cutting administrative and establishment costs and privatisation.

3. Reduction of staff strength by a policy of downsizing and constituting a pension and amortisation fund to make committed payments like terminal benefits and debt services, self-financing.

4. Enacting a 'Fiscal Responsibility and Budget Management' bill under which borrowing shall be restricted in order to reduce the burden of interest payments.

5. Improving the internal resources of State PSUs by implementing power sector reforms so that the State Electricity Boards earn at least a minimum rate of return of 3 per cent on their assets.

6. To impose a limit on State Governments to issue State Guarantees to State level Public Enterprises by legislative or administrative ceiling.

In case, the Centre and State/UT Governments do not undertake the measures listed above, the targets of resource generation are not likely to be achieved.

As against the requirements of the Tenth Plan of the order of ₹ 15,92,300 crores, a re-assessment has been made and thus, the allocations aggregate to ₹ 15,25,639 crores. In the Central Sector, this re-assessment has lowered the Internal and Extra-ordinary Budgetary Resources (IEBR) to ₹ 4,87,448 crores and in the States/UTs, the core plan along with own resources and Central assistance has been reassessed at ₹ 6,32,456 crores as against the requirement of ₹ 6,71,009 crores. The re-assessed allocations presented in Table 5 indicate lowering of the Plan size by 4.2 per cent.

Sectoral Allocation of the Tenth Plan

Sectoral allocations of the Ninth and Tenth Plan are given in Table 6. The data indicate that as against the total allocation of ₹ 9,41,041 crores in the Ninth Plan (At 2001-02 prices), the Tenth Plan allocates ₹ 15,25,639 crores—an increase by 62 per cent which is substantial. Although the Tenth Plan explaining the relatively low GDP growth of the Ninth Plan, held agriculture responsible since it showed a miserably low growth of 2.1 per cent on the average, still the Tenth Plan allocation of

Table 5: Public Sector Requirement and Allocations for the Tenth Plan

(₹ crores at 2001-02 prices)

	Requirement	*Allocations*
CENTRE		
1. Budgetary Support	4,05,735	4,05,735
2. IEBR	5,15,556	4,87,448
A. Sub-total (1+2)	9,21,291	8,93,183
STATES & UTs		
4. Core Plan	5,90,948	5,90,948
5. Own Resources	38,553	—
6. Central Assistance	41,508	41,508
B. Sub-total (4+5+6)	6,71,009	6,32,456
TOTAL PUBLIC SECTOR		
C. Grand Total (A+B)	15,92,300	15,25,639

Source: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I.

agriculture (including irrigation) was stepped up by only 51 per cent. The only underlines the relatively low priority given to agriculture. The sector which has been given the maximum boost is energy with its allocation jacked up from ₹ 2,19,243 crores during the Ninth Plan to ₹ 4,03,927 crores during the Tenth Plan—a big increase of 84 per cent. The other big increase is the allocation for social services from ₹ 1,94,529 crores to ₹ 3,47,391 crores—a jump by about 79 per cent. Since in communication, big private sector corporates are undertaking huge investments, public sector outlay in communications has been raised by merely 6.6 per cent. Industry and minerals have got a boost by only 32 per cent. This is also due to the fact that the reform process has mainly boosted private sector in industry and there is a withdrawal by the public sector from this area. However, there was need to step up allocation to small scale industry, but separate figures are not given in this regard.

4. REGIONAL BALANCE AND POVERTY

A unique feature of the Tenth Plan is to lay down specific targets for each state in consultation with State governments. Table 7 provides information on growth rate targets for different States in the Tenth Plan along with the growth rates achieved during the Eighth and the Ninth Plan.

During the Eighth and the Ninth Plan period, the rate of growth in better-off States (i.e. States with higher per capita GDP), *viz.* Gujarat, Maharashtra, etc. have generally been higher than the States with lower level of per capita income like Bihar, Orissa and Uttar Pradesh. Such a phenomenon has resulted in higher income differences among States. According to some studies, the regional disparities tended to increase gradually in the 1980s followed by a relatively steep increase in the years after the reforms were launched and a gradual increase through the 1990s.

The Tenth Plan aims at reversing the pace of increase in inequality and create the necessary preconditions to help the worse-off States to catch up.

Table 6: Sectoral Allocations of Public Sector Resources for the Ninth and Tenth Plan

(₹ crores at 2001-02 prices)

	Ninth Plan		*Tenth Plan*		
	Amount (1)	*% (2)*	*Amount (3)*	*% (4)*	*% Increase 5 = (3–1/1) × 100*
1. Agriculture & Allied Activities	37,239	3.9	58,933	3.9	58.3
2. Rural Development	88,965	9.5	1,21,928	8.0	37.1
3. Special Area Programmes	5,408	0.5	20,879	1.3	286.1
4. Irrigation & Flood Control	69,830	7.4	1,03,315	6.8	48.0
Sub-total (1+2+3+4)	2,01,442	21.4	3,05,055	20.0	51.4
5. Energy	2,19,243	23.2	4,03,927	26.5	84.2
6. Industry and Minerals	44,695	4.7	58,939	3.9	31.9
7. Transport	1,43,249	15.2	2,25,977	14.8	57.8
8. Communications	92,836	9.9	98,968	6.5	6.6
9. Science, Technology & Environment	15,667	1.7	30,424	2.0	94.2
10. General Economic Services	13,734	1.5	38,630	2.5	181.3
11. Social Services	1,94,529	20.7	3,47,391	22.8	78.6
12. General Services	15,646	1.7	16,328	1.0	4.4
Total	9,41,041	100.0	15,25,639	100.0	62.1

Source: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 87.

Raising of growth rate is also important from the point of view of reducing poverty levels prevailing in the country.

An effort has been made to fix the growth rates of relatively poor States like Uttar Pradesh, Bihar, Madhya Pradesh, Orissa, Rajasthan, Chattisgarh and Assam in the range of 6-8 per cent per annum. This is a healthy development if these targets can be translated into reality. Whether the planning process would be able to create conditions for higher growth rates in terms of economic and social infrastructure in these States so as to boost growth rates, is the major challenge for the Tenth Plan.

Poverty Projections of the Tenth Plan

As a consequence of the Tenth Plan strategy to reduce regional disparities, poverty ratio in 2006-07 is expected to decline to 19.2 per cent as against 26.1 per cent for 1999-2000. However, out of the total poor population in 2006-07 at 2,197 lakhs, about 1,626 lakhs, i.e. 74 per cent will be concentrated in six poor States, *viz.*, Madhya Pradesh, Assam, Uttar Pradesh, Rajasthan, Orissa and Bihar. Only 24 per cent (525 lakhs) will be in the nine better-off States.

5. EXTERNAL SECTOR DIMENSIONS

Giving the background of the external sector targets, the Tenth Plan stated: "During the Ninth Plan period, India's balance of payments position remained mostly comfortable. The current account deficit narrowed down and on the average was 0.8 per cent of Gross Domestic Product (GDP), less than one half of the 2.1 per cent envisaged in the Plan. The growth of exports in dollar terms during the Ninth Plan period has been 5.6 per cent as against the targeted growth rate of 11.8 per cent. During the same period, import growth has been 3.3 per cent as against the target of 10.8 per cent . . . Invisible receipts have been buoyant. Foreign exchange reserves have increased significantly to around $ 54 billion by the end of March 2002."[2]

Targets of External Sector

According to the Tenth Plan, Indian exports are primarily supply-side determined. Thus, in order to take advantage of international markets, the country has to produce adequate volume of exportables. Tenth Plan envisages that exports are likely to increase from $ 44,915 million in 2001-02 to $ 80,419 million by 2006-07. This would mean a compound growth rate of 12.4 per cent during the Tenth Plan period.

As against exports, imports are expected to increase from $ 57,618 million in 2001-02 to $ 1,22,846 million in 2006-07 indicating an average annual growth rate of 16.3 per cent.

Trade balance deficit is likely to increase from $ 12,703 million in 2001-02 to $ 42,427 million in 2006-07. As a percentage of GDP, trade deficit will rise from 2.9% in 2001-02 to 6.6 % in 2006-07.

Regarding net invisibles, the Tenth Plan envisages an increase from $ 14,054 million in 2001-02 to $ 23,716 million by 2006-07, giving an average annual growth rate of 11 per cent.

Based on these projections, Tenth Plan estimates the current account balance which was positive by $ 1,351 million by 2001-02 to turn into negative to the extent of $ 18,711 million by 2006-07. As a percentage of GDP, current account balance (CAB) would deteriorate from 0.3% in 2001-02 to (-) 2.9% in 2006-07.

TABLE 7 : Current Account Balance during the Tenth Plan

($ million)

Scenario: (GDP 8%; Tariffs 33.7%, 28%, 24%, 20%, 18%)

	2001-02	*2006-07*	*Total*	*Growth Rate (%)*
1. GDP	4,37,029	6,42,025	27,37,497	8.0
2. Exports	44,915	80,419	3,22,863	12.4
3. Imports	57,618	1,22,846	4,64,215	16.3
4. Trade Balance (2–3)	-12,703	-42,427	-1,41,352	
5. Trade Balance/GDP (4/1)	-2.9	-6.6	-5.2	
6. Invisibles: (a) Receipts	35,612	67,077	2,64,542	13.5
7. (b) Payments	21,558	43,361	1,67,155	15.0
8. Invisibles (Net) = (a-b)	14,054	23,716	97,387	11.0
9. Current Account Balance (4+8)	1,351	-18,711	-43,965	
10. Current Account Balance/GDP (%) (9/1)	0.3	-2.9	-1.6	

SOURCE: Planning Commission (2002), *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 100.

2. *Ibid.*, p. 100.

However, the average CAB for the entire plan period would be of the order of (-) 1.6 per cent of GDP which is manageable to achieve the target of overall growth of 8 per cent.

Capital Account Scenario

Capital account projections give details of external assistance and foreign direct investment to finance the current account deficit. (Refer Table 9).

Total inflow of foreign savings in the Indian economy in the capital account are expected to increase from $ 9,545 million in 2001-02 to $ 22,222 million in 2006-07. In the same period, current account balance will decline from $ 1,351 million to $ (-) 18,711 million. Consequently, there shall be decline in accretion to our foreign exchange reserves from $ 10,896 million in 2001-02 to $ 3,511 million. India's external debt will increase from $ 2,550 million in 2001-02 to $ 9,122 million in 2006-07.

Table 8 : Inflow of Foreign Savings in the Indian Economy

($ million)

	2001-02 (P)	*2006-07*
1. External assistance	1,117	1,572
2. Commercial borrowings (net)	-1,114	4,400
3. Non-Resident Deposits (net)	2,754	2,750
4. Rupee Debt Service	-519	-600
5. Foreign Direct Investment (net)	3,905	7,500
6. Portfolio Investment (net)	2,020	5,600
7. Other capital flows (net)	1,382	1,000
8. Capital account Total (1 to 7)	9,545	22,222
9. Debt	2,550	9,122
10. Current Account Balance	1,351	-18,711
11. Change in F.E. Reserves (8 + 10)	10,896	3,511

Source: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 112.

6. EMPLOYMENT PERSPECTIVE

On the basis of the Report of the Special Group on creation of 10 million employment opportunities per year, the Tenth Plan has estimated the backlog of unemployed around 34.85 million (defined on CDS basis) in 2001-02. It also provides the estimates of addition to labour force over the Tenth Plan period as 35.29 million person years. The total job opportunities needed during the Tenth Plan will be 70.14 million (i.e. 34.85 + 35.29 = 70.14 million).

On basis of 8 per cent GDP growth, the Tenth Plan has estimated that an additional 29.67 million job opportunities will be created on 'business as usual' basis. Consequently, enough job opportunities will not be created even to taken care of the additions to labour force of the order of 35.29 million and as a result, 5.62 million employment opportunities will be needed. As a consequence, total number of unemployed will increase to 40.47 million.

The answer to this, therefore, is to look for a development strategy, which will revamp those sectors where the comparative advantage is in favour of a labour intensive production. For this, the Tenth Plan, following the Report of Special Group recommended some labour intensive sectors which require policy intervention. These sectors are agriculture, food processing, rural non-form activities, including khadi and village industries, small and medium enterprises and service sectors encompassing health, nutrition, education, information technology and communications. The total employment generated from these programme-based policy interventions will be of the order of 19.32 million. The details are as under:

Table 9 : Programme Generated Additional Employment during the Tenth Plan

Development Initiative	*Employment Opportunities (million)*
Agriculture & Allied Activities	3.55
Greening the Country through Agro-forestry	3.50
Energy Plantation for Bio-Mass Power Generation	2.01
Rural Sectors and Small & Medium Industries	7.06
Education and Literacy	1.70
Employment through Information and Communication Technology (ICT)	0.70
Health, Family and Child Welfare Services	0.80
Total	19.32

Source: Planning Commission, *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 157.

Thus, total employment generation will be of the order of nearly 49 million comprising of 8 per cent growth generated to be 29.67 million and programme generated to be 19.32 million. As a consequence, the rate of unemployment which was estimated to be 9.21 per cent in 2001-02 would decline to 5.11 per cent by 2006-07.

Table 10 : Total Employment Generation in the Tenth Plan

(In million)

	2001-02	*2006-07*	*Difference*
1. Labour force	378.21	413.50	35.29
2. Employment	343.36	392.35	48.89
3. No. of Unemployed (1-2)	34.85	21.15	(-) 13.70
4. Unemployment (%)	9.21	5.11	

Source: Compiled and computed from *Tenth Five Year Plan (2002-2007)*, Vol. I, p. 172.

7. ACHIEVEMENTS AND FAILURES OF THE TENTH PLAN

Tenth Plan completed its five years on 31st March 2007. Although complete information is not available about the achievements of the Plan, it would be appropriate to understand the achievements on the basis of facts available. This will provide an overall view of the progress during the plan.

Data provided in table 1 provide us the macro-economic indicators of the Plan.

Table 11: Macro-economic Indicators

	9th Plan 1997-98 to 2001-02	*10th Plan 2001-02 2006-07*
GDP growth of which	5.5	7.6
• Agriculture	2.0	2.1
• Industry	4.6	8.9
• Services	8.1	9.3
Gross Domestic Savings (As percent of GDP at market prices)	23.1	30.8
Gross Domestic Investment (As percent of GDP at market prices)	23.8	32.0
Current Account Balance (As percent of GDP at market prices)	-0.7	1.3
Foreign Exchange Reserves (US$ billion)	54.2	165.3
Rate of Inflation (based on WPI)	4.9	5.1

Source: Planning Commission (2007) *Eleventh Five Year Plan* (2007-12), Vol.1.

Creditable achievements of 10th Plan

Firstly, 10th Plan has not been able to achieve its target of 8 percent growth of GDP, but has taken the economy to a higher trajectory of growth rate at 7.6 percent as against 5.5 percent in the 9th Plan. It is also heartening to note that GDP growth in the last year of the Plan (2006-07) is expected to be 9.2 percent. This is a welcome development.

Secondly, gross domestic savings (as percent of GDP at market prices) averaged 28.2 percent in 10th Plan as against 23.1 percent in the 9th Plan. This is also a positive development because this implies that the economy is now moving to a higher level of saving which is a necessity to raise GDP growth a higher level of 8-9 percent. Domestic saving rate is estimated by the CSO to have climbed to 32.4 percent of GDP in 2005-06. This is a matter of legitimate pride because it enables the economy to reach higher levels of investment. Gross rate of investment is expected to be of the order of 33.8 percent in 2005-06 – another record achievement.

Thirdly, the economy has been able to reduce its incremental capital output ratio from a level of 4.3 during the 9th Plan to a level of 4.2 during the 10th plan. With higher levels of capital formation expected during the 11th Plan, the economy will be able to attain the target of average GDP growth of 9 percent during the 11th plan.

Fourthly, our foreign exchange reserves reached a level of US $ 185 billion on February 2007. This is another indication of the strength of the economy.

Fifthly, foreign investment flows were of the order of US $ 20.2 billion in 2005-06 – US $ 7.7 billion in the form of Foreign Direct Investment (FDI) and US $ 12.5 billion in the form of Portfolio Investment (PI). Since FDI improves the productive capacity of the economy, the share of FDI in total foreign investment inflow is only 35.6 percent. This needs an improvement, because portfolio investment takes place in highly speculative activities and is very volatile. The situation has taken a turn in a better direction and in 2006-07 out of total inflows of the order of $ 29.1 billion, FDI accounted for $ 22.1 billion (i.e. 76% of total).

On the basis of these macro-economic indicators, *The Approach Paper of the 11th Five year Plan* concluded: "Compared to the 9th Plan, the pace of growth of the economy has accelerated and our macro-economic fundamentals are sound." (p.3)

Gross failures on several fronts

While these achievements are welcome, there are also gross failures in certain targets. It would be of interest to examine them.

Reduction in the size of the Plan

Table 2 provides data about the planned outlay during the Tenth Plan and the actual allocations. As against a total planned outlay of ₹ 15,25,269 crores in the Tenth Plan at 2001-02prices, the actual allocation on the basis of 2006-07 prices works out to be ₹ 16,18,466 crores. *But if we deflate these figures at 2001-02* prices, the shortfall in total planned outlay will be much greater since the average annual inflation rate during the Tenth Plan was 5.1 percent. This only underlines the stark reality that the Plan size was substantially reduced in real terms, may be of the order of 24 percent. This indicates a gross failure.

Failure to reduce poverty to the targeted level

The 10th Plan had targeted to reduce poverty ratio in 2006-07 to a level of 19.2 percent as against 26.1 percent in 1999-00. However, on the basis of the findings of 61st Round of NSS, the level of poverty as studied on the basis of uniform recall period of 30 days was 27.5

TABLE 12: SECTORAL ALLOCATION OF PUBLIC SECTOR RESOURCES FOR THE TENTH PLAN

	*Original Tenth Plan**		*2002-03 to 2006-07***	
	Amount (₹ crores)	*%*	*Amount (₹ crores)*	*%*
1. Agriculture and allied activities	58,933	3.9	60,702	3.8
2. Rural Development	1,21,928	8.0	1,37,710	8.5
3. Special Area Programmes	30,879	1.3	16,423	1.0
4. Irrigation & Flood Control	1,03,315	6.8	112,415	6.9
Sub-total (1+2+3+4)	**3,05,055**	**20.0**	**3,27,250**	**20.2**
5. Energy	4,03,927	26.5	3,63,635	22.5
6. Industry and Minerals	58,939	3.9	64,655	4.0
7. Transport	2,25,977	14.8	2,63,934	16.3
8. Communications	98,968	6.5	82,945	5.1
9. Science, Technology and Environment	30,424	2.0	28,673	1.8
10. General Economic Services	38,630	2.3	30,349	1.9
11. Social Services	3,47,391	22.8	4,36,529	27.0
12. General Services	16,328	1.0	20,489	1.2
Total (1 to 12)	**15,25,639**	**100.0**	**16,18,460**	**100.0**

* At 2001–02 prices ** At 2006-07 prices

SOURCE: Compiled and computed from *Eleventh Five Year Plan (2007-12), Vol.1.*

percent in 2004-05 as against the comparable figure of 36.0 percent in 1993-94. This implies during the 11-year period (1993-94 to 2004-05), there was reduction of poverty by 8.5 percentage points. The average reduction of poverty works out to be 0.74 percent for the period 1993 to 2004. Translated in terms of absolute numbers, 300 million persons were below the poverty line in 2004-05. The data also reveal that 166 million poor i.e. 55.4 percent of total were concentrated in five states, with Uttar Pradesh topping the list with 59 million poor, followed by Bihar (36.9 million), Maharashtra (31.7 million), West Bengal (20.8 million) and Orissa (17.8 million). Obviously, there is a gross failure in the target of poverty reduction. This has introduced an internal inconsistency in the Indian economy. While there is an improvement in GDP growth, this is not reflected in an increase in poverty reduction. Rather it indicates a slowing down of rate of poverty reduction. Consequently, the percolation effect of higher growth of GDP to the poor is conspicuous by its absence which means the benefits of accelerated growth are pocketed by the upper classes. This stark reality needs remedial action.

Unemployment on the Increase

10th Plan targeted to reduce unemployment from a level of 9.11 percent in 2001-02 to a level of 5.11 percent in 2006-07. But data about unemployment as revealed by 61st Round (NSS) shows that unemployment on CDS basis was 8.3 percent in 2004-05. In respect of males, it was nearly 7.2 percent, but female unemployment was more than 9 percent. It may be noted that levels of female unemployment were higher than those of males – 8.7% in rural areas and 11.6% in urban areas in 2004-05.

Another distressing feature of the employment situation is that the organized sector employment growth was negative – at the annual average of (-) 0.38 percent during 1994-2004. While public sector employment growth fell to (-) 0.80 in 1994-2004, sine the public sector was shedding the load of surplus workers, private sector employment tardily improved its annual average from 0.44% during 1983-1994 to 0.61% during 1994-2004. The failure of the organized private sector to compensate for the fall in employment in the public sector resulted in a sharp decline in the overall employment growth rate becoming negative. There was lip sympathy expressed for the employment generating sectors, but in reality the reform process pushed its agenda of strengthening corporate sector. The explanation for failure of the employment objective lies in the growing capital intensity of the economy. Failure on the employment objective also contributed to the slowing down of poverty reduction in the 10th Plan.

Dismal Performance of Agricultural Sector

Prime Minister Manmohan Singh candidly admitted: "the cornerstone of the Plan had been a reversal of the declining trend in the growth rate of agriculture to eventually take it to above four percent. The actual performance in agriculture appears to have deteriorated even further and will possibly not exceed 1.5 percent during the first three years of the plan." The estimate of actual growth in agriculture for the entire 5-year period is now reckoned at 1.7 percent which is even less than half of the target of 4 percent growth envisaged in the Plan. Economists are of the opinion that the recent spurt

in the prices is mainly fuelled by supply constraints of agriculture. For this purpose, it is vitally necessary to step up investment in irrigation and watershed management. The government seems to have responded to this wake-up call by Indian agriculture and is now taking measures to step up investment in irrigation, watershed management and other related sub-sectors in agriculture.

No Reduction in Regional Inequalities

The Tenth Plan has not been able to bring about balanced regional development. Several studies are available which show that interstate inequality has increased in the nineties as only the better-off stated were able to benefit from the economic reforms and increase their growth rate significantly. While it is now an established fact that the richest states benefited the most, but in contrast some of the poorest and most populous states did experience decelerating growth.

Failure to reduce untargeted subsidies

To cut down subsidies even of the untargeted groups raises problems of tackling various kinds of lobbies. The Mid-term Appraisal stated very categorically that the minimum support prices paid for agricultural produce and subsidies on inputs such as fertilizers, electric power and water rates are availed of typically by the richer farmers. Both the Centre and the State Governments have to muster courage to reduce and ultimately eliminate such subsidies which are distributionally inequitable.

Similarly, lamenting the populist attitude of the state governments regarding electric power, the Mid-term Appraisal stated: "Electric power is clearly the area which remains perhaps the single largest cause of concern to the economy. Progress in this area has clearly been disappointing." Though large investment is required for improving generating capacity, the failure of state governments to levy user charges has been the biggest impediment. It is, therefore, vitally necessary that a rational electrification strategy be evolved so that power projects can be properly maintained and also to augment power supply, investible resources are released. The enactment of the Electricity Act, 2003 does have the potential to bring about dramatic changes, but this can happen if the States take collateral steps.

Financial Pattern Goes Haywire

As against an expectation of 1.3 percent as balance from current revenues, the performance during he Plan indicates a negative balance of he order of 9.6 percent. As against an expectation of 37.6 percent resources from public sector enterprises, actual realizations were of the order of 34.9 percent. There was practically a neglible net inflow from abroad of the order of just about percent. In this scenario, market borrowings were of the order of ₹ 12,22,161 crores i.e. 74 percent of the total as against the original provision of 59.4 percent. The emerging financial pattern only underlines the stark reality that major source of plan financing is market borrowing. This only shows that the original pattern of financing envisaged was only an attempt at wishful thinking. As a consequence of the heavy dose of market borrowing, the liabilities of the government in terms of interest payment would increase still further (Refer table 13).

Failure to achieve the targets of reducing IMR and malnutrition among childern

10th Plan targeted to reduce infant mortality rate (IMR) to 45 and maternal mortality rate (MMR) to 2 per 1000 live births by 2007. On both counts, there is a serious failure as IMR in 2005 was still as high as 58 and MMR is 4. There is a strong need to strengthen health improvement measures in the country. The Plan has failed in these monitorable targets.

Besides, this there is very dismal performance with regard to reduction in mal-nutrition. The National

TABLE 13 : FINANCIAL PATTERN DURING THE TENTH PLAN

	*Original Tenth Plan**		*2002-03 to 2006-07** Estimate*	
	Amount (₹ crores)	*%*	*Amount (₹ crores)*	*%*
1. Balance from current revenues	20,193	1.3	–1,58,888	–9.6
2. Borrowing including MCR	9,46,667	59.4	12,22,161	73.9
3. Resources of public enterprises	5,98,240	37.6	5,77,533	34.9
4. Aggregate Domestic Resources (1+2+3)	15,65,100	98.3	16,40,806	99.2
5. Net inflow from abroad	27,200	1.7	16,121	0.9
6. Resources for the Public Sector Plan (4+5)	15,92,300	100.0	16,53,868	100.0

* At 2001-02 Prices ** At current prices

SOURCE: Compiled and computed from the data provided by the *Eleventh Five Year Plan (2002-12)*, Vol.1.

Family Health Survey (2005-06) has recorded that the progress regarding reduction of child malnutrition during the 7-years period between 1998-99 and 2005-06 has been very poor.

Table 14: Progress in Reducing Child Malnutrition

	NFHS-2 (1998-99)	*NFHS-3 (2005-06)*
Children under 3 years who are		
(a) stunted	46	38
(b) wasted	16	19
(c) underweight	47	46

Source: *National Health Surveys* (Fact Sheets)

The data presented in table 4 indicates that between 1998-99 and 2005-06, (a) the proportion of children who are stunted (too short for age) marginally declined from 46% to 38% and (b) those who are wasted (too thin for height) increased from 16% to 19%. Similarly, (c) the proportion of underweight children indicated merely 1 percent decline in 7 years and was still high at 46% in 2005-06.

Conclusion

The total picture that emerges after a review of the achievements and failures of the Tenth Plan in that the planners are able to push forth the growth objective of GDP rising to a level of over 9 percent in 2006-07 and along with it, the level of saving and investment has been raised to 32% and 34% respectively. These are creditable achievements for which the country can legitimately feel proud.

But the irony of the growth process is that it has failed to percolate the benefits of growth down the line among the poor and weaker sections of the society, but has lined up the pockets of the better-off sections of society. Consequently, poverty is widespread and around 300 million persons (27.5% pf the population) were living below the poverty line. The level of unemployment on CDS basis was as high as 8.3 percent in 2004-05. There is gross failure on the agricultural front and the actual average annual growth rate achieved in the 10th Plan was 2.1 percent as against the target of 4 percent. There is no reduction in regional disparities and five poor states account for 55 percent of total poor. The child population suffering from malnutrition was as high as 46% in 2005-06.

The question which the critics raise is: Growth for whom? Is it for *aam admi* (Common man) or for the millionaires and billionaires and the richer classes in general. Effective measures are needed to promote inclusive growth, rather than paying lip sympathy for the poor and downtrodden.

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CHAPTER

19

ELEVENTH FIVE YEAR PLAN AND INCLUSIVE GROWTH

"India's economy is driven by one half of the population. The other half is mute witness to what is happening in India. If the other half also becomes a part of the driving forces of growth, India's economy will grow not by 8-9 per cent, it will easily grow between 10-11 per cent."

P. Chidambaram
Finance Minister of India

ELEVENTH FIVE YEAR PLAN AND INCLUSIVE GROWTH

The National Development Council in December 2006 approved the Approach to the 11th Plan document titled "*Towards faster and more Inclusive growth*" and directed the Planning Commission to prepare a detailed plan to assess the resources required to meet the broad objective set forth in the Approach Paper. The detailed version of the Eleventh Five Year Plan (2007-12) was approved by the National Development Council in December 2007.

1. ECONOMIC SCENARIO ON THE EVE OF ELEVENTH PLAN

Outlining its vision, the Eleventh Plan noted that 'the economy accelerated in the Tenth Plan period (2002-03 to 2006-07) to a record average of growth of 7.6 percent – the highest in any Plan period so far.' It emphasized the fact that during the last 4 years of the Tenth Plan, average GDP growth was 8.6% making India one of the fastest growing economies in the world. The saving and investment rates have also increased. The industrial sector has responded well to face competition in the global economy. Foreign investors are keen to invest in the Indian economy.

But "a major weakness in the economy is that growth is not perceived as being sufficiently inclusive for many groups, especially SCs, STs and minorities... The lack of inclusiveness is borne out by data on several dimensions of performance."[1]

1. "The percentage of population below the official poverty line has come down from 36% in 1993-94 to 28% in 2004-05. However, not only this is high, the rate of decline in poverty has not accelerated with GDP growth and the incidence of poverty among certain marginalized groups, e.g. the Scheduled Tribes, has hardly declined at all. Because the population has grown, the *absolute* number of poor people has declined only marginally form 320 mil-

1. Planning Commission (2007), *Eleventh Five year Plan* (2007-12) Vol.I., Inclusive Growth, p.1.

lion in 1993-94 to 302 million in 2004-05. *This performance is all the more disappointing since the poverty line on which the estimate of the poor is based is the same as in 1973-74, when per capita incomes were much lower.*"[2] (emphasis added)

2. Indicators of deprivation suggest that the proportion of population deprived of a minimum level of living is much higher. This is indicated by the following
   (*a*) According to National Family Health Survey, 46% of the children in the 0-3 age group suffered from malnutrition in 2005-06, but the more disturbing fact is that there is no decline from the level of 47% reported in 1998.
   (*b*) Human Development indicators like literacy, maternal and infant mortality rates also show that the progress is slow and India lags behind several other countries in Asia. While literacy rate has gone up to 64.8% in 2001, the number of illiterates still exceeds 304 million, making India the country with the largest number of illiterates. Life expectancy during 2001-06 is 63.9 years for males and 66.9 years for females, is still below 72 years for China. Adverse sex ratio with only 933 women for 1,000 men is another cause for concern. More disturbingly, the child sex ratio (ages 0-6) has declined sharply from 962 in 1981 to 927 in 2001. Infant mortality rates are higher than those of countries in East Asia.
3. Agriculture growth continues to be sluggish and was of the order of 2.1 percent during the 10th Plan, despite a target of 4% growth.

TARGETS SET TO ACHIEVE THE OBJECTIVES

(i) Income and Poverty
(1) Average GDP growth of 9% per year.
(2) Agricultural GDP growth of 4% per year.
(3) Generation of 58 million employment opportunities;
(4) Reduction unemployment among the educated to less than 5%.
(5) 20% increase in the real wage of unskilled workers.
(6) Reduction in headcount ratio of poverty by 10 percentage points.

(ii) Education
(1) Reduction in drop-out rate among children at the elementary level from 52.2% in 2003-04 to 20% by 2011-12.
(2) Developing minimum standards of attainment in elementary schools to ensure quality of education.
(3) Increasing literacy rate for persons 7 years or more to 85% by 2011-12.
(4) Reducing gender gap in literacy to 10 percent points by 2011-12.
(5) Increasing the percentage of persons going for higher education from 10% to 15% by 2011-12.

(iii) Health
(1) Infant mortality rate (IMR) to be reduced to 28 and maternal mortality rate (MMR) to 1 per 1,000 by 2011-12.
(2) Total fertility rate to be reduced to 2.1 by 2011-12.
(3) Clean drinking water to be made available to all by 2009.
(4) Malnutrition among children of age 0-3 to be reduced to half its present level.
(5) Anaemia among women and girls to be reduced to half its present level.

(iv) Women and Children
(1) Sex ratio for age group 0-6 to be raised to 935 by 2011-12 and to 950 by 2016-17.
(2) Ensuring that at least 33% of beneficiaries of all government schemes are women and girl children.
(3) Ensuring that all children enjoy a safe childhood, without any compulsion to work.

(v) Infrastructure
(1) To ensure electricity connection to all villages and BPL (Below Poverty Line) Households by 2009 and reliable power by the end of the 11th Plan.
(2) To ensure all-weather road connection to all habitations with population 1000 and above (500 and above for hilly areas) by 2009.
(3) To connect every village by telephone and provide broad band connectivity to all village by 2012.
(4) To provide homestead sites to all by 2012 and step up the pace of housing construction for the poor to cover all the poor by 2016-17.

(vi) Environment
(1) To increase forest and tree cover by 5 percentage points.
(2) To attains WTO standards of air quality in all major cities by 2011-12.
(3) To treat all urban waste water by 2011-12 to clean river waters.
(4) To increase energy efficiency by 20 percentage points.

2. *Ibid., p.1.*

4. Current daily status unemployment rate increased form 7.3% in 1999-00 to 8.3% in 2004-05, despite the higher GDP growth of 7.6% during the 10th Plan. Moreover, the entire increase in employment has taken place in the unorganized sector. A very disturbing feature of the employment situation is: "Permanent employment in the organized sector has decreased, although organized sector firms may be increasing their informal employment."[3] This indicates deterioration in the quality of employment.

2. OBJECTIVES OF THE ELEVENTH PLAN

The Plan envisages a high growth of GDP of the order of 9 percent for the country as whole. This implies that per capita GDP would grow at about 7.5% per year to double in 10 years.

However, the Plan document hastens to add that the target is not just faster growth but also inclusive growth which ensures broad based improvement in the quality of life of the people, especially the poor SCs/STs, OBCs and the minorities.

Vision for the Eleventh Plan

The broad vision of the 11th Plan includes several inter-related components.

1. Rapid growth that reduces poverty and creates employment opportunities;
2. Access to essential services in health and education especially for the poor;
3. Empowerment through education and skill development;
4. Extension of employment opportunities using National Rural Employment Guarantee Programme;
5. Environmental sustainability;
6. Reduction of gender inequality; and
7. improvement of governance.

3. MACRO ECONOMIC DIMENSIONS OF THE ELEVENTH PLAN

Total Public Sector outlay in the Eleventh Plan (Both Centre and States) is estimated at ₹36,44,718 crores. Out of this, the share of the Centre will be ₹21,56,571 crores (59.2%) and that of the States will be ₹14,88,147 crores (40.8%). The 11th plan outlay will be 120% higher than the 10th Plan realization. As a proportion of GDP, public sectors outlay of the Eleventh Plan will be an average of 13.54% compared to 9.46% that was achieved in the 10th Plan realization.

3. Ibid., *p.2.*

Targets of GDP and per capita GDP – The 11th Plan has targeted average GDP growth of the order of 9% for the Plan period 2007-11, which implies increasing gradually from 8.5% in 2007-08 to 10% in 2011-12. Per capita GDP growth will be of the order of 7.6% per year and this would double in 10 years.

Sectoral Growth Rates – Eleventh Plan intends to improve the growth rate of agriculture from 2.13% realized in the 10th Plan to 4%. Industry growth is targeted to be stepped up to 10-11% and service sector growth to 9-11%. The Eleventh Plan aims at double digit growth both in manufacturing and industry. For this, it will be critical to improve the performance of the core sector (steel, coal cement, oil, fertilizers and refined petroleum) to sustain this growth.

Table1: Macro-economic Parameters

	Tenth Plan	*Eleventh Plan*
1. Investment rate (% of GDP)	32.1	36.7
2. Domestic Saving rate (% of GDP)	30.8	34.8
3. Current account deficit (% of GDP)	1.28	1.88
4. Incremental capital output ratio (ICOR)	4.3	4.1
5. GDP growth rate	7.5	9.0

Figures are based on 2006-07 prices

Source: *Planning Commission (2007), Eleventh Five Year Plan (2007-12), Vol.1.p.30*

Service sector growth has improved impressively during the 9th and the 10th plan. Further improvement to a level of 9-11% with rapid growth in IT related services and in tourism will contribute to this outcome. The expected expansion in health and education should provide additional jobs in teaching, doctors and other medical personnel.

Table 2: Sectoral Growth Rates In Plans

	Agriculture	*Industry*	*Services*	*Total*
Ninth Plan (1997-2001)	2.44	4.29	7.87	5.52
Tenth Plan (2002-2006)	2.13	8.90	9.28	7.59
Eleventh Plan (2007-12)	4.0	10.11	9.11	9.0

Source: *Planning Commission (2007),* Eleventh Five Year Plan (2007-12), *Vol.1.p.30*

Public and Private sector Investment

The Eleventh Plan estimates an increase in private sector investment to reach 28.7 percent and public sector investment to 8.0%. This will result in aggregate investment to reach 36.7%.

Table 3: Total Public

	Public Sec
Ninth Plan	7.0
Tenth Plan*	6.7
Eleventh Plan	8.0

Note: Tenth Plan figures peri 2005-06.

Source: Planning Commissi *Plan (2007-12),* Vo

It may be noted tha likely to go up from 24.1% the Eleventh Plan. Howe ment will improve from 6. the 11th Plan. The Plan do increase in private sector i ment is in large part a re reforms initiated in the 19 on private investment an investment climate."[4] As private sector investment in the 11th Plan as agains quently, the share of the decline to 23% in the 11 Ninth Plan.

Table 4 reveals tha from 20.3% of GDP du during the Tenth Plan an the Eleventh Plan. The C more buoyancy and hav Ninth Plan to 6.0% durin to be 8.5% during the El

Public Sector sav savings of Government Public Sector Undertakin deterioration in the perf ngs during the Ninth Pl consequence of the Fifth tions which led to a shar ries. Departmental sav 2.9% in the Tenth P of the implementation c Management Act, the fi declined. Besides this, revenues during the Tent moderate and lower ta administration. The situ during the Eleventh Pl ment savings are likely 5% of GDP, unless th Pay Commission upset

4. Ibid., *p.32.*

Table 3: Total Public and Private Sector Investment

	Public Sector	*Private Sector*	*Total*
Ninth Plan	7.0	17.3	24.3
Tenth Plan*	6.7	24.1	30.8
Eleventh Plan	8.0	28.7	36.7

Note: Tenth Plan figures pertain to first 4 years i.e. 2002-03 to 2005-06.

Source: Planning Commission (2007), *Eleventh Five Year Plan (2007-12)*, Vol.1.p.30

It may be noted that private sector investment is likely to go up from 24.1% in the Tenth Plan to 28.7% in the Eleventh Plan. However, the public sector investment will improve from 6.7% in the 10th Plan to 8.0% in the 11th Plan. The Plan document mentions: "The rapid increase in private sector investment in aggregate investment is in large part a reflection of the impact of the reforms initiated in the 1990s, which reduced restrictions on private investment and created a more favourable investment climate."[4] As a consequence, the share of private sector investment is expected to improve to 77% in the 11th Plan as against 71% in the 9th Plan. Consequently, the share of the public sector investment will decline to 23% in the 11th Plan as against 29% in the Ninth Plan.

Table 4 reveals that household savings improved from 20.3% of GDP during the Ninth Plan to 22.6% during the Tenth Plan and are likely to be 22.8% during the Eleventh Plan. The Corporate Savings have shown more buoyancy and have risen from 4.1% during the Ninth Plan to 6.0% during the Tenth Plan and are likely to be 8.5% during the Eleventh Plan.

Public Sector savings have two components – savings of Government Administration and savings of Public Sector Undertakings (PSUs). There was marked deterioration in the performance of Departmental savings during the Ninth Plan to the extent of (-) 4.1% as a consequence of the Fifth Pay Commission recommendations which led to a sharp increase in government salaries. Departmental savings marginally improved to (-) 2.9% in the Tenth Plan. Recently, as a consequence of the implementation of Fiscal Responsibility Budget Management Act, the fiscal and revenue deficits have declined. Besides this, there is a sharp increase in tax revenues during the Tenth Plan due to the introduction of moderate and lower tax rates and improvement in tax administration. The situation is likely to improve further during the Eleventh Plan and Government administration savings are likely to turn positive to the extent of 0.5% of GDP, unless the recommendations of the Sixth Pay Commission upset the applecart.

4. Ibid., *p.32.*

Table 4: Compositions of Savings as % of GDP

	Ninth Plan	*Tenth Plan*	*Eleventh Plan*
1. Household Sector	20.3	22.6	2.8
2. Corporate Sector	4.1	6.0	8.5
3. Public Sector (a+b)	-0.8	1.2	4.5
(*a*) Govt. Administration	-4.1	-2.9	0.5
(*b*) Public Sector Undertakings	3.3	4.1	4.0
Total (1+2+3)	23.6	29.9	34.8

Source: Planning Commission (2007), *Eleventh Five Year Plan (2007-12)*, Vol.1.p.30

As against Government administration, savings of PSUs have been improving and are likely to be 4.0% of GDP during the Eleventh Plan as against 3.3% during the Ninth Plan. This is a very encouraging development.

Total saving in the economy increased from 23.6% of GDP during the Ninth Plan to 29.9% during the Tenth Plan and the Eleventh Plan estimates that they are likely to reach a high level of 34.8% – a very healthy trend. The Eleventh Plan projection is based on the following assumptions:

(a) The recommendations of the Sixth Pay Commission will have only moderate impact on salaries.

(b) Government will moderate some of the subsidies given by it.

(c) The savings of public sector undertakings will continue to maintain the level attained during the Tenth Plan or even improve upon their earlier performance.

(d) Subsidies on oil prices will be controlled by government policy and will not produce adverse impact on the savings of PSUs.

Balance of Payments

During the Tenth Plan, merchandise exports indicated on annual average growth rate of 23.2%. Similarly, merchandise imports increased by 27.8%. It may be noted that net oil imports increased by 26.5% due to the steep hike in the international oil prices. Export of services increased substantially contributing to a positive balance in invisibles which financed a large part of the trade deficit. Current account deficit in 2006-07 was US$ 9.6 billion i.e. 1.1% of GDP.

Exports in the Eleventh Plan are projected to grow at about 20% per year in US dollar terms and the share of exports to GDP will rise from 13.95 in 2006-07 to 22.5% in 2011-12. The imports in the Eleventh Plan are likely to continue at an average rate of 23%. As a consequence, imports as a percentage of GDP will increase from 21% in 2006-07 to 38.5% in 2011-12.

Table 5: Eleventh Plan Projections of Balance of Payments

	2006-07		2011-12		2007-12	
	US$ Billion	*% of GDP*	*US$ Billion*	*% of GDP*	*US$ Billion*	*CAGR*
1. Exports	127.1	13.9	316.2	22.5	1,135	20.0
2. Imports	192.0	21.0	540.5	38.5	1,864	23.0
3. Trade balance (1-2)	-64.9	-7.1	-224.3	-16.0	-729	
4. Net invisibles	55.3	6.1	190.0	13.5	616	28.0
5. Current Account Deficit	-9.6	-1.1	-34.3	-2.4	-113	-1.9*
6. Net capital inflows (3+4)	44.9	4.9	51.9	3.7	206.8	2.9

CARG – Compound Annual Growth Rate

* As a percentage of GDP

Source: Planning Commission (2007), *Eleventh Five Year Plan* (2007-12), Vol.1, p. 35

The Eleventh Plan states: The trade deficit is expected to be 16% of GDP… The invisible surplus is projected to be 13.5% GDP in 2011-12 and consequently the current account deficit for the Eleventh Plan period increases from 1.1% in 2006-07 to between 1.9% and 2.4% of GDP in 2011-12. These calculations are based on the assumption that international oil price remains around $80 per barrel. "Financing a deficit of this order should not present a problem given the foreign capital inflows that are taking place and which can be expected to continue, barring an unexpectedly severe and prolonged downside shock to the world economy."[5]

A close perusal of the Eleventh Plan Projections of balance oaf payments reveals that the Planning Commission deliberately understates the current account deficit for period 2007-012 to $ 81.4 billion, when its own data shows a deficit of the order of $ 113 billion. In case this is accepted, current account deficit will of the order of 2.3% of GDP on the average and not 1.9% as indicated in the Plan document.

Although there is a strong need to reduce the import growth rate so as to have a positive trade balance, the Government continues its open door policy on imports. There is a need to bring about a course correction. Secondly, with the appreciation the Rupee, exports may slow down, but imports may be stimulated. This may result in a bigger trade deficit. It is also possible that invisibles surplus may decline due to other competitors in the IT sector, especially China. This may reduce the size of the invisibles surplus to substantially neutralize the trade deficit. This may result in bigger current account deficit. Prudence requires that planners should adopt a more cautious approach.

4. FINANCING THE ELEVENTH PLAN

Table 6 provides us an idea of the Tenth Plan Realizations and the Eleventh Plan projections of financing. During the Tenth Plan, for the public sector total realizations of ₹ 16,53,865 crores, 73.9 percent were

Table 6: Eleventh Plan Projection of Resources

₹ Crores

	Tenth Plan Realizations			*Eleventh Plan Projection*		
	Centre	*State*	*Total*	*Centre*	*State*	*Total*
1. Balance from current Revenues	-1,27,166 (-13.5)	-31,722 (-4.5)	-1,58,888 (-9.6)	6,53,989 (30.3)	3,85,050 (25.9)	10,39,039 (28.5)
2. Borrowings including MC ₹	8,50,382 (89.9)	3,71,779 (52.5)	12,22,161 (73.9)	7,67,722 (35.6)	6,49,423 (43.6)	14,17,145 (38.9)
3. Net inflow from abroad	16,121 (1.7)	—	16,121 (1.0)	—	—	—
4. Gross Budgetary Support (1+2+3)	73,937 (78.2)	3,40,057 (48.0)	10,79,394 (65.3)	14,21,711 (65.9)	10,34,473 (69.5)	24,56,184 (67.4)
5. Central Assistance to States & UTs.	-2,52,539 (–26.7)	+2,48,677 (35.2)	-3,862 (-0.2)	-3,24,851 (–15.1)	+3,24,851 (21.8)	-
6. Net budgetary support (4+5)	4,86,798 (51.5)	5,88,734 (83.2)	10,75,532 (65.1)	10,96,860 (50.8)	13,59,324 (91.3)	24,56,184 (67.4)
7. Resources of Public sector undertakings	4,58,530 (48.5)	1,19,003 (16.8)	5,77,533 (34.9)	10,59,710 (49.2)	1,28,824 (8.7)	11,88,534 (32.6)
8. Total Resources for Public Sector (6+7)	9,45,328 (100.0)	7,07,737 (100.0)	16,53,865 (100.0)	21,56,571 (100.0)	14,88,147 (100.0)	36,44,718 (100.0)

Note : MCR means miscellaneous capital receipts.

Figures in brackets indicate the relative share of Centre, States in the Public Sector Plan.

Source: Compiled and computed from *Eleventh Five Year Plan* (2007-12), Vol.1.

5. Ibid., *p.35*

obtained from market borrowings and 34.9 percent were contributed by public sector undertakings. However, balance from current revenues (both Centre and States) were negative to the tune of 9.6 percent of total plan resources.

As against this picture of Tenth Plan realizations, the Eleventh Plan hopes to generate ₹ 10,39,039 crores – 28.5 of the resources from balance from current revenues. The Planning Commission states: "This outcome is the consequence of tighter fiscal discipline imposed by fiscal responsibility framework, both at the Centre and the States and an optimistic revenue outlook driven by buoyancies in revenue collections during the last three years of the Tenth Plan reflects the robust performance of the economy."[6]

The planners are conscious of the fact that this optimism may not be realized because there are certain uncertainties associated with the impact of Sixth Pay Commission recommendations. Equally important is the upward pressure on subsidies, particularly fertilizer and petroleum subsidies. The hike in the international price of petroleum above $115 per barrel is already pushing the petroleum subsidy very sharply. Similarly, fertilizer subsidies are also increasing. There is an urgent need to undertake reform of the subsidies. However, the Central Government is not taking a courageous step to control them, fearing backlash in the impending General Election due in 2009. This may upset the optimistic calculations of the Planning Commission which will force the planners either to cut the size of the Plan or take greater resort to market borrowing.

Resources of surplus from public sector undertakings are continuing their forward march and all likely to finance 32.6% – or nearly one-third of the total public sector plan. But subsidies provided to petroleum products may reduce resources generation by public sector oil companies – a major source of resource generation. Actual realization from PSUs will be affected by two factors: (a) international price of oil, and (b) the policy of the Central government on petroleum subsidies. If the realization from PSUs decline in the Eleventh Plan, the country may witness a higher dose of market borrowing to finance the Plan.

It is, therefore, difficult to agree with the rosy picture presented by the Planning Commission about the financial pattern of the Eleventh Plan. A similar optimistic outlook was presented at the time of the formulation of the Tenth Plan, but its financial pattern went haywire. In the absence of bold policies in view of the problems of coalition government, actual realizations in the Eleventh Plan may vary sharply from projected figures on various components.

5. SECTORAL ALLOCATION OF RESOURCES

A comparison of the sectoral allocation of the 10th and the 11th Plan is given in table 7. It may be observed that as compared to Tenth Plan realizations of ₹ 16,18,460 crores in the aggregate, Eleventh Plan proposes an overlay of ₹ 36,44,718 crores – an increase by 125 percent. In this sense, the Eleventh Plan is bold and more ambitious. It is, therefore, natural to expect large absolute increases in all the sectors.

However, it would be more desirable to see whether the resource allocation pattern marks a big shift from that of the Tenth Plan. For this purpose, percentage of total

Table 7: Sectoral allocations during 10th and 11th Plan

	10th Plan Realizations (2002-07)		*11th Plan Projections (2007-12)*	
	₹ crores	*%*	*₹ crores*	*%*
1. Agriculture and allied activities	60,702	(3.8)	1,36,381	(3.7)
2. Rural Development	1,37,710	(8.5)	3,01,069	(8.3)
3. Special area programmes	16,423	(1.0)	26,329	(0.7)
4. Irrigation & flood control	1,12,415	(6.9)	2,10,326	(5.8)
Total Agriculture (1 to 4)	**3,27,250**	**(20.2)**	**6,74,105**	**(18.5)**
5. Energy	3,63,635	(22.4)	8,54,123	(23.4)
6. Industry & Minerals	64,655	(4.0)	1,53,600	(4.2)
7. Transport	2,63,934	(16.3)	5,72,413	(15.7)
8. Communications	82,945	(5.1)	95,380	(2.6)
9. Science, Technology & Environment	28,673	(1.8)	8,7933	(2.4)
10. General Economic Services	30,349	(1.9)	62,523	(1.7)
11. Social services*	4,36,529	(27.0)	11,02,327	(30.9)
12. General Services	20,489	(1.3)	42,283	(1.2)
Total	**16,18,460**	**(100.0)**	**36,44,718**	**(100.0)**

* Social Services include education, medical and public health, water supply & sanitation, housing and urban development etc.
Source: Compiled and computed from Planning Commission (2007), *Eleventh Five Year Plan* (2007-12).

6. Ibid., *p.47.*

Table 8: Social Services in the Eleventh Plan

	Centre	*States and UTs*	*Total*	*%*
Social Services	5,78,864	5,23,463	11,02,327	30.3
1. Education	2,38,608	1,08,730	3,47,338	9.5
2. Medical & Public Health	1,20,879	53,897	1,74,776	5.0
3. Water supply & sanitation	41,825	86,447	1,28,272	3.5
4. Housing	—	26,007	26,007	0.7
5. Urban Development	68,532	85,530	1,54,062	4.2
6. Other social services	1,09,020	1,62,852	2,71,872	7.5
Total Plan Outlay	21,56,571	14,88,147	36,44,718	100.0

Source : Compiled from the data provided for Central Ministries and States and UT plans in the *Eleventh Five Year Plan* (2007-12)

plan outlay for each sector are indicated in Table 7. From the presentation of comparative figures of Tenth and Eleventh Plan, it may be observed that the share of agriculture and irrigation which was 20.2% in the Tenth Plan has been reduced to 18.5% in the Eleventh Plan. A major upward shift in the proportion of allocation is observed in social services i.e. from 27 percent in the Tenth Plan to 30.3 percent in the Eleventh Plan. There is also a big decline in the proportion of allocation to communications – from 5.1% in the Tenth Plan to 2.6% in the Eleventh Plan – nearly by 50 percent. Since the private sector has been growing strong in the development of communications, this reduction appears to be justified. As the Eleventh Plan intends to undertake human development on a big scale, education and health allocations are proposed to be stepped up. This is consistent with its strategy of inclusive growth.

Energy imposes a constraint on development and the Eleventh Plan commitment of 23.4% to the energy sector is eminently justified.

The most disappointing aspect of the resource pattern of the Eleventh Plan is its reduced priority in terms of resource allocation to agriculture. Within the agricultural sector, slashing down the provision for irrigation to 5.8% against the Tenth Plan allocation of 6.9% is also uncalled for, because it is held by the economists that extension of irrigation is the basic necessity to achieve the target of 4% growth in agriculture.

Allocation for Social Services

Eleventh Plan intends to incur an outlay of ₹ 11,02,327 crores (30.3%) of the total plan outlay on social services. The share of education is being stepped up to ₹ 3,47,338 crores (9.5% of plan outlay), followed by medical & public health, nearly ₹ 1,75,000 crores (5% of total) and urban development ₹ 1,54,000 crores (4.2% of total). A big programme for the provision of drinking water supply and sanitation involving ₹ 1,28,272 crores has been undertaken, so as to provide drinking water to all habitations.

Infrastructure Development

Good quality infrastructure is most critical physical requirement for attaining faster economic growth in a competitive world and also for ensuring investment in backwards regions. The total investment needed for infrastructure defined to include electric power, roads, railways, airports, telecommunications, irrigation, drinking water, sanitation, storage and warehousing will have to increase from about 5% of GDP in 2006-07 to 9% of GDP in 2011-12. Since public private partnership is being promoted, the share of the private sector is expected to rise to about 25%. Obviously public sector has to play a leading role in infrastructure.

Table 9: Investment in Infrastructure

(Percentage of GDP)

	2006-07	2011-12
Public Sector (Center+States)	4.11 (82.2)	6.78 (75.3)
Private Sector	0.89 (17.8)	2.22 (24.7)
Total	5.00 (100.0)	9.00 (100.0)

Source: Planning Commission, *Eleventh Five Year Plan* (2007-12) Vol.1.

Power Development

The performance of the Tenth Plan in power development was disappointing. As against a target addition of 41,110 Mega Watt (MW), only 21,080 MW were commissioned (i.e. 51%), out of which 18,000 MW were actually made fully operational.

The Eleventh Five Year Plan targets a capacity addition of 92,577 MW, out of which the share of hydro power will be 16,553 MW(17.9%), thermal power 58,644 MW (63.3%), Nuclear power 3,380 (3.7%) and wind & renewable energy sources 14,000 MW (15.1%). Obviously, the Eleventh Plan programme of power generation is a much bolder attempt, if the government is able is execute it within the timeframe of 5 years.

Table 9: Additional Power Generation Capacity During the 11th Plan (2007-12)

	Megawatt	%
Hydro	16,553	17.9
Thermal	58,644	63.3
Nuclear	380	3.7
Wind and Renewable energy sources	14,000	15.1
Total	92,577	100.0

Source: Planning Commission, *Eleventh Five Year Plan* (2007-12), Vol.III.

IT Sector

Eleventh Plan targets to reach a subscriber base of 500 million and a rural teledensity of 25%. The IT Sector at present employs over 5 million people and is expected to provide employment to over 18 million by 2012.

Petroleum and Natural Gas Production

Eleventh Plan proposes an outlay of ₹ 2,13,515 crores on petroleum and natural gas production. This is likely to produce 207 million tonnes of crude oil during 2007-12 and 266 bcm of natural gas production.

Roads

An expanded National Highway Development Programme involving ₹ 2,27,258 crores is contemplated in the Eleventh Plan. Besides Highway Development, the plan intends to ensure all-weather roads connection to all habitations with population 1,000 and above (500 and above in hilly and tribal areas) by 2009.

6. EMPLOYMENT PERSPECTIVE IN THE ELEVENTH PLAN

Eleventh Plan rightly states: "Generation of productive and gainful employment, with decent working conditions, on a sufficient scale to absorb our growing labour force form a critical element in the strategy for achieving inclusive growth."[7]

Weaknesses of past experience

"The basic weakness in our employment performance is the failure of the Indian economy to create a sufficient volume of additional high quality employment to absorb new entrants into the labour force while also facilitating the absorption of surplus labour that currently exists in the agricultural sector into higher wage non-agricultural employment."

The following major weaknesses were noticed in the Eleventh Plan:

- The rate of unemployment has increased from 6.1% in 1993-94 to 7.3% in 1999-00 and further to 8.3% in 2004-05.
- Unemployment among agricultural labour households has risen from 9.5% in 1993-94 to 15.3% in 2004-05.
- While non-agricultural employment expanded a robust rate of 4.7% during the period 1999-00 to 2004-05, this growth was largely in the unorganized sector.
- Despite fairly healthy GDP growth, employment in the organized sector actually declined, leading to frustration among the educated youth.
- Although real wages of casual labour in agriculture continue to rise during 2000-2005, growth has decelerated strongly as compared to 1994-2000 which reflects poor performance in agriculture.
- Growth of real wage rates in non-agricultural employment during 1999-00 to 2004-05 has been negligible.
- Real wages stagnated or declined even for workers in the organized industry although managerial and technical staff did secure large increase.
- Wage share in the organized sector has halved after 1980s and is now among the lowest in the world.

During the Tenth Plan, as against a target of 50 million employment opportunities, 47 million employment opportunities were created which indicates that the employment target was more or less achieved. Moreover, employment growth rate improved from 1.25%

Table 10: Employment scenario during 1993-94 to 2004-05

Current daily status

All India	*1993-94*	*1999-00*	*2004-05*	*Growth rate during 1993-94 to 1999-00*	*Growth rate during 1999-00 to 2004-05*
	(Million Persons)				
1. Population	893.4	1005.0	1092.8	1.98	1.69
2. Labour	334.2	364.9	419.6	1.47	2.84
3. Workforce	313.9	338.2	384.9	1.25	2.62
4. No. of employed (2-3)	20.3	26.7	34.7	4.69	5.40
5. Unemployment rate (%) (4/2*100)	6.1	7.3	8.3		

Source: Planning Commission (2007), *Eleventh Five Year Plan*, Vol.1., p.71

7. Ibid., *p.69*

Table 11: Sector wise share of employment by current daily status

	1993-94	1999-00	2004-05
(1) Agriculture	**61.0**	**56.6**	**52.1**
(a) Mining & Quarrying	0.8	0.7	0.6
(b) Manufacturing	11.1	12.1	12.9
(c) Electricity, water etc.	0.4	0.3	0.4
(d) Construction	3.6	4.5	5.6
(2) Industry (a+b+c+d)	**15.9**	**17.6**	**19.5**
(e) Trade, hotel & Restaurant	8.3	11.2	12.6
(f) Transport, storage & Comm.	3.2	4.1	4.6
(g) Finance, insurance, real estate & business services	1.1	1.4	2.0
(h) Community, social & personal services	10.5	9.1	9.2
(3) Services (e+f+g+h)	**23.1**	**25.8**	**28.4**
Total	**100.0**	**100.0**	**100.0**

Source: Compiled from Planning Commission (2007), *Eleventh Five Year Plan*, Vol.1., p.71

during 1993-94 to 1999-00 to 2.62% during 1999-00 to 2004-05. The annual increase in employment rose form 4 million per annum to 9.3 million per annum during 1999-00 to 2004-05.

Share of Employment in different sectors reveals the share agricultural employment declined from 61.0% in 1993-94 to 52.1% in 2004. The share of industry improved from 15.9% in 1993-94 to 19.5% in 2004-05. Services indicated the sharpest increase from 23.1% in 1993-94 to 28.4% in 2004-05.

Employment Projections for the Eleventh and Twelfth Plans

The Approach Paper of the Eleventh Plan had projected an addition to labour force of 52 million in the Plan period. However, the projections of labour force growth have been revised in view of the latest population projections made by the National Commission on Population and work done by the Eleventh Plan Working Group on Labour Force and Employment Projections. The projected increase in labour force during the Eleventh Plan is now estimated as 45 million.

Since the backlog of unemployed in 2006-07 were reckoned as 36.7 million, the total requirement of employment opportunities works out to be about 82 million.

With the generation of additional employment opportunities of the order of 58 million in the Eleventh Plan, the backlog of unemployed at the end of the

Table 12: Population, Labour Force and Employment Projection

Million

	2004-05	*2006-07*	*2011-12*	*2016-17*
(a) Population	1,092.8	1,128.1	1,208.0	1,283.2
(b) Labour Force	419.6	438.9	483.6	524.0
(c) Employment opportunities	384.9	402.2	460.3	518.2
(d) Unemployed	34.7	36.7	23.3	5.8
(e) Unemployment Rate (%)	**8.28**	**8.36**	**4.83**	**1.12**

Source: Planning Commission (2007), *Eleventh Five Year Plan*, Vol.1., p.71

Table 13: Projected Growth of Population, Labour Force and Employment

	2004-05 to 2006-07	*2006-07 to 2011-12*	*2011-12 to 2016-17*
Growth rate in population	1.43	1.37	1.22
Growth rate in labour force	2.02	1.96	1.62
Growth rate in employment	1.98	2.73	2.42
Additions to labour force (million)	19.3	44.7	40.4
Additions to employment opp. (million)	17.3	58.1	57.9
Average additions to employment per year (million)	8.6	11.6	11.6

Source: Planning Commission (2007), *Eleventh Five Year Plan*, Vol.1., p.71

Eleventh Plan will be of the order of 23-24 million. Consequently, the rate of unemployment will decline from 8.36% in 2006-07 to 4.83% in 2011-12. Similarly, another 58 million employment opportunities will be created in the Twelfth Plan and as a consequence, the backlog unemployed will get further reduced to merely 6 million. The rate of unemployment will fall still further to 1.12% in 2016-17. If the projections and the actual realizations are achieved as per schedule, India will attain a state of full employment by 2016-17. But the Planning Commission is itself not sure of its labour force projections and employment generation capacity of the economy. To safeguard itself, it mentions:

"There are important qualifications to these projections which must be kept in mind, arising from the limitation of employment elasticity as a projection tool. The concept of employment elasticity is at best a mechanical device to project employment on the basis of projected growth of output and past relationships between employment and output. These relationships can change as a result of changing technology and change in real wages. The labour force participation rate is also subject to changes especially because of possible changes in female participation rates in urban areas associated with advances in women's education. For all these reasons, the projected decrease in unemployment rate must be treated with caution."[8]

Table 13 presents data about additional employment opportunities created in agriculture during the Tenth Plan, the Eleventh Plan contemplates zero additional employment. To assume zero employment elasticity in agriculture when the rate of GDP growth in agriculture is sought to be stepped up from 2% to 4%, is to say the least, preposterous. This is more so when the Eleventh Plan itself recommends encouragement to employment generating sectors in the economy. If 8.84 million employment opportunities could be generated in the Tenth Plan in agriculture, it pass one's comprehension why the same order of employment opportunities, if not more, be generated during the Eleventh Plan, moreso when its growth rate is to be doubled. Agriculturally backward states like Bihar, Orissa, Chhattisgarh, Rajasthan and Uttar Pradesh can certainly create more employment opportunities via extension of irrigation and watershed development. The major sources of employment generation in the Eleventh Plan are trade, hotels and restaurants (17.4 million), manufacturing (11.94 million), construction (11.92 million) and transport, storage and communications (9 million). If the target of additional employment in agriculture had been kept at the same level as in the Tenth Plan i.e. 8.8 million, the employment generation in the Eleventh Plan would have reached the level contemplated by the Approach Paper (65 million). It appears that the Planning Commission intends to develop agriculture via contract farming and treating the corporate sector as the main source of agricultural growth. If that is so, it goes against the philosophy of inclusive growth.

8. Ibid., *p.83*

It would be worthwhile to compare this optimism moderated with a certain degree of caution along with the observations made in the Approach to the Eleventh Five Year Plan (December 2006): "On the supply side, the labour force will increase by about 52 million during the 11th Plan if it grows at the same rate as current projections of working age population. The increase could be much higher, around 65 million if female participation rises at the pace observed during 1999-2005. Since the increase will be over and above the present backlog of 35 million unemployed on a typical day, and since inclusiveness requires a shift from agriculture to non-agriculture, we must plan for at least 65 million additional non-agricultural opportunities in the 11th Plan."[9]

The basic message of the Approach Paper was that total employment requirement would be 100 million in the 11th Plan (65 million new entrants plus 35 million backlog). In case, 65 million new employment opportunities are created during the 11th Plan, then the same backlog of unemployment (35 million) will be left at the end of the 11th Plan.

Table 14: Sectorwise Generation of Additional Employment

Additional Employment (Million)

	Tenth Plan Achievement (2000-05)	*Projected for Eleventh Plan (2007-12)*
Agriculture	8.84	0.00
Mining and Quarrying	0.17	0.00
Manufacturing	8.64	11.94
Electricity, water etc.	0.18	0.02
Construction	6.44	11.92
Trade, Hotels & restaurant	10.70	17.40
Transport, storage & communication	4.04	9.02
Finance, insurance, real estate & business services	3.12	3.43
Community, social & personal services	4.59	4.34
Total	**46.71**	**58.07**

Source: Planning Commission (2007), ***Eleventh Five Year Plan (2007-2012)***

The Planning Commission has now reduced the estimate of new entrants to the labour force from 65 million to 45 million – a drastic reduction by 20 million in the estimate of the labour force. Even when the Planning Commission has now estimated the target of additional employment to a lower level of 58 million opportunities, it has been able to bring the backlog of unemployed at the end of the 11th Plan to 23-24 million and bring about a reduction in the rate of unemployment from 8.36% in 2006-07 to 4.83% in 2011-12. What else is this but statistically jugglery!!

Another issue which has evaded the Planning Commission is: What strategy should be adopted to

9. *Planning Commission (2007), **An Approach to the 11th Five Year Plan***, p.73.

increase the wage share in organized sector when it has itself admitted that "it has halved after the 1980's and is now among the lowest in the world." Similarly real wages stagnated or declined even for workers in organized industry, although managerial and technical staff did secure large increase. Since inclusive growth implies that the growth process should benefit the low paid workers and provide decent work, what we observe is that growth process in industry and even in services, is helping only managerial and technical staff securing large increase in their emoluments, but the workers are left high and dry. The Planning Commission has elaborated the social security measures being introduced by the Government, but they help only marginally on account of the large labour force in the country.

The fact of the matter is that profits of enterprises in the organized sector are rising fast, and wage share is declining. The Planning Commission has not applied its mind to generate a process by which wage share in organized sector should improve. Failure to do this will mean 'growth for the few' or 'exclusive growth' and not 'inclusive growth' which is the central theme of the Eleventh Plan. Since the entire additional employment is to be generated by the unorganized sector, then to treat the corporate sector as the engine of growth is meaningless. The country should concentrate its attention towards the unorganized sector as suggested by the National Commission for Enterprises in the Unorganized Sector (2007) headed by Dr. Arjun Sengupta.

Moreover, the Planners themselves admit, "Permanent employment has decreased, although organized sector firms may be increasing their informal employment." The fact of the matter is that even without any change in chapter VB of the Industrial Disputes Act, organized sector firms have succeeded in increasing the share of informal employment to about 23 percent, which is a tacit admission of the fact that the labour laws are observed more in their breach than in compliance, but the Planning Commission is not tired of in recommending amendment of labour laws to enlarge and improve employment. But as facts stare us in face, in a labour surplus economy, the tendency to employ contract labour or casual employment is intended to enhance profits at the cost of cutting wage share in value added. This is what has happened during the last decade. Inclusive growth requires an improvement in the share of permanent jobs in the economy and increase in wage share, but what we witness and what is proposed to strengthened, is precisely the opposite.

7. POVERTY REDUCTION

In 2004-05, the proportion of the poor was 27.5% – 28.3% for rural areas and 25.7% for urban areas. The total number of poor in 2004-05 was 301.7 million, lower than 321.3 million in 1973-74 by about 19.6 million during the long span of 31 year which cannot be described as a very creditable achievement. Sixty years after independence, more than a quarter of population continue to be poor.

The Planning Commission further states: "There is growing consensus that the poverty line (₹ 356 monthly per capita consumption for rural areas and ₹ 458 for urban areas in 2004-05) in India is much too low, and continues to be based on consumption basket. If the poverty line was higher, the share of the population below the poverty line would be accordingly higher."[10]

To reconsider and revise the poverty lines, the Planning Commission has constituted an Expert Group whose recommendations, hopefully, would provide acceptable measures of both poverty reduction and the population below the poverty line.

Since poverty is a multidimensional problem, it requires a multi-pronged strategy to tackle it.

Firstly, regions which have large number of poor people include tribal forested regions and rainfed agricultural regions. In these regions, watershed development has to be the crucial instrument for poverty reduction.

Secondly, the poor are concentrated in certain states or regions where land-man ratio is the lowest. In these regions, effective land reforms and provision of agricultural services need special emphasis.

Thirdly, there is a large dependence on casual labour. These workers get low wages and are unable to find employment throughout the year. Most of them belong to SC and STs. A programme like the National Rural Employment Guarantee Programme can provide better wages and enhance the number of working days for this category.

Fourthly, the poor have to be enabled to increase their incomes by diversifying away from agriculture to non-farm work as a source of subsidiary income.

Fifthly, education and skill development among the poor should be enhanced so that they can seek employment in emerging sectors like information technology, and other occupations requiring better skills.

Last but not the least, the structure of production has to be employment generating, especially in non-agricultural occupations. In other words, the Eleventh Plan recommends a three-legged strategy – economic growth, income- poverty reduction through programmes like NREGA and Swaran Jayanti Rozgar Yojana (SJRY) and human capital formation with the help of education and skill development.

The Eleventh Plan has only made a general observation that it intends to reduce poverty by 10 percentage points which implies a reduction from 28 percent to 18 percent. But since it has started the process of revision of poverty line, it has to revise its whole programme of poverty reduction when now norms and findings become available.

10. Planning Commission (2007), *Eleventh Five year plan* (2007-12), Vol. III, p.79.

8. REGIONAL DISPARITIES IN GROWTH RATES

During the Tenth Plan, All-India GDP growth average was 7.6%. States which showed better performance were Jharkhand, Gujarat, Orissa, Chhattisgarh, Maharashtra, Goa, Uttaranchal, Nagaland and Tripura. Laggards which showed less than 6% GDP growth included Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh, Punjab, Meghalaya, Arunachal Pradesh and Jammu & Kashmir. Remaining states which indicated growth rates between 6% and 7.6% were Karnataka, Andhra Pradesh, Kerala, West Bengal, Tamil Nadu and Assam.

It may be noted that the laggards (below 6% GDP growth) accounted for nearly 45 percent of the total population of India. Consequently, efforts have to be made to strengthen GDP growth rates in these states so that they reach higher levels between 7-8% at last.

Table 15: State-wise Growth Targets for Eleventh Plan

	Achievement Tenth Plan	*Target Eleventh Plan*
Jharkhand	11.1	9.8
Gujarat	10.6	11.2
Chhattisgarh	9.2	8.6
Orissa	9.1	8.8
Maharashtra	7.9	9.1
Goa	7.8	12.1
Haryana	7.6	11.0
All India	7.6	9.0
Kerala	7.2	9.5
Karnataka	7.0	11.2
Andhra Pradesh	6.7	9.5
Tamil Nadu	6.6	8.5
West Bengal	6.1	9.1
Rajasthan	5.0	7.4
Bihar	4.7	7.6
Uttar Pradesh	4.6	6.5
Punjab	4.5	5.9
Madhya Pradesh	4.3	6.7
Special Category States		
Manipur	11.6	5.9
Uttaranchal	8.8	9.7
Tripura	8.7	6.9
Nagaland	8.3	9.3
Sikkim	7.7	6.7
Himachal Pradesh	7.3	9.5
Assam	6.1	6.5
Mizoram	5.9	7.1
Arunachal Pradesh	5.8	6.4
Meghalaya	5.6	7.3
Jammu & Kashmir	5.2	6.4

Note: States have been arranged in the descending order on the basis of GDP growth achieved in the 10th Plan.

Source: Planning Commission (2007), *Eleventh Five Year Plan (2007-2012)*, Vol.I

Eleventh Plan has fixed targets of GDP growth in consultation with the State Governments. It may be noted that whereas All-India growth rate is targeted at 9% for the Eleventh Plan, Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh and Punjab are likely to remain below the 7.5% GDP growth level. The planning process has to concentrate attention to stimulate growth among the laggards.

Many states of the North Eastern Region viz., Anurachal Pradesh, Meghalaya, Mizoram, Assam and Sikkim have indicated low growth rates. Planning process is helping them by a special package which will be continued in the Eleventh Plan.

9. CRITIQUE OF THE ELEVENTH PLAN

The Eleventh Plan had set the correct goal in the form of moving 'Towards Faster and More Inclusive Growth', the course which was charted out to achieve the goal was paradoxically anti-labour and pro-corporate sector. This was precisely in conflict with the goal of providing secure income and employment for 'aam admi' (common man). The best way to achieve this was to promote small and medium enterprises (SMEs) and small peasant agriculture. However, there was no clear policy of promoting SMEs. It sidetracked the issue of small peasant agriculture and pleads for contract farming which is capital-intensive and not labour intensive. The recommendations of the National Commission on Farmers (NCF), headed by eminent agricultural scientist Dr. M S Swaminathan, regarding the setting up a fund for farmers affected by crop losses on the lines of national calamity fund, reducing interest on farm loans to 4% and not charging compound rate of interest and imposing quantitative restrictions on import of agricultural products, were not included in the Eleventh Plan.

The Planning Commission's target of creating 58 million jobs during the Eleventh Plan was inadequate and it would have been much better if the Commission had adhered to the target of 65 million jobs as suggested by the Approach Paper.

The removal of poverty required targeted attention to the poor. The Planning Commission had given a long catalogue of schemes such as National Rural Employment Guarantee Scheme, Swaran Jayanti Rozgar Yojana (SJRY), slum improvement programme, housing for the poor and skill development programmes etc. However, the Planning commission was silent on some issues like food security, strengthening price support systems, creation of price stabilization fund for agricultural commodities, universalizing crop insurance, protection to peasantry from subsidized imports of agricultural commodities and land reform.

Eleventh Plan was a very ambitious plan which sought 125 percent increase over resources over the

Tenth Plan. Its initiative in providing over 30 percent resources to improve the quality of social services was appreciable. It was also ambitious from the point of view of the target of 9% GDP growth. However, its success was dependent on the extent to which, it was able to convert the growth process into pro-poor growth and reduce the urban-rural divide and the rich-poor divide.

Rate and Pattern of Growth

The 11th Plan visualized "Faster and more inclusive growth" as its objective. This, by itself was a welcome development, that after a period of a decade and half of reforms initiated in 1991, it was realized that the reform process has widened disparities between the rich and the poor. It had slowed down reduction of poverty to a modest figure of 0.74 percent for a period 1993-94 and 2004-05, it has resulted in a rise of unemployment from about 6 percent in 1993-94 to 7.32 percent in 1999-00 and further to 8.3 percent in 2004-05. Besides, it sharpened the rural-urban divide as well as the regional divide between the fast growing forward states and slow growing backward states. The iniquitous growth that the reform process had generated was shaking the political foundation of the Indian society and there was a need for a course correction. Failure to do this would pose a serious threat.

From the beginning of the Eleventh Plan, there were apprehensions whether the Plan really attempt to address the concerns which it has chosen to redress? Eleventh Plan had fixed a target of pushing up overall GDP growth to an average rate of 9.0 percent. This was supposed to be achieved by boosting growth of agriculture to about 4 percent after a disappointing growth of 2.1 percent during the 10th Plan, and by pushing up growth of industry to 10-11 percent and services to 9-11 percent. It would be good to recall that industry indicated a growth rate of 8.3 percent and services to 9.0 percent during the 10th Plan. Obviously, in industry and services, the 11th Plan intended to improve growth rates only marginally, it was possible only by doubling growth rate in agriculture that its target of 9 percent growth could have been possible to achieve. This implied that the success of the 11th Plan was dependent on the success in achieving growth target in agriculture, more so, when agriculture continued to provide livelihood to 58 percent of our population. To that extent, the strategy indicates that the concept of 'inclusive growth' is a part of Eleventh Plan framework.

In the table given above we note that rate of growth of GDP never touched 9 percent except the year 2007-08. In the 11th plan (2007-12) overall rate of growth of GDP was 7.9 percent. Under achiever was the agriculture, rate of growth of which remained low at 3.3. percent over the plan period, as compared to the 4 percent target rate of growth. We do find that target rate of growth was more or less achieved in case of industry and services.

Let us now look at the achievements of Eleventh Plan in terms of rate and composition of GDP growth.

Reduction of Poverty – The basic issue

But, inclusive growth is possible only with a rapid decline in poverty coupled with rapid reduction of unemployment in the 11th Plan. On the question of setting a target of poverty reduction, the Eleventh Plan mentions : "percentage of poverty in 2004- 05 is about 28 percent and thus, the 11th Plan intends to reduce it by 10 percentage points by 2017. This would imply a rate of reduction of poverty by about 1 percent during 2004-05 and 2016-17. This is even less than the decline in poverty observed during 1973-74 and 1986-87 when the average growth rate of GDP ranged around 5 percent."

Mohan Guruswamy raises a pertinent question about the definition of poverty line. "While the definition of hunger in terms of calories can remain constant, the definition of poverty is relative to the present levels of general prosperity...the present official poverty line is based only on calories and hence accounts for little else but the satiation of one's hunger. **It would have been more accurate to define this as a starvation line, as that is exactly what it is.**" [11] (Emphasis added). The Planning Commission, thus, intended to reduce starvation line up by 10 percent by 2017. For providing a basic

Table 12 : Key Indicators in 11th Five Year Plan

Data Categories and Components	2007-08	2008-09	2009-10	2010-11	2011-12
GDP (factor cost 2004-05) in Rs. crore	3896636	4158676	4507637	4885954QE	5202514RE
Growth Rate (%)	9.3	6.7	8.4	8.4	6.5
Savings Rate (% of GDP)	36.8	32.0	33.8	32.3	NA
Capital Formation (rate) (% of GDP)	38.1	34.3	36.6	35.8	35.5
Rate of growth of agriculture					
Foodgrains (Mn tonnes)	230.8	234.5	218.1	244.8	250.4a
Index of Industrial Production[5] (growth) %	15.5	2.5	5.3	8.2	.....
Electricity Generation (growth) %	6.3	2.7	6.4	5.5	9.4c

Source : Economic Survey 2011-12, Press Release, 31st May 2012, CSO.

11. Gurruswamy, Mohan and Abraham, Ronald, (2006), *Redefining Poverty – A New Poverty Line for a New India*, p.2.

minimum, poverty line was required to be redefined in terms of basic needs approach. While India is aiming to become a super-economic power by 2020, it will only reduce starvation by the date. In the light of this, India should adopt the International Poverty Line of $2 per day as the basis of determining the percentage of people in poverty. As per the Human Development Report (2007/2008), on the basis of $1 per day, for the year 1999-00, people below the poverty line in India were of the order of 34.3% and if we use the norm of $2 per day, then 80 percent of the Indian population would be below the poverty line. The poverty line used by the 11th Five Year Plan, based on calories does not even meet the rock bottom standard of poverty set at $1 per day, not to speak of reaching the standard of $2 per day basis on basic needs approach. There was a need to upgrade the poverty line to reach international standards as it intends to do in other sectors of manufacturing, services and yield of output in agriculture. It should not seek a false sense of satisfaction that it has been able to effectively reduce poverty. After the adoption of new methodology as suggested by Prof. Tendulkar all India figures of Poverty/head count of poor has been put at 45.3 percent in 1993-94. Rate of reduction in poverty would be less between 1993-94 and 2004-05, if we use Tendulkar's methodology rather they earlier definition. Using the same methodology Poverty/head count ratio in 2004-05 has been put at 37.2 percent. For the year 2009-10 this figure has been reported to have declined to 29.8 percent. There are various issues with regard to methodology of poverty count, which are still to be resolved.

Reduction of Unemployment

The Planning Commission by reducing the estimate of new entrants to the labour force to 45 million instead of 65 million as indicated by the Approach paper and with a backlog of 35 million unemployed has reduced the total requirement of employment opportunities to 80 million. By providing the target of 58 million employment opportunities, the rate of unemployment has been reduced from 8.36% in 2006-07 to 4.83% in 2011-12. The Planning Commission was itself not sure, of the projection of 45 million new entrants and to save itself from criticism, it had stated a number of qualifications. The whole approach to reduce the rate of unemployment so sharply in a span of 5 years is seemingly a statistical jugglery.

Issue of Labour Flexibility

Shorn of its frills to pay homage to inclusive growth, the 11th Plan was a new avatar of the Report of the Task Force on Employment Opportunities headed by Dr. Ahluwalia in 2001. It mentions,"It must be emphasized that labour flexibility does not mean"hire and fire". There are many aspects of labour laws where greater flexibility is needed and would be in the interest of labour as a whole in the sense that it would actually generate large volumes of employment in the organized sector by encouraging employers to expand employment. This flexibility is especially needed if we want to exploit the enormous opportunities offered by export markets…we should evolve a consensus on the scope of reforming key labour laws including especially the industrial Disputes Act and the Contract Labour (Regularization and abolition) Act." The statement very admirably clothed the hidden agenda of the Planning Commission. This was due to the developments taking place in the organized sector in recent years. The Textile Minister wanted (i) raising of working hours from 48 to 60 per week, (ii) allowing women to work in night shifts, (iii) permitting contract labour, (iv) easy exit norms and (v) treating export industry as a public utility for the purpose of Industrial Disputes Act. To add to it, Commerce and Industry Minister wanted Special Economic Zones to be exempted from labour laws. Obviously, the direction in which the UPA government intended to push labour laws was amply clear, however, it used soft words in the plan document.

The Planning Commission had set the goal of inclusive growth. It noted the fact that despite sharp increase in productivity, real wages of labour had declined. ILO report on **Labour and social Trends in Asia and the Pacific (2006)** brought out the hard reality that between 1990 and 2002, there was a decline in real wages in manufacturing in India by 22 percent, despite an increase in manufacturing labour productivity of over 84 percent over the same period. Obviously, this implied that the fruits of economic reforms have been pocketed by the corporate sector, while labour was denied its due. Ironically, the salaries of managerial and technical personnel had been increasing at the rate of 15% per annum. The Planning Commission's 'inclusive growth' failed to provide any strategy for improving the share of labour in the surplus generated by faster growth. Critics had serious doubts about the sincerity with which the equity objective was sought to be achieved by the 11th Plan. The determination of wages by market forces and taking away even the modicum of protection by labour laws would be give the organized sector business magnates unbridled power to freely exploit and pauperize labour.

Accelerating the growth of agriculture

The most important issue relating to the success of the 11th Plan was to accelerate the growth rate in agriculture to 4% per annum, as against 2% rate of growth achieved during 10th Five Year Plan. A number of measures were suggested, such as remunerative prices for farmers for their crops, shift from productivity of individual crops to farm income security by diversifying agriculture, stepping up public investment in irrigation, watershed development, rural electrification and rural

infrastructure, etc. and improving access to credit so as to help farmers not to fall into the clutches of moneylenders who charge high rates of interest. Prof. S. Mullainathan of Harvard University in this connection states: "Credit is the most important resource which the rural populace lacks…Despite priority sector lending of PSU banks, farmers are still borrowing from local moneylenders at high rates." (*Business Line*, 12th September 2006). For this purpose, the government should have asserted through the agency of PSBs and willing private sector banks that they give top priority to priority sector leading. This would require opening more branches to increase access to credit which should be done forthwith. Emphasizing the immediacy of the problem, Prof. Mullainathan says: "A lot of soul searching needs to be done by banks and the RBI about why this segment of population is not being served by the financial sector. How do we go about it? I suspect the outcome of this process will determine the shape of the economy. If the key players make the correct calls, we can see a huge transformation in Rural India. The PSU banks, the RBI and the private banks such as ICICI Bank recognize the credit problem, but there is an immediacy of action that is needed on the issue." The Eleventh Plan lacked the spirit of "immediate action".

Agriculture sector shows a dismal development during 11th Five Year Plan as shown in the following Table .

Table 13 : Contribution of Agriculture, Forestry and Fishing in 11th Five Year Plan

Year	*Contribution of Agriculture Forestry and Foresting and (₹ Crores)*	*Contribution of Agriculture Forestry and Fishing (% of GDP)*	*Annual growth rate %*
2006-07	619190	17.4	
2007-08	655080	16.8	5.8
2008-09	654118	15.7	(–) 0.2
2009-10	662509	14.7	1.3
2010-11	709103	14.5	7.0
2011-12	728667	14.0	2.8
(2007-12)			(3.3)

Sources: 1. CSO, National Accounts Statistics, 2011.
2. CSO, Press Note May 31st, 2012..

Projecting Current Account Deficit to 2.3 percent

The plan document intends to use higher level of current account deficit as a means for arranging the component of increased foreign savings along with increased domestic savings. The Approach Paper outlining its policy mentions: "The higher level of investment has to be financed by some combination of increased domestic savings and increased foreign savings as reflected in the larger current account deficit (CAD). There are limits to the extent to which the CAD can be widened but it is reasonable to assume that the CAD could be allowed to increase from 1.3% of GDP in 2005-06 to 3%, provided it is financed mostly from foreign direct investment (FDI) and long term borrowings than short-term borrowings or portfolio flows."

It would be of interest to examine the ground reality in this regard. The share of FDI in total foreign investment of $29 billion in 2006-07 was $22 billion (75.9%). This share is decling and it is unfornate that FDI in 2010-11 was $37.8 billion (54.0%) in a total foreign investment of $70.1 billion and share of FDI in total foreign investment for the went down to 46.2 percent. The increase in the share of portfolio investment is not a healthy development because portfolio is very volatile in nature.

Another point which deserves attention is that the entire net FDI is not available for Greenfield investment, but takes the form of acquisition of Indian companies and as consequence, a very small proportion is available for technological upgradation.

Even at the time of the beginning of 11th Five Year Plan, questions were raised about the legitimacy of the policy of raising CAD deficit to a level of 2.3 percent of GDP. The country has to follow a policy of having a positive balance of trade or at least permit a trade deficit which can be completely compensated by invisibles surplus. The situation has been continuously deteriorating during the last 5 years. But overenthusiastic about our achievements on the export front, we have been neglecting the warning to apply breaks on the import front.

However, against the proposed current account deficit in five years of the 11th Five Year Plan of US$ 113

Table 14 : Performance on External Front (11th Five Year Plan)

	2007-08	*2008-09*	*2009-10*	*2010-11*	*2011-12*	*CAGR (2007-12)*	*2006-07*
1. Export	166.2	189.0	182.4	251.1	303.7	19.3	128.9
2. Imports	257.6	308.5	300.6	369.8	488.6	20.7	190.7
3. Trade Balance	-91.5	-119.5	-118.2	-118.7	-184.9	24.5	-61.8
4. Net Invisibles	75.7	91.6	80.0	84.6	NA	12.3*	52.2
5. Current Account Deficit	-15.7	-27.9	-38.1	-45.9	NA	47.9*	-9.6
6. Net Capital Inflow	61.6	24.0	70.1	58.5	NA	—	29.8

Note : *four years (2007-12)
Source : Handbook of Statistics on the Indian Economy, 2011, RBI Bulletin May 2012.

billion, the cumulative CAD in the first four years of the plan had already reached US$ 127.2 billion. If we add the figure of CAD for the year 2011-12, five year sum total of CAD may cross even US$ 200 billion. Balance of trade deficit has reached US$ 644 billion in this five years period, indicating at payment crisis during the terminal year of the 11th Five Year Plan. It was this payment crisis which led to sudden depreciation of rupee in 2012, when rupee plunged from ₹ 48.7 per US$ in February 2012 up to ₹ 58 per US$ by June 2012.

It may be noted that our trade deficit which was of the order of $10.69 billion in 2003-04 has shot up to $185 billion in 2011-12. Between 2000-01 and 2002-03, the country had achieved surplus in the balance of payment. The large surplus on invisibles of the order of $17.04 billion in 2002-03 not only wiped out the trade deficit but created a surplus in the balance of payment. Invisibles surplus improved to $53.40 billion in 2006-07, our trade balance that year was (-) $63.17 billion and thus CAD rose to $9.76 billion in 2006-07. Since then current account deficit has been on rise and by the year 2010-11, it had reached 45.9 billion.

Unrealistic Financial Pattern

Experience of the financial pattern of the Tenth Plan reveals that as against an expectation of 1.3% surplus form current revenues, the performance indicates a negative balance of the order of 9.6%. As against an expectation of 37.6% from public sector enterprises, actual realization was of the order of 34.9% which is very creditable. There was practically negligible inflow from abroad of just 1.0 percent of total financial resources. In this scenario, a heavy dose of market borrowing was resorted to the extent of 73.9% of total financial resources. Slippages in current revenue balance and deficit in surpluses of public enterprises resulted in nearly three-fourth of the total plan resources to be obtained from market borrowing. As a result of the heavy dose of market borrowing, the liabilities of the government in terms of interest and principal repayment would be much greater.

While preparing the estimate of financial resources for the Eleventh Plan, 28.5% resources were projected to be provided from current revenues balances, and 32.6% from surpluses of public enterprises. The balance of about 39 percent resources were to be provided from market borrowing. But when we look at the Mid Term Review of 11th Five Year Plan we find much deviation from the resource pattern given above. Balance of current revenue which was supposed to provide 28.5 percent of the plan resources (2.31 percent of GDP), actually went into deficit and if we take data up to the budget estimates of 2010-11, we find on an average actual realization of resources by -0.17. If we look at the resources of public sector enterprises, we find an actual realization of 3.93 percent, thereby up to first four years of the plan, actual realization was about .09 percent less than the projected annual figure on an average. Borrowings including miscellaneous capital receipts were to

Table 15 : Eleventh Plan Projection and Realization of Resources of the Centre

Sources of Funding	*Eleventh Plan Projection (2007-12)*	*Realized*					*MTA Projection*	
		2007-08 (Actual)	*2008-09 (Actual)*	*2009-10 (RE)*	*2010-11 (RE)*	*Average 2007-11*	*MTA Projection 2007-12 (Average)*	*Difference (8-2)*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1. Balance from current revenues	2.31	1.69	-1.07	-1.82	-0.31	-0.38	-0.17	-2.48
2. Borrowings incl. net Miscellaneous CapitalReceipts (MCR)	2.86	2.46	6.01	6.94	5.69	5.27	5.22	2.36
(a) Borrowings	–	2.57	6.05	6.68	5.46	5.19	5.10	–
(b) MCR (net)								
3. Gross Budgetary Support to Plan (1+2)	5.17	4.14	4.94	5.11	5.38	4.89	5.04	-0.13
4. Central assistance to states and UTs	1.20	1.25	1.38	1.40	1.33	1.34	1.33	0.13
5. Gross Budgetary Support for Central Plan (3 - 4)	3.97	2.90	3.55	3.72	4.05	3.55	3.71	-0.26
6. Resources of public sector enterprises	4.02	2.92	3.73	3.73	4.32	3.67	3.93	-0.09
7. Resources for Central Plan (5+6)	7.99	5.82	7.28	7.44	8.36	7.23	7.64	-0.35

Source : Mid Term Review of Eleventh Five Year Plan.

provide 38.9 percent of a total resources, actually exceeds enormously and against gross budgetary support by 2.86 percent of GDP projected in the plan on an average, it actually provided 5.27 percent of GDP, thereby exceeding by 2.36 percent of GDP, as compared to the plan projection. One can easily conclude the estimates for the financial resource pattern could not be adhered. The government failed miserably in achieving positive balance from current revenues and the short fall on this account had to be filled up by fresh borrowings. The performance of public sector enterprises was still better, as they could more or less provide resources as per the plan projections.

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CHAPTER

20

AN APPROACH TO THE TWELFTH FIVE YEAR PLAN (2012-17)

Demographic dividend can add to growth potential, provided higher levels of health, education and skill development are achieved.

— An Approach to the Twelfth Five Year Plan (2012-17).

The Approach Paper to the Twelfth Five Year Plan states, "The Indian economy on the eve of the Twelfth Plan is characterised by strong macrofundamentals and good performance over the Eleventh Plan period, though clouded by someslowdown in growth in the terminal year of the Eleventh Five Year Plan, with continuing concern about inflation and a suddenincrease in uncertainty about the global economy". The paper further states "Objective of the Eleventh Plan was faster andinclusive growth and the initiatives taken in the Eleventh Plan period have resulted in substantialprogress towards both objectives. Inevitably, there are some weaknesses that need to be addressedand new challenges that need to be faced. Some of the challenges themselves emanate from theeconomy's transition to a higher and more inclusive growth path, the structural changes that comewith it and the expectations it generates. There are external challenges also arising from the fact that the global economic environment is much less favourable than it was at the start of the EleventhPlan. These challenges call for renewed efforts on multiple fronts, learning from the experiencegained, and keeping in mind global developments."

1. AN ASSESSMENT OF ELEVENTH FIVE YEAR PLAN (2007-12) AND PATH AHEAD

The Eleventh Five Year Plan had aimed at achieving faster and more inclusivegrowth. Rapid GDP growth, targeted at 9.0 per cent per annum, was regarded necessary for two reasons: first, to generate the income and employment opportunities that were needed for improving livingstandards for the bulk of the population; and second, to generate the resources needed for financing socialsector programmes, aimed at reducing poverty and enabling inclusiveness.

The economy has performed well on the growth front, averaging 8.2 per cent in the first four years.Growth in 2011-12, the final year of the Eleventh Plan was originally projected at around 9.0 per centcontinuing the strong rebound from the crisis, which saw an 8.4 per cent growth in 2010-11. Instead, theeconomy actually slowed down in 2011-12 compared to the previous year – a phenomenoncommon to all major economies reflecting the fact that 2010 was a rebound from depressed levels in2009. Growth in 2011-12 is likely to

be around 6.5 per cent. The economy is therefore, likely to achieve an average GDP growth of around 7.9 per cent over the Eleventh Plan period, which is lower than the9.0 per cent targeted originally, but somewhataround the 7.8 per cent achieved in the Tenth Plan. This implies a nearly 6.2 per cent increase in per-capita GDP during this period. It has also led to a substantial increase in government revenues, both at the Centre and the States, resulting in a significant step-up of resourcesfor the programmes aimed at inclusiveness. A healthy increase in aggregate savings and investment rates,particularly in the private sector, testifies to the strength of our economy as it enters the Twelfth Plan period.

Though growth in the Eleventh Plan period is almost at par with the Tenth Plan, but it is nevertheless a good performance, given the fact that a severe global economic crisis depressedgrowth in two of these five years, and also that in the year 2009 India had the weakest monsoon in three decades. The slowdown in 2011-12 is a matter of concern, but can be reversed if the investment climate is turned around and fiscal discipline is strengthened.

Inclusiveness

The progress towards inclusiveness is more difficult to assess, because inclusiveness is a multidimensionalconcept. Inclusive growth should result in lower incidence of poverty, broad-based andsignificant improvement in health outcomes, universal access for children to school, increased accessto higher education and improved standards of education, including skill development. It should alsobe reflected in better opportunities for both wage employment and livelihood, and in improvement inprovision of basic amenities like water, electricity, roads, sanitation and housing. Particular attentionneeds to be paid to the needs of the SC/ST and OBC population. Women and children constitute agroup which accounts for 70% of the population and deserves special attention in terms of the reach ofrelevant schemes in many sectors. Minorities and other excluded groups also need special programmesto bring them into the mainstream. To achieve inclusiveness in all these dimensions requires multipleinterventions, and success depends not only on introducing new policies and government programmes,but on institutional and attitudinal changes brought about, which take time. A comprehensive assessmentof outcomes on all these fronts during the Eleventh Plan is not possible at this point, because the data forrecent years is still not available. However, available evidence suggests that there have been significant gainson many of these fronts, even though there are shortfalls in some areas on which further work is needed.

An important consequence of the focus on inclusion during the Eleventh Plan has been heightenedawareness about inclusiveness and empowerment amongst people. A greater desire to access informationabout the rights and entitlements made available by law and policy, and eagerness to demand accountabilityfrom the public delivery systems augurs well for the future.

One important feature of the growth experienced in the Eleventh Plan, which is relevant forinclusiveness, is that high rates of economic growth have been more broadly shared than ever before acrossthe States. While most States have shown sustained high rates of growth, several of the economicallyweaker States have demonstrated an improvement in their growth rates. Amongst them are Bihar, Orissa,Assam, Rajasthan, Chhattisgarh, Madhya Pradesh, Uttarakhand and to some extent Uttar Pradesh.According to the available data, no State has averaged GSDP growth of less than 6.0 per cent during theEleventh Plan period.

The improvement in this formerly low growth and low income States is evident in many cases over the Tenth Plan period, and insome others, more so over the Eleventh Plan period. It should be emphasized that those States which picked up over the Tenth Planperiod, have continued to perform better in the Eleventh Plan. However, some formerly higher income and high growth States haveshown slightly weaker growth over the Eleventh Plan period, most prominent of which are Karnataka and Tamil Nadu.

While the economically-weaker states are catching up in growth rates, there is growing concernabout the backwardness of individual districts, several of which are located in States that are otherwisedoing well. Many of these districts are also affected by Left-wing Extremism. The Backward RegionsGrant Fund (BRGF) and various other regional initiatives have been speciallydesigned to address thisproblem.

Plan Programs for Inclusiveness

The Eleventh Plan gave a special impetus to several programmes aimed at building rural and urbaninfrastructure and providing basic services with the objective of increasing inclusiveness and reducingpoverty. Some of these programmes were new, while others augmented existing initiatives. Thirteen suchflagship programmes are MGNREGA, Indira Awas Yojana (IAY), National Social AssistanceProgramme (NSAP), Pradhan Mantri Gram SadakYojana (PMGSY), NRHM Health & Family Welfare, ICDS Women & ChildDevelopment, Mid-Day Meal (MDM), Sarva Siksha Abhiyan (SSA) School Education &Literacy, JNNURM Urban Development, Accelerated Irrigation BenefitProgramme (AIBP) and Otherwater resource programmeWater Resources, Rajiv Gandhi Gramin

VidyutiKaran Yojana (RGGVY), Rajiv Gandhi Drinking WaterMission (Rural Drinkingwater) – NRDWP, Sanitation Campaign (TSC)Drinking Water Supply and Rashtriya Krishi Vikas Yojana.

Most of these programmes are Centrally Sponsored Schemes (CSS), which are implemented byState Government agencies, but are largely funded by the Central Government with a defined StateGovernment share. The total expenditure on these schemes by the Central Government in 2011-12(budget estimate) is Rs.188.573 crore, and the total expenditure during the Eleventh Plan period is almost Rs. 700,000 crore.

There is an urgent need to transform the system and sharply reduce the number of schemes. This willenable more focused and effective implementation. A Committee under Shri B.K. Chaturvedi, Member,Planning Commission, has been appointed to review the entire gamut of Centrally Sponsored Schemesand make recommendations for rationalization and consolidation leading to a significant reduction intheir number.

With a people-centred, demand-driven architecture, completely different from the earlier unemployment programmes, MGNREGA has directly led to the creation of 987 crore person-days ofwork since its inception in 2006-07. In financial year 2010-11, MGNREGA provided employment to5.45 crore households generating 253.68 crore person-days. It has also successfully raised the negotiatingpower of agricultural labour, resulting in higher agricultural wages, improved economic outcomes leadingto reduction in distress migration. This is not to deny that with better project design, implementationleakages could be greatly reduced and the assets so created could make a larger contribution towardsincrease in land productivity.

Demographics

The country's total population, as recorded in Census 2011, at 1.21 billion, is slightly more thanwhat was forecast. But the population growth rate has decelerated from 1.97 per cent per annum between1991 and 2001, to 1.64 per cent per annum between 2001 and 2011. Notably, it declined in almost everyState including those of the populous Gangetic plains. The deceleration reflects a much-needed decline inthe Total Fertility Rate (TFR) which is estimated to have fallen to 2.6 per cent and is expected to declineto 2.3 per cent in the first half of the present decade. The Southern States have reached, or are close toreaching, the replacement level of fertility. Fertility levels in the northern states are also falling, but are stillmuch higher than the replacement level.

India has a younger population not only in comparison to advanced economies but also inrelation to the large developing countries. As a result, the labour force in India is expected to increase by32 per cent over the next 20 years, while it will decline by 4.0 per cent in industrialised countries and bynearly 5.0 per cent in China. This 'demographic dividend' can add to growth potential, provided twoconditions are fulfilled. First, higher levels of health, education and skill development must be achieved.

Second, an environment must be created in which the economy not only grows rapidly, but also enhancesgood quality employment/livelihood opportunities to meet the needs and aspirations of the youth.

Employment and Livelihood

For growth to be inclusive it must create adequate livelihood opportunities and add to decentemployment commensurate with the expectations of a growing labour force. As noted above,India'syoung age structure offers a potential demographic dividend for growth, but this potential will be realisedonly if the extent and quality of education and skill development among new entrants to the workforceis greatly enhanced. One of the most remarkable things brought out by the 66th round National SampleSurvey Organization (NSSO) survey on Employment (2009-10) is that the number of young people ineducation, and therefore, out of the workforce, has increased dramatically causing a drop in the labourparticipation rate. The total number of young working-age (15-24) people who continued in educationalinstitutions doubled from about 30 million in 2004-05 to over 60 million in 2009-10.

The survey also shows that between 2004-05 and 2009-10, the overall labour force expanded by only11.7 million. This was considerably lower than comparable periods earlier, and can be attributed to themuch larger retention of youth in education, and also because of lower labour force participation amongworking-age women. Over the same period, 18 million job opportunities were created on current dailystatus basis. Thus, in absolute terms, unemployment came down by 6.3 million; and the unemploymentrate which had increased from 6.06 per cent in 1993-94 to 7.31 per cent in 1999-2000 and further to 8.28percent in 2004-05, came down to 6.60 in 2009-10.

The lower growth in the labour force is not expected to continue in future and we can assumethat much larger numbers of educated youth will be joining the labour force in increasing numbersduring the Twelfth Plan and in the years beyond. The clear implication of this is that the pace of job/livelihood creation must be

greatly accelerated. Part of this must come from a significant boost to themanufacturing sector of the economy, such that it grows at a rate that is faster than most other parts of theeconomy. However, this may not be enough, in part because not all categories of manufacturing are labourintensive. Although GDP from manufacturing increased at 9.5 per cent per annum between 2004-05 and2009-10 along with some increase in employment in the organised manufacturing sector, the survey suggeststhat overall employment in manufacturing actually declined during this period. The implied shake-out oflabour from the un-organised manufacturing sector needs to be examined in detail and appropriate stepstaken so that the obvious potential of the MSME sector as a source of jobs/livelihoods is realised fully.

The 66th round NSSO Survey of Employment shows that the vast majority of new jobs createdbetween 2004-05 and 2009-10 was in casual employment, mainly in construction. While such jobs areoften more attractive for rural labour than casual work in agriculture, there is a potential for an acceleratedpace of creation of more durable rural non-farm jobs/livelihood opportunities. Such job opportunitiescould come from faster expansion in agro-processing, supply chains and the increased demand fortechnical personnel for inputs into various aspects of farming that is undergoing steady modernisation,and also the maintenance of equipment and other elements of rural infrastructure. The service sector toohas to continue to be a place for creation of decent jobs/livelihood opportunities, in both rural and urbanareas.

In the age group of 5–14 years, 89.3 per cent of children were in school in 2009-10, up from 82.4 per cent in 2004-05. Furtherthis increase was higher for girls, rising from 79.6 per cent in 2004-05 to 87.7 per cent in 2009-10. In the 15–19 years age group,59.5 per cent of young people were in the educational system in 2009-10 as compared to 46.2 per cent in 2004-05. Once again,the increase was more for girls, from 40.3 to 54.6 per cent. In the next higher age group of 20–24 years, 22.5 per cent of boys and12.8 per cent of girls were still in the educational system in 2009-10 against only 14.9 and 7.6 per cent, respectively, in 2004-05.

Agriculture

A weakness in the economic performance thus far is that growth in the farm sector (agricultureand allied activities), though better than in the Tenth Plan, remains short of the 4.0 per cent Plantarget. The farm sector has grown at an average rate of around 3.2 per cent during the first four yearsof the Eleventh Plan and assuming conditions remain favourable in 2011, the average farm sectorgrowth in the Eleventh Plan period may be a little over 3.0 per cent. This is a markedimprovementfrom the average growth of about 2.0 per cent during the Tenth Plan period. Still, with half of ourpopulation dependent on agriculture and allied activities, we need faster farm sector growth tobenefit poor farmers, many of whom are women. The below target growth in this sector is one of thereasons for increase in food prices over the last two years. Global development experience, especiallyfrom the BRIC countries, reveals that one percentage point growth in agriculture is at least two tothree times more effective in reducing poverty than the same magnitude of growth emanating fromnon-agriculture sector.

Since agriculture is a State subject, the Centre will have to work hand in hand with the States tobring coherence in policies and strategies. Overall investment in agriculture, which had dipped to lessthan 10.0 percent of agri-GDP in 2002-03 has been substantially raised and today stands at more than21.0 percent of agri-GDP. Higher levels of investments in agriculture, both by the public and privatesector can yield much better results if the reforms are undertaken to streamline not only the incentivestructures for the farmers, but also the institutional framework in which agriculture and related activitiestake place. Seeds and irrigation are priority areas, which can be catalysts for raising productivity on thesupply side. On the demand side, there is urgent need to remove most of the controls that have denied aunified and seamless all India market for most agri-products. Finding the most effective ways of usheringin these changes must be a key priority area in the Twelfth Plan.

Health

The Eleventh Plan had drawn attention to the fact that India's health outcome indicators continueto be weaker than they should be, at our level of development. The Plan had therefore expressed thenecessity of allocating additional resources to health and laid down monitorable targets for parametersrelating to Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), institutionalised delivery, extent of full immunisation, etc. Data on these parameters, available for the first three years of theEleventh Plan, show some improvement. The Infant Mortality Rate (IMR) fell from 57.0 percent in2006 to 50.0 percent in 2009. The percentage of deliveries in institutions increased from 54.0 percentin 2006 to 73 per cent in 2009, while the Maternal Mortality Rate (MMR) came down by 32 points to212 (2007-09). These are marked improvements but their rate of decline is lower than what is neededfor achieving the desired targets. We must accelerate the pace of progress in this area in the TwelfthPlan.

In the Eleventh Plan, the total public expenditure on health in India by Centre and the States wasless than 1.0 per cent of GDP and it needed to be increased to 2.0

or 3.0 percent. The process has begunand the percentage is estimated to have increased to around 1.4 per cent in 2011-12 (BE). If expenditureon drinking water and sanitation in rural areas, which are critical for better health outcomes, is included,the percentage would be higher at 1.8 per cent. Regardless, a larger allocation of resources will definitelybe needed in the Twelfth Plan to achieve the objective. We should aim to increase total health expenditureas percentage of GDP to 2.5 percent by the end of Twelfth Plan.

It must be emphasised that financial resources are not the only constraint. Shortage of healthprofessionals at all levels has become a serious impediment to achieving an expansion in the public provisionof health services. There has been inadequate attention to improving our education and training capacitiesin this area. There are also problems of accountability of personnel even when these are recruited. Theselacunae will take time to rectify, but the Twelfth Plan must give a special emphasis to solve this problem.

Education

The Eleventh Plan had articulated the need for expanding educational facilities and improvingquality of education, as key instruments for achieving faster and inclusive growth. There hasbeen notablesuccess in expanding capacity, but the challenge of improved quality still persists.

There has been improvement in the extension of primary education, both in regard to enrolmentand in reduction of dropout rates. The Right to Education (RTE) Act, which became operational in 2009, has laid a solid foundation on which we need to build. A major achievement is that most children are nowin school. The ASER 2010 report shows that for the age group 6–14 years in all of rural India, the percentage of children who are not enrolled in school has dropped from 6.6 per cent in 2005 to 3.5 percentin 2010. The proportion of girls in the age group 11–14 years who were out of school has also declinedfrom 11.2 per cent in 2005 to 5.9 per cent in 2010. However, the absolute numbers of children who remain out of school remains large. While this needs to be reduced, it is not unreasonable to state that access isnow more or less universalised.

We now confront the greater challenge of improving the quality of schooleducation. This means extensive and improved teacher training, upgrading curriculum and enforcing ofaccountabilityin teachers' attendance. The increasing number of children finish elementary school, thereby beneed to expand capacity in secondary and higher secondary schools. Envisaging universalisationof secondary education by 2017 should be a priority in the Twelfth Plan.

The Eleventh Plan had outlined a threefold strategy of expansion, equity and excellence for highereducation. The Central Government introduced a programme of creating new Central Universities andother institutions of higher learning in the Eleventh Plan. This effort has begun, but it will have to becontinued into the Twelfth Plan period to reach its full potential. Revitalisation of the State Universitiesand Colleges is also critical. These universities suffer from under funding by State Governments with asmany as 50.0 per cent of faculty positions unfilled, forcing frequent resort to contract teachers and anadverse impact on the quality of teaching.

The task of achieving excellence in higher education demands academic reforms to providegreater flexibility and choice for the students, and strengthening of research activity in Universities byestablishing mutually-reinforcing linkages between teaching and research. Faculty shortages need to betackled through innovative ways such as technology-enabled learning, and collaborative information andcommunication technologies (ICT). As an experiment in achieving higher quality, the Government isproposing Innovation Universitieswhich will have greater autonomy and freedom. This effort needs to besupplemented by funding Centres of Excellence in existing universities, which may yield better results ina shorter time.

Resource constraints will make it difficult to meet the need of expanding higher education entirelythrough the public sector. Not all private educational institutions are of good quality and some are quiteinferior. Minimum standards will have to be ensured. But free entry will, in the end, automatically weed outthe poor quality institutions. Private initiatives in higher education, including viable and innovative models, will therefore, be actively promoted. The current "not-for-profit" prescription in the educationsector should be re-examined in a pragmatic manner soas to ensure quality, but without losing focus onequity.

Infrastructure Development

Inadequate infrastructure was recognised in the Eleventh Plan as a major constraint on rapid growth.The Plan had, therefore, emphasized the need for massive expansion in investment in infrastructure basedon a combination of public and private investment, the latter through various forms of public private partnerships. Substantial progress has been made in this respect. The total investment in infrastructurewhich includes roads, railways, ports, airports, electricity, telecommunications, oil gas pipelines andirrigation is estimated to have in-

creased from 5.7 per cent of GDP in the base year of the Eleventh Plan to around 8.4 per cent in 2010-11. The pace of investment has been particularly buoyant insome sectors, notably telecommunications, oil and gas pipelines, while falling short of targets in electricity,railways, roads and ports. Efforts to attract private investment into infrastructure through the PPP routehave met with considerable success, not only at the level of the Central Government, but also at the levelof the individual States. A large number of PPP projects have taken off, and many of them are currentlyoperational in both the Centre and the States.

Compared to other developing countries, India has been slow to urbanise, but the pace ofurbanisation is expected to accelerate over the next two decades. The 2011 Census also shows an increasein the urban population from 27.8 percent in 2001 to 31.2 percent in 2011, and it is likely to exceed40.0 per cent by 2030. This would generate a heavy demand for better quality infrastructure in urbanareas, especially water, sewerage, public transport and low cost housing. Since it takes time to create urbaninfrastructure, it is necessary to have a sufficiently long-term focus on urban planning in the TwelfthPlan.

The Twelfth Plan must continue the thrust on accelerating the pace of investment in infrastructure,as this is critical for sustaining and accelerating growth. Public investment in infrastructure will haveto bear a large part of the infrastructure needs in backward and remote areas to improve connectivityand expand the much needed public services. Since resource constraints will continue to limit publicinvestment in infrastructure in other areas, PPP-based development needs to be encouraged whereverfeasible. It is necessary to review the factorswhich may be constraining private investment, and take stepsto rectify them. PPP, with appropriate regulation and concern for equity, should also be encouraged inthe social sectors, such as health and education. Several State Governments are already taking steps in thisdirection.

The Energy Challenge

The energy needs of rapid growth will pose a major challenge since these requirements have to bemet in an environment where domestic energy prices are constrained and world energy prices are highand likely to rise further. For the GDP to grow at 9.0 percent, commercial energy supplies will have togrow at a rate between 6.5 and 7.0 per cent per year. Since India's domestic energy supplies are limited, dependence upon imports will increase. Import dependence in the case of petroleum has always beenhigh and is projected to be 80 percent in the Twelfth Plan. Even in the case of coal, import dependence isprojected to increase as the growth of thermal generation will require coal suppliieswhich cannot be fullymet from domestic mines.

Rational energy pricing is critical for both effective demand management and a healthy supplyresponse. It is relevant for demand management, because energy users have no incentive to economizeif energy is underpriced. It is also relevant for expansion of domestic supply, because under-pricingof energy imposes a large burden on the energy producers reducing the resources that should accrueto them for financing new investments in these areas. In the longer term, we must move beyondfossil fuels to non-conventional energy. However, these new energy sources are significantly moreexpensive at present than fossil fuels and increased dependence on these fuels will mean higher perunit energy costs.

The Integrated Energy Policy, which was approved in 2009, had enunciated principles of energypricing that equalize domestic energy prices with the prices of imported energy, while allowing fortargeted subsidy to the needy and poor. While we have taken some steps in this direction, our energyprices still remain significantly below the world prices. This is true for both petroleum prices (other thanpetrol) and coal. It is also true of electricity, since regulators, often under political pressure, are not settingtariffs to reflect normative costs. The Twelfth Plan must address the challenge of aligning domestic energyprices with the global price trends. This is not easy to do in a short time span, but it can be done graduallyover a period of time. It must be emphasized that our ability to sustain high growth in the Twelfth Planwill depend critically upon our ability to make this adjustment. The poor will need subsidy, which shouldbe appropriately targeted, but energy prices in general cannot be de-linked from global price levels,particularly in a situation where import dependence is increasing.

Natural Resource Management – Water, Land and Forests

Economic development will be sustainable only if it is pursued in a manner which protects theenvironment. With acceleration of economic growth, these pressures are expected to intensify, and wetherefore, need to pay greater attention to the management of water, forests and land.

Management of water resources poses increasingly difficult challenges that will require attentionin the Twelfth Plan. The total quantity of usable fresh water annually available in India is fixed, but itsdemand from expanding agriculture and other sectors is increasing. Water resources in many parts of thecountry are under

severe stress leading to excessive exploitation of ground water. There is some scope forincreasing water availability. While these opportunities must be fully exploited, the real solution has tocome from greater efficiency in water use.

Agriculture accounts for 80.0 per cent of water needs at present, and there is considerable scopefor increasing efficiency of water use in this area. This requires better management of water in areas oflarge and medium irrigation projects. It also requires putting in place more holistic aquifer managementstrategies. Separation of electricity feeders for agriculture and domestic use can help limit the availabilityof electricity for pumping ground water thus breaking the vicious cycle between free energy and excessuse of groundwater. Wherever this has been done in combination with large-scale watershed programmes, there is evidence that groundwater levels have recovered.

Normally, efficient use of scarce resources requires appropriate pricing, but pricing of water is asensitive issue. This problem can be solved by providing 'lifeline' water supplies for drinking and cookingat very low prices, while charging appropriately for additional water use by domestic consumers. There is astronger case for rational pricing reflecting the scarcity of water for commercial and industrial use. There isalso a strong case for rational pricing of water for agricultural purposes. The proportion of water recycledin urban areas, and by Indian industry needs to be significantly increased. This will happens if supply forcommercial purposes is appropriately priced.

Even if we succeed in bringing about a major rationalisation of water prices, by itself, it will not leadto optimal use. For this, a rational pricing must be accompanied by regulatory measures to ration waterto different agricultural users, and stronger measures to discourage pollution.Contamination of drinkingwater is the principal cause of health disorders, particularly amongst children. It is estimated that up to13.0 percent of drinking water in rural areas contains chemical contaminants including fertilizer run-offs(particularly urea and its decomposition products).

The availability of land has become a major constraint on expansion of infrastructure, developmentof mineral resources, industrialisation and urbanisation. The present arrangements for acquisitionof land, and also for change in land use are archaic, often unfair and non-transparent. They need acomprehensive review. A new modern law is needed to govern the acquisition of land for industrial use, infrastructure development and urbanisation. This should also contain provisions for resettlement andrehabilitation. A bill has been introduced in Parliament which seeks to put in place an appropriate andfairer legal framework. Finalisation of this legislation, with an appropriate balance between the need toprotect the interests of current land owners and those dependent on it for livelihood and the broaderobjective of development, is critical.

The protection and strengthening of our natural forests is another critical area. This is also linked toconservation of soil and treatment of watersheds, which have a bearing on the way we deal with our waterresources, particularly drinking water. They also impact on the availability of energy for the economy,since most of the country's coal resource lies under forest. Since rapid economic growth will require acommensurate growth in energy supply and most of our electricity generation is expected to be coalbased, there are potential conflicts between protecting the forests and ensuring an adequate supply ofenergy to the economy. It will be necessary to evolve mechanisms through which a suitable balance canbe struck between the energy requirements of development and the need for environmental protection.

Implementation, Accountability and Governance

An over-arching challenge that requires much greater attention in the Twelfth Plan is that ofensuring better implementation and improved accountability. There are four aspects of governance thatare important.

First, better governance is crucial for translating the large outlays of our flagship programmesinto enduring outcomes on the ground. Interaction with stakeholders reveals that while there is generalappreciation that these programmes have the right objectives, their implementation on the ground ispoor. Implementation of programmes can be improved through a multi-faceted approach relying onprofessionalization of public service delivery, Total Quality Management, innovative use of IT andother technologies which improve monitoring and supervision. It can also be improved through greateremphasis on social mobilisation and capacity building, strengthening of local institutions, and buildingdeeper partnerships with civil society organisations and the community to determine the needs andaspirations of the people.

Second, implementation in many areas, particularly in infrastructure development, involving largeprojects, is held up for a variety of reasons. Coordination needed across different agencies to facilitateprogress in project implementation is often lacking and can lead to long delays and cost over-runs. 'Projectmanagement' capabilities must be improved for

the country to get better returns from public investmentin infrastructure and also in the social sectors. Project management, with a view to deliver on time andwithin cost, is a learnable capability that can be institutionalised, as demonstrated by the developmentexperiences of Japan, Korea, Singapore and China. A nation-wide drive to improve project managementmust be an integral part of the Twelfth Five Year Plan.

Third, is the broader issue of how to rid the system of corruption, which is both morally abhorrentand imposes economic costs? A number of initiatives need to beurgently pursued. Several legislativemeasures are needed. These include the establishment of an effective Lokpal, introduction of a law on publicprocurement and transparency, and the creation of a legislative framework governing the functioning ofregulatory institutions so as to ensure both functional autonomy and accountability.

Finally, to combat corruption, it is imperative to ensure speedy prosecution and trial in corruptioncases. The long delays in the judicial process are an important factor behind the growing cynicism aboutthe rule of law in our system. Reforms in the legal process need to be put in place without further delays.

The Global Context

India's growth prospects depend largely on an ability to tackle supply side constraints in thedomestic economy, but they cannot be viewed in isolation from developments in the world economy, ifonly because our economy is now much more globally integrated. The share of exports of goods &servicesin GDP has increased from 14.0 per cent in 2000-01 to 22.0 per cent in 2010-11 and India is now viewedas an important destination for FDI.

Global economic prospects are clouded with uncertainty. The world has avoided a prolongeddownturn that was feared at one stage as a possible consequence of the 2008 crisis. Theindustrialisedcountries have resumed positive growth after contracting in 2009, but growth in these countries remainanaemic with serious macro-economic imbalances and concerns about sovereign debt. Emergingmarkets are growing much more robustly, and India has been one of the leaders in this process. However,concern about sovereign debt and fiscal unsustainability in industrialised countries not only weakensthe prospects of an early return to robust growth in these countries, but also creates uncertaintyabout the export markets in industrialised countries. An adverse development globally, which affectsIndia directly, has been the rise in oil prices, and also the prices of other commodities, includingfood. Economic management over the next two to three years will have to cope with this uncertainty.

Taking a longer view, however, the changes taking place in the world economy, with a shift ineconomic strength towards emerging markets and especially in Asia, are inherently favourable for India.

Table 1 presents a projection of world economy over the next two and a half decades. Industrialisedcountries are likely to grow at about 3.5 per cent per year in nominal US Dollar terms between 2010 and2025, while developing and emerging economies are projected to grow at around 8.0 per cent. Withinthis group, developing Asia is projected to grow, again in nominal US Dollar terms, at around 10 percent per year. These projections are, of course, subject to the usual qualifications that attend long-termforecasts, but they are not out of line with the current perceptions. The

Table 1
Structure of Global GDP (in current US $ Trillion)

	2000	2011	2016	2020	2025
World GDP	32.2	68.7	90.5	110.5	140.5
Advanced Economies	25.7(79.7%)	44.4(64.6%)	53.3(58.9%)	61.1(55.3%)	71.7(51.1%)
Developing and Emerging	24.3(35.4%)	37.2(41.1%)	49.4(44.7%)	68.8(48.9%)	6.5(20.3%)
		of which			
Developing Asia	2.3(7.3%)	10.5(15.2%)	17.4(19.3%)	26.6(24.1%)	40.7(28.9%)
of which India	0.5(1.5%)	1.9(2.8%)	3.6(4.0%)	5.8(5.2%)	10.0(7.1%)
Sub-Saharan Africa	0.3(1.0%)	1.2(1.8%)	1.7(1.9%)	2.5(2.2%)	3.9(2.8%)
West Asia and North Africa	0.8(2.5%)	2.8(4.0%)	3.8(4.2%)	5.0(4.5%)	7.1(5.0%)
Latin America and Caribbean	2.1(6.6%)	5.5(8.0%)	7.4(8.2%)	9.7(8.8%)	13.3(9.5%)

[Figures in parentheses denotes share of world GDP]

Source: The World Economic Outlook database of the International Monetary Fund. This data up to 2010 in most cases (up to 2009 and earlier in a few) is actual data. Thereafter the figures up to 2016 are projections by the IMF. The projections for India and other countries beyond 2016 have been made internally in the DPPP Division of the Planning Commission.

advanced economies' share inglobal GDP is projected to fall from 65.0 per cent in 2011 to 51.0 per cent by 2025, while the share ofemerging economies is projected to increase from 35.0 per cent to about 49.0 per cent over the sameperiod. This is shown in Table 1.

This data up to 2010 in most cases (up to 2009 and earlier in a few) is actual data. Thereafter the figures up to 2016 are projections by the IMF. The projections for India and other countriesbeyond 2016 have been made internally in the DPPP Division of the Planning Commission.

The important point emerging from these projections is that India has the potential to becomethe third largest GDP in the world in two decades. However, to realise this potential we must ensuresustained rapid growth. China has grown around 10.0 per cent per year in real terms for 30 years and isnow expected to slow down. India is currently behind China, but the evidence suggests that India hasnow developed the potential for sustained rapid growth over the next two decades, provided appropriatesupportive policies are put in place. These policies must promote and support changes in many sectors.

2. PROSPECTS FOR THE TWELFTH PLAN

The message emerging from this overview is that the economy has gained in strength in many dimensions and is therefore well placed to achieve faster, sustainable and more inclusive growth. Approach paper claims that having achieved 8.2 per cent growth during the Eleventh Plan, it is reasonable to aim at 9.0 per cent growth for the Twelfth Plan. *It may be important to mention here that this growth estimate has been reduced to 7.9 percent later.* Though Planning Commission thinks this to be a feasible target from a macro-economic perspective but it cannot be viewed as an assured outcome. Global economic conditions are very uncertain and energy prices are likely to remain high. To achieve rapid growth, the economy will have to overcome constraints posed by limited energy supplies, increase in water scarcity, shortages in infrastructure, problems of land acquisition for industrial development and infrastructure, and the complex problem of managing the urban transition associated with rapid growth. Greater efforts also need to be made in agriculture, health and education to ensure inclusion of the most excluded and sometimes invisible parts of our population.

These difficulties suggest that a 9.0 per cent growth target for the next five years is ambitious. But it is not impossible, if we have the political will to do what is necessary. Economic reforms over the last twenty years have resulted in the citizens of India having high expectations. The Twelfth Plan has to meet the aspirations of millions of young men and women. This cannot be done by following a business-asusual approach. All sections of society – government, farmers, businesses, labour and concerned citizens – have to adopt newer, more effective ways of pursuing their activities, so that we can collectively achieve our lofty goals.

Growth Targets for the Twelfth Plan

The Planning Commission has explored two alternative targets for economic growth in the Twelfth Plan. The first is a restatement of the Eleventh Plan target of 9.0 per cent growth, which could not be achieved. The second is an even higher target of 9.5 per cent average growth for the Twelfth Five Year Plan. Several macroeconomic models have been used to examine the feasibility of these targets in terms of internal consistencies and inter-sectoral balances. The detailed results obtained from these models will be published separately. In the following analysis we present a tentative assessment of the implications of these two alternative growth targets.

The sectoral growth rates broadly consistent with the 9.0 per cent and 9.5 per cent alternatives are presented in Table 2. The 9.0 per cent target requires a significant acceleration in growth in agriculture; in electricity, gas and water supply; and also in manufacturing. Agricultural growth has always been an important component for inclusiveness in India, and recent experience suggests that high GDP growth without such agricultural growth is likely to lead to accelerating inflation in the country, which would jeopardise the larger growth process. However, even if such agricultural growth is achieved, it is unlikely that the agricultural sector will absorb additional workers. Thus, the main onus for providing additional jobs to the growing labour force will rest on manufacturing and construction and on the services sectors. The target set for the mining sector, mainly reflecting additional production of coal and natural gas, is also very demanding, but is necessary to meet the primary energy requirements without resorting to excessive imports.

As shown in Table 2, taking the growth rate to 9.5 per cent would require much faster growth in the manufacturing, as well as in electricity, gas and water supply sectors. The feasibility of achieving such large acceleration in key sectoral performance needs to be considered carefully before the growth targets for the Twelfth Plan are fixed. This is particularly true for the energy sector where supply constraints could be severe.

Table 2 : Sectoral Growth Rates – Previous Plans and Target for Twelfth Plan

	IXth Plan	*Xth Plan*	*XIth Plan*	*XIIth Plan*	
				9.0% Target	*9.5% Target*
1. Agriculture, Forestry & Fishing	2.5	2.3	3.2*	4.0	4.2
2. Mining & Quarrying	4.0	6.0	4.7	8.0	8.5
3. Manufacturing	3.3	9.3	7.7	9.8	11.5
4. Elect. Gas & Water Supply	4.8	6.8	6.4	8.5	9.0
5. Construction	7.1	11.8	7.8	10.0	11.0
6. Trade, Hotels & Restaurant	7.5	9.6	7.0		
7. Transport, Storage & Communication	8.9	13.8	12.5		
6+7. Trade, Hotels etc. + Transport, Communication, Storage	8.0	11.2	9.9	11.0	11.2
8. Financing, Insurance, Real Estate & Business Services	8.0	9.9	10.7	10.0	10.5
9. Community, Social & Personal Services	7.7	5.3	9.4	8.0	8.0
Total GDP	**5.5**	**7.8**	**8.2**	**9.0**	**9.5**
Industry	4.3	9.4	7.4	9.6	10.9
Services	7.9	9.3	10.0	10.0	10.0

Note : * It is likely that on revision of farm sector GDP growth rates for the previous year and an expected good harvest in 2011-12, the average for the Eleventh Plan may be higher at 3.3-3.5 percent.

Source : Planning Commission, Approach to the Twelfth Five Year Plan

Investment and Savings Requirements

A basic macro-economic feasibility check is to establish whether the investment and savings rates and the current account deficit required for achieving these growth targets are broadly feasible. Unless this balance is achieved, there is a danger that higher growth will only be obtained at the expense of unacceptable inflation. Ensuring macro-economic balance is a key aspect of medium term inflation management, though of course, many other issues come in for short term management. The current situation of high inflation and tightening of monetary policy at the domestic level and uncertainty in the global financial markets require a careful appraisal of the saving-investment prospects for the Twelfth Plan period. The relevant information is presented in Table 3.

The investment required to achieve 9.0 per cent growth in the Twelfth Plan calls for some increase from the levels already achieved. The investment rate (which equals gross domestic capital formation adjusted for errors and omissions as a percentage of GDP) is estimated to have increased to 36.4 per cent of GDP in the Eleventh Plan as compared to 31.8 per cent in the Tenth Plan. Nonetheless, the average rate of growth in the Eleventh Plan at 7.9 per cent was not much greater than the average 7.8 per cent achieved over the Tenth Plan period. One obvious reason for this is the dislocation caused by the global crisis.

There was also a purely domestic factor at play. In the Ninth Plan (1997-98 to 2001-02) the rate of GDP growth was subdued at 5.5 per cent and the incremental capital output ratio (ICOR), notwithstanding comparatively lower investment rates, was rather high at 4.5 per cent, as it also was in the first two years of the Tenth Plan (2002-03 and 2003-04) at 4.9 per cent. This flowed from slower growth in domestic demand during these years, and as a result India had a persistent current account surplus for three successive years from 2001-02 to 2003-04. There was thus some slack in the system, which got utilized in the Tenth Plan period. This should be borne in mind when viewing investment and growth rates realized in the Tenth Plan.

The current account balance slipped back into negative in 2004-05 and averaged (–) 0.9 per cent of GDP in the last three years of the Tenth Plan. On account of the large surpluses in the first two years of the Tenth Plan, the average current account deficit for the five year period was nil. The Eleventh Plan period did not start out with the benefit of a slack in the system, as did the Tenth. One consequence of this was that despite the high investment rates that were realized during the closing years of the Tenth, and early years of the Eleventh Plan, inflation came to be a persistent problem.

Plan	
XIIth Plan	
Target 9.5%	*Target*
.0	4.2
.0	8.5
.8	11.5
.5	9.0
0.0	11.0
1.0	11.2
0.0	10.5
.0	8.0
.8	9.5
.6	10.9
0.0	10.0

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While there are specific sectoral bottlenecks that explain some of the inflationary pressures, at the aggregate level, resolving these bottlenecks requires additional investment. Hence, in order to sustain high rates of growth percent, while maintaining moderate inflation, investment rate has to be higher than in the past, especially in areas where supply side bottlenecks could trigger inflation. Thus the average investment rate needed during the Twelfth Plan period is estimated to be 38.5 per cent of GDP for the 9.0 per cent growth with 4.5–5.0 average inflation. The investment rate would have to rise to as much as 41.4 per cent of GDP for the 9.5 per cent growth with 5.0–5.5 rate of inflation.

The rate of fixed capital formation had increased rapidly during the Tenth Plan. It averaged around 28.4 per cent of GDP over the Tenth Plan period as against 23.2 per cent of GDP in the Ninth Plan. It had risen to 32.9 per cent of GDP in 2007-08, after which it declined through the years of the crisis to 29.5 per cent (provisional) in 2010-11. Even so, the rate of fixed capital formation is likely to average around 31 per cent of GDP in the Eleventh Plan, which is 2.6 percentage points of GDP higher than in the Tenth Plan. As pointed out above, the pickup in the average rate of growth in the Eleventh Plan period was not fully commensurate with this increase partly due to external developments. Further in order to sustain high growth while keeping inflation within moderate limits, it is imperative to expand the productive potential of the economy at a faster rate. In order to achieve an average economic growth rate of 9.0 per cent, the rate of fixed capital formation needs to improve to around 33.5 per cent of GDP over the Twelfth Plan period. This Planning Commission claims to be feasible considering that a fixed capital formation rate of 32.9 per cent was actually achieved in 2007-08.

For the 9 per cent economic growth scenario, the likely break-up of fixed capital formation by investing sector shows some interesting features:

(i) Fixed capital formation in the household sector (which, in addition to agriculture and residential construction, includes practically all the micro and small enterprises) has been rather stable, and are projected to increase to 12.0 per cent of GDP in the Twelfth Plan from 11.6 per cent of GDP during the Eleventh Plan. For this to happen, the flow of financial resources to these sectors has to increase significantly. This would require not only expansion of the reach of the formal banking sector, but also revitalisation of the micro finance and other innovative financial institutions.

(ii) Fixed capital formation in the private corporate sector increased sharply to over 14.0 per cent of GDP in 2007-08 (the main reason for the peaking of fixed investment in the country in that year) before moderating to around 11.0 per cent in the last two years of the Eleventh Plan. Prospects for private corporate investment in the Twelfth Plan period depend upon many factors, which include India's overall macro-economic environment, particularly fiscal deficits and interest rates, the domestic investment climate and India's relative attractiveness as an investment destination compared with other countries. It is difficult to predict how private investment will behave, but with somewhat optimistic assumptions one can envisage private corporate fixed capital formation averaging around 12.4 per cent of GDP during the Twelfth Plan.

(*iii*) The public sector (government and PSUs) will have to contribute its share for raising the rate of fixed capital formation to the desired levels. Table 3 projects that fixed capital formation from this sector needs to improve from an average 8.3 per cent of GDP in the Eleventh Plan to an average 9.1 per cent of GDP in the Twelfth Plan. The additional investment of 0.8 percentage points of GDP should be directed largely into infrastructure sectors like energy, roads, transport, irrigation, watershed management, etc.

The savings needed to finance this level of investment are expected to come from a modest improvement in the savings rate of the household sector, from 23.2 per cent of GDP in the Eleventh Plan to 24.0 per cent in the Twelfth Plan. Private corporate savings are expected to increase from an average of 8.2 per cent of GDP in the Eleventh Plan to 8.5 per cent in the Twelfth Plan. A much stronger performance is needed in public sector savings, up from 2.5 per cent of GDP in the Eleventh Plan to 3.7 per cent in the Twelfth Plan. Public enterprises, which are a sub-component of public savings, had done reasonably well in terms of savings performance during the Tenth Plan, but have slipped a bit in the Eleventh Plan, and their contribution is being projected to improve slightly as a percentage of GDP in the Twelfth Plan. However, Government Administration, which has negative saving, needs to improve its performance from -1.3 per cent in the Eleventh Plan to -0.5 per cent in the Twelfth Plan. This improvement is possible only if fiscal discipline is restored; and the Centre and the States succeed in containing revenue deficits.

As far as financing the current account deficit (CAD) is concerned, two alternative scenarios have been generated with the same constraint that the current account deficit should not exceed 2.5 per cent of GDP. The current account balance actually averaged nil in the Tenth Plan and deteriorated in the Eleventh Plan to an average deficit of 2.4 per cent, mainly because of higher deficits in the later years, amounting to 2.6 per cent of GDP in 2010-11 and expected to be about the same in 2011-12. For prudent management of the external ac-

Table 3 : Broad Macro-Economic Parameters – Previous Plan and Targets for Twelfth Plan

	IXth Plan	*Xth Plan*	*XIth Plan*	*XIIth Plan*	
				9.0% Target	*9.5% Target*
1. Investment Rate(Gross Capital Formation adjusted for errors and omissions)	24.6	31.8	36.4	38.7	41.4
2. Fixed Investment*of which*	23.2	28.4	30.9	33.5	35.5
Household Sector	9.9	11.7	11.6	12.0	12.0
Private Corporate Sector	6.6	9.6	11.0	12.4	13.5
Public Sector	6.6	7.1	8.3	9.1	10.0
3. Saving Rate*of which*	23.7	31.7	34.0	36.2	38.9
Household Sector	20.5	23.2	32.2	24.0	24.5
Private Corporate Sector	4.0	6.4	8.2	8.5	9.2
Public Saving*of which*	-0.8	2.0	2.5	3.7	5.2
Govt. Admin.	-4.9	-2.6	-1.3	-0.5	0.8
Public Enterprises	4.0	4.6	3.8	4.0	4.5
4. Current Account Balance*of which*	-0.6	0.0	-2.4	-2.5	-2.5
Trade Balance	-2.6	-2.5	-5.0	-4.5	-4.5
Capital Account Balance	2.1	3.5	3.8	5.0	5.0
5. WPI Inflation Rate	4.9	5.0	6.0	4.5-5.0	5.0-5.5

Source: Planning Commission, Approach to the Twelfth Five Year Plan

count, it is desirable that we restrict the CAD to an average below 2.5 per cent over the Twelfth Plan period. We can exceed this level for a year or two, but for the five year period as a whole we should work to a limit of 2.5 per cent of GDP, particularly so in the uncertain and volatile global financial conditions that are likely to persist for some time.

It should not be difficult to secure the capital inflows necessary to finance a level of the CAD of 2.5 per cent of GDP, relying on stable long term Foreign Direct Investment (FDI) flows. But for this to happen, it is also necessary to ensure that policies relating to foreign investment are appropriately tailored to encourage such flows Indeed, the likelihood is that external capital inflows may exceed the financing requirements indicated by the CAD. During the Tenth Plan and the first two years of the Eleventh Plan, external commercial borrowings (ECBs) and external trade credits expanded sharply. While this allayed all concerns regarding the sustainability of our external account and contributed substantially to the positive image of the country globally, it did create fairly serious challenges in domestic macromanagement. There are indications that a similar situation may occur as we go into the Twelfth Plan. It will be necessary, therefore, to carefully monitor not just the CAD, but also the build-up of private external debt.

As shown in Table 3, both the investment and saving rates required for the 9.5 per cent GDP growth scenario are much higher. Taking into account the need to limit reliance on external financing to a prudent level, and also considering practical limitations on the amount of additional public savings and investment that can be mobilised, it would be better to fix the growth target for the Twelfth Plan at an average 9.0 per cent of GDP.

Financing the Public Sector Plan

Having established the macro-economic feasibility of 9.0 per cent GDP growth in terms of investment–saving balances and the current account deficit, it is necessary to consider the likely size of he Public Sector Plan. A detailed assessment of the size of the Central and State Plans will be possible only at the time of finalisation of the Twelfth Plan. A provisional assessment of resource availability for the Centre has been made by the Working Group on Centre's Resources. This is presented in Table 4, which shows absolute value in rupees and also in percentage of GDP.

3. A CRITIQUE OF THE TWELFTH PLAN APPROACH PAPER

1. Growth Targets Seemingly Unachievable

In view of the slowdown of the economy in the last two years of the Eleventh Five Year Plan, the growth target of even 9 percent seems to be impractical. This slowdown has been broad based affecting almost all sectors of the economy. Gross fixed capital formation has been badly hit in the last two years of the Eleventh plan due to rising interest rates, slowing consumption growth and the uncertain business environment. In the terminal year of the Eleventh plan in almost all infra-

Table 4 : Projection of Centre's Resources for the Twelfth Five Year Plan (2012-17)

(Figures in ₹ Crore at Current Prices)

Sl. No.	Description	2011-12 (BE) Base Year	2012-13	2013-14	2014-15	2015-16	2016-17	XIIth Plan Total
1.	Tax Revenue net to Centre	6,64,457	8,38,216	10,04,659	11,75,451	13,63,523	15,74,869	59,55,718
		(7.40)	(8.14)	(8.53)	(8.72)	(8.83)	(8.91)	(8.68)
2.	Non-Tax Revenue	125435	112620	128387	146361	151683	155627	694678
		(1.40)	(1.10)	(1.09)	(1.09)	(0.98)	(0.88)	(1.01)
3.	Non-Debt. Capital Receipts	55020	56027	54471	55178	55930	56785	278391
		(0.60)	(0.54)	(0.46)	(0.41)	(0.36)	(0.32)	(0.41)
4.	Fiscal Deficit	412817	421606	412095	404441	463085	530233	2231461
		(4.60)	(4.10)	(3.50)	(3.00)	(3.00)	(3.00)	(3.25)
5.	Aggregate Resources	1257729	1427469	1599612	1781431	2034222	2317514	9160248
	(1+2+3+4)	(14.00)	(13.88)	(13.59)	(13.21)	(13.18)	(13.11)	(13.34)
6.	Non-Plan Expenditure	816182	921082	1016307	1109819	1208801	1300879	5556888
		(9.09)	(8.96)	(8.63)	(8.23)	(7.83)	(7.36)	(8.09)
7.	Gross Budgetary Support	441547	506387	583305	671612	825421	1016635	3603360
	for Plan	(4.92)	(4.92)	(4.95)	(4.98)	(5.35)	(5.75)	(5.25)
7a.	Central Assistance to	106026	121930	140219	161252	191890	230268	845558
	States/UTs	(1.18)	(1.18)	(1.19)	(1.20)	(1.25)	(1.30)	(1.23)
7b.	Central Plan	335521	387458	443086	510361	633531	786367	2757802
		(3.74)	(3.74)	(3.76)	(3.78)	(4.10)	(4.45)	(4.02)
8.	IEBR	256936	293641	335589	383531	438321	500938	1952020
		(2.86)	(2.86)	(2.85)	(2.84)	(2.84)	(2.83)	(2.84)
9.	Plan Resources for the Centre	292457	678099	778675	893892	1071852	1287305	4709822
		(6.60)	(6.59)	(6.61)	(6.63)	(6.94)	(7.28)	(6.86)
10.	Gross Domestic Product	8980860	10283085	11774132	13481381	15436181	17674428	68649207

Note : Figures in parentheses denote percent of GDP (*The projections here assume 9.0 percent real GDP growth and 5.0 percent inflation in terms of GDP deflator*).

Source : Planning Commission, Approach to the Twelfth Five Year Plan

structure industries, growth has come down. There doesn't seem to be any possibility of improvement in the investment activity in the near future. Due to continuation of high rates of interest and depreciation of rupee, profit margins of industry are eroding fast. Worsening global economy scenario is adding to the woes of the economy.

Further the target Gross Capital formation rate at 38.7 percent of GDP (with 9 percent growth scenario), seems to be unachievable and with 9.5 growth scenario, gross capital formation of 41.1 percent is even more impractical. Therefore growth target, which primarily depends upon Gross Capital Formation are seemingly unachievable.

2. Unrealistic Financial Pattern Once Again

Eleventh Five year Plan had unrealistic financial pattern, whereby balance from current revenues was expected to provide 28.5 of the resources (2.31 % of GDP) actual realization from balance from current revenue actually was – 0.17 percent of GDP. 12th Five Year Plan repeats the same mistake. Due to shortfall in surplus from current revenues for resources of the centre, 11th plan, had to rely heavily or borrowings for financing plan expenditure, though public sector enterprises provided more, or less on expected lines.

The finance ministry has itself admitted that there would be an overall slippage in all fiscal responsibility and budget management (FRBM) requirements in 2011-12. Generally there has always been a shortfall in surplus from the current revenues. It would have been better if Planning Commission had adopted a more practical financial plan for the 12th plan period.

3. Impractical Infrastructure Targets

The twelfth plan sets an ambitious target of one lakh MW in power generation, whereas actual realization in 11th plan was 50,000 MW, on account of slippage in public sector power projects. Thus 12th plan target is unrealistic in actual practice. From another angle the target actually is only 72000 MW because 28000 MW capacity supposed to be completed in 11th plan is expected to be completed in first two years of 12th plan. 12th plan target of 72000 MW, is thus effectively lower than 78700 MW set for 11th plan. It will be insufficient to meet the rising electricity demand in the 11th plan.

The Approach Paper envisages a 6.5% annual increase in energy supplies. This cannot sustain the target 9% growth rate of the economy. Against 11th plan investment for infrastructure, projected at rupees 5,14,040 crores of total infrastructure investment, 12th plan envisages an investment of fifty lakh crores in 5 years. This seems to be a very ambitious target. Out of this total investment of fifty lakhs crores over a period of 5 years, private sector is expected to provide 25 lakh crores.

4. Overemphasis On Public Private Partnership

Government looks to be withdrawing from infrastructure sector in 12th Five Year Plan and lays overemphasis on public private partnership (PPP). Approach paper of 12th Five Year Plan states that India has 1017 PPP projects accounting for Rs 4,86,603 crores. India today is second only to china in terms of number of PPP projects and in terms of investments it is second to Brazil. So far transport sector has been the major recipient of investment in these PPP projects. Approach Paper of 12th Five Year Plan talks about need to explore the scope for PPP projects in the development of social sectors like health and education.

Planning commission rides high on the success of PPP model in road transport and modernization of airports; but looking at the problems being faced with regard to the implementation and working of PPP model, government needs to go slow on PPP model and instead of taking its hands off from provision of social services like health and education, should try to strengthen its presence in these sectors as profit motive of the private players may come in way of social welfare objectives of the government.

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CHAPTER

21

THE PROBLEM OF CAPITAL FORMATION

Capital is a necessary but not a sufficient condition of progress.

— Ragnar Nurkse

1. MEANING AND CONCEPT OF CAPITAL FORMATION

Among the many factors, responsible for underdevelopment, lack of capital formation is considered to be a factor of prime importance. It is therefore, necessary that certain conceptual problems associated with capital formation be fully understood.

According to Professor Nurkse : "The meaning of 'Capital formation' is that society does not apply the whole of its current productive activity to the needs and desires of immediate consumption, but directs a part of it to the making of capital goods, tools and instruments, machines and transport facilities, plant and equipment—all the various forms of real capital that can so greatly increase the efficacy of productive effort..... The essence of the process, then is the diversion of a part of society's currently available resources to the purpose of increasing the stock of capital goods, so as to make possible an expansion of consumable output in the future."[1] This, definition of capital formation by Prof. Nurkse emphasizes the inclusion of real physical assets and not financial assets such as shares and bonds, currency notes and bank deposits (which are all paper claims). It is only the increase of real capital which increases the productive potential of the society.

The definition of Professor Nurkse emphasizes only the physical aspect of capital and ignores the aspect of "investment in human beings" that is made by the society in the form of expenditures on health and education. The basic characteristic of capital is that it helps to enlarge the productive potential of the society. Judged from this standpoint, investment-in-human beings, more appropriately described as human capital, should be included within the scope of capital. Professor Simon Kuznets has rightly pointed out measures of capital formation based on fixed capital are deficient because they omit expenditures for education, non-profit research, health, recreation, etc., which "contribute to economic growth by increasing the efficiency of a complex productive system."[2] Even the classical economists recognised the existence and usefulness of human capital but the obsession of the economists to deal with material objects led to the adoption of a narrow definition of capital in terms of physical assets. The attitude is undergoing a change and human capital and physical capital are being treated as two components of

1. Nurkse, R. *Problems of Capital Formation in Underdeveloped Countries*, p. 2.
2. Kuznets, S., *Six Lectures on Economic Growth*, p. 77.

capital which help to enlarge the productive capacity of a nation. Prof. T.W. Schultz pleading for a revision of the definition of capital writes : "Surely one of the major reasons for the widely held popular belief that economics is materialistic is the over-commitment on the part of economists to a partial concept of capital restricted to material objects. The failure to include the acquired abilities of man that augment his economic productivity as a form of capital, as a produced means of production, as a product of investment, has fostered the retention of the patently wrong notion that labour is capital free and it is only the number of man-hours worked that matters. But ..... labourers have become capitalists in the sense that they acquired much knowledge and many skills that have economic value. Clearly what is needed in this connection is an all-inclusive concept of capital."[3]

Although the traditional estimates of capital formation made in India preferred to restrict the term capital formations to additions to the stock of producer good viz., machines, tools, equipment, transport facilities, etc., efforts have been made in recent years to estimate human capital formation as well. We shall therefore, enlarge the definition of capital formation and study both the components of capital formation—physical and human—with reference to India.

The Process of Physical Capital Formation

There is a close relationship between economic growth and capital accumulation. A silent assumption runs through most of the theories of capital formation i.e., output is limited by the stock of capital at a particular time in a country whether there is abundant labour or not. But it may be emphasized that a high rate of capital formation is usually accompanied by a rapid growth in productivity and income but it would be a folly to pin exclusive faith on this factor alone. Professor Nurkse has aptly put it, "*Capital is a necessary but not a sufficient condition of progress.*"[4] Since capital formation is an essential determinant of economic growth, it is quite necessary to determine the desirable rate of capital formation and also determine the process of capital accumulation. Most of the theories of capital accumulation believe in stepping up the rate of capital formation in a short period of time. The main purpose of this approach is to compress the process of economic growth in a relatively short period.

Professor P.N. Rosenstein Rodan in his theory of the Big Push has emphasised that the philosophy of gradualism will not work in starting economic growth, and that the underdeveloped economy needs to be given a big push. Proceeding *'bit by bit' will not add up in its effect to the sum total of single bits.* A minimum quantum of investment is a necessary (though not sufficient) condition of success.

3. Schultz, T.W., *The Economic Value of Education*, preface, p. x.
4. Nurkse, *op. cit.*, p. 1.

How can a community achieve a high rate of investment or capital formation? The process of physical capital accumulation is a function of three variables:

(1) An increase in the volume of real domestic savings so that the resources that would have been used for consumption are released for investment.

(2) The creation of adequate banking and financial institutions to mobilise the savings of the community.

(3) The emergence of an entrepreneurial class which can utilise the community's saving into channels of productive investment or the assumption of the entrepreneurial function by the State in critical areas.

Different economies adopted different ways to boost up the rate of real saving in the community. The bootstraps approach followed by Communist Russia and other centrally planned economies was intended to achieve a high rate of domestic saving by imposing curbs on consumption. Similarly, in the British economy, the same objective was achieved by keeping wages low and ploughing back business and industrial profits for economic expansion. Both these courses are extreme. In India, the emergence of a democratic government and a class conscious labour force would not permit either the use of totalitarian measures to restrict consumption or to keep wages depressed at a very low level for a long time. Consequently, domestic savings alone may not be sufficient for planned investment. A part of investment may, therefore, be financed by the import of foreign capital. External assistance is a short-term measure because, ultimately, the entire burden of economic growth has to be borne by the developing community.

The Indian economy had outlined a path of capital accumulation in which a major part of resources needed for economic development were to be supplied by real domestic savings and a part by inflow of capital from abroad. In order to initiate the conditions of take-off, a higher rate of capital inflow was admitted in the Second and Third Plans, but from the Fourth Plan onwards, an effort was made to progressively reduce the quantum of foreign aid so as to make the economy self-reliant and self-sustaining.

2. TREND OF SAVING AND CAPITAL FORMATION IN THE INDIAN ECONOMY

Estimates of physical capital formation in the post-independence period have been prepared mainly by the Central Statistical Organisation (C.S.O.) from time to time.

C.S.O. prepares its estimates by the product method. For this purpose, the estimate is compiled by the type of capital goods viz., 'construciton' and 'machinery

and equipment'. This part of capital formation is called fixed capital formation. Estimates of 'change of stock' (working capital are added to gross fixed capital to arrive at the total of gross capital formation.

The Central Statistical Organisation (CSO) has been preparing estimates of saving and capital formation as part of the National Accounts Statistics (NAS). Recently, the CSO has shifted the base year to 1999-00 series and to provide a long-term series to be able to make comparison over the last six decades, it has presented saving and capital formation data.

For this purpose, the economy has been divided into three broad sectors—the public sector, the private corporate sector and the household sector. The public sector comprises public sector undertakings along with departmental enterprises. The private corporate sector limits itself to the organised corporations run under company form of ownership and management. The household sector is a residual sector embracing all economic units other than the units of public sector and private corporate sector. Thus, the household sector includes besides individuals, all non-government and non-corporate enterprises like sole proprietorships, partnerships and non-profit institutions which furnish educational, health, cultural, recreational and other social and community services to households.

Four steps are involved in the CSO's estimation of saving and capital formation.

Step I: Aggregate gross domestic capital formation (GDCF) is estimated for the entire economy for each year, separately for three forms of assets, viz.., construction, machinery and equipment and change of stock.

Step II: From the total of GDCF estimated, the independently estimates for gross capital formation for the public sector and private corporate sector are deducted to obtain the residual investment in the household sector.

Step III: Aggregate saving or the same as total finance available for investment is derived as the sum total of the domestic savings plus foreign savings (i.e. net capital inflow from abroad).

Step IV: In principle, estimates of GDCF and aggregate savings including foreign savings should be equal, but in practice, we observe a gap. Assuming that the estimates of aggregate saving (including foreign capital inflows) are more reliable than the estimates of GDCF, the difference or gap is termed as 'errors and omissions' which is used to adjust the original GDCF estimates. The adjusted GDCF estimate is treated as the aggregate gross investment of the domestic economy in official estimates.

Table 1 provides an illustration of the various steps involved in the estimation of saving and capital formation for 1980-81 and 1993-94. It may also be mentioned that the Government of India *Economic Survey (2002-2003)* used the term 'investment' in place of capital formation and thus calculates 'saving and investment gap' to determine 'errors and omissions'.

Table 1: Estimates of Gross Domestic Saving and Capital Formation

(1993-94 series—₹ crores at current prices)

	1980-81	*1993-94*
Step I		
GDCF by assets (i + ii + iii)	26,868	1,82,619
(i) Construction	13,787	87,625
(ii) Machinery & equipment	12,831	96,668
(iii) Change of Stocks	250	-1,674
Step II		
GDCF by institutions (a + b)	26,868	1,82,619
(a) Organised sectors (i + ii)	15,610	1,19,047
(i) Public sector	12,105	70,834
(ii) Private corporate sector	3,505	48,213
(b) Household sector (residual)	11,258	63,572
Step III		
Finances for GDCF (A +B)	29,230	1,98,412
A. Foreign capital inflow (net)	2,094	4,791
B. Gross domestic saving (a + b)	27,136	1,93,621
(a) Organsed sectors (i + ii)	7,268	35,311
(i) Public sector	4,929	5,445
(ii) Private corporate sector	2,339	29,866
(b) Household sector (iii + iv)	19,868	1,58,310
(iii) Financial assets	8,610	94,738
(iv) Physical assets	11,258	63,572
Step IV		
(a) Finances for GDCF (Step III)	29,230	1,98,412
(b) GDCF unadjusted (Step I)	26,868	1,82,619
	(18.7)	(21.3)
(c) Errors & omissions (a – b)	2362	15,793
(d) Adjusted GDCF (b + c)	29,230	1,98,412
	(20.3)	(23.1)

Note: Figures in brackets are percentage of GDP at market prices.

Source: EPW Research Foundation, *National Accounts Statistics of India—1950-51 to 2000-01*, 4th Edition, 2002.

Gross Domestic Savings (GDS)

Central Statistical Organisation (CSO) has brought out a series of Gross Domestic saving (Popularly referred to as 1999-2000 series). Table 2 presents data of Gross Domestic Saving (GDS) during 1950-51 to 2006-07. The data reveal that GDS as a percentage of GDP at market prices improved from 8.6% in 1950-51 to 14.2% in 1970-71 and subsequently reached a level of 22.8% in 1990-91. By 2000-01, Gross domestic saving was of the order of 23.7%, but rose sharply thereafter to reach a high level of 37.7% in 2007-08.

Table 2 : Components of Gross Domestic Savings

	As percent of GDP at market prices 1999-00 series			
Year	*Household sector*	*Private corporate sector*	*Public sector*	*Total (2+3+4)*
(1)	(2)	(3)	(4)	(5)
1950-51	5.7	0.9	2.0	8.6
	(66.3)	(10.5)	(23.2)	(100.0)
1960-61	6.5	1.6	3.1	11.2
1970-71	9.5	1.5	3.3	14.2
1980-81	12.9	1.6	4.0	18.5
1990-91	18.3	2.7	1.8	22.8
	(80.3)	(11.8)	(7.9)	(100.0)
2000-01	21.6	3.9	−1.8	23.7
	(91.1)	(16.5)	(−7.6)	(100.0)
2004-05 Series				
2004-05	23.3	6.6	2.3	33.2
2005-06	23.2	7.5	2.4	33.1
2006-07	22.9	8.0	3.6	34.4
2007-08	22.6	8.7	5.0	36.4
2008-09	23.6	7.4	1.0	32.0
2009-10	25.4	8.2	0.2	32.3
2010-11*	22.8	7.9	1.7	32.3
	(70.6	(24.3)	(5.2)	(100.0)

*Quick estimates (P) Provisional

Note: Figures in brackets are percentage share of different sectors in total saving

Source: Government of India, *Economic Survey* (2011-12)

Analysing the major components of GDS, it may be noted that household sector is the major contributor to GDS accounting for 5.7% in 1950-51, increasing to 9.5% in 1970-71, to further rise to 21.6% in 2000-01 and then reaching the high level of 22.8% in 2010-11.

Private corporate sector contributed 0.9% in 1950-51, its share improved to 2.7% 1990-91 and further increased to 3.9% in 2000-01. Thereafter, there was sharp increase in the corporate sector saving reaching a high level of 7.9% GDP in 2010-11. This was primarily due to the introduction of economic reforms introduced in 1991 which provided a fillip to corporate sector saving.

Public sector saving which was 2.0% in 1950-51 improved to 4.0% 1980-81. Thereafter, it indicated a decline to 1.8% in 1990-91 and became negative in 2000-01 to the extent of 1.8%. This was largely the result of dissaving in public administration, though the savings of the public sector enterprises indicated sustained growth. However, there was a reversal of trend and public sector savings became positive during 2004-05 to 2006-07, reaching a level of 5.0% in 2007-08, before decling to 1.7% in 2010-11.

Taking the relative contribution of the three sectors to GDS, it may be noted that in 1950-51 household sector accounted for about 66.3%, the corporate sector 10.5% and the public sector 23.2%. By 1980-81, the share of the household sector improved to 80.3%, that of the private corporate sector marginally improved to 11.8% and that of the public sector 7.9%. Since in 2000-01, the share of public sector savings was negative to the extent of 7.6%, the other two sectors i.e. household sector's contribution touched a high level of 91.1% and the private corporate sector 16.5%. During 2000-01 and 2009-10, there was a qualitative shift in the relative shares of the three sector and by 2010-11 the share of the household sector declined to 70.6%, but that of the private corporate sector sharp rose to 54.2% and that of the public sector became positive to the extent of 5.2%.

Gross Domestic Capital Formation (GDCF)

It is not necessary that the savings done by a particular sector are also used fully by the same sector. This implies that savings done by a particular sector may be utilised by the other sector. Therefore, the share of different sectors in capital formation would vary from their share in domestic saving.

Gross Domestic Capital Formation is composed of two components — gross domestic saving (GDS) and capital inflow (CI). Table 3 provides information about gross domestic capital formation (GDCF) for the last six decades.

GDCF which was 8.4% of GDP in 1950-51 has shown a sustained increase and reached a level of 19.9% in 1980-81 and then further that up to 26.0 % in 1990-91. There was a slight decline to 24.3% in 2000-01, but in the subsequent period 2000-01 to 2010-11, there was a rapid increase and GDCF reached a level of 35.1% in 2010-11 (Refer Table 3).

The share of the public sector in GDCF has been gradually increased during the first four decades and it increased from 2.9% in 1950-51 to 6.7% in 1970-71 and reached its peak in 1990-91 to 10%. With the introduction of economic reforms in 1991, there was a deliberate shift in favour of the private sector and thus GDCF in the private sector improved from 14.2% in 1990-91 to 16.6% in 2000-01 and sharply rose to 24.9 percent in 2010-11. Compared with this, the share of public sector in GDCF declined to 8.8% in 2010-11.

So far as gross domestic investment or gross domestic capital formation is concerned, it reached a level of 32.7% in 2004-05 as against 24.3% in 2000-01. The target of reaching the level of 28 percent set by the Tenth Plan for investment level in 2006-07, was therefore, surpassed by 2004-05. Thereafter, GDCF has further increased to 35.1% 2010-11. This is really a creditable achievement of the Indian economy.

Table 3 :
Gross Domestic Capital Formation as percent of GDP at Market Prices (1999-00 series/2004-05 Series)

Year (1)	*Public Sector* (2)	*Private Sector* (3)	*Valuables* (4)	*Total* (2+3+4) (5)	*Errors & Omissions* (6)	*Adjusted Total* (5+6) (7)
1950-51	2.9	7.4	n.a	10.3	–1.9	8.4
1960-61	7.2	7.2	n.a	14.4	–0.4	14.0
1970-71	6.7	8.9	n.a	15.6	–0.5	15.1
1980-81	8.9	9.6	n.a	18.5	1.4	19.9
1990-91	10.0	14.2	n.a	24.2	1.9	26.0
2000-01	6.9	16.6	0.7	24.2	0.1	24.3
2004-05 Series						
2004-05	7.4	23.8	1.3	32.5	0.4	32.8
2005-06	7.9	25.2	1.1	34.3	0.4	34.7
2006-07	8.3	26.4	1.2	35.9	–0.2	35.7
2007-08	8.9	28.1	1.1	38.0	0.1	38.1
2008-09	9.4	24.8	1.3	35.5	–1.2	34.3
2009-10	9.2	25.2	1.8	36.1	0.5	36.6
2010-11*	8.8	24.9	2.1	35.8	–0.7	35.1

*Quick estimates

Source : Central Statistical Organisation as reported in *Economic Survey (2011-12).*

A break-up of GDCF reveals that in 2010-11, the share of the public sector was 8.8% and that of the private sector was 24.9%. Besides these, the CSO has introduced for the first time the concept of valuables in the new 1999-00 servies Valuables accounted for 2.1% of GDCF in 2010-11. Errors and omissions were –0.7 percent.

Economic and Political Weekly in its editorial dated February 11, 2006 "Higher Investment by Statistical Revision" has questioned the validity of investment estimates. EPW mentions : "The most conspicuous and what seems to be an inadmissible method adopted is the coverage given to a new category of "Valuables" in the estimation of capital formation which is attributed to the recommendation of the 1993 System of National Accounts (SNA) of the United Nations, and which has enhanced the GCF rate by 1.3 percentage points of GDP (or by ₹ 40,146 crore) for 2004-05. The method adopted is actually an incorrect interpretation of the UNSNA. The UNSNA 1993 said the "Valuables are expensive goods that do not deteriorate over time, are not used up in consumption or production, and are acquired primarily as a store of value". It has also said that acquisitions and dispositions of "valuables" are to be recorded in the capital account, not as component of capital formation". Since valuables do not contribute to production nor can there can be any imputted earnings or rentals for such assets, it is totally unjustified to include them in the estimates of capital formation.

But if we exclude "Valuables" from the estimate of capital formation, even then GDCF would be of the order of 33 per cent in 2010-11 which is quite high. There is no doubt that estimates should have also included a counterpart entry for valuables in saving which has not been done. The CSO should provide a convincing argument to support its methodology or amend the estimates of gross capital formation accordingly.

Saving, Investment and GDI Growth of the Indian Economy

Dr. Rakesh Mohan, Deputy Governor of the Reserve Bank of India in his articled entitled, "The Growth Record of the Indian Economy 1950-2008; A story of sustained Saving and Investment", Reserve Bank of India Bulletin, March 2008 appreciating the sustained GDP growth along with saving and investment growth writes: "In analysing the growth record of the Indian economy, various scholarly attempts have been made to identify the turning point from the "traditional" low growth to the modern high growth since the 1980s. The simple ordering of the data presented in table 4 provides a somewhat different picture of continued slow acceleration of growth except for 1970s decade. What can explain this continued acceleration? The secular uptrend in domestic growth is clearly associated with the consistent trends of increasing domestic savings and investment over the decades. Gross domestic savings have increased continuously from an average of 9.6 per cent of GDP during the 1950s to almost 35 per cent at present; over the same period, domestic investment rate has also increased continuously from 10.8 per cent in 1950s to close to 36 per cent by 2006-07. A very significant feature of these trends in saving and investment rates is that Indian economic growth has been financed predominantly by domestic savings. The recourse to foreign savings has been rather modest in the Indian growth process". This is really a matter of legitimate pride.

Table 4 : Saving and Investment in the Indian Economy

As percent of GDP

	1950s	1960s	1970s	1980s	1991-92 to 1996-97	1997-98 to 2003-04	2004-05 to 2010-11
							(2004-05) Series
1. Gross Domestic Capital formation	10.8	14.3	17.3	20.8	23.9	24.9	35.3
2. Gross Domestic Saving	9.6	12.3	17.2	19.0	22.7	24.9	33.5
3. Saving Investment Gap	−1.2	−2.0	−0.1	−1.0	−1.2	0.0	−1.8
4. Real GDP Growth	3.6	4.0	2.9	5.6	5.7	5.7	8.4

Note: Average for the growth rates of various indicators in the decade except for 1950 which is the average of nine years i.e. from 1951-52 to 1959-60.

Source : Rakesh Mohan, The Growth Record of the Indian Economy 1950-2008 : A story of sustained savings and Investment, *Reserve Bank of India Bulletin*, March 2008, Economic Survey 2011-12

Data provided in table 4 gives saving-investment gap which is indicative of foreign savings. During 1960s, this gap was the highest to the extent of 2 per cent of GDP which showed a continuous decline to 1.8% in 1980s and further reaching zero during 1997-98 to 2005-04. Later during 2004-05 and 2010-11 in become 1.8%.

However real GDP growth, but for 1970s has shown a continuous upward trend from 3.6% during 1950s to 5.6% during 1980s and further progressed to 8.4% during 2004-05 to 2010-11. Consequently, India is now considered to be one of the fastest growing economies of the world, only next to China.

Financial and Physical Savings by Household Sector

Households undertake savings in the form of financial savings which include currency and bank deposits, shares and debentures, life insurance, provident and pension funds, etc. Physical savings are in the form of construction of houses and equipment in possession of households. Data given in Table 5 indicates the trends in the growth of financial and physical savings. In 1950-51, with a very underdeveloped capital and money market, the share of financial savings in the total household savings was only 0.6 per cent of GDP and bulk of the savings were undertaken in the form of physical assets. The situation changed by 1980-81, the financial savings as a proportion of total savings accounted for 43.5 per cent of total household savings. This was due to the rapid expansion of banking in rural areas after bank nationalisation and a larger increase in the employees in the organised labour market contributing to provident fund and pension. The mobilisation of rural savings by the Life Insurance Corporation also added to the growth of financial savings. With the development of the capital market, households began investment in shares and debentures and this further strengthened the share of financial savings in total household savings. In 2009-10, out of total household savings of the order of 25.1 per cent of GDP, the share of financial savings was 12.6 per cent and that of physical savings was 12.5 per cent. In relative terms, the share of financial savings in the household savings was 50.2 per cent, and the contribution by physical savings of the order of about 49.8 per cent. In other words, there is a structural shift that has taken place in the composition of household savings during the last 59 years.

Table 4 : Break-up of Household Sector

(Savings at current prices as per cent of GDP)

Year	Financial Saving in Assets	Physical Saving in Assets	Total
1950-51	0.6	5.5	6.2
	(11.3)	(88.7)	(100.0)
1960-61	2.7	4.6	7.3
1970-71	3.0	7.1	10.1
1980-81	6.0	7.8	13.8
1990-91	8.7	10.6	19.3
2000-01	10.2	11.0	21.2
2005-06	11.7	12.4	24.1
2006-07	11.7	12.4	24.1
2007-08	11.7	12.6	24.3
2008-09	11.1	13.0	24.1
2009-10	12.6	12.5	25.1
	(50.2)	(49.8)	(100.0)

Source: EPW Research Foundation (2002), *op. cit.*, and CSO, *National Accounts Statistics* (2011).

Gross Domestic Capital Formation by Industry of Use

The economy is broadly classified into commodity sector and non-commodity sector. The commodity sector comprises of two components: (a) Agriculture, forestry, fishing, etc. and (b) Mining and manufacturing which includes construction, electricity, gas and water supply. Non-commodity sector includes (a) transport, communication and trade, (b) finance and real estate, and (c) community and personal services. Table 6 indicates the decomposition of gross domestic capital formation by industry use. In 1950-51, the share of the commodity sector was 42.2 per cent and that of the non-commodity

TABLE 6 : Gross Capital Formation by Industry of Use at 1999-00 Prices

(₹ crores)

		1950-51*		2009-10**	
1.	Agriculture, forestry & fishing	3,798	(19.3)	1,33,377	(7.7)
2.	Mining & quarrying	178	(0.9)	96,079	(5.5)
3.	Manufacturing	3,790	(19.2)	5,63,633	(32.6)
4.	Electricity, gas & water	439	(2.2)	98,908	(5.7)
5.	Construction	123	(0.6)	1,01,287	(5.9)
A.	**Commodity Sector (1 to 5)**	**8,328**	**(42.2)**	**9,93,284**	**(57.4)**
6.	Trade, hotels & restaurants	2,432	(12.4)	99,708	(5.8)
7.	Transport, storage & communications	2,502	(12.7)	1,31,543	(7.6)
8.	Finance, insurance, real estate & business services	4,202	(21.3)	2,49,131	(14.4)
9.	Community, social & personal services	2,230	(11.3)	2,57,543	(14.9)
B.	**Non-Commodity Sector (6 to 9)**	**11,366**	**(57.8)**	**7,37,925**	**(42.6)**
	Total	**19,694**	**(100.0)**	**17,31,209**	**(100.0)**

Note: Figures in brackets are percentages of total GCF.

Source: Compiled and computed from EPW Research Foundation (2002), *National Accounts Statistics of India (1950-51 to 2009-10)*.* At 1999-00 prices ** At 2004-05 prices

(service) sector was 57.8 per cent. But with the industrialisation of the economy, the share of manufacturing sharply jumped to 32.6 per cent and that of electricity, gas and water supply increased to 5.7 per cent in 2009-10. Consequently, a structural shift in capital formation in favour of the commodity sector took place and share in total capital formation increased to 57.4 per cent in 2009-10. As a result, the share of the non-commodity (service) sector declined to 42.6 per cent. The sectors which are very important from the point of view of capital formation are manufacturing (32.6%), transport, storage and communications (7.6%), community and personal services (14.9%) and finance, insurance and real estate (14.4%).

3. MOBILISATION OF DOMESTIC SAVING

As an essential requisite for development, the planners believed that the low level of savings in the Indian economy was the principal bottleneck and it was, therefore, argued that for an underdeveloped country like India, it was necessary that to achieve a higher rate of growth as also to develop a self-reliant economy, rate of saving will have to be pushed up. In case, domestic savings are not sufficient, we may admit a dose of foreign savings to supplement domestic savings. But in the ultimate analysis, foreign savings have to be paid back along with interest. It was, therefore, a case of transferring a part of the burden of development to the future generation. In short, it was argued that development did require sacrifice in the form of restraining consumption so as to force a higher rate of saving.

To enable the Indian economy to reach a level of high saving, various measures were taken to mobilise savings. The trend in the overall period of 50 years (1950-51 to 2000-01) can be divided into six distinct phases. It would be appropriate to discuss these phases :

(i) 1950-51 to 1967-68 (Low Saving Phase) — This phase was marked by the establishment of financial infrastructure. The Reserve Bank of India was nationalised in 1949 and given the responsibility of the Central Bank of the country. In 1955, the State Bank of India was brought under the public sector. This was accompanied by the nationalisation of insurance companies under the Life Insurance Corporation. In 1964, the Unit Trust of India (UTI) was set up to mobilise household savings. Besides, the establishment of Industrial Development Bank of India and the Agricultural Refinance and Development Corporation also enlarged the financial infrastructure. Whereas the LIC mobilised contractual savings and spread its area of operation, the UTI provided another avenue for mobilising household financial savings with the help of Unit 1964 Scheme. By 1967-68, the saving rate gradually moved up from a low level of 10.4 per cent of GDP in 1950-51 to 13 per cent in 1967-68. Two factors have been identified by Ray and Bose for this low level of savings. "First, the propensity to save in agriculture was comparatively low than in non-agriculture sector during this period in contrast to the outcome in the following periods. Secondly, there exists a comparatively high share of agriculture in GDP during this period than in the subsequent periods."[6] Both these factors acted as

6. Partha Ray & D. Bose, Growth, Savings and Investment in the Indian Economy : Trend, Composition and Relationship, Reserve Bank of India, *Occasional Papers*, Vol. 18, Nos. 2 & 3, Special Issue (June & September 1997), pp. 113-14.

Table 8 : Gross Saving and Its Components

(as % of GDP at market prices)

Period	*1950-51 to 1967-68*	*1968-69 to 1975-76*	*1976-77 to 1978-79*	*1979-80 to 1984-85*	*1985-86 to 1992-93*	*1993-94 to 1995-96*	*1996-97 to 1999-2000*	*2008-09*	*2009-10*
I. Household Saving	8.4 (70.9)	11.7 (72.2)	15.8 (72.2)	14.3 (72.2)	17.1 (79.4)	19.2 (78.5)	18.6 (81.9)	24.1 (69.6)	25.04 (66.8)
a. Household financial saving	2.5 (20.1)	3.6 (22.1)	6.1 (27.8)	6.5 (33.1)	8.4 (38.8)	10.7 (43.8)	10.4 (45.8)	11.1 (32.1)	12.57 (34.9)
b. Household physical saving	6.0 (50.7)	8.1 (50.1)	9.7 (44.4)	7.8 (39.1)	8.8 (40.6)	8.5 (34.6)	8.2 (36.1)	13.0 (37.5)	12.46 (34.6)
II. Private Corporate Saving	1.3 (10.7)	1.5 (9.4)	1.4 (6.6)	1.7 (8.6)	2.4 (10.9)	3.9 (15.8)	4.0 (17.6)	9.9 (26.0)	8.66 (24.1)
III. Public Sector Saving	2.2 (18.4)	3.0 (18.4)	4.6 (21.2)	3.8 (19.2)	2.0 (9.7)	1.4 (5.7)	0.1 (0.4)	1.5 (4.4)	2.28 (6.3)
a. Public Authorities	1.8	2.0	3.1	1.8	-1.1	-1.8	-3.3	-6.2	-0.85
b. Non-departmental enterprises	0.4	1.0	1.5	2.0	3.1	3.2	3.4	10.6	3.13
IV. Gross Domestic Saving	11.9 (100.0)	16.2 (100.0)	21.8 (100.0)	19.8 (100.0)	21.5 (100.0)	24.5 (100.0)	22.7 (100.0)	34.6 (100.0)	36.00 (100.0)

Note : Figures in brackets are percentage share of gross domestic saving.

Source : RBI, *Occasional Papers*, Vol. 18, Nos. 2 & 3, June & September 1997 and CSO, *National Accounts Statistics, 2011*.

constraints to raising the level of savings and thus, the overall saving rate did show a marginal increase, but continued to be depressed. The problem of mobilising rural savings was attacked in the next period.

(ii) 1968-69 -87 to 1975-76 (The Initial Years of Increasing Savings) — The momentous decision to nationalise 14 commercial banks in 1969 was motivated by the desire to enlarge the sphere of banks in the rural and semi-urban areas. This led to rapid branch expansion with greater thrust on rural and semi-urban areas. During 1969 and 1976, the branches of commercial banks increased from 4,168 to 11,010. Out of the total increase in bank branches of the order of 6,842, about 68 per cent were opened in rural and semi-urban areas. Rapid branch expansion helped to mobilise untapped rural savings. The establishment of Regional Rural Banks (RRBs) supplemented the efforts of the commercial banks. This period also witnessed the spread of Green Revolution which raised the incomes of farmers, more especially those who were able to take advantage of high yielding varieties. Consequently, the propensity to save in the rural areas improved and the availability of banking facilities helped to mobilise these savings. As a result, this phase witnessed a steady improvement in gross saving rate from 12.8 per cent to 19.0 per cent. (Refer table 8).

(iii) 1976-77 to 1979-80 (High Saving Phase) — This period was marked by high saving. Gross domestic saving (GDS) reached the level of 21.8 per cent. Several special factors helped in the sharp rise of GDS – (a) A sharp acceleration in foreign remittances, (b) large public sector food procurement which increased currency available with the public, (c) impact of branch expansion in rural and semi-urban areas, and (d) improvement in household physical saving.

(iv) 1979-80 to 1984-85 (Stagnation Phase) — This period witnessed a decline in public sector savings as a result of the sharp rise in government expenditure. Secondly, rapid rise of consumerism also adversely affected household saving. Thirdly, increasing dependence of the corporate sector on borrowed funds also had an adverse impact on this sector to generate more internal savings.

(v) 1985-86 to 1992-93 (Recovery Phase) — The introduction of measures of liberalisation provided a boost to the capital market. Along with this, the enlargement of mutual funds sector was also undertaken. As a consequence, the public started investment in shares and debentures resulting in a sharp recovery of gross domestic saving from 19.8 per cent in 1985-86 to 22.4 per cent in 1989-90. The savings of the corporate sector also showed an increase, though public sector savings showed a downward trend, more especially due to negative savings in government departments as a result of increase in expenditure on defence, interest payments and subsidies. Thus, after reaching a record high of 24.1 per cent in 1990-91, gross domestic saving declined to 22.1 per cent in 1993-94.

(vi) 1993-94 to 1995-96 (A High Saving Phase) — The saving rate rose further and was of the order of 24.5 per cent for 1993-94 to 1995-96. This was mainly due to increase in household financial saving and private corporate sector saving as a result of the measures of economic reforms. Although the savings of non-departmental enterprises showed an increase, but the negative savings of the public authorities increased still further producing an adverse impact on overall public sector saving.

(vii) 1996-97 to 2001-02 (Low saving Phase)— There has been a consistent decline in the Gross Domestic Saving during 1996-97 to 1999-00. Taking the 4 year period, average gross domestic saving rate was 22.7 per cent of GDP. The highest contribution was that of the household sector i.e. 18.6 per cent, followed by private corporate sector at 4.0 per cent. The share of the public sector was practically nil, but this was the consequence of dissaving of the public authorities at 3.3 per cent. Although the non-departmental enterprises contributed 3.4 per cent of GDP as its share of saving, but it only neutralised the dissaving of the public authorities, leaving a meagre surplus of 0.1 per cent of the GDP for the public sector.

Recent increase in saving: We find a jump in saving rate since 2002-03 and it was to 36.0 percent of GDP during 2009-10.

During the Ninth Plan (1997-98 to 2001-02), the savings of the public enterprises were of the order of 3.47 per cent of GDP, but the savings of public authorities were (–) 4.29 per cent. This resulted in an overall dissaving of the public sector to the extent of 0.82 per cent of GDP.

It may be noted that the high saving rate of the nineties was due to temporary factors such as heavy foreign inward remittances and, therefore, could not be sustained. But the nineties witnessed the best performance of the economy in terms of domestic savings upto 1995-96, but subsequent years witnessed a decline in saving.

Sectoral Components of Gross Domestic Saving

It would be of interest to understand the behaviour of three sectors which contribute to saving.

Savings of Household Sector — The household savings has gone up from 8.4 per cent during 1950-51 to 1967-68 to 19.2 per cent during 1993-94 to 1995-96. Three factors are responsible for this favourable trend :

(a) The rapid branch expansion after bank nationalisation in 1969 and the setting up of the Rural Regional Banks thereafter helped considerably in mobilising savings from the hitherto unbanked areas.

(b) The inherent desire to acquire physical assets like a house or durable consumer goods prompted households to undertake financial savings for a long period till they accumulated to the level sufficient for the purchase of the physical assets. The government schemes of allowing individuals to purchase physical assets and then pay in instalments spread over a long period also introduced a higher propensity to save.

(c) To have a regular source of income for the old age or to supplement current income, households invest in some pension schemes or such variants of it as devised by the LIC. This has also encouraged several persons to invest in financial savings.

Household financial savings are of two types — (i) Non-contractual savings in the form of currency, bank deposits, shares and net claims on government. (ii) The contractual savings are in the form of life insurance, provident fund and pension funds.

Analysis of the period 1970-71 to 2010-11 reveals that non-contractual savings have risen during 2000-2005 and reached a level of 71.0% as against 68.3% in 1990s. Bank deposits constitute the largest proportion in household financial savings. It may be noted that although non-banking deposits sharply rose from 3% in

Table 9 : Shares of Components of Household Financial Savings

(per cent)

	1970s	*1980s*	*1990s*	*2000-05*	*2005-2011*
I. Non-contractual	**68.2**	**71.8**	**68.3**	**71.0**	**70.0**
1. Currency	13.9	11.9	10.3	8.9	10.7
2. Bank deposits	45.6	40.3	34.7	37.8	49.9
3. Non-banking deposits	3.0	4.6	6.8	2.0	1.7
4. Shares & debentures	1.5	3.9	7.0	2.8	4.3
5. Claims on Government	4.2	11.1	9.5	19.5	3.5
II. Contractual	**31.8**	**28.1**	**31.7**	**29.0**	**30.0**
6. Life Insurance Funds	9.0	7.5	10.1	14.7	19.9
7. Provident & Pension Funds	19.6	17.5	18.8	15.1	10.3
8. Units of UTI	0.5	2.2	3.8	–0.9	–0.2
9. Trade debt (Net)	2.7	0.9	–1.0	0.0	0.4
Total I+II	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Re-arranged and calculated from the data provided by RBI, *Handbook of Statistics on Indian Economy, 2006-07, 2009-10, 2010-11*, Bulletin June 2012.

the 1970s to 6.8% during 1990s, but people are losing faith in then and shifting to bank deposits whose share shot up to 49.9% during 2005-11 from a low level of 33% during 1991-92 to 1996-97. Among non-contractual savings, there was a sharp increase in claims on Government from a low level of 4.2% during the 1970s rising to a level of 19.5% during 2000-05. But that was shortlived and it declined to 3.5 percent in 2005-11.

Thanks to further growth in life insurance funds, share of contractual saving surged to 19.9 percent during 2005-11. Share of non-contractual claim on government turned negative. The major contributors of contractual savings now are Life Insurance Funds and Provident & Pension Funds. With the greater enlargement of the life insurance, its share has gradually improved from 9% during the 1970s to 30.2% between 2005-11. But the share of Provident & Pension funds has come down significantly from 19.6% during 1970s to 10.3% during 2005-11. This is due to the policy of the government to deny the benefit of pensions to employees appointed after 2004. Another point to be noted is the units of UTI which gained very great popularity during 1990s accounting for 3% of total financial saving lost the faith of the people after the Ketan Parekh seam of 2001 and thus, their share became negative. In case, the tax structure continues to remain stable during the coming five years, one can reasonably hope that financial savings are likely to maintain their pace with GDP growth in the economy.

Private Corporate Saving — The private corporate sector saving during the period 1950-51 to 1978-79 showed a poor saving rate around 1.4 per cent of GDP. This was due to the tendency on the part of the private corporate sector to rely more on borrowed funds and less on its own internal funds. This led to higher interest outgo. Since profitability was comparatively low in this sector, a higher outflow in interest payments resulted in poor savings of the private corporate sector.

But the liberalisation environment of the eighties re-inforced by new economic reforms resulted in accelerating savings of this sector. Moreover, the development of new financial institutions and mutual funds further increased the saving capacity of this sector. As a result of the new economic policy enunciated in 1991, profits of the private corporate sector — both Indian and foreign — registered a high growth and consequently, the savings of the private corporate sector increased to 4.9 per cent of GDP in 2004-05, surpassing the public sector saving. Trend was further strengthened in 2009-10, when private corporate sector contribution to saving was increased to 8.66 percent of GDP.

Public Sector Saving — During the first three periods (1950-51 to 1978-79), public sector savings peaked to a level of 4.6 per cent of GDP during 1976-77 as against 2.2 per cent during 1950-68. Two factors contributed to this situation : First, rate of inflation was reasonably controlled and secondly, as a result of greater tax effort, public sector saving improved. This period is marked by increasing saving rate of public administration for 1.8 per cent to 3.1 per cent of GDP, although the savings of the non-departmental enterprises picked up very slowly from 0.4 per cent to 1.5 per cent of GDP.

In the subsequent three periods (1979-80 to 1995-96), there is a continuous and noticeable decline in public sector savings from 3.8 per cent to 1.4 per cent of GDP. This was largely the result of continuous deficit budgets and increasing dependence on borrowings to meet growing non-plan expenditure. Along with this, to meet the demands of various lobbies, there was a sharp increase in subsidies. As a consequence of the expansion in government administration, increase in subsidies and interest payments due to rising debt burdens, the savings of public authorities became negative to the tune of 1.1 per cent during 1985-93 and 1.8 per cent of GDP during 1993-96. As against it, the savings of non-departmental enterprises showed a continuous improvement from 1.5 per cent during 1976-79 to 3.3 per cent during 1993-96, but this was not enough to compensate for the erosion of the savings of public administration. The net result of these two opposing tendencies was a decline in the savings of the public sector from 4.6 per cent of GDP to 1.4 per cent in 1993-96. This trend has been accentuated during 1996-2000 and public sector savings became practically nil. Public sector savings became positive and were of the order of 2.28% in 2009-10. This was largely the correquence of dissaving of the public authorities, though savings of non-departmental enterprises have shown an increasing trend.

4. ADDITIONAL MEASURES OF MOBILISATION OF SAVINGS IN INDIA

The term mobilisation of savings is generally understood to mean tapping "hidden" or 'idle' funds. Such a concept of mobilisation of savings is rather very narrow because it calls forth policy measures to attract or mop up idle funds. But mobilisation of savings involves a total effort on the part of a community to release productive resources for investment by deliberately cutting down its level of consumption. The purpose of mobilisation of savings is, therefore, to enlarge production and thus it must be ensured that adverse effects on present production are avoided.

Since bulk of the investment programmes are being initiated in the public sector, it is customary to correlate mobilisation of savings with an effort to find resources for the investment programmes of the public sector in the Plans. Here again, it may be pointed out that in a mixed economy, investment programmes are undertaken both by the public and the private sector and, therefore, mobilisation of savings has to be understood keeping in mind the needs of both the sectors. In a capital-scarce country, it is quite possible that efforts at resource mobilisation may to some extent result in a diversion of savings from the private to the public sector.

or vice versa. In case savings are directed from non-priority to priority sectors of investment, resource mobilisation results in desired economic development. But in case resources are diverted to non-priority uses, distortions in the process of development occur. But the process of mobilisation of savings aims at augmenting the total as well as relative share of savings in the lines of productive economic activity which help to accelerate the process of development.

It would, therefore, be necessary to mobilise savings from all the three sectors and for this purpose suitable policies have to developed.

Saving of the public sector

The savings of the government sector are largely derived from taxes, surplus of the public enterprises and mobilisation of internal loans and deposits. It would be of interest to examine the possibilities of resource mobilisation in the public sector from these sources. It may be pointed out that in view of the trend of rising prices, the government had to sanction pay increases to its employees. Similarly, the prices of goods consumed by the public sector have also shown a rising trend. Both these factors have been pushing up State expenditure and thus eroding the surplus of state enterprises. Unless a strict vigil is kept on price rise trends, savings of the government sector may not increase as anticipated in the Plan document. Secondly, by improving the efficiency and profitability of public sector undertakings, the savings of the public sector can be increased. This requires the reform of the public sector.

Additional Taxation

Tax revenue as per cent of GDP increased from 14.6 % of GDP in 1980-81 to 14.3% in 1997-98 and then increased to 21.6 % in 2008-09.

Taxes are broadly grouped into two categories, direct and indirect taxes. In our country, about 5 per cent of households are in the taxable income bracket (i.e., ₹ 1,00,000 and above per annum). Whereas Indian income tax system imposes very high rates of taxation, the yield has not been proportionately high. The principal reason is the large-scale tax evasion carried on by businessmen and industrialists. The only group which honestly pays taxes is the salaried group because it cannot conceal its income. A very large group of petty merchants and small industrialists who fall within the income tax range either pay very little or get away without payment of any tax.

The Government has embarked on a policy of lower direct tax rate with stricter enforcement. Similarly steps of higher tax compliance in indirect taxes are being taken. This has yielded good results. As a consequence, Tax-GDP ratio has improved to 18.4 percent. Direct tax accounted for 40.5 per cent of total tax revenue in 2008-09. In 2009-10, Tax-GDP ratio declined to 16.2 percent but direct taxes contributed a higher proportion in total taxes (42.7 percent). Tax-GDP ratio continued to be low even in 2010-11.

Although it is universally accepted that direct tax revenue is non-inflationary and it also helps to attain the objective of egalitarian distribution, yet the Government failed to tap this source adequately. This only highlights the fact that greater reliance is being placed on indirect taxes as compared with direct taxes. This is only an admission of the failure to mop up resources going into the pockets of big business and elite sections of our society.

Table 10 : Direct and Indirect Taxes in India. (Centre and States Combined)

	Tax Revenue (₹ crores)		
	Direct	*Indirect*	*Total*
1980-81	3,593	16,170	19,763
a.	(18.2)	(81.8)	(100.0)
b.	(2.7)	(11.9)	(11.6)
1990-91	14,267	73,297	87,564
a.	(16.3)	(83.7)	(100.0)
b.	(2.7)	(13.7)	(16.4)
1997-98	54,743	162,570	217,313
a	(25.2)	(74.8)	(100.0)
b	(3.6)	(10.7)	(14.3)
2008-09	393,125	5,76,723	9,69,848
a.	(40.5)	(59.5)	(100.0)
b.	(7.4)	(11.0)	(18.4)
2009-10(R.E.)	424,956	5,71,151	9,96,107
a.	(42.7)	(57.3)	(100.0)
b.	(6.9)	(9.30)	(16.2)
2010-11	4,77,973	6.83,268	11,61,241
a.	(41.2)	(58.8)	(100.0)
b.	(6.7)	(9.6)	(16.3)

a. Represents percentages to total tax revenue.
b. Indicates tax to GDP ratio in percentages.
RE Revised Estimates
BE Budget Estimates
Source : Compnted from RBI, *Handbook of Statistics on Indian Economy (2010-11)*.

In all advanced countries of the world, tax system is developed to lean in a greater proportion towards direct taxes. In India, despite our profession of socialism, the tax system leans heavily on indirect taxes. Our failure to check tax evasion and our failure to build traditions of honest and efficient administration is forcing us to develop a regressive tax structure in which the beneficiaries of economic development are required to contribute much less in proportion to the rise in their income. It was expected that the Government would make a bold plan and bring about greater progressivity in tax structure, but the planners indicate excessive faith in indirect taxes, both as the major instrument of resource mobilisation and of bringing about economic equality. The Sixth Plan mentioned : "In a developing economy characterised by less income and the preponderance of small producers, the collection of small amounts of direct taxes from a multitude of low income assessees presents insuperable difficulties. Indirect taxes have, therefore, to play a major role in resource mobilisation. Apart from raising additional resources for development these taxes can be used to achieve several socio-economic objectives e.g.,

the restraining of conspicuous consumption and investment in non-priortiy sectors of the economy, mopping up of excessive or windfall profits arising in certain lines of activity, curtailing the domestic consumption of commodities in short supply or those required for export, encouraging desirable substitutes in the use of intermediates, and the encouragement of small-scale and cottage enterprises by means of rate differentiation." If past is any guide then such an excessive faith in the efficacy of indirect taxation is unwarranted. There are two reasons for this : firstly, tax exasion is not limited to direct taxes, but pervades to indirect taxes equally. We observe the phenomenon of "black factories" as also the existence of considerable tax evasion in excise duties and sales tax. Secondly, so long as the phenomenon of black money exists in our society, all efforts at restraining conspicuous consumption are bound to get frustrated.

Table 11 : Tax Revenue as per cent of GNP (1991)

	Direct Taxes	*Indirect Taxes*	*Total*	*(1) as % of (3)*
	(1)	(2)	(3)	(4)
U.S.A.	9.9	8.1	18.0	55
Australia	18.0	7.0	25.0	72
Canada	11.2	7.8	19.0	59
U.K.	14.6	19.4	34.0	43
Germany	4.9	24.1	29.0	17
India (2008-2009)	8.7	12.9	21.6	40.0

Source: Compiled from UNDP, *Human Development Report (1994)* and RBI, *Handbook of Statistics on the Indian Economy (2009-10)*

Taxation of Agricultural Income. A source of taxation which has remained untapped is the agricultural sector. It is generally held in the country that whereas in 2003-04 about 23 per cent of the income is generated by the agricultural sector, its contribution to State revenues in 2003-04 was ₹ 2,183 crores from land revenue. It implies that 0.4 per cent of GDP was derived from agriculture. This is considered to be too low. It may, however, be pointed out that not the whole of the agricultural income is amenable to taxation. For example, 50 per cent of the farm income is retained for family consumption. Obviously, the instruments of taxation find it difficult to mobilise additional revenues from the 'non-monetized' sector. Consequently, the tax base becomes narrow. Not only that, the distribution of income, is more even in the rural areas than in the urban areas. For instance, 3 per cent of the farm households fall in the income tax range i.e., ₹ 1,00,000 and above per annum and they account for about 12 per cent of the total rural income. This also suggests that the taxable income in the rural areas forms a low base.

As a result of the green revolution and the introduction of capitalist farming in Indian agriculture, it is commonly believed that a class of well-to-do peasants is growing in rural India. The proposals of agricultural taxation are aimed at this new class of prosperous peasants. Here again there are several difficulties. Agricultural taxation being a State subject, there is a general reluctance on the part of the States to impose these levies. Rural areas are considered the bastions of political parties and the rich peasants are regarded as vote banks. Political parties are, therefore, hesitant to impose levies and the chances of the States raising resources from this source do not appear to be bright. The second problem is of an administrative nature. The introduction of levies requires the assessment of farm income after allowing 'legitimate farm expenses'. This imposes heavy burden on the administrative machinery and it is feared that the principle of economy so well known in taxation may not operate.

5. RELATION BETWEEN SAVING RATE, GROWTH RATE AND ICOR

Incremental capital-output (ICOR) measures the increase in output as a result of the increase in capital (investment) during a given period.

Table 12 : Saving Rate, ICOR and Growth Rate of GDP at Market Prices

	GDP Growth Rate (1)	*Rate of Gross capital* Formation (2)	*ICOR* (3 = 2/1)
1951-52 to 1964-65	4.22	16.56	3.92
1965-66 to 1975-76	3.52	19.94	5.66
1976-77 to 1991-92	5.05	22.62	4.48
1992-93 to 1996-97	6.68	24.10	3.43
1997-98 to 2001-02	5.35	23.31	4.53
2002-03 to 2006-07	7.2	28.2	3.9
2007-08 to 2011-12	8.32	37.0	4.44

Source : Compiled and computed from RBI, *Handbook of Statistics on Indian Economy* (2004-05) and *Approach to the 11th Five Year Plan (2006). CSO, Press Release May 30, 2012.*

Jagdish Bhagwati (1993) explained the paradox of 'high saving, low growth' leading to the phenomenon of declining productivity, mentions : "the weak growth performance reflects, not a disappointing saving performance, but rather a disappointing productivity performance."[6] Enumerating the factors that stifled efficiency and growth, Bhagwati divided them into three major groups :

1. Extensive bureaucratic controls over production, investment and trade;
2. inward looking trade and foreign investment policies ; and

6. Bhagwati, Jagdish (1993), *Indian Transition : Freeing the Economy*, Oxford, p. 40.
7. *Ibid.*, pp. 46-47.

3. a substantial public sector, going well beyond the conventional confines of public utilities and infrastructure.

"The former two adversely affected the private sector's efficiency. The last, with inefficient functioning of public sector enterprises, additionally impaired the public sector enterprises' contribution to the economy. Together, the three sets of policy decisions broadly set outer limits to what India could get out of its investment."[7]

An analysis of the ICOR in the four periods reveals that the economy moved from a low ICOR of 3.92 during 1951-65 to 5.66 during 1965-76. This was largely the consequence of large investments made in heavy industry, defence industries more especially after the armed conflict with China in 1962 and Pakistan in 1965 and the initial phase of building infrastructure for the economy. In this period, it was natural that ICOR should move up. This is not to deny the effect of the restrictive policies of the government towards the private sector as also the inefficiencies associated with public sector investment. Once basic investment in heavy industry and infrastructure was made, the attention was turned towards emphasising wage goods industries. The subsequent periods also witnessed a change in policies in favour of the private sector. Attempts were also made to reform the management of public sector and make it more autonomous. This had salutary effect in reducing ICOR. It would, therefore, be very prudent to mention that whereas it is important to raise the rate of saving in the economy, it is equally important to use those savings effectively in raising output. The efficiency of use of investment, whether it is made in the public or private sector, will determine ICOR.

During the Eighth Plan, the ICOR declined to 3.43 and the growth rate of GDP rose to 6.68 per cent, but during the Ninth Plan, ICOR increased to 4.53 and GDP growth rate declined to 5.35 per cent. During the Tenth Plan, ICOR declined was to 3.9 since. The avarage GDP growth 7.2% and Rate of investment improves. In Eleventh plan (2007-2012) it increased to 4.4. We find rate of GDP growth and rate of capital formation both increasing. ICOR is affected by the pattern of investment. For instance, a higher investment in consumer durables increases ICOR, but a shift in favour of agriculture, small scale industry and consumer non-durable goods lowers ICOR. Moreover, efficiency of use of investment also affects ICOR.

6. HUMAN CAPITAL FORMATION IN INDIA

The process of human capital formation implies the development of abilities and skills of people of an underdeveloped country. During the course of economic development a nation has to absorb new technology and develop the productive apparatus. The productive apparatus may be imported in the early phase of development, but to make use of the machines and equipment in an efficient manner, it is necessary that an underdeveloped country should train its labour force in technology, engineering, medicine, management and a host of other fields. The process of human capital formation is, therefore, as important as that of physical capital formation.

An underdeveloped country like India has to do two things to accelerate the rate of development. Firstly, it should step up the rate of investment in physical capital and secondly, it should also increase the rate of investment in human capital. Thus, human resource development becomes competitive to physical resource development in so far as it imposes a demand on the scarce resources available for growth. Professor B. Dutta has given a clear expression to this competitive nature of demand by stating that "the use of a large amount of equipment, materials, consumer goods and trained labour for the purpose of developing skill may substantially reduce the internal supplies of inputs for the formation of real capital."[8]

The process of human resource development requires a long-period policy because skill formation is a time-consuming process. The "crucial" factor in human capital formation is the development of top skills. For instance, to train a person as an engineer requires a period of education of about 15 to 18 years. Thus, a country should have its educational policy so that it can produce educated manpower in the desired lines of productive activity.

Another problem to which an underdeveloped country should pay attention is that the process of human capital formation has to be correlated to the process of physical capital formation. In its zeal for developing skills, a country should not train large supply of manpower than is required by the needs of its expanding economy. In other words, the process of balancing the demand and supply of manpower in different sectors of the economy is of strategic importance.

Lastly, the output-mix of manpower is another serious problem. In a country like India, investment in education in the pre-Independence period was directed mainly to creation of a clerical cadre of personnel. In this way, there was a good deal of misdirection of resources in human resource development. In the post-Independence period, efforts were made to correct this misdirection of educational investment.

The problem of human capital formation in India can be studied from two points of view. Firstly, human capital can be considered as a stock and an estimate of the stock at two points of time can be made; from this the growth rate of human capital formation between these two points of time can be calculated. Secondly, investment in education can be studied as a percentage of national income and from a time series data, it may be reasonable to conclude whether resources going into human resource development are increasing during the process of economic development.

8. B. Dutta, *Economics of Industrialisation*, p. 200.

Stock of Human Capital in India

An idea of the stock of human capital can be had from a study of the educational profile of the population. Table 13 indicates that taking the population (excluding the age group 0.6), 65.5% were literates. Out of this, 3.6 per cent were literates without educational level. In other words, very little amount of investment had gone into 20 million such persons. Of the rest, 26% had, only primary school education, 16.1% had middle school education. The educated manpower (i.e., those with education of matriculation level and above) accounted for only 28.3 per cent of the population. It is this sector and distribution within this sector that is crucial for development.

The growth of the stock of scientific and technical personnel during the last three decades is given in table 14. There is no doubt that starting from a very low base, India has been able to train a very large pool of scientific and technical manpower in the world. The growth rate of scientific manpower during the decade 1950-60 was of the order of 10.5 per cent during 1960-70 i.e. the period in which India emphasized the development of heavy and basic industries as a part of its strategy of industrialisation. Thereafter, during 1991-2000 period, the growth rate decelerated to 5.6 per cent per annum.

Though the Government claims that India enjoys third position in the stock of scientific and technical manpower in the world, but as per the data compiled by UNESCO, India ranks fifth in absolute numbers with its pool of 1.8 million after USSR (25.2 million), Japan (20.5 million), China (4.7 million) and USA (3.4 million). But a more appropriate index of comparison is the number of scientific personnel per 1,000 of population. In terms of this index, India stands third from the bottom with only 2.63 per thousand of population.

Table 13: Educational Level in India (2001)

	Population Million	*Per cent of total literates*	*Literates to total population*
1. Total Population	858.2		100.0
2. Illiterates	296.2		34.5
3. Literates	562.0	100.0	65.5
4. Literates without any Educational Level	20.2	3.6	2.4
5. Below Primary	145.0	25.8	16.9
6. Primary	147.0	26.2	17.1
7. Middle	90.5	16.1	10.5
8. Matric/ Higher Secondary	79.4	14.1	9.3
9. Higher Secondary/ But Below Graduate	42.0	7.5	4.9
10. Graduate and above	37.9	6.7	4.4

Note: Population figures relates to population related to age 7 years and above and excludes the age group 0-6

Source: Compiled and computed from *Census of India, 2001, C-Series* (Socio-cultural Tables,)

India's main problem in scientific and technical manpower is not quantity but quality. Let alone a few top Indian scientists/technologists, who compare with the best in the world, bulk of the Indian scientists and technologists should be rated very low by international standards. The principal reasons for this situation are : lack of adequate laboratory space and equipment, poorly paid teachers, increasing admission of less meritorious students who do not have a strong foundation to make a mark in the areas of scienific and technical specialisation, and, last but not the least, the tendency among bright scientists/technologists to migrate abroad. But the most disappointing aspect of the situation is that the Government has failed to utilise even this slender stock of scientific and technical manpower in gainful employment in their areas of specialisation. A considerable section of the scientific personnel are engaged in jobs which can be neither treated as scientific nor technical. This is due to the fact that over 57 per cent of the scientific personnel possess a general science degree and do not possess any training in any area in applied sciences. To make this stock of technical manpower more employable, there is a great need to shift these graduates and post-graduates from the general faculty of science to other applied faculties.

Table 14 : Estimated Stock of Scientific and Technical Personnel

	1971	*1991*	*(Thousands) 2003*
I. Engineer			
(*a*) Degree	174.5	519.6	1,183.2
(*b*) Diploma	230.4	859.3	1,720.5
II. Medical			
(*a*) Degree*	127.4	310.3	921*
III. Agriculture Graduate	73.8	202.7	285.3
IV. Science			
(*a*) Post-graduate	134.9	482.0	805.0†
(*b*) Graduate	625.9	2,430.3	4,024.9†
Total	**1,366.9**	**4,804.3**	**8,434.8**
Average Annual Growth Rate	—	6.5	4.8

* Includes allopathy and dentistry. †For 2001

Source : Compiled and computed from Institute of Applied Manpower Research, *India Year Book* (2005) National Health Profile of India 2010.

Returns on Human Capital

Various studies have been made in recent years about the rate of return of education in India. Mark Blaug, P.R.G. Layard and M. Woodhall in their study 'Causes of Educated Unemployment in India' calculated social and private rates of return for different levels of education. The crude rates of return were adjusted for wastage, unemployment and ability factor. (Refer table 15)

Findings by Mark Blaug and others support the conclusion that it appears as if the law of diminishing

returns is operating in the educational employment market. This calls for a re-appraisal of the educational policies in view of the social and economic requirements while keeping in mind the rates of return from different educational categories.

D.P. Chaudhuri and Mr. P. Rao have calculated the private and social return to higher education for Delhi graduates. The study made use of A.M. Khusro's survey of "Living and Working Conditions of Students of Delhi University" for average earnings. Private and social rates of return on various degrees have been computed by taking educational costs including transportation costs plus income foregone as the basis.

Table 15: Rates of Return to Educational Costs (1960)

Educational Category	Crude		Adjusted	
	Social	Private	Social	Private
Primary over Illiterate	20.2	24.7	13.7	16.5
Middle over Primary	17.4	20.0	12.4	14.0
Matric over Middle	16.1	18.4	9.1	10.4
First Degree over Matric	12.7	14.3	7.3	8.7
Engineering over Matric	16.6	21.2	10.8	13.5

(Per cent of cost)

Table 16. Internal Rates of Return of Various University Degrees

Degree	Private	Social
B.A. Pass	20	14
B.Sc. Pass	16	10
B.Com.	16	11
B.A. Hons.	24	18
B.Sc. Hons.	16	8
M.A. Languages	15	12
M.A. Economics	18	13
M.Sc.	16	9
Law	19	14
Library Science	26	18

(Per cent of cost)

What comes as a surprise from the findings of the study is that the "Private internal rates of return are even higher than what could be obtained from investment in the industrial sector of the Indian economy (16-20 per cent)." (Refer table 16) This is possible, for higher education is subsidized by the society and this explains the difference between private and social rates of return. The study provides the raison d'etre for high pressure of demand for higher education.

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CHAPTER

22

FOREIGN CAPITAL, FOREIGN AID AND ECONOMIC DEVELOPMENT

"It is not possible to buy development so cheaply. The provision of foreign capital may yield a more adequate infrastructure but rarely by itself generates rapid development unless there are already large investment opportunities going a-begging."

—A.K. Cairncross

1. THE NEED FOR FOREIGN CAPITAL

If a backward and underdeveloped country is interested in rapid economic development, it will have to import machinery, technical knowhow, spare parts and even raw materials. One method of paying for the imports is to step up exports. This is possible, if the Government is prepared to curtail consumption drastically and export more, simultaneously curtailing import of consumption goods. Russia, China, and others had adopted this method after the establishment of communist governments in these countries. As this involves a lot of sacrifice, it can be adopted only by a government which is committed to such a policy. The second alternative of getting foreign technology and equipment is to depend upon foreign assistance in some form or the other. Most countries of the world which embarked on the road to economic development had to depend on foreign capital to some extent. The degree of dependence, however, varied with the extent to which domestic resources could be mobilised, the state of the domestic economy in respect of technical progress, the attitude of the respective governments, etc. But the fact cannot be denied that foreign capital contributed in many important ways to the process of economic growth and industrialisation. The need for foreign capital for a developing country like India can arise on account of the following reasons:—

(a) Domestic capital is inadequate for purposes of economic growth and it is necessary to invite foreign capital.

(b) For want of experience, domestic capital and entrepreneurship may not flow into certain lines of production. Foreign capital can show the way for domestic capital.

(c) There may be potential savings in a developing economy like India but this may come forward only at a higher level of economic activity. It is, therefore, necessary that foreign capital should help in speeding up economic activity in the initial phase of development.

(d) It may be difficult to mobilise domestic savings for the financing of projects that are badly needed for economic development. In the early stages of development, the capital market is itself underdeveloped. During the period in which the capital market is in the process of development, foreign capital is essential as a temporary measure.

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(e) Foreign capital brings with it other scarce productive factors, such as technical know-how, business experience and knowledge which are equally essential for economic development.

2. FORMS OF FOREIGN CAPITAL

The different forms of foreign investment are:

(a) **Direct Foreign Investment.** Foreign capital can enter India in the form of direct investments. In the past, companies had been formed in advanced countries with the specific purpose of operating in India. Sometimes companies of advanced countries start their subsidiary offices or branches and affiliates in India. Alternately, foreigners may subscribe to stocks and debentures of concerns in India. (This is known as portfolio or rentier investment).

(b) **Foreign Collaboration.** In recent years there has been joint participation of foreign and domestic capital. India has been encouraging this form of import of foreign capital. There are three types of foreign collaborations—joint participation between private parties, between foreign firms and Indian Government and between foreign governments and Indian Government.

(c) **Inter-Government Loans.** Since the Second World War, there has been a growing tendency towards direct inter-government loans and grants. Marshall Aid was a massive system of American aid given to the war-devastated European countries to reconstruct their economies. Other advanced countries too provide grants and loans to Governments of less developed countries. With the spread of globalisation, this sources has been shrinking very fast.

(d) **Loans from International Institutions.** Since 1946, the World Bank and its affiliates have been important suppliers of capital to India. International Monetary Fund (IMF), Aid India Consortium, Asian Development Bank (ADB) and the World Bank have been the major sources of external assistance to India in recent years.

(e) **External Commercial Borrowing** (ECB). India has also been tapping export credit agencies like the US Exim Bank, the Japanese Exim Bank, ECGC of the UK etc. to obtain a major portion of the commercial borrowing from the capital market.

3. GOVERNMENT POLICY TOWARDS FOREIGN CAPITAL

With the advent of freedom, the pressure for economic development in India necessitated a realistic approach towards foreign capital. The late Prime Minister Nehru made a statement in April 1949 giving three important assurances to foreign investors:

(a) India would not make any discrimination between foreign and local undertakings;

(b) Foreign exchange position permitting, reasonable facilities would be given to foreign investors for remittances of profits and repatriation of capital; and

(c) In case of nationalisation of the undertaking, fair and equitable compensation would be paid to foreign investors.

The Industrial Policy Resolution of 1948 and 1956 as well as Mr. Nehru's statement on foreign capital were the basis of the Government's policy on foreign capital till 1991 when the New Industrial Policy was announced.

The Indian Government recognised foreign capital as important supplement to domestic saving for the development of the country and for securing scientific, technical and industrial knowhow. Although as a matter of policy the major ownership and effective control of undertaking was to be in Indian hands, the Government permitted, in a few cases, foreign capital to have majority control of an enterprise. The Government extended a number of tax concessions favouring foreign enterprises and streamlined industrial licensing procedures to avoid delays in approvals of foreign collaborations.

The Government of India decided in 1972 to permit wholly-owned subsidiaries of foreign companies provided they undertake to export 100 per cent of their output. However, in case the new venture is to export less than 100 per cent of its output, the extent of permissible foreign capital participation would be subject to negotiation with the Government.

Since the new policy of the Government marked a reversal of its earlier policy of reducing the share of foreign equity holdings in subsidiaries of foreign companies operating in India, it gave rise to suspicion and anxiety. During February 1972, the Government developed a precise formula setting out the limits of participation by Indians in foreign subsidiary companies if they undertook plans of output-expansion. Thus companies with foreign holdings exceeding 75 per cent would have to raise 40 per cent of the estimated cost of expansion by issue of additional equity to Indians. The corresponding proportion for companies with 60-70 per cent foreign ownership would be 33.3 per cent and for those with 51-60 per cent foreign ownership would be 25 per cent.

Thus, the Government had to choose between pursuing a policy of Indianisation of foreign subsidiary companies or to boost up exports through the agency of foreign firms. The latter course, which was chosen, was beset with grave dangers of proliferation of the influence of foreign concerns. While liberalising the conditions for foreign private investment the Government was reluctant to permit such subsidiary companies which were neither

willing to make a firm commitment about export promotion nor are willing to accept the scheme of gradual Indianisation. The principles of participation were laid down in unambiguous terms.

The Janata Party and Foreign Collaborations

In its statement on Economic Policy (November, 1977) the Janata Party laid the following guidelines regarding foreign collaborations:

"The Janata Party will not go in for foreign collaboration in areas where adequate Indian skills and capital are available....whenever the need for foreign collaborations is felt in areas of high priority emphasis should be on purchasing outright technical know-how, technological skills and machinery."

"The provisions of FERA must be rigorously enforced in the sector of consumer goods industries. The foreign firms should be asked to carry forward the process of Indianisation. Their production capacities also should be frozen at the existing levels."[1]

During two years of Janata rule, two major decisions regarding multinationals were taken and much advertised. Firstly, the Coca-Cola Company was asked to wind up its operations. Secondly, the Government asked International Business Machines (IBM) to dilute its equity to 40 per cent so as to conform to FERA guidelines. Since the IBM did not agree, it was also asked to fold up its operations.

Despite these two decisions, multinationals continued to operate in non-priority areas like tobacco, toiletries, beverages, etc. For instance, Hindustan Lever was permitted 51 per cent of foreign equity on the grounds of introduction of sophisticated technology in India. But the plea was unwarranted because the products of Hindustan Lever include vanaspati, shampoo, toothpaste, soap, detergent etc. India can certainly produce these products and induction of sophisticated technology is a lame excuse. Even against the guidelines of FERA, several foreign companies viz., Alkali Chemicals, Indian Explosives, Dunlop, Good Year, Asbestos Cement, Hindustan Pilkington were permitted to retain foreign equity at 51 per cent or more.

Policy regarding Foreign Investment (1991)

Industrial Policy (1991) announced by the Congress Government accepted the fact that foreign investment is essential for modernisation, technology upgradation and industrial development of India. The policy, therefore, overbent to cajole foreign capital to come to India. The main points of the policy were :

(i) Approval would be given for direct foreign investment upto 51 pet cent foreign equity in high priority industries. Clearance would be available if foreign equity covers the foreign exchange requirement for imported capital goods.

(ii) The payment of dividends would be monitored through the Reserve Bank of India so as to ensure that outflows on account of dividend payments are balanced by export earnings over a period of time.

(iii) To provide access to international markets, majority foreign equity holding upto 51% equity would be allowed for trading companies primarily engaged in export activities.

(iv) Automatic permission would be given for foreign technology agreements in high priority industries upto a lumpsum payment of ₹ 1 crore, 5% royalty for domestic sales and 8% for exports, subject to a total payment of 8% of sales over a 10 year period from date of agreement or 7 years from commencement of production.

The Government of India liberalised its policy towards foreign investment in 1991 to permit automatic approval for foreign investment upto 51 per cent equity in 34 industries. The Foreign Investment Promotion Board (FIPB) was also set up to process applications in cases not covered by automatic approval. During 1992-93 several additional measures were taken to encourage direct foreign investment, portfolio investment, NRI investment etc. These measures were:

1. The dividend-balancing condition earlier applicable to foreign investment up to 51 per cent equity is no longer applied except for consumer goods industries.

2. Existing companies with foreign equity can raise it to 51 per cent subject to certain prescribed guidelines. Foreign direct investment has also been allowed in exploration, production and refining of oil and marketing of gas. Captive coal mines can also be owned and run by private investors in power.

3. NRIs and Overseas Corporate Bodies (OCBs) predominantly owned by them are also permitted to invest up to 100 per cent equity in high-priority industries with repatriability of capital and income. NRI investment up to 100 per cent of equity is also allowed in export houses, trading houses, star trading houses, hospitals, Export-Oriented Units (EOUs), sick industries, hotels and tourism related industries and without the right of repatriation in the previously excluded areas of real estate, housing and infrastructure.

4. Provisions of the Foreign Exchange Regulation Act (FERA) have been liberalised as a result of which companies with more than 40 per cent of equity are also now treated at par with fully Indian-owned companies.

5. Foreign companies have been allowed to use their trade marks on domestic sales.

In january 1997, this limit was raised to 74 per cent in case of foreign investors and 100 per cent for Non-resident Indians (NRIs).

1. *Janata Party Statement on Economic Policy*, pp. 21-22.

As a consequence of the measures taken by the Government, during August 1991 and August 1998, the Government approved total foreign investment of the order of ₹ 1,73,510 crores, about 137 times the ₹ 1,270 crores of foreign investment in the last decade (1981-1990).

All these measures were taken to promote the inflow of foreign capital by offering a large number of concessions. This is in sharp contrast to the policy followed during the first four decades of planning. Obviously, this indicates that the Government has been quite successful in changing the climate for the entry of foreign investment.

There should be no complacency about the policy of foreign collaborations. Foreign collaborations do have a positive role in certain fields like power generation, steel, aluminum, petroleum, cement etc., but they should not be allowed to proliferate in consumer goods, needed by the upper strata of Indian society. Besides this, the activities of multinationals which increase our dependence on foreigners and drain away our resources should be restricted. But a much bolder and persistent policy has to be followed to get rid of them. The stakes are high because multinationals are even known for toppling governments wherever they feel that the regime has become an obstacle to the achievement of their aspirations.

4. FOREIGN COLLABORATION IN THE POST-INDEPENDENCE PERIOD

During the early phase of the planning era, the national policy towards foreign capital did recognize the need for foreign capital, but decided not to permit it a dominant position. Consequently, foreign collaborations had to keep their equity within the ceiling of 49% and allow the Indian counterpart a majority stake. Moreover, foreign collaborations were to be permitted in priority areas, more especially those in which we had not developed our capabilities. But in an overall sense, our policy towards foreign collaborations remained restrictive and selective.

It was only during the eighties that government relaxed its policy towards foreign collaborations. This was done specifically in respect of investors from Oil Exporting Developing countries with a well-defined package of exemptions.

This was followed by Technology Policy Statement(TPS) in January 1983. The objective of the Policy was to acquire imported technology and ensure that it was of the latest type appropriate to the requirements and resources of the country. Under this policy, a number of policy measures were announced liberalising the licensing provisions:

a. All but 26 industries were exempted from licensing in case of non-MRTP and non-FERA companies;

b. private sector was allowed to participate in the manufacture of telecommunications equipment;

c. a number of electronic items were exempted from MRTP Act;

d. foreign companies were allowed to manufacture electronic components;

e. MRTP companies were allowed to set up industries in backward areas;

f. a number of new items were added to the list of industries allowed to be set up by FERA and MRTP units;

g. broadbanding of a licence for a number of industries was allowed; and

These technical collaborations were allowed on financial criteria i.e., royalty or lumpsum payment or a combination of both. These relaxions resulted in a larger inflow of foreign direct investment and consequently, the number of approvals during the decade (1981-90) reached a record figure of 7,436 involving a total investment of ₹ 1,274 crores. Countrywise analysis of foreign collaborations reveals that USA was at the top accounting for nearly ₹ 322.7 crores of investment. This was one-fourth of the total foreign collaboration approvals. This was followed by Federal Republic of Germany (17.2 per cent), Japan, U.K, Italy, France and Switzerland. Five countries i.e. USA, West Germany, Japan, U.K and Italy accounted for nearly 63 per cent of total approved foreign investment. Even Non-resident Indians (NRIs) contributed about ₹ 113 crores accounting for 8.9 per cent of total investment.

An industrywise analysis of the distribution of foreign collaboration approvals reveals that Electricals and Electronics (indcluding telecommunications) accounted for 22 per cent of the total approvals, indicating highest priority to this sector, followed by industrial machinery 15.5 per cent. Foreign collaborations in chemicals (other than fertilizers) were third in importance. By and large, it may be stated that the priority sector accounted for about 70 per cent of total approvals. It implies that foreign collaborations approvals were more or less in conformity with the general climate towards foreign capital in the country at that time.

Foreign Investment Inflows

After the announcement of New Industrial Policy (1991), there has been an acceleration in the flow of foreign capital in India. As per data provided by the Government of India, during 1991-92 to 2010-2011, total foreign investment flows were of the order of $ 352 billion, out of which about $ 210.3 billion (59.8 per cent) were in the form of Foreign Direct Investment and the remaining $ 141.7 billion (40.2 per cent) were in the form

Table 1: Foreign Investment Flows by Categories

US $ million

	Direct Investment			*Portfolio Investment*			*Grand Total*
	Foreigners (1)	*NRI's* (2)	*Sub-total* (3=1+2)	*FIIs* (4)	*Others*[2] (5)	*Sub-total* (6=4+5)	(7=3+6)
1991-92	66	63	129	4	0	4	133
1992-93	264	51	315	1	243	244	559
1993-94	369	217	586	1,665	1,902	3,567	4,153
1994-95	872	442	1,314	1,503	2,321	3,824	5,138
1995-96	1,418	726	2,144	2,009	739	2,748	4,892
1996-97	2,057	764	284	1,926	1,386	3,312	6,133
1997-98	2,956	601	3,557	979	849	1,828	5,385
1998-99	2,000	462	2,462	–390	329	–61	2,401
1990-00	1,581	574	2,155	2,135	891	3,026	5,181
2000-01	3,600	429	4,029	1,847	913	2,760	6,789
2001-02	5,214	916	6,130	1,505	516	2,021	8,151
2002-03	4,119	916	5,035	379	600	979	6,014
2003-04	3,587	735	4,322	10,918	459	11,377	15,699
2004-05	5,121	930	6,051	8,686	629	9,315	15,366
2005-06	6,728	2,233	8,961	9,926	2,566	12,492	21,453
2006-07	15,675	7151	22,826	3,225	3,778	7,003	29,829
2007-08	17,708	17,127	34,335	20,328	6,943	27,271	62,106
2008-09	19840	17,998	37,838	–15,017	1162	–13,855	23,983
2009-10	18,773	18,990	37,763	29,048	3328	32,376	70,139
2010-11	14,030	12,994	27,024	29,422	2,049	31,471	58,495
Total	**1,25,978**	**84,319**	**2,10,297**	**1,10,099**	**31,603**	**1,41,701**	**3,51,993**
(1991-92 to 2010-11)	**(35.8)**	**(24.0)**	**(59.8)**	**(31.3)**	**(9.0)**	**(40.2)**	**(100.0)**

Note: 1. Foreigners include investment flows by RBI automatic route and SIA/FIPB route.
2. Others include Euro-equities (GDR amounts raised by Indian Corporates) and Offshore funds and others.
3. Figures in brackets are percentages of total foreign investment.

Source: Compiled from Government of India, *Economic Survey (2004-2005)* and *RBI Bulletin, March 2008, June 2011*

of portfolio investment. This clearly shows that the preference of foreign firms was more in favour of portfolio investment. Moreover, out of the total direct foreign investment of the order of $210.3 billion, nearly 40 per cent ($84.3 billion) was contributed by Non-resident Indians. Thus, the net contribution of foreign firms in direct investment was about 40 per cent of total foreign investment flows.

As a response to the policies of liberalisation, the foreign investors were very keen to undertake portfolio investment, including GDR (Global Depository Receipts) and investment by Foreign Institutional Investors, Euro equities and others rose sharply from $244 million in 1992-93 to $ 3,824 million in 1994-95 and declined to $ 1,828 million in 1997-98. Portfolio investment became negative in 1998-99 but again improved to $2.76 billion in 2000-01, but again declined to nearly $ 1 billion in 2002-03 but touched a record level of 11.4 billion in 2003-04 and $ 12.5 billion in 2005-06. However, the trend was reversed in 2006-07 and out of total foreign investment of $29.1 billion, direct foreign investment contributed $22.1 billion, about 76% of total. This was a healthy development. In 2007-08, out of total foreign investment of $62.1 billion, $34.8 billion was contributed by direct investment (56%) During 2008-09 direct investment flow continued unabated but portfolio investment became negative (net outflow of $ 13.8 billion) In 2010-11 again we find total foreign investment of $ 58.5 billion.

Data given table 2 shows that total DFI proposals approved since 1991 till 2002 amounted to ₹ 2,90,854 crores against just ₹ 1,274 crores approved during the whole of the previous decade (1981-90). There is no doubt that it takes sometime for all these proposals to fructify into actual inflows. Unfortunately, the actual flows as a proportion of approvals were low till 1997, but the situation has shown distinct improvement thereafter. Actual flow during 2002 peaked to ₹ 21,286 crores.

Table 2 : Direct Foreign Investment: Approvals and Inflows

Year	*Amount approved (₹ crores)* (1)	*Actual Inflow (₹ crores)* (2)	2 as % of 1
1991	534	351	65.7
1992	3,888	675	17.4
1993	8,859	1,787	20.2
1994	14,187	3,289	23.2
1995	32,072	6,820	21.3
1996	36,147	10,389	28.7
1997	54,891	16,425	29.9
1998	30,814	13,340	43.3
1999	28,367	16,868	59.5
2000	37,039	19,342	52.2
2001	26,875	19,265	71.7
2002	11,140	21,286	191.1
2003	6,042	14,301	236.7
Total	**2,90,854**	**1,51,124**	**52.0**

Source: Ministry of Commerce and Industry, *Annual Report, 2003-04.*

Note : Approvals and inflows include NRI investments as well. a creditable achievement.

Data given in Table 3 reveals that 10 sectors account for FDI inflows of ₹ 5,36,637 crores for the period April 2000 to March 2012. This accounts for over 49 percent of the total FDI inflow. Out of this, nearly 36 percent of FDI inflows are in high priority areas like Computer software and hardware Telecommunication Construction, Power, Automobile Industries, Metallurgical Industries, Drugs & Pharmaceutical and Chemicals.

Table 3 :
Sector Attracting Highest FDI Inflows Form April 2000 to March 2012

Amount ' in crores (US$ in million)

Ranks	Sector	Cumulative Inflows (April '00 - March 12)	% age to total Inflows (In terms of US$)
1.	Services sector	145,764 (32,351)	19 %
2.	Telecommunications	57,078 (12,552)	7 %
3.	Construction Activities	52,253 (11,433)	7 %
4.	Computer software & Hardware	50,118 (11,205)	7 %
5.	Housing & Realstate	49,717 (11,113)	7 %
6.	Chemicals	47,904 (9,844)	6 %
7.	Drugs and Pharamceutical	42,868 (9,195)	5 %
8.	Power	33,214 (7,299)	4 %
9.	Automobile industry	30,785 (6,758)	4 %
10.	Metallurgical Industries	26,936 (6,041)	4 %

Source : Department of Industrial Policy & Promotion , Ministry of Commerce & Industry, 2010, FDI Fact Sheet March 2012)

Countrywise Investment Approvals and Actual Inflows

Table 4 provides information about countrywise actual inflows of FDI. We note theat Mauritius accounted for 38 percent inflows (commulative) between April 2000 and March 2012. Singapore and UK come next with 10 percent and 9 percent respectively. The other contributors to actual inflows of some significance were Japan, USA, Germany,Netherlands, Cyprus, UAE and France.

Table 4 : Countrywise Actual Inflows of Foreign Direct Investment (April2000 to March 2012)

Amount ' in ₹ crores (US$ in million)

Ranks	Country	Cumulative Inflows (April '00 -March '12)	%age to total Inflows (in termsof US $)
1.	Mauritius	289,471 (64,169)	38 %
2.	Singapore	77,588 (17,153)	10 %
3.	U.K.	74,661 (15,896)	9 %
4.	Japan	57,581 (12,313)	7 %
5.	U.S.A.	47,889 (10,564)	6 %
6.	Netherlands	32,335 (7,109)	4 %
7.	Cyprus	29,670 (6,400)	4 %
8.	Germany	20,828 (4,621)	3 %
9.	France		13,378 (2,927) 2 %
10.	U.A.E.	10,320 (2,243)	1 %
Total FDI Inflows*		**775,006 (170,407)**	**100%**

Source : Department of Industrial Policy & Promotion , Ministry of Commerce & Industries, India FDI Fact Sheet March 2012

Note: *(i) *Includes inflows under NRI Schemes of RBI.*

(ii) Cumulative country-wise FDI equity inflows (from April 2000 to March 2011)

(iii) %age worked out in US$ terms & FDI inflows received through FIPB/SIA+ RBI's Automatic Route+ acquisition of existing shares only

Table 5: Regionwise (Statewise) Breakup of FDI Inflows (from January 2000 to March 2011)

RBI's Regional Office		*₹ crores*	*Share in %*
1. Mumbai	Maharashtra, Dadra & Nagar Haveli, Daman and Diu	246,135 (54,620)	32%
2. New Delhi	Delhi, Part of UP and Haryana	1,51,092 (33,071)	19%
3. Bangalore	Karnataka	43,892 (9,761)	6%
4. Chennai	Tamil Nadu and Pondicherry	37,559 (8,273)	5%
5. Ahmedabad	Gujarat	36,423 (8,157)	5%
6. Hyderabad	Andhra Pradesh	30,601 (6,809)	4%
Sub-total (1 to 6)		**5,45,702 (1,20,691)**	**70.8**
7. Others		**2,29,304 (49,716)**	**29.2**
Total (1 to 7)		**7,75,006 (1,70,407)**	**100.0**

Note: Figures in brackets show FDI inflows in US$ billion. FDI Fact Sheet
Source: Department of Industrial Policy and Promotion, March 2011.

Data provided in Table 5 reveals that 6 destinations comprising of Mumbai, Delhi, Bangaluru, Chennai, Ahmedabed and Hyderabad had a total FDI inflow of the order of ₹ 5,45,702 crores (US $ 120.7 billion) out of the total FDI inflows in India during January 2000 to March 2012 i.e. ₹ 7,75,006 crores or US$ 170.4 billion). In other words, there was heavy concentration of FDI inflows in these 6 regions. It implies that 71 percent of FDI flows into developed regions with better infrastructure and connectivity, leaving the backward regions to receive some crumbs.

FDI and the Indian Stock Market

Stock market is an ideal form of organisation which by providing easy liquidity encourages the public to invest *and this brings out the latent surplus in the economy.*

For this purpose, the shares of good promising companies should be listed on the market. During the 70's and 80's, a good number of blue-chip TNC scrips got listed. Notable among them were : Abbot Labs, Burroughs Wellcome, E. Merck, Eskayef, Fulford, Hoechst, May & Baker, Organon, Parke Davis and Wyeth. The chief objective of offering shares to the public by the affiliates could not be to raise fresh capital from the public, but was only a strategy of diluting foreign equity without reducing their foreign parent's quantum of investment.

In the post-liberalisation period, the policy was reversed. At the first available opportunity, many foreign affiliates raised foreign equity to majority levels. While raising share of foreign equity to majority levels, most TNCs indicate a tendency to avoid the stock market. TNCs are side-stepping the stock market and they sell off the existing units to locals and promote wholly-owned-subsidiaries (WOS) or transfer certain divisions/products to wholly owned subsidiaries of the parent company.

The number of technical collaborations declined from 629 in 1997-98 to only 299 in 2003-2004. There was a tendency to convert purely technology transfer arrangements later into financial collaboration by buying the equity share of the concerns.

An Assessment of Policies towards Foreign Investment

The main arguments put forth by the protagonists of liberalisation to permit larger doses of foreign collaborations are: The days of East India Company are over. The inflow of foreign collaborations through Multinational Corporations (MNCs) or their subsidiaries does not imply subjugation. The share of India in direct foreign investment when compred with China, Brazil, Mexico etc. is very low.

Foreign Direct Investment flows have increased from U S $ 51.1 billion in 1992 to about US $ 620.7 billion by 2008 for all developing countries. Data given in table 6 reveal that India's share in Foreign Direct Investment increased from 0.5% in 1992 to 4.3% in 2010. As against it, China's share declined from 21.8% in 1992 to 18.4% in 2010. In absolute terms, whereas China's share was US $ 105.7 billion in 2010, India's share was barely US $ 24.6 billion. Obviously, India has not been able to benefit much from Foreign Direct Investment despite the red carpet spread by it for the foreign investors.

Table 6: Foreign Direct Investment by Host Region

(U S $ million)

Country	*1992*	*2004*	*2008*	*2010*
China	11,156	60,630	1,08,312	1,05,735
Singapore	na	16,060	8,588	38,638
South Korea	727	7,690	8,409	6,873
India	233	5,340	42,546	24,640
Malaysia	5,183	4,620	7,172	9,103
Philippines	228	470	1,544	1,713
Thailand	2,114	1,060	8,448	5,813
All Developing Countries (including China)	51,108	2,33,230	6,58,002	5,73,568
India's Share (%)	0.5	2.3	6.5	4.3
China's Share (%)	21.8	26.0	16.5	18.4

Source: United Nations, *World Investment Report*, 2011.

Secondly, transfer of technology can also be effected with more investment being made by technologically advanced MNCs. These gains are not disputed by the critics, but the fact of the matter is that there are aspects of foreign direct investment which seriously impinge on people's welfare and national sovereignty. It is these aspects which need serious consideration.

Thirdly, 40.2 per cent of the Foreign Investment is in the nature of portfolio investment (financial investment) which only strengthens speculative trading in shares. The wisdom of permitting foreign companies to trade in the share market is punctuated by a question mark. This has led to an artificial boom in the share market and the BSE Sensitive Index touched a high mark of 4,282 on 18th June 1994. Earlier when the share market boom burst, the market came tumbling down and millions of small shareholders who entered the share market to have a quick buck, suffered very heavy losses, but the big sharks were able to manipulate the market to corner big gains for them. The securities boom resulted in a scam involving over ₹ 5,000 crore. The critics are of the view that although we feel jubilant over the strengthening of the share market, but we do not realise the fact that we may be sitting on a volcano.

Even during 2001, the activities of MNCs resulted in wild fluctuations in BSE Sensitive Index which came tumbling down after budget 2001-2002 was presented to the parliament. The Government had to intervene so that confidence in the market is revived. This only underlines the fact that MNCs are able to manipulate the stock market to suit their goals.

During 2005 and 2007, BSE Sensitive index has risen to dizzy heights. At one time, it was thought that if it touches 14,000 mark, it will imply an unprecedented rise. But unfortunately, the main beneficiaries of stock exchange boom are big players. The Government is considering ways and means to restrict this sharp rise in BSE index.

Again during 2008, SENSEX slipped down from a high level of 20,000 to 14,800. The wide fluatuation in SENSEX has adversely affected a large section of shareholders. This was due to the withdrawal of FII Investment of the order of $ 30 billion (₹ 12,000 crores) between Jan-March 2008.

Fourthly, foreign direct investment is catering to the needs of the upper middle and affluent classes, thus concentrating on the 180 million consumers in the Indian economy. In this sense, they feel a new consumer culture of colas, jams, ice creams, processed foods and the acquisition of durable consumer goods. Consequently, there is an utter neglect of the wage goods sector.

During 1993-94 to 2001-02, the output of consumer durables increased at an annual average rate of 12.4 per cent, while that of wage goods was as low as 5.8 per cent. In other words, production instead of benefitting the masses, is only catering to the needs of the upper classes. In this sense, the multinationals by entering into production of goods like potato chips, wafers, bakery products, food processing etc. are rapidly displacing labour working in the small scale sector since such units are faced with the stark prospects of closure being unable to compete with MNCs. Thus both from the point of view of the pattern of production and employment, the unrestricted entry of multinationals in soft areas has dangerous inplications.

Fifthly, portfolio investment made in India is in the nature of hot money which may take to flight if the market signals indicate any adverse trends. Thus, it would be a mistake to treat portfolio investment as a stable factor in our growth.

Sixthly, a larger inflow of foreign direct investment, more so in the financial sector, will lead to building of reserves which in turn will expand domestic money supply. Consequently, inflationary trend of prices gets strengthened in the process. Moreover, the country is witnessing the growth of a vast non-banking financial and intermediate sector which may include foreign financial companies and mutual funds. If this sector grows at a very fast rate as is happening in India, it may render any efforts of monetary management by the Reserve Bank of India ineffective.

Seventhly, MNCs after their entry are rapidly increasing their shareholding in Indian companines and are thus swallowing Indian concerns. This has resulted in a number of takeovers by the MNCs and thus, the process of Indianisation of the corporate sector initiated by Jawaharlal Nehru has been totally reversed. This has given a serious set back to Indian private sector. This explains the reason why leading industrialists of the Bombay Club or the All India Manufacturers Organisation (AIMO) have raised their voice against the

"discriminatory" policies of the Government to woo foreign capital at the cost of indigenous capital.

Finally, it has recently come to light that multinationals such as Cadbury Schweppes, Gillette, Procter and Gamble, Danone, GEC, Unilever, Ciba-Geigy, Hewlett Packard, Timex, ABB, Unisys and Rhone-Poulenc have decided to expand their business in India by adopting the wholly-owned (100%) subsidiary route at the cost of their established and listed subsidiaries. Thus thousands of Indian minority shareholders in the listed affiliate subsidiaries (joint ventures) feel cheated by this move of the multinationals. Earlier, in the last couple of years, most of the MNCs augmented their holdings in listed affiliates by acquiring shares at heavy discounts over market prices through the mechanism of preferential allotments while making demands for preferential allotment of shares. MNCs promised that they would bring fresh capital, introduce latest technologies and marketing skills and help Indian affiliates become more competitive internationally and accelerate their growth. The move to keep Indian affiliates out of their activities on the one hand has hurt Indian interests, but a serious issue is that more attractive and profitable businesses have been transferred to wholly owned and newly created subsidiaries. Thus a conflict of interests has arisen between a wholly-owned subsidiary and the 51 per cent owned affiliates. But since MNCs have acquired majority stake in the affiliates, the Indian minority investor has been rendered powerless to take any retaliatory action. Indian industrialists feel that the new move is a kind of day-light robbery because the MNCs want to profit on established brand names. The clandestine manner by which the multinationals enhanced their equity at throw-away prices by seeking preferential allotment of shares, is a blatant abuse of the permissive clauses in Industrial policy (1991). It is, therefore, of urgent necessity that the Government should take remedial steps through SEBI and RBI to plug this abuse. To sum up, while capital inflows by multinationals may be permitted, but this should not be allowed at the cost of Indian national interests. The Government should, therefore, not have an open door policy but should be more selective in its approach.

K S Chalapati Rao and M S Murthy after making a detailed study of FDI in the Post-Liberalisation period reach the following conclusion:

"Overall it does appear, in line with experience elsewhere, FDI has shown a preference for developed states. Also, the role of FDI seems to be not so insignificant, especially in the large private corporate sector. The two factors combined may accentuate the differences between the developed and backward states. The backward states may neither be in a position to offer the incentives to offset disadvantages and even if they do, the net benefit to their economies is not guaranteed. States have to improve the overall investment climate to be able to attract investment, whether domestic or foreign. The private sector would not always be forthcoming to meet this basic requirement. The role of public investment is thus obvious."[2]

It may worthwhile to point out that as a proportion of GDP, foreign investment remained at 0.2 percent or less till 1992-93, it picked up with economic reforms facilitating foreign investment to reach 1.6 percent of GDP in 1996-97 and was only 1.4% of GDP in 2005-06. But capital formation in India has reached a level of 36% of GDP in 2006-07. Obviously, foreign investment can at best be a minor contributor and not the main driver of industrialization. Ogutcu (2002), after studying the experience of FDI in Brazil, China and Turkey draws the following lesson which is very relevant for India.

"... Although attracting FDI can be an important element of a regional development strategy, the key to successful development will ultimately be sound domestic macro-economic and structural policies, adequate and efficient domestic savings and investment and human capital accumulation, supported by sound and strong domestic institutions. FDI is not a substitute for getting domestic policies "right." Appropriate domestic policies will attract FDI and maximize its benefit, while at the same time removing obstacles to local business."[3]

5. EXTERNAL ASSISTANCE AND THE FIVE YEAR PLANS

Foreign assistance comes in three forms: Loans, grants and P. L. 480/665 assistance[4]. Upto 1979-80, loans accounted for about 76 per cent, grants for about 11 per cent and PL 480/665 assistance for about 14 per cent of total external assistance. The severe drought of 1965-66 and 1966-67 compelled India to take PL 480 food aid assistance on a massive scale. During the Fourth Plan, as the Green Revolution gathered momentum, PL 480 aid was slashed down to just 9 per cent of total assistance. Later, as India became self-sufficient in foodgrains production, PL 480 aid was discontinued. During the Sixth Plan (1980-81 to 1985-86), the share of grants got reduced to 16 per cent. However, in absolute terms, external assistance of the order of ₹ 10,903 crores was utilised. During the Seventh Plan, annual average flow of external assistance was of the order of ₹ 4,540 crores as

2. Chalapati Rao K S and Murthy M R (2006), *Towards Understanding the State-wise Distribution of Foreign Direct Investment in the Post-Liberalisation Period*, p.26
3. Quoted by Chalapati Rao and Murthy, Op.Cit., p.26.
4. P. L. 480/665 assistance was provided by USA in its public law assistance programme in the form of food aid to India to overcome chronic shortage of food caused by drought of 1965 and 1966.

against ₹ 2,180 crores during the Sixth Plan. This implies that the annual flow of assistance more than doubled.

Table 7 : Utilisation of External Assistance According to its Form in India

₹ crores at current prices

	Loans	*Grants*	*PL 480/665*	*Total*
Upto 1979-80	15,541	2,175	2,819	20,535
	(75.7)	(10.6)	(13.7)	(100.0)
Sixth Plan	9,123	1,780	NIL	10,903
(1980-81 to 1984-85)	(83.7)	(16.3)		(100.0)
Seventh Plan	20,120	2,580	NIL	22,700
(1985-86 to 1989-90)	(88.6)	(11.4)		(100.0)
1990-91 to 1991-92	16,866	1,453	NIL	18,319
	(92.1)	(7.9)		(100.0)
Eighth Plan	51,813	4,831	NIL	56,644
(1992-93 to 1996-97)	(91.5)	(8.5)		(100.0)
Ninth Plan	66,136	5,065	NIL	71,201
1997-98 to 2001-02	(92.9)	(7.1)		(100.0)
Tenth Plan	76,818	11,719	NIL	88,537
(2002-03 to 2006-07)	(86.8)	(13.2)		(100.0)
	1,25,238	13,768	NIL	1,39,006
2007-08 to 2011-12)	(90.1)	(9.9)		(100.0)

Source: Compiled and computed from *Economic Survey* (1985-86) and (2011-2012).

During the Eighth Plan (1992-93 to 1996-97) total external assistance of the order of ₹ 56,644 crores was utilized out of which the share of loans was of the order of about 92 per cent and grants of the order of 8 per cent. During the Ninth Plan average annual assistace of the order of ₹ 14,240 crores was received. Obviously, India's dependence of foreign aid in absolute terms has increased. Since over 93 per cent of external aid is in the form of loans, it imposes burdens in the form of repayment of principal and interest. This is a cause for concern for India. Even during 2002-03 and 2006-07, total external assistance utilised was ₹ 88,537 crores, out of which 86.8 per cent was in the form of loans. Between 2007-08 and 2011-12, (11th plan) the share of loan component in total external assistance further increased to 90 percent. (Table 7)

Group-wise receipt of External Assistance

Among the various groups, Consortium members accounted for about 90 per cent of total aid, USSR (Russian Federation) and other East European countries accounted for 4 per cent and all other countries represented less than 6 per cent of total external assistance to India during 1985-86 to 1989-90.

Upto the end of the Fourth Plan, USA was the largest single contributor of foreign assistance, but thereafter, its share in external assistance declined to 3 per cent of the total assistance received during 1978-79 to 1984-85. However, taking the entire period (1951-52 to 1984-85), USA contributed ` 6,306 crores or 15 per cent

Table 8 : Utilisation of External Assistance (1951-52 to 2010-11)

(₹ crores)

	Up the end of the 4th Plan	*Fifth Plan* (1974-78)	*Sixth Plan* (1980-81 to 1984-85)	*Seventh Plan* (1985-86 to 1989-90)	1990-91 and 2001-2002	2002-03 to 2006-07	2007-08 to 2010-11
1 Consortium members	10,918 (92)	4,469 (74)	9,893 (91)	20,352 (90)	121,852 (83.4)	65,711 (74.2)	1,07,411 (76.8)
2 USSR/Russian Federation and East European Countries	869 (7)	349 (6)	278 (2)	1,018 (4)	672 (0.5)	4,798 (5.9)	3,371 (2.4)
3 Others	135 (1)	1,226 (20)	732 (7)	1,330 (6)	23,551 (16.1)	18,028 (20.2)	29,029 (20.8)
4 Grand Total	11,922 (100)	6,044 (100)	10,903 (100)	22,700 (100)	146,075 (100.0)	88,537 (100.0)	139811 (100.0)
PRINCIPAL AID GIVERS							
Japan	539 (5)	391 (7)	462 (4)	2,069 (9)	31,298 (21.4)	9,477 (10.7)	29,979 (21.4)
IBRD	1,786 (15)	1,786 (30)	1,632 (15)	7,758 (34)	33,333 (22.8)	25,282 (28.5)	45,171 (32.3)
IDA			4,180 (38)	5,444 (24)	39,379 (26.9)	24,662 (27.8)	23030 (16.5)
ADB	..	..	538 (5)	234 (1.0)	20,670 (14.2)	27,351 (30.9)	22510 (16.1)

Note: Figures in brackets are percentages of total.

1. Consortium members include Austria, Belgium, Canada, Denmark, France, West Germany, Italy, Japan, Netherlands, Sweden, U.K., USA, IBRD (International Bank for Reconstruction and Development, now renamed as World Bank) and IDA (International Development Association).
2. USSR/Russia and East European countries include Bulgaria, Czechoslovakia, Hungary, Poland, USSR and Yugoslavia. Russian Federation includes Russia and Commonwealth of Independent States.
3. Others include Australia, New Zealand, Spain, Switzerland, Iraq, European Economic Community, OPEC Fund, Asian Development Bank (ADB) etc.

Source: *Economic Survey* (2010-2011) and earlier issues.

of total external aid and was still the principal aid-giver. USA is now indirectly routing this assistance via IBRD and IDA whose share has gone up to ₹42,482 crores (i.e. 42%) of the total assistance received during 1985-86 to 1989-90. Obviously, India also prefers to negotiate with International Financial Institutions like IBRD, IDA (International Development Association) and Asian Development Bank. Japan is next in importance.

During 2007-08 and 2010-11, IBRD and IDA contributed 48.8% of total assistance. Another 16.1% was received from ADB. The share of international financial institutions was of the order of 64.9%. We should note here that during Tenth plan period (2002-03 to 2006-07) this share was 86.3 percent.

Aid Authorisation and Utilisation

There is no doubt that some time lag between aid authorised and aid utilised is inevitable but in case sufficient advance preparation is done and procedures simplified, it is quite possible to improve the extent of utilisation. Upto the end of March 1985, out of total authorised aid of ₹ 40,927 crores, a sum of ₹ 30,906 was utilised. The extent of utilisation was 75.5 per cent. But during the Seventh Plan, the situation deteriorated and percentage utilisation slumped to 51 per cent. According to the ***Economic Survey*** (1991-92) "the major constraints in the speedy utilisation of committed assistance are the paucity of Rupee resources due to limited plan allocations, delay in the procurement of stores and equipment, problems concerned with land acquisition and rehabilitation and replacement of displaced persons." Ths situation has improved during 1997-98 and 2001-02 and percentage utilisation has gone up to 80%. The situation has deteriorated to 60.2 per cent during 2002-03 and 2007-08 but this is due to very large authorisation of ₹ 32,969 crores in 2007-08, out of which ₹ 19,851 crores was utilised during the year. In 2011-12, utilisation ratio remained low at 62.6 percent.

Table 9 : Aid Authorisation and Utilisation

(₹crores)

	Aid Authorised	*Aid Utilised*	*% Utilisation*
Upto the end of March 1985	40,927	30,906	75.5
Seventh Plan (1986-90)	44,972	22,700	50.5
1990-91 to 1991-92	20,831	18,319	87.9
Eighth Plan	70,892	56,644	79.9
Ninth Plan	89,035	71,201	80.0
2002-03 and 2006-07	1,14,822	88,537	77.1
2007-08	33,283	19,851	60.2
2008-09	29,526	26,893	91.1
2009-10	49,926	30,739	61.6
2010-11	37,432	37,878	101.1
2011-12 (P)	37,765	23,644	62.6

Source :Compiled and computed from Government of India, *Economic Survey (2011-12)*, ***Reserve Bank of India, Hand Book of Statistics on P - Provisional Indian Economy,*** *2009-10*

Foreign Assistance during Plans

The Second Five Year Plan conceived of a rapid expansion of heavy and basic industries so as to build an industrial base for the Indian economy. Capital goods industries which had hitherto been foreign to the soil, were to be started. This required import of capital equipment as well as foreign experts for providing knowhow. All this necessitated a big programme of foreign capital inflow. Total aid utilised during the Second Plan was of the order of ₹ 1,430 crores.

During the Third Plan, the policies of the Second Plan to further strengthen the industrial base of the economy were continued. Moreover, the Chinese invasion in 1962 awakened the Gorvernment of India towards the need for strengthening defence industries and defence production. In addition to this, the failure of agricultural production to rise commensurate with the needs of a growing population and increasing national income, made imperative large intake of food aid under U.S. Public Law 480 programme. The cumulative effect of all these factors resulted in negotiating aid agreements and a total of ₹ 2,878 crores of foreign assistance was utilised during the Third Plan.

During the period of the Annual Plans, several factors operated in the Indian economy which compelled a large intake of foreign aid. Firstly, the drought of 1965-66 and 1966-67 made it imperative for the Government to make heavy import of food-aid under P.L. 480. Secondly, the rapid rise of prices led to depletion of internal private savings and to cover this gap a programme of massive foreign assistance was planned. Thirdly, the war with Pakistan in 1965 further necessitated the need for enlarging defence production and defence industries. Lastly, a philosophy of using the cushion of foreign aid to meet the balance of payments deficit acted as a dope to our effort towards self-reliance.

Moreover, recovery in agriculture after 1967-68 reduced our dependence on foreign countries for maintenance imports. Consequently, the component of foreign assistance in the Fourth Plan began to decline. Coupled with it the Fourth Plan target of reducing external assistance to nearly half the level of the Third Plan also led to the adoption of measures to cut down non-essential imports. Consequently, a total external assistance of the order of ₹ 4,181 crores was utilised during the Fourth Plan.

However, after 1973-74 external assistance has been rising quite fast. The main factors responsible for this trend are : steep rise in the price of crude oil, food and fertilizers in world markets. Thus, total assistance during the Fifth Plan (1974-78) aggregated to ₹ 6,044 crores.

During the Sixth Plan period (1980-81 to 1984-85) total external assistance of the order of ₹ 10,903 crores was received. The sharp hike in oil prices in 1979-80 led to a

deterioration in the balance of payments position and thus forced the government to admit a larger dose of foreign aid.

During the Seventh Plan, external assistance of the order of ₹ 22,700 crores was received implying an annual average inflow of ₹ 4,540 crores which was much higher than the average inflow during the Sixth Plan. The most important factor contributing to higher capital inflows from abroad is the loosening of licensing restrictions on imports and industrial capacity which have according to ***Economic Survey*** (1988-89) contributed to higher import demand and larger current account deficit.

During 1990-91 and 2000-01, total external assistance utilised was of the order of ₹ 1,28,516 crores. Bulk of this aid was provided by international agencies like IBRD, IDA and ADB. The share of these three agencies aggregated to ₹ 85,967 crores i.e. 64% of total.

Greater emphasis in utilisation of foreign loans and credits for energy, irrigation and infrastructure is intended to remove the major infrastructural constaints on the Indian economy. This is a welcome development. It may also be noted that there is a sharp increase in external assistance during the Tenth Plan (2002-03 to 2006-07) amounting to ₹ 88,537 crores. Thus, the annual average aid received was of the order of ₹ 17,707 crores which is the highest in plan so far. India received 87 of the total aid from international institutions, viz., IBRD, IDA and ADB amounting to a huge figure of ₹ 77,295 crores. In addition to them, Japan provided aid of the order of ₹ 9,477 crores or 10% of total aid received. Obviously, India now approaches international institutions for external assistance and the role of countries like USA, UK, Germany has become minimal, because these countries now route aid through these international institutions.

6. THE IMPACT OF FOREIGN AID ON INDIA'S ECONOMIC DEVELOPMENT

In principle, foreign aid is meant to do three things, viz., (a) to supplement domestic savings, (b) make available additional supplies of foreign exchange, and (c) facilitate transfer of technology. The extent to which foreign aid can contribute to the development of the productive capacity of the country depends in the last analysis, on the judicious use of foreign aid; the effort and the total disposable resources of the recipient country. Besides, foreign aid creates growth potential far beyond the point where it is applied. The import of capital goods may release non-aid resources for increasing the current consumption while aid in terms of consumer goods may, in effect, help release domestic resources for capital formation. Therefore, it is difficult to assess the impact of aid precisely. Consequently we shall discuss the significance of the participation of aid in creating productive capacity.

1. ***Foreign aid has helped to raise the level of investment.*** The rate of investment has substantially increased from the annual level of over 10 per cent of the national income at the beginning of the First Plan to nearly 36 per cent of the national income by 2006-07. With this increase in the rate of investment the foreign exchange outlay had also to be correspondingly increased which was beyond the resources of the country. Ever since 1972-73, the country has faced serious foreign exchange crisis. But for aid, it would have been well nigh impossible for the country to tide over this difficulty. The situation has, however, improved during recent years and our foreign exchange reserves stood at $ 293 billion in January 2008.

2. ***Aid used to stabilise food prices and import raw materials.*** Of the total aid utilised, a significant proportion represented aid in kind or commodity, the bulk of which has been utilized to import foodgrains which played a significant role in stabilising foodgrain prices during 1960s. A part of the aid has been used to import raw materials or spare parts in short supply in the economy and this contributed substantially to increase in production in the country.

3. ***Aid used for the enlargement of irrigation and power potential.*** External assistance has contributed to the productive capacity of agriculture in a big way by enlarging the irrigation potential of the country. In the field of dairy and fishery, foreign aid has helped to modernize the technique of production. Foreign aid has, in a big way, helped enlarge power potential of the country. It has enabled the country to import machinery and equipment which has helped to increase the installed capacity in the country from 2.3 million K.W. in 1950 to 157 million K.W. in 2006-07.

4. ***Aid for improving transport.*** Transport absorbed large proportion of total utilized aid, i.e., 14 per cent, out of which 12 per cent has gone to the railways. It has played an important role in the renovation and modernisation of the railway transport and it has helped to increase the rolling stock and locomotives.

5. ***Aid used for building up steel industry.*** Foreign aid has played an important role in the creation of capacity in such a basic line of production as steel in the country. Over eighty per cent of the amount of aid utilized by manufacturing industry went into the expansion and creation of capacity in the steel industry. The necessary aid was received from West Germany, erstwhile U.S.S.R. and U.K.

6. ***Aid used to develop petro-chemical and electronics industry.*** India is making efforts to develop the complex of petro-chemical and electronics industries. The 'sunrise industries', as they are generally referred to, are the harbingers of new industrial revolution in the world. This cannot be accomplished without the help of foreign aid and Government is now making all-out efforts to modernize our industrial structure by entering into foreign collaborations.

7. *Aid used to enlarge technical resources.* External assistance has also helped to enlarge technical resources through: (a) the provision of expert services, (b) training of Indian personnel and (c) helping the establishment of new or the development of existing educational research and training institutions in the country. India has thus developed its technical manpower considerably and is in a position to export technical manpower in OPEC.

7. PROBLEMS OF FOREIGN AID

Political Pressure. Various difficulties and constraints arise as a result of foreign aid. The most serious of these problems is the heavy and continuing dependence of India on other countries, especially the U.S.A. There have been times when India has not been able to resist the pressure these donor countries have been exerting on the economic policies of India, not to speak of her foreign policy. American influence is seen in the shift in emphasis from capital goods to consumer goods industries, much greater reliance on private enterprise for industrial expansion, non-availability of foreign aid for public sector projects in manufacturing industry, greater resort to foreign private capital as the only means for securing foreign exchange for the rapid expansion of industries like the chemical fertilisers to which high priority is attached in India's development programme. The U.S. Government used stoppage of aid as a threat to the Indian Government in the Indo-Pakistan conflict in December 1971. More recently the U.S. Government decided in 1978 not to honour its agreement to supply nuclear fuel to Tarapur Atomic power plant. Forcing India to accepts Dunkel proposals is the most recent onslaught of USA on the Indian government.

Gross and Net Inflow of External Assistance

By deducting debt servicing from gross disbursements of external assistance during a certain period, we derive net inflow of external assistance. If the cumulative effect of debt servicing increases, a relatively smaller net proportion of gross aid will be available for the benefit of the economy.

Data given in table 10 reveals that during the Seventh Plan (1985-86 to 1989-90), gross aid utilised was of the order of ₹ 22,699 crores, but out of it ₹ 12,652 (i.e. 55.7 per cent of total) was utilised for debt servicing. Thus, net aid available for development was only ₹ 10,047 crores (44.3 per cent of total). During 1990-91 to 1995-96, the situation worsened still further and about 77 per cent of total aid utilised was made available for debt servicing and only 23 per cent of net aid was available for development. The cumulative effect of borrowing more and more became manifest during 1995-96, 1999-00 when net aid received became negative to the extent of about 6 per cent. It has further worsened during 2002-03 and 2003-04. The situation is a cause for serious concern for the country. During 2005-06, net aid became positive to the extent of ₹ 7,100 crores. Since then net aid has been positive (Table 10). This is a welcome relief.

Table 10: External Aid : Gross and Net

(₹ crores)

	Gross Aid Utilised	*Debt Servicing*	*Net Aid*
	(1)	(2)	(3 = 1 - 2)
Seventh Plan	22,699	12,652	10,047
(1985-86 to 1989-90)	(100.0)	(55.7)	(44.3)
19990-91 to 1994-95	52,024	39,880	12,044
	(100.0)	(76.8)	(23.2)
1995-96 to 1999-00	62,391	66,172	–3,781
	(20.0)	(106.1)	(–6.1)
2000-01	14,254	17,091	–2,837
2001-02	17,559	15,961	1,598
2002-03	15,737	34,366	–18,629
2003-04	17,353	31,813	–14,460
2004-05	17,083	12,822	+ 4,256
2005-06	18,831	12,015	+6,816
2006-07	19,288	13,433	5,855
2007-08	19,852	13,220	6,632
2008-09	26,925	15,939	10,985
2009-10	30,756	16,523	14,233
2010-11	38,304	16,871	21,433

Source : Compiled and computed from RBI, *Handbook of Statistics on Indian Economy (2010-11)*.

Uncertainty. Another difficulty is the uncertainty of the magnitude and character of foreign aid which is likely to become available over a period of time. Such an element of uncertainty stands in the way of perspective planning. Thus, an advance knowledge of the resources that are likely to become available through aid becomes important. If the donors could indicate the magnitude and character of aid on the basis of five-year periods, the planning programmes could be greatly facilitated.

Capacity to absorb Foreign Aid. The absorptive capacity of a country depends on a number of factors. For the optimum utiliation of aid, the projects must be efficiently executed. It is not basically a shortage of capital which retards the rate of industrial development in many countries but the shortage of good, well-developed projects is, in many cases, the limiting factor on economic growth. The most important factor which limits the absorptive capacity is the country's capacity to repay in future the loans currently contracted. The easy terms of repayment of loans may temporarily widen the limit of our absorptive capacity but that is no solution to the problem. Till the country reaches the stage of 'self-sustaining growth', its needs for larger volume of imports will ever grow. The problem becomes more serious in view of the fact that the country has not built large exportable potential. So the burden of repayment obligations becomes more acute.

Burden of Debt : During the Sixth Plan (1980-81 to 1984-85), total debt servicing aggregated to ₹ 4,809 crores, out of which 60 per cent was towards amortisation and 40 per cent towards interest payments. The snowballing effect of contracting more foreign aid became visible during the Seventh Plan (1985-86 to 1989-90) when debt servicing rose to ₹ 12,652 crores. But during Eighth Plan, (1992-93 to 1996-97), debt servicing skyrocketed to ₹ 53,536 crores, out of which 57 per cent represented amortisation and 43 per cent interest payments. The situation has worsered during and debt servicing has shot up to ₹ 74,635 crores the during the Ninth Plan. The situation worsened further during 2002-03 and 2005-06. By the year 2010-11, total debt service burden increased to ₹ 16,871 crore, thereby reducing the net aid inflow to ₹ 21,433 of gross aid of ₹ 38,304 crores.

To reduce the burden of repayment of foreign aid, a two-pronged drive may have to be made. Firstly, while seeking assistance, India should make agreements for external assistance with those nations and agencies which charge lower rates of interest and are prepared to liberalise their terms of trade so as to facilitate repayment; and secondly, the quantum of foreign assistance should be progressively reduced.

Table 11 : Debt Servicing Payments

(₹ crores)

	Amortisation	*Interest*	*Total*
Sixth Plan	2,906	1,903	4,809
(1980-81 to 1984-85)	(60.4)	(39.6)	(100.0)
Seventh Plan	7,166	5,486	12,652
(1985-86 to 1989-90)	(56.6)	(43.4)	(100.0)
1990-91 to 1991-92	5,979	4,959	10,938
	(54.7)	(45.3)	(100.0)
Eighth Plan	30,533	23,003	53,536
(1992-93 to 1996-97)	(57.0)	(43.0)	(100.0)
Ninth Plan	48,483	26,152	74,635
1997-98 and 2001-02	(65.0)	(35.0)	(100.0)
Tenth Plan	48,483	26,152	74,635
2002-03 and 2006-07	82,504	20,103	102,607
	(80.4)	(19.6)	(100.0)
2007-08	8,593	4,627	13,320
2008-09	11,087	4,852	15,939
2009-10	12,370	4,153	16,523
2010-11	13,103	3,768	16,871

Source : Compiled and computed from RBI, *Handbook of Statistics on Indian Economy (2011-12)*.

8. EXTENT OF EXTERNAL DEBT AND DEBT TRAP

A controversy had been going on in the country that the figures about the magnitude of external debt provided in the Official Economic Surveys of the Government of India varied significantly from the figures provided by the World Bank Debt Tables. There was also a marked difference between the figures provided by different international agencies like the OECD, Bank of International Settlement(BIS), IMF and Institute of International Finance (IIF). The main cause of the difference in the debt statistics was the difference in definitions adopted by the various agencies. There was divergence in the debt statistics compiled by the Goverment of India and the RBI as well.

To rationalise the external debt statistics, the Reserve Bank of India appointed a Task Force on External Debt Statistics of India which was later followed by the Report of the Policy Group. The RBI should be really commended for undertaking this exercise in an objective manner so as to bring transparency in the entire problem of external debt. The Reserve Bank of India Bulletin Supplement of November 1992 published the Report of the Policy Group and Task Force on External Debt Statistics. The Economic Survey of 1992-93 and later years, therefore, published data on external debt on the basis of the RBI methodology and thus streamlined the data on a scientific basis.

Magnitude of External Debt

Table 12 provides data pertaining to external debt and debt servicing. Data prior to 1988-89 is not strictly comparable with the period after 1988-89. The data prior to 1988-89 took into account only medium and long-term loans and excluded short-term loans. Critics feel that debts do not cease to be debts merely because they have to be paid in the short period. Logic, therefore, demands that such debts be included since they are an international liability and the country has to pay interest on short-term deposits no less than on long-term ones. The Task Force has, therefore, decided to include short-term debt in the estimation of total external debt. Secondly, deposits of non-resident Indians were also excluded. Since the deposits were also payable in foreign exchange, they should be treated like any other foreign loans, more so when they carry an interest burden of over $ 1 billion.

In 1980-81, India's external debt disbursed and outstanding inclusive of external commercial borrowings (including suppliers' credit) but exclusive of non-resident deposits stood at ₹ 19,470 crore. But the reclassification of external debt on the basis of revised definition suggested by the RBI Task Force resulted in placing external debut at ₹1,30,278 crore in 1989-90 and this figure rose to ₹ 1,63,001 crore in 1990-91 and further skyrocketed to ₹2,80,746 crore in 1992-93. By 2005-06, India's external debt reached a high figure of ₹ 5,64,591 crores.

The revised estimates of external debt have included the estimates of NRI & F.C.(B & O) Deposits which were not included in the earlier estimates. Since these deposits are quite substantial, they account for about 12 to 15 per cent of the total debt.

Secondly, in the earlier estimates, defence debt was not included since these figures were not made

available by the Government. In the revised estimates, defence debt figures have been included. Besides this, the civilian debt owed to the Russia has also been included. These of figures of external debt have been grouped under Rupee debt.

RBI has also revised the data of short term debt by including NRI deposits up to one-year maturity and Foreign Currency Deposits also upto one-year maturity and other trade related short-term debts of 6 months. As a result of the revisions made in the classification of debt as also by including NRI and FC Deposits, the debt estimates have become more comprehensive. This has also implications in terms of the growing burdens of external debt.

Table 12 :External Debt and Debt Servicing

	External Debt		*Debt GDP Ratio (%)*	*Debt Servicing as % of Current Receipts*
	As at the end of March			
	₹ crores	*US $ billion*		
1980-81	19,470	23.50	13.1	9.3
1989-90	1,30,278	75.86	26.7	30.9
1990-91	1,63,001	83.80	28.7	35.3
1991-92	2,52,910	85.28	38.7	30.2
1992-93	2,80,746	90.02	37.6	27.5
1993-94	290,418	92.70	33.8	25.6
1994-95	3,11,685	99.01	30.9	26.2
1995-96	3,20,728	93.73	27.1	24.3
1996-97	3,35,827	93.47	24.7	21.2
1997-98	3,69,684	93.53	24.4	19.0
1998-99	4,11,297	96.88	23.4	17.8
1999-00	4,28,555	98.26	21.9	16.2
2000-01	4,72,625	101.3	24.8	16.1
2001-02	4,82,328	98.8	23.2	15.4
2002-03	5,00,886	104.9	22.2	16.0
2003-04	4,91,078	111.6	19.3	15.9
2004-05	581,802	133.0	20.2	6.1
2005-06	6,16,144	138.1	17.2	10.1
2006-07	7,46,982	171.3	18.1	4.7
2007-08	8,97,955	224.6	19.0	4.8
2008-09	11,69,575	229.9	22.0	4.6
2009-10	11,79,096	261.0	18.0	5.5
2010-11	13,66,117	305.9	17.3	4.2

Source : Reserve Bank of India, *Handbook of Statistics on Indian Economy (2010-2011)* and *Economic Survey (2011-2012)*

Classification of External Debt

Table 13 provides data about the external debt liability on the basis of the refinements introduced in the estimates of the Task Force so as to make them more comprehensive. External assistance accounted for about 24.3% of total debt burden in 2010-2011 i.e. ₹ 3,32,611crore. Out of this multi-lateral assistance was of the order of 15.9% and bilateral assistance of the order of 8.5 per cent. The share of Commercial Borrowing increased in absolute terms from ₹ 19,727 crore in 1990-91 to ₹ 3,94,070 crore in 2010-2011, and in relative terms, it went up from 12 to 28.8 per cent. Export credits have continued to be around 4-7 per cent between 1990-91 to 2010-11 and was ₹ 83,167 in 2011-12. The share of NRI and Foreign Currency Deposits has risen in absolute terms from ₹ 20,030 crore in 1990-91 to ₹ 2,30,813 crores in 2010-11. It may be mentioned that the Commercial Borrowings bear a relatively higher rate of interest and thus impose a higher service burden. The same is true of NRI deposits which are a kind of hot money and intend to reap the advantage of higher rates of interest in India, since interest rates in developed countries are far lower. There is a decline in Rupee debt in relative terms from 15.5 per cent in 1990-91 to 0.5 per cent in 2010-11.

Taking all these components together, it may be stated that total long-term debt has indicated a tendency to decline from 90 per cent in 1990-91 to 78.8 per cent in 2010-11. This implies a tendency of the short-term debt to rise from 10 per cent in 1990-91 to 21.2 per cent in 2010-2011.

A significant part of the external assistance is in the form of Government Borrowing which accounted for 37.7 per cent of the total debt in 1990-91 but declined to 19.8 per cent in 2010-11. But a redeeming feature of the Government Borrowing is that out of it, concessional debt accounted for 46 per cent in 1990-91 and its share declined about 15.0 per cent in 2010-2011. The fact that nearly 15.0% of the total external debt was in the form of concessional debt indicates that this exerts an over-all salutory effect in reducing the service burden in the form of interest payments.

Table 12 provides data about the growth of India's external debt from 1990-91 to 2010-11 — the period of intensive economic reforms. The data reveal that in dollar terms, India's external debt rose from US $ 83.8 billion in 1990-91 to US $ 305.9 billion in 2010-2011 indicating a growth rate of 6.7 per cent per annum. But figures of external debt in dollar terms really conceal the burden of debt, since the exchange rate between US dollar and Rupee had also deteriorated from ₹ 17.94 in 1990-91 to ₹ 45 in 2010-2011. Consequently, in rupee terms, India's external debt rose from ₹ 1,63,000 crores in 1990-91 to ₹ 13,66,117 crores in 2010-2011, indicating a growth rate of 11.2 per cent per annum. This wide difference between the growth rate of India's external debt in dollar and rupee terms highlights the actual burden of debt. Whereas India's external debt rose by 6.7 per cent in dollar terms between 1990-91 and 2010-11, it rose by 11.2 per cent in rupee terms during the same period.

India's external debt, as a percentage of Gross Domestic Product (GDP) at current market prices, rose sharply from 26.7 per cent in 1989-90 to a peak of 37.6 per cent in 1992-93. But the ratio declined to 30.9 per cent in 1993-94 and there was a sharp drop to 17.3 per cent in 2010-2011.

Status of India's External Debt

India's external debt was recorded, at U S $ 305.9 billion at end-March 2011. The Ministry of Finance has

TABLE 13 : Classification of India's External Debt

₹ crores as on March 31

	1991	1995	2000	2002	2006	2009	2010	2011
I. External Assistance	67,764	1,53,508	216,410	230,395	2,15,805	3,06,387	2,94,861	3,32,611
	(41.6)	(49.3)	(50.5)	(47.8)	(35.0)	(26.2)	(24.9)	(24.3)
a. Multilateral	40,386	89,819	137,132	155,633	1,45,503	2,01,565	1,92,875	2,16,628
	(24.8)	(28.8)	(32.0)	(32.3)	(23.6)	(17.2)	(16.3)	(15.9)
b. Bilateral	27,378	63,761	79,278	74,762	70,302	1,04,822	1,01,986	1,15,983
	(16.8)	(20.5)	(18.5)	(15.5)	(11.4)	(9.0)	(8.6)	(8.5)
II. IMF	5,132	13,545	113	0	0	0	27,264	28,163
	(3.1)	(4.3)	—	—	—	(0.0)	(2.3)	(2.1)
III. Export Credit	8,374	20,876	29,564	26,110	24,312	74,400	76,179	83,167
	(5.1)	(6.7)	(6.9)	(5.4)	(3.9)	(6.4)	(6.5)	(6.1)
IV. Commercial Borrowing	19,727	40,915	86,963	113,908	1,17,825	3,19,302	3,20,395	3,94,070
	(12.1)	(13.1)	(20.3)	(23.6)	(19.1)	(27.3)	(27.2)	(28.8)
V. NRI & FC (B & O) Deposits	20,030	39,006	59,137	83,712	1,61,834	2,10,118	2,17,061	2,30,813
	(12.3)	(12.5)	(13.8)	(17.4)	(26.2)	(18.0)	(18.4)	(16.9)
VI. Rupee Debt*	25,199	30,315	19,218	14,807	9,064	7,779	7,481	7,147
	(15.5)	(9.7)	(4.5)	(3.1)	(1.5)	(0.7)	(0.6)	(0.5)
VII. Total Long-Term Debt (I to VI)	**1,46,226**	**2,98,237**	**4,11,405**	**468,932**	**5,28,840**	**9,18,046**	**9,43,243**	**10,75,970**
	(89.7)	**(95.7)**	**(96.5)**	**(97.2)**	**(85.8)**	**(78.5)**	**(80.0)**	**(78.8)**
VIII. Short-Term Debt	16,775	13,448	17,150	13,396	87,287	2,51,529	2,36,830	2,90,147
	(10.3)	((4.3)	(4.0)	(2.8)	(14.2)	(21.5)	(20.0)	(21.2)
Grand Total (VII + VIII)	**1,63,001**	**3,11,685**	**4,28,555**	**482,328**	**6,16,127**	**11,69,575**	**11,80,073**	**(13,66,117)**
	(100.0)	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**
Out of which								
Government Borrowing	61,493	1,35,188	1,81,241	194,325	1,88,393	2,56,659	2,42,293	2,71,119
	(37.7)	(43.3)	(42.3)	(40.2)	(30.6)	(21.9)	(20.5)	(19.8)
Concessional Debt	74,627	1,41,139	1,66,671	173,287	1,67,269	2,05,695	1,87,629	2,05,546
	(45.8)	(45.2)	(38.9)	(35.9)	(27.1)	(17.6)	(16.8)	(15.0)

Note: FC (B&O) deposits denote Foreign Currency (Banks & Others) deposits R : Revised.

* Debt owed to Russia denominated in Rupees and payable in exports.

Source: Compiled and computed from Ministry of Finance, *India's External Debt—A Status Report*, December 1995 and RBI, *Handbook of Statistics on Indian Economy* (2010-11) and *Economic Survey* (2011-12).

highlighted the trend of key debt indicators as given in Table 12 and Table 13:

1. Debt Service as a proportion of current receipts, which reached a peak of 35.3 per cent in 1990-91, came down steadily to 4.2 per cent in 2010-11. This is a healthy trend which needs to be strengthened.

2. Debt-GDP (Gross Domestic Product) Ratio – another key indicator of debt burden, measuring the size of the debt in relation to domestic output also indicated improvement from the peak of 38.7 per cent in 1991-92 to 17.3 per cent in 2010-11. This also indicates better debt management by India.

3. India's short-term debt (with an original maturity of up to one year) was at a high level of U S $ 16.8 billion at end-March 1991–10.3 per cent of total debt. The short-term debt was to $ 26.2 billion at the end of March 2007 – 15.5 per cent to total debt. Unfrotunately by 2011, it again increased to 21.2 percent.

Evidence is strong that such countries in which investor confidence is on the decline are forced to depend on short-term debt to finance their balance of payments difficulties. Experience the world over, more especially at a time of the East Asian crisis suggests that such countries which had accumulated a very high proportion of short-term debt became the victims of the crisis as investor confidence evaporated and there was rapid withdrawal of short-term capital. According to *World Development Indicators* (2006), even in 2004, short-term debt constituted $ 36.2 billion out of a total debt of $ 140.6 billion (24.4%) in the case of Indonesia, $ 11.5 billion out of a total of $51.3 billion (22.4%) in the case of Thailand and $ 11.4 billion out of a total of $ 52.1 billion (20.7%) in the case of Malaysia. These countries were very vulnerable because the strength of their economies rested on weak foundation of short-term debt, which could take to easy flight in times of crisis. In that sense, the Indian economy appears to be moving in the danger zone to tide over balance of payments difficulties.

4. The increase in India's debt stock at $ 305.9 billion at end-March 2011 as against $ 101.1 billion at

end-March 1999, indicates an increase of $ 204.8 billion which is disturbing.

Analysing the different components of debt stock, it may be mentioned that at end-March 2011, multi-lateral debt was 15.9 per cent of the total external debt. The share of bilateral debt (excluding Rupee Debt) in total external debt declined from 20.5 per cent at end-March 1996 to 8.5 per cent at end-March 2010.

The share of total Government debt, which includes multi-lateral, bilateral, IMF and Rupee debt reached a peak of 43.3 per cent in the end of March 1995, and thereafter, declined to 19.8 per cent at end-March 2011. This implies that the share of private creditors in the total external debt has begun to gradually rise after March 1995.

Another important development is the decline in the proportion of concessional debt form 45 per cent in 1994-95 to 15.0 per cent at end-March 2011. This implies that the share of non-concessional debt has begun to increase after March 1995. This will result in higher interest burden in future.

The Status Report in the concluding section mentions: The improvement in India's external indebtedness in recent years was not by "default but by design". This has been made possible through "a conscious debt management policy that emphasises sustaining a high growth rate of exports, keeping the maturity structure as well as the total amount of commercial debt under manageable limits, prioritizing the use of commercial credit and encouraging foreign investment."

Assessment of the Position on India's External Debt

There is no doubt that India has been able to manage its external debt within reasonable limits. Improvement in key debt indicators such as debt to GDP ratio, and debt service to current receipts ratio are really encouraging and in this sense the Government deserves a word of appreciation for the achievement that it has not allowed the East Asian crisis and the global contagion to affect the Indian economy.

However, there are several disturbing elements in the Indian economic situation. Firstly, whereas during 1997-98, exports were of the order of U S $ 35.68 billion indicating a small increase in 4.6 per cent, the situation worsened during 1998-99 and export reached a level of S $ 34.3 billion, showing a negative increase of 5.1 per cent. This trend has now been reversed and Indian exports touched $ 110.9 billion in 2005-07 which is really creditable.

Secondly, as a consequence of the decline in the share of official debt in total debt, the share of the private creditors has begun to rise after March 1995. Similarly, decline in the share of concessional debt has increased the proportion of non-concessional debt in total debt. Both these developments are likely to increase interest burden in the coming years. This trend should be restrained. It would be prudent to take steps well in time so that in the next five years the burden of external debt does not mount further.

C. P. Chandrasekhar and Jayati Ghosh in their article Inda's external debt: Are we out of the woods yet? (*Business Line*, June 15, 1999) raised two issues. In their opinion, it would be more appropriate to take two more indicators viz., debt to exports ratio and the ratio of short-term capital to foreign exchange reserves. The use of debt to current receipts according to these authors conceals certain weaknesses. For instance, value of remittance inflows in the balance of payments have already reached a high level of $ 8.1 billion in 1994-95 and further picked up to $ 20.65 billion in 2004-05. A bulk of these remittances are transfer payments from Indians living and working abroad. It is quite possible that these inflows may not be sustained. Chandrasekhar and Jayati Ghosh argue: "There is also no reason to expect that the high rates of growth in remittances seen in recent years would definitely be sustained." In view of the uncertainty of maintaining high level of current receipts, the authors have argued for preferring debt to export ratio as a more appropriate indicator. During 1997-98, debt service ratio with respect to current receipts was 19.8 per cent, but debt-service ratio with reference to exports was 33.6 per cent. However, there is a marked improvement in debt - service ratio with respect to exports. India's debt service burden in 2005-06 was $ 12.9 billion, but exports reached a high level of $ 64.72 billion. In other words, debt service ratio with respect to exports came down sharply to 12.5 per cent.

Table 14 : Ratio of Liquid Foreign Capital to Foreign Exchange Reserves

Year	*Per cent*
1993	292.4
1994	168.5
1995	152.9
1996	179.8
1997	168.8
1998	167.9
2005	149.9

Source: *RBI Bulletin* April 2006

Secondly, besides short-term debt, there are other forms of liquid capital, which can also exit in one year. If we define all liquid capital flows as those which can exit in a year, then we include in them besides short term debt,

portfolio investment, NRI deposits, trade credits and maturing long-term debt. During 1994-95 and 1998-99 the ratio of liquid foreign capital to foreign exchange reserves has fluctuated in the narrow rage of 150-170 per cent. In a period of crisis, not only short-term debt, but other components of liquid foreign capital, which are of a similar nature as short-term debt, also get affected. It is in this sense that the Indian economy can become vulnerable. Obviously, there is a need to exercise abundant caution in this regard. Indian economy has, therefore, to depend more of direct foreign investment and such other forms of long term capital inflows to insulate itself from external shocks. This is the lesson of the experience of East Asian economies, which appeared to have strong "fundamentals", but did not in reality stand on solid foundations.

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CHAPTER

23

POVERTY AND THE PLANNING PROCESS IN INDIA

In human society too much wealth or too much poverty is a great impediment to the higher development of the soul. It is from the middle classes that the great ones of the world come. Here the forces are very equally adjusted and balanced.

— Vivekananda

"A country of dazzling prosperity is also a country of dehumanizing poverty."

— Sonia Gandhi

at the India Economic Summit

We can't live happily as islands in a sea of poverty.

— M.S. Swaminathan

1. THE CONCEPT OF POVERTY

Poverty can be defined as a social phenomenon in which a section of the society is unable to fulfil even its basic necessities of life. When a substantial segment of a society is deprived of the minimum level of living and continues at a bare subsistence level, that society is said to be plagued with mass poverty. The countries of the third world exhibit invariably the existence of mass poverty, although pockets of poverty exist even in the developed countries of Europe and America.

Attempts have been made in all societies to define poverty, but all of them are conditioned by the vision of minimum or good life obtaining in society. For instance, the concept of poverty in the U.S.A. would be significantly different from that in India because the average person is able to afford a much higher level of living in the United States. There is an effort in all definitions of poverty to approach the average level of living in a society and as such these definitions reflect the existence of inequalities in a society and the extent to which different societies are prepared to tolerate them. For instance, *in India, the generally accepted definition of poverty emphasises minimum level of living rather than a reasonable level of living*. This attitude is borne out of a realization that it would not be possible to provide even a minimum quantum of basic needs for some decades and, therefore, to talk about a reasonable level of living or good life may appear to be wishful thinking at the present stage. Thus, political considerations enter the definitions of poverty because programmes of alleviating poverty may become prohibitive as the vision of a good life widens. The upshot of the entire argument is that the absolute standard of poverty expressed in terms of minimum requirements of cereals, pulses, milk, vegetables, butter or calorie intake is conditioned by the relative levels of living prevalent in the country. The deprivation of a significant section of the society of minimum basic needs in the face of a luxurious life for the elite classes, makes poverty more glaring.

Two types of standards are common in economic literature : the absolute and the relative. In the absolute standard, minimum physical quantities of cereals, pulses, milk, butter, etc. are determined for a subsistence level and then the price quotations convert into monetary terms the physical quantities. Aggregating all the quantities included, a figure expressing per capita consumer expenditure is

determined. The population whose level of income (or expenditure) is below the figure, is considered to be below the poverty line. According to the relative standard, income distribution of the population in different fractile groups is estimated and a comparison of the levels of living of the top 5 to 10 per cent with the bottom 5 to 10 per cent of the population reflects the relative standards of poverty. The defect of the latter approach is that it indicates the relative position of different segments of the population in the income hierarchy. Even in affluent societies, such pockets of poverty exist. But for underdeveloped countries, it is the existence of mass poverty that is the cause for concern.

2. STUDIES OF POVERTY IN INDIA

Several economists and organisations have conducted studies on the extent of poverty in India. It would be worthwhile to study some of the important estimates.

Ojha's Estimate of Poverty

Mr. P.D. Ojha estimated the number of persons below the poverty line on the basis of an average calorie intake of 2,250 per capita per day. This entailed monthly per capita consumption expenditure of ₹ 15-18 (1960-61 prices) in urban areas and of ₹ 8-11 in rural areas. On this basis, Ojha estimated that 184 million persons in the rural areas (51.8 per cent of total rural population) and 6 million persons in the urban areas (7.5 per cent of urban population) lived below the poverty line. For the country as a whole, 190 million persons (44 per cent of total population) could be classed as poor in 1960-61.

For 1967-68, Ojha estimated that 289 million persons (70 per cent of the rural population) lived below poverty line. Ojha, therefore, concluded : "Compared to 1960-61, the nutritional deficiency in rural areas widened considerably in 1967-68. As compared to only 52 per cent of the rural population in 1960-61, 70 per cent of the population in 1967-68 was found to be below the poverty level."[1]

Dandekar and Rath's study of Poverty in India

Dr. V.M. Dandekar and Mr. Nilkantha Rath computed the value of the diet with 2,250 calories as the minimum level of nutrition. They suggested that whereas the Planning Commission accepts ₹ 20 per capita per month (or ₹ 240 per annum) as the minimum acceptable standard, it would not be fair to use this figure for both the urban and the rural areas. Dandekar and Rath, therefore, suggested somewhat lower minimum for rural population, i.e., ₹ 180 per capita per annum and a somewhat higher minimum ₹ 270 per capita per annum for the urban population at 1960-61 prices. However, at 1968-69 prices, the corresponding figures for the rural and urban population work out to be ₹ 324 and ₹ 486 per capita per annum respectively. Interpolating at this basis Dandekar and Rath estimated that in 1968-69 about 40 per cent of the rural population (i.e., 166 million) and a little more than 50 per cent of the urban population (i.e., 49 million) lived below the poverty line. The total number of persons living below the poverty line showed an increase from 177 million in 1960-61 to 216 million in 1968-69, but there was no change in the percentage of rural and urban poor to the population in the two years—it stood at 41 per cent.

Minhas' Study of Rural Poor

Another estimate made by B.S. Minhas on the basis of NSS data revealed that if one regards the level of per capita annual consumption expenditure of ₹ 240 as the bare minimum, then 50.6 per cent of the population lived below the poverty line in 1967-68. During the period 1956-57 and 1967-68, the proportion below the poverty line among the rural poor seems to have fallen in good harvest years but shot up again in bad harvest years. However, there has been a steady decline in the proportion of people below the poverty line, i.e., from 65 per cent in 1956-57 to 50.6 per cent in 1967-68. In other words, we had around 210 million poor people in rural areas in 1967-68, and the corresponding number in the earlier years varied between 206 and 221 million.

Bardhan's Study of Rural Poor

Dr. P.K. Bardhan questioned the validity of the GNP deflator used by Dr. B.S. Minhas in his study. Bardhan suggested the use of agricultural labour price index as a more suitable deflator. His main argument was that the national income deflator covers both the agricultural and manufactured commodities and as such it is very likely to understate the rise in prices paid by the rural poor because the budget of the poor in the rural areas includes a much smaller proportion of the manufactures than the national average. Bardhan considered ₹ 15 at 1960-61 prices to be the national minimum as it was a conservative approximation to the minimum standard fixed by the Planning Commission's Study. Bardhan's study brought out the conclusion the percentage of rural people below the poverty line as defined above has gone up from 38 per cent in 1960-61 to 54 per cent in 1968-69.

Montek Ahluwalia's study of Rural Poverty (1977)

Montek Ahluwalia studied the trends in incidence of rural poverty in India for the period 1956-57 to

[1] P.D. Ojha, A Configuration of Indian Poverty—Inequality and Levels of Living, *Challenge of Poverty in India*, p. 40

1973-74. He used the same concept of poverty line i.e., an expenditure level of ₹ 15 in 1960-61 prices for rural areas and ₹ 20 per person for urban areas. He mentioned: "this line has a well-established pedigree in the Indian literature . . . However, it is important to emphasise that attempts to interpret this line as guaranteeing nutritional minimum could be seriously misleading. Suffice to say that this level of expenditure represents an extremely low level of living and one that has been widely accepted as 'minimum level' in the policy debate."

The most important feature of Montek Ahluwalia's study is the marked fluctuation over time in the extent or incidence of rural poverty. The proportion of rural poverty declined initially from over 50 per cent in the mid-fifties to around 40 per cent in 1960-61, rose sharply through the mid-sixties, reaching a peak in 1967-68, and then declined again. He, therefore, concludes : "The Indian experience over the past two decades cannot be characterised as showing a trend increase in the incidence of poverty in India as a whole . . . *In general, the time series shows a pattern of fluctuation with the incidence of poverty falling in periods of good agricultural performance and rising in periods of poor performance.*"[2]

Table 1 : Percentage and number of persons living in poverty : Rural India

	Size of Poverty population (millions)		*Percentage of rural population in poverty*	
	Ahluwalia	*Minhas*	*Ahluwalia*	*Minhas*
1956-57	181	215	54.1	65.0
1957-58	171	212	50.2	63.2
1960-61	141	211	38.9	59.4
1961-62	146	206	39.4	56.4
1963-64	171	221	44.5	57.8
1964-65	184	202	46.8	51.6
1967-68	235	210	56.5	50.5
1968-69	217		51.0	
1970-71	210		47.5	
1973-74	241		46.1	

Source: Compiled from M. Ahluwalia, *The Journal of Development Studies* (1977) and B.S. Minhas, *Planning and the Poor.*

The all-India evidence reveals that the incidence of rural poverty is inversely related to agricultural performance measured in terms of agricultural NDP per rural person. In other words, rising agricultural productivity per person tends to reduce incidence of poverty. There is, therefore, some evidence of 'trickle down' associated with growth. State level evidence further indicates that even if trickle-down processes do exist in the rural economy, they may not reach all the way down to the very poor. "It has long been recognised," says Ahluwalia, "that for such groups, poverty alleviation will require special programmes of assistance and support and not merely a general improvement in productivity."

Poverty Line and Poverty Gap — Study by Gaurav Datt & Martin Ravallion

Gaurav Datt and Martin Ravallion in their paper "*Regional Disparities, Targeting and Poverty in India*" (1989) developed the concept of poverty gap along with the poverty line. The authors have also used ₹ 89 as the poverty line. Since all NSS data on consumption expenditure are in current local prices, the study has used

Table 2 : Poverty in India 1983

Poverty line = ₹89.

State	*Urban*		*Rural*		*Total*	
	Po	P1	Po	P1	Po	P1
Andhra Pradesh	30.81	7.49	30.32	7.20	30.44	7.2[illegible]
Assam	34.29	7.34	42.44	8.44	41.58	8.3[illegible]
Bihar	49.28	14.58	62.48	19.10	60.76	18.5[illegible]
Gujarat	40.05	8.79	44.43	10.28	43.04	9.[illegible]
Haryana	26.93	5.93	20.14	3.86	21.69	4.[illegible]
Himachal Pradesh	17.58	3.89	29.79	5.77	28.85	5.6[illegible]
Jammu & Kashmir	39.78	7.73	14.00	1.87	19.56	3.[illegible]
Karnataka	38.61	11.33	47.88	14.53	45.11	13.5[illegible]
Kerala	37.76	10.42	39.07	9.85	38.82	9.[illegible]
Madhaya Pradesh	42.06	10.41	41.71	11.01	41.78	10.[illegible]
Maharashtra	38.82	11.68	50.71	14.70	46.45	13.[illegible]
Manipur	31.79	6.91	30.56	5.53	30.93	5.[illegible]
Meghalaya	11.09	1.72	44.79	14.23	38.44	11.[illegible]
Orissa	37.29	9.24	57.74	17.79	55.16	16.[illegible]
Punjab	30.96	7.51	14.72	2.51	19.35	3.[illegible]
Rajasthan	37.90	9.83	32.37	8.45	33.58	8.[illegible]
Tamil Nadu	46.80	14.21	54.06	17.52	51.63	16.[illegible]
Tripura	32.39	8.38	35.33	7.68	35.01	7.[illegible]
Uttar Pradesh	44.19	12.17	40.85	10.58	41.48	10.[illegible]
West Bengal	40.82	11.56	59.34	20.39	54.37	18.[illegible]
All India	40.03	10.94	45.07	12.70	43.90	12.[illegible]
Population-weighted co-efficent of variation	13.46	20.47	26.92	38.21	23.05	35.[illegible]

Note: 1. All poverty measures are expressed as percentages.
2. Po expresses the percentage of population below the poverty line to the corresponding total population.
3. P1 (poverty gap) = Po.G where $G = \frac{Z-Y}{Z}$ when Z represents the poverty line and Y represents the average consumption expenditure of poor in each state.

Source: Gaurav Datt & Martin Ravallion, *Regional Disparities, Targeting and Poverty in India* (1989), World Bank Paper W.P.S. 375, p. 37.

2. Montek Ahluwalia, Rural Poverty and Agricultural Performance in India, *The Journal of Development Studies* (1977), p. 319.

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Poverty line = ₹

	Rural		Total	
P1	Po	P1	Po	P1
.49	30.32	7.20	30.44	7.2
34	42.44	8.44	41.58	8.3
58	62.48	19.10	60.76	18.5
79	44.43	10.28	43.04	9.8
93	20.14	3.86	21.69	4.2
89	29.79	5.77	28.85	5.4
73	14.00	1.87	19.56	3.4
33	47.88	14.53	45.11	13.5
42	39.07	9.85	38.82	9.9
41	41.71	11.01	41.78	10.8
68	50.71	14.70	46.45	13.4
91	30.56	5.53	30.93	5.9
72	44.79	14.23	38.44	11.4
24	57.74	17.79	55.16	16.7
51	14.72	2.51	19.35	3.9
83	32.37	8.45	33.58	8.7
21	54.06	17.52	51.63	16.4
38	35.33	7.68	35.01	7.7
17	40.85	10.58	41.48	10.9
56	59.34	20.39	54.37	18.0
94	45.07	12.70	43.90	12.2
47	26.92	38.21	23.05	33.4

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and interstate price relatives (ratio of rural prices in a state to all-India prices) for 1973-74 constructed by Bhattacharya updated to 1983 using Consumer Price Index for Agricultural Labourers as the rural price deflator. Similarly, Consumer Price Index for Industrial workers has been used to update the interstate price relatives for urban areas. According to this study, 43.9 per cent of the population was below the poverty line — 40% of the urban population and 45 per cent of the rural population was reckoned as poor in 1983. (Refer table 4).

In addition to this, the paper measured poverty gap as the distance from the poverty line of average consumption expenditure of the poor in each state as a proportion of the national poverty line. The weighted co-efficient of variation reveals that poverty gap (P1) is relatively greater in rural areas than in urban areas. This would imply that measures for alleviation of poverty should be so designed that the focus of their benefit is rural poor. To remove severe poverty, greater effort needs to be made in the rural areas so that though a very large percentage may not cross the poverty line, but a definite dent be made on reducing the intensity of poverty.

Minhas et. al. Study of Incidence of Poverty in India (1991)

B. S. Minhas, L. R. Jain and S. D. Tendulkar made a study of incidence of poverty for the period 1970-71 to 1987-88 with the help of NSS data, using adjusted price indices of the consumer price index series for agricultural labourers (CPIAL) for rural areas and the combined price indices data of consumer price index for industrial workers (CPIIW) and for non-manual employees (CPINM) for urban areas. The data have been processed for 20 states and on that basis, the all-India Headcount Ratios of the poor have been computed and the inter-state variations have been worked out. The study revealed the following:

(i) The incidence of poverty in rural India declined from 58.8 per cent in 1970-71 to 50.8 per cent in 1983 and further to 48.7 per cent in 1987-88. In the urban sector, the corresponding decline in the incidence of poverty was from 46.2 per cent in 1970-71 to 39.7 per cent in 1983 and to 37.8 per cent in 1987-88. For rural and urban India taken together, the incidence of poverty declined from 56.5 per cent in 1970-71 to 48.1 per cent in 1983 and further to 45.9 per cent in 1987-88.

(ii) The absolute numbers of the rural poor rose from 258 million in 1970-71 to 284 million in 1987-88. In urban India, the numbers of the poor rose from 50 million in 1970-71 to 77 million in 1987-88. For the Indian union as a whole, the population in poverty grew from 308 million in 1970-71 to 361 million in 1987-88.

Table 3 : All-India Estimate of Poverty Incidence

	Year	Percentage of people below the poverty line		
		Rural	Urban	Combined (R and U)
1. Minhas et al with appropriate price adjustment	1970-71	57.3	45.9	55.1
	1983	49.0	38.3	46.5
	1987-88	44.9	36.5	42.7
2. Planning Commission	1983	40.4	28.1	37.4
	1987-88	32.7	19.4	29.2

Source: *Economic and Political Weekly*, July 6-13, 1991.

(iii) For India as a whole, the population of the poor grew at the annual rate of about 0.9 per cent between 1970-71 and 1987-88, which may be compared with the overall growth rate of population of around 2.2 per cent since 1971. This implies that development and poverty alleviation programmes did have a healthy effect in reducing the growth rate of the population of the poor.

Planning Commission Expert Group Report (1993)

The Planning Commission constituted in September 1989 an 'Expert Group' to consider methodological and computational aspects of estimation of proportion and number of poor in India. Prof. D.T. Lakdawala was the Chairman of the Expert Group. The Report of the Expert Group was submitted in July 1993.

Taking into account various considerations, the Expert Group recommended the following criteria for determining the Poverty Line:

1. The Poverty Line recommended by the Task Force on projection of minimum needs and effective consumption demand, namely a monthly per capita total expenditure of ₹ 49.09 (rural) and ₹ 56.64 (urban) rounded respectively to ₹ 49 and ₹ 57 at all-India level at 1973-74 prices be adopted as the base line. This was anchored in the recommended per capita daily intake of 2,400 calories in rural areas with reference to the consumption pattern as obtained in 1973-74. The Expert group recommended that these norms may be adopted uniformly for all states.

2. Regarding the choice of the base year, the Expert group was of the opinion that since much systematic work has already been done with the base 1973-74, this base year may be continued for estimating the poverty line.

3. For estimating state specific poverty lines, the standardised commodity basket corresponding to poverty line at the national level should be valued at the prices in each state in the base year, i.e. 1973-74. For udating poverty line to the current prices in a year, there is a need to generate State-specific consumer price index. For this purpose, the consumer price index for the agricultural labourers (rural) and the consumer price index for industrial

workers and non-manual employees (urban) should be used. Since prices vary between States and periods, the procedure calls for price adjustments for interstate variations in the base year and State-specific price movements over time.

4. For the choice of the deflator, the Expert Group came to the conclusion that it would be most suitable to rely on the disaggregated commodity indices for Consumer Price Index for Agricultural Labourers (CPIAL) to update the rural poverty line and a simple average of suitably weighted commodity indices of consumer price index for industrial workers (CPIIW) and consumer price index of non-manual employees (CPINM) for updating the poverty line.

The Expert Group estimated the proportion and number of the poor below the poverty line at four points covering the 14-year period 1973-74 to 1987-88. The norms for determining poverty line are given below:

Since these estimates covering a period of 14 years are based on the same methodology, they are comparable. These estimates reveal that rural poverty ratio has declined from 56.4 per cent in 1973-74 to 39.1 per cent in 1987-88. As compared with this, there is a relatively smaller decline in the urban poverty ratio which has come down from 49.2 per cent in 1973-74 to 40.1 per cent in 1987-88. The overall poverty ratio has, therefore, declined from 54.9 per cent in 1973-74 to 39.3 per cent in 1987-88. This implies that during the 14-year period, poverty ratio has declined by 15.6 points in percentage terms, or an annual average decline of about 1.2 per cent.

Secondly, an important revelation of the study is that for the first time, the urban poverty ratio has been estimated to be higher than rural poverty ratio. In absolute terms, the number of urban poor has risen from 60.3 million in 1973-74 to 83.3 million in 1987-88 — an increase of 20 million. This is an indicator of the growing urbanisation. It also underlines the fact that on account of non-availability of employment due to inadequate expansion of jobs in rural areas, the poor are pushed into the urban areas for search of employment. It implies that *the overflow of the rural poor to the urban areas with increasing urbanization is the principal factor accounting for an increase in urban poverty.*

TABLE 4: Poverty Lines with base 1973-74 (₹ per capita per month)

Year	*Rural*	*Urban*
1973-74	49.09	56.96
1977-78	56.84	72.50
1983	89.45	117.64
1987-88	115.43	165.58

SOURCE: Planning Commission (1993): *Report of the Expert Group on Estimation of Proportion and Number of Poor*, p. 36

Thirdly, the population of the rural poor which was 261 million in 1973-74 rose to 264 million in 1977-78, but thereafter, the number of the rural poor started declining and was 229 million in 1987-88. This is a healthy development.

Fourthly, five states viz., Uttar Pradesh, Bihar, Maharashtra, West Bengal and Madhya Pradesh account for 181.4 million poor in 1987-88. In relative terms, 59 per cent of the total poor in India reside in these five states. This indicates concentration of the bulk of the poor in these states.

TABLE 5 : Population below the poverty line

	In millions			*Percentage of total population*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
1973-74	261.3	60.3	321.6	56.4	49.2	54.9
1977-78	264.3	67.7	332.0	53.1	47.4	51.8
1983	251.7	75.3	327.0	45.6	42.2	44.8
1987-88	229.4	83.3	312.7	39.1	40.1	39.3

SOURCE: Compiled from the Planning Commission (1993): *Report of the Expert Group on Estimation of Proportion and Number of Poor*

Fifthly, although generally there is a decline in the number of poor but unfortunately, during 1973-74 and 1987-88, there is an absolute increase in the number of poor in Orissa, Bihar, Maharashtra, Assam and Uttar Pradesh. A very distressing fact is that the number of poor in Bihar has increased from 37 million to 44 million during the 14-year period, signifying an increase by 7 million. This is an indicator of growing pauperisation in Bihar and is the cause for serious concern.

Sixthly, the states in which poverty ratio is higher than the all-India figure in 1987-88 are: Orissa (55.6%), Bihar (53.4%), Tamil Nadu (45.1%), West Bengal (44%), Madhya Pradesh (43.4%) and Uttar Pradesh (42%). As against them, the States which have achieved heavy reduction in poverty are Gujarat, Kerala, Andhra Pradesh, Haryana and Panjab.

Lastly, a comparison of the reduction in poverty ratios during 1973-74 and 1987-88 among the major states of India reveals that whereas at the all-India level poverty reduction of the order of 15.6 per cent could be achieved during the 14-year period, there is a wide divergence noticed among the various states. On the one extreme, we observe Bihar to have realised a poverty reduction of the order of 8.4 per cent only and on the other, Kerala achieved a poverty reduction of the order of 27.6 per cent. Obviously, poverty eradication programmes and general economic development that occurred in various states resulted in wide variations in poverty reduction in various states.

Table 6. Alternative Estimates of Poverty in India

Million Persons

Author (1)	Year (2)	Rural (3)	Urban (4)	Total (5)	Criterion of Poverty line (6)
P.D. Ojha	1960-61	184 (51.6)	6 (7.6)	190 (44.0)	Rural Monthly per capita consumption of ₹ 15-18 (1960-61 prices), Urban Monthly per capita consumption of ₹ 8-11.
	1967-78	289 (70.0)			*Monthly per capita consumption expenditure*
P.K. Bardhan	1960-61	131 (38.0)			₹ 15 at 1960-61 prices using Agricultural Labour Price Index
	1967-68	221 (53.0)			
B.S. Minhas	1956-57	181 (65.0)			₹ 20 at 1960-61 prices
	1963-64	221 (57.8)			
	1969-70	210 (50.6)			
M. Ahluwalia	1956-57	181 (54.1)			₹ 15 at 1960-61 prices for rural areas and ₹ 20 for urban areas.
	1963-64	171 (44.5)			
	1967-68	235 (56.5)			
	1973-74	241 (46.1)			
Dandekar & Rath	1960-61	135 (40.0)	42 (50.0)	177 (41.0)	₹ 15 at 19600-61 prices for rural areas and ₹ 22.5 for urban areas.
	1969-70	166 (40.0)	49 (50.0)	215 (41.0)	
V.M. Dandekar	1971-72	238 (46.0)			
	1977-78	284 49.5			₹ 54.4 at 1977-78 prices
	1983-84	286 (44.4)			₹ 88.4 at 1983-84 prices
Minhas, Jain and Tendulkar	1987-88	284 (44.8)	77 (36.5)	361 (42.7)	₹ 122.6 for rural areas and ₹ 158.3 for urban areas.
Planning Commission Expert Group (1993)	1987-88	229 (39.1)	83 (40.2)	312 (39.1)	₹ 115.43 for rural areas ₹ 165.58 for urban areas
Planning Commission	1996-97	211 (30.6)	66 (25.6)	277 (29.2)	
NSSO	1999-2000	195 (27.1)	65 (23.6)	260 (26.1)	₹ 211.30 for rural areas ₹ 454.11 for urban areas
NSSO	2004–05	221 (28.3)	81 (25.7)	302 (27.5)	₹356.0 for rural areas ₹ 538.0 for urban areas

Note: 1. Whereever per capita consumption expenditure is given, other than at 1960-61 prices, it has been worked out by converting it to curent prices on the basic nutritional norm of 2,250 calories per day.

2. Figures in brackets indicate the percentage of the total population in the respective group, *i.e.* of total rural population in col. 3, of total urban population in col. 4 and total population in col. 5.

TABLE 7 : Number and Percentage of Poor — arranged in ascending order on the basis of 1987-88 Povety Ratio

	Povetry Ratio (% of Populations)		*% Reduction in Poverty*	
	1973-74	*1987-88*	*14 yrs*	*Annual*
1. Punjab	28.08	12.70	15.38	1.1
2. Himachal Pradesh	26.40	15.46	10.94	0.8
3. Haryana	35.24	16.63	18.60	1.3
4. Jammu & Kashmir	42.59	23.20	19.39	1.4
5. Goa	44.04	23.42	20.62	1.5
6. Andhra Pradesh	49.25	27.20	22.05	1.6
7. Kerala	59.71	32.08	27.63	2.0
8. Gujarat	47.21	32.33	14.88	1.1
9. Mizoram	50.33	32.52	17.81	1.3
10. Manipur	50.01	32.93	17.08	1.2
11. Meghalaya	50.25	34.60	15.65	1.1
12. Rajasthan	46.33	34.60	11.73	0.8
13. Sikkim	50.91	34.67	16.24	1.2
14. Nagaland	50.87	34.85	16.02	1.1
15. Tripura	51.03	36.84	14.19	1.0
16. Assam	51.23	36.84	14.39	1.0
17. Arunachal Pradesh	51.96	37.47	14.49	1.0
18. Karnataka	54.34	38.14	16.20	1.2
All India	**54.93**	**39.34**	**15.59**	**1.1**
19. Maharashtra	52.94	40.10	12.84	0.9
20. Uttar Pradesh56.98	41.99	14.99	1.1	
21. Madhya Pradesh	61.90	43.40	18.50	1.3
22. West Bengal	63.39	43.99	19.40	1.4
23. Tamil Nadu	56.51	45.13	11.38	0.8
24. Bihar	61.78	53.37	8.41	0.6
25. Orissa	66.24	55.61	10.63	0.7

SOURCE : Compiled and Computed from Planning Commission, *Report of the Expert Group on Estimation of Proportion and Number of Poor* (1993).

Gaurav Datt's Study on poverty

Gaurav Datt of the World Bank has made a study of poverty in India for the period 1951-1992 using NSS data. The poverty line is based on a nutritional norm of per capita daily intake of 2,400 calories in rural areas and 2,100 calories for urban areas. This implies a per capita monthly expenditure of ₹ 49 as the rural poverty line and ₹ 57 for the urban poverty line at 1973-74 prices. Using all-India Consumer Index for Industrial Workers (CPIIW) and Consumer Price Index for Agricultural Workers (CPIAL) for survey period, the study reveals that between 1951-52 and 1991-92, the national headcount index of poverty declined from about 53 per cent to 38 per cent. Rural poverty during this period declined from about 55 per cent to 39 per cent but urban poverty declined from about 43 per cent to about 33 per cent.

Gaurav Datt concludes : "The trend annual rate of decline in headcount index during 1951-92 was about 0.8% per year. Most of the gains in poverty reduction were concentrated over the late 1970s and early 1980s. Indeed, it was not until the early 1980s that India's poverty measures fell appreciably below the levels of 30 years earlier... The decline in poverty rates has however not been very large enough or sustained enough to halt the burgeoning ranks of the poor. With the absolute number of the poor having increased by more than 120 million over the four decades (from 199 million in 1951-55 to about 323 million in 1991-92), 'garibi hatao (remove poverty)' still remains an elusive goal." (Refer table 9).

Summary of the various estimates of poverty

B.S. Minhas has indicated that the percentage of the rural poor declined during the period 1956-57 to 1967-68. On the other hand, P.D. Ojha and Pranab K. Bardhan indicate the increasing proportion of the rural poor. In their view, the direction of change indicates a trend of growing pauperization. Dandekar and Rath have shown a constant proportion of both the rural and the urban poor during the period 1960-61 and 1967-68. However, in their estimate there is an absolute increase in the rural poor from 135 million to 166 million and in the urban poor from 42 million to 49 million. Montek Ahluwalia believes that Indian experience over the past two decades does not indicate trend increase in poverty. In general, a pattern of fluctuation with the incidence of rural poverty falling in periods of good agricultural performance and rising in period of poor performance has been observed.

V.M. Dandekar estimated that in 1983-84, a total of 286 million (44.4 per cent) persons were living below the poverty line.

More recent evidence by the World Bank supports the view that the proportion of persons below the poverty line come down from 52.4 per cent in 1970 to 42.5 per cent in 1983 and further to 39.6 per cent in 1988. Gaurav Datt and Martin Ravallion also estimate that persons below the poverty line are 43.9 per cent — 40 per cent in urban and 45 per cent in rural areas.

Gaurav Datt and Martin Ravallion clearly bring out that poverty gap in rural area is 12.7 per cent and in urban areas is 10.94 per cent. Obviously, greater effort is needed to reduce poverty gap by having specific programmes for rural areas to alleviate poverty.

B.S. Minhas, L.R. Jain and S. D. Tendulkar in their study revealed that the incidence of poverty in 1987-88 at the all-India level comes to about 44.8 and 36.5 per cent respectively in rural and urban India, rather than 32.7 and 19.4 per cent as reported by the Planning Commission. For the Indian Union as a whole, it works out to 42.7 per cent for 1987-88 as against 29.2 per cent reported by the Planning Commission. In absolute terms 361 million were counted as poor in 1987-88 — 284 million in the

Table 8 : Poverty in India 1951-92 : Summary Table

NSS Round	Period	Head count index (poor as % of total population)			Number of poor (million)		
		Rural	Urban	Total	Rural	Urban	Total
[illegible]	1951-55	54.77	42.70	52.66	170.6	28.1	198.7
[illegible]	1956-60	53.96	47.06	52.74	184.6	34.8	219.5
[illegible]	1961-65	48.59	45.46	48.02	183.0	38.6	221.6
[illegible]	1966-70	60.44	50.90	58.60	251.0	50.7	301.7
[illegible]	1971-75	55.27	46.09	53.39	252.2	54.6	306.8
[illegible]	1976-83	47.96	38.08	45.68	246.0	58.1	304.1
[illegible]	1984-90	37.94	34.99	37.20	223.3	67.7	290.0
[illegible]	1991-92	39.44	33.24	37.84	249.5	73.3	322.8
[illegible] change between [illegible]-55 and 1991-92		-28.0	-22.2	-28.1	46.2	160.7	62.4

[illegible] : Compiled from Gaurav Datt (1996), Poverty in India 1951-92 : Trends and Decomposition's (Mimeo) World Bank.

[illegible] areas and 77 million in the urban areas.

Planning Commission Expert Group (1993) [illegible]ed that rural poverty ratio has declined from [illegible] in 1973-74 to 39.1% in 1987-88. As against it, [illegible] a relatively smaller decline in urban poverty ratio [illegible] has come down from 49.2% in 1973-74 to 40.1% [illegible]7-88. The overall poverty ratio has, therefore, [illegible]ed from 54.9% in 1973-74 to 39.3% in 1987-88.

Economists may have differences in methodology [illegible] their estimates may vary in magnitude. But [illegible] is a general consensus on two things : firstly, [illegible]age of population below the poverty line has [illegible] declining as a consequence of the indirect benefit [illegible] growth rate and also as a result of the impact of [illegible]ect programmes of poverty alleviation. Still the [illegible]tion of population below the poverty line is about [illegible] per cent as per the Seventh Plan which can be [illegible]ered to be high. Secondly, the absolute number of [illegible] poor has certainly increased over the years. The [illegible]pal elements of the situation are :

(i) Major chunk of the poor reside in rural areas. [illegible] them are two principal categories : the small [illegible] and the landless labourers. A little less than half [illegible] rural poor are landless labourers and a little more [illegible] that are small and marginal farmers. The two [illegible]ories overlap since small farmers also work as [illegible]ural labourers.

(ii) The major economic problem of the weaker [illegible] in rural India is not open unemployment, but low [illegible]ivity employment.

(iii) In the urban areas, the problem of poverty is [illegible]flow of rural poverty. Most of the poor are either [illegible]ployed or are working in the non-organised [illegible]turing or service sectors of the economy. The [illegible] that is relevant here is of low paid job in case of [illegible] employment or a low resource base in case of the [illegible]-employed.

Economists can conduct an unending debate on the correctness of one estimate or another. But "judged by any reasonable standards, the extent of abject poverty in rural India is alarmingly massive. The precise estimate of whether it is two-fifths or one-half of rural people, who are beset with crushing poverty today, is a terribly academic matter. A far more important and practical need today is to focus policy analysis on concrete measures for the benefit of the poor, particularly the rural poor, who are more numerous but fail to catch as much attention as the urban poor."[3]

Incidence of Poverty among Rural Households

On the basis of National Sample Survey (NSS, 38th Round), the World Bank Report calculated the incidence of poverty among different categories of rural households. It was revealed that persons in wage-dependent families (including those working in non-agricultural jobs) comprise 46% of the poor in rural areas. For agricultural Labour households, 64% were below the poverty line in 1983. Self-employed households constituted the other large block of the rural poor. Nearly 38% of total poor were accounted for by the self-employed households.

Two factors account for this high incidence of poverty among rural labour households. Firstly, there is a considerable degree of unemployment and under-employment among rural labourers. It has been established that incidence of unemployment is the highest among casual labourers. Even during periods of employment, their weak bargaining power results in low wages being paid to them. The market forces are so strong that minimum wage legislation is observed more in breach than in compliance.

3. *Minhas, B.S.*, Rural Poverty, Numbers Games and Polemics, *Indian Economic Review, New Series*, April 1971, p. 102

TABLE 9 : Percentage of Distribution of Households and Percentage Share of Assets Owned in 1991.

	Rural Households		*Urban Households*	
Asset Group (₹ 000's)	*% of households*	*% share of assets*	*% of households*	*% share of assets*
Less than 5	7.5	0.2	18.1	0.2
5 to 10	7.4	0.5	6.1	0.3
10 to 20	12.1	1.7	9.3	0.9
(Less than 20)	**27.0**	**2.4**	**33.5**	**1.4**
20 to 30	9.4	2.2	7.1	1.2
30 to 50	14.4	5.3	10.1	2.7
(20 to 50)	**23.8**	**7.5**	**17.2**	**3.9**
50 to 70	10.3	5.7	8.0	3.3
70 to 100	10.6	8.3	8.0	4.7
(50 to 100)	**20.9**	**14.0**	**16.0**	**8.0**
100 to 150	9.7	11.0	9.6	8.2
150 to 250	9.1	16.3	9.4	12.6
(100 to 250)	**18.8**	**27.3**	**19.0**	**20.8**
250 & Above	**9.6**	**48.8**	**14.2**	**65.8**
All classes	100.0	100.0	100.0	100.0

SOURCE: Compiled and computed from RBI, All-India Debt and Investment Survey, 1991-92, *RBI Bulletin*, May 1999.

Another major cause of rural poverty is the low asset base of the poor. The Reserve Bank of India in its All-India Debt and Investment Survey for 1991-92 has provided data for asset distribution in rural and urban households separately.

The data reveal that 27 per cent of rural households, owning assets worth less than ₹ 20,000 accounted for only 2.4 per cent of total assets, and 23.8 per cent of households in the asset ownership range of ₹ 20,000 – 50,000 accounted for only 7.5 per cent of total assets. In other words, nearly 51 per cent of households owned only 10 per cent of assets. As against them, 9.6 per cent of households owning assets worth more than ₹ 2.5 lakhs accounted for 48.8 per cent of the assets. This indicates high concentration of assets by richer households and lack of asset ownership among very poor households.

The situation appears to be worse for the urban households. 33.5 per cent of the poor households owning assets worth less than ₹ 20,000 accounted for only 1.4 per cent of total urban assets – a case of extreme misery. 17.2 per cent of the households in the asset range ₹ 20,000 – 50,000 worth of assets merely owned 5.3 per cent of total assets. As against them, 14.2 per cent of the top households owning assets worth ₹ 2.5 lakhs and above accounted for nearly 66 per cent of total assets. This underlines that stark reality that there is a very high degree of concentration of assets among urban households at the top.

It is really distressing that urban areas which are considered to be the forerunners of development indicate such sharp inequality in asset distribution. It is quite probable that on account of lack of employment opportunities, the rural poor are shifting to urban areas in search of livelihood and thus swelling the ranks of poor assetless households.

It may be mentioned that a large proportion of the rural poor remain in poverty, not only because they have very few assets, but also because most of these assets are in the form of durable consumer goods, rather than such assets as land, farm implements, livestock which increase their productive capacity.

Another major cause of poverty is the low educational attainments of the poor. These educational differentials are one of the main factors for relatively lower levels of income among the poor. Poor parents are not able to help their children reach higher educational levels.

Two observations may be made here : First, earnings are directly related with increase in levels of education. The earnings of arts, science and commerce graduates were nearly six times as compared with those of illiterates and 3.5 times as compared with those with primary level education. Secondly, as age advances these differentials tend to increase.

3. PLANNING COMMISSION'S ESTIMATE OF POVERTY

TABLE 10 : Number and percentage of Population below Poverty line
(Modified Expert Group Methodology)

	Rural Number of Person (lakh)	%	*Urban No. of persons (lakhs)*	%	*Combined No. of persons (lakhs)*	%
ALL-INDIA						
1973-74	2,613	56.4	600	49.0	3,213	54.9
1977-78	2,642	53.1	647	45.2	3,289	51.3
1983	2,520	45.7	709	40.8	3,229	44.5
1987-88	2,319	39.1	752	38.2	3,071	39.1
1993-94	2,440	37.3	763	32.4	3,203	36.[illegible]

SOURCE : Planning Commission, *Ninth Five Year Plan (1997-2002)*, Vol. I, p. 29.

The Planning Commission has accepted the Lakdawala Expert Group estimates for poverty with minor modifications. There is very marginal difference between the estimates of the Planning Commission and the Expert Group. Between 1973-74 and 1987-88, there was a

TABLE : 11 : Planning Commission Estimate of Population of Below Poverty line

	No. of persons in lakhs		*Poverty Ratio (% of Population)*		*Poverty Reduction*
	1987-88	*1993-94*	*1987-88*	*1993-94*	*87-88 to 93-94*
1. Delhi	10.3	15.5	12.4	14.7	-2.3
2. Punjab	25.2	25.1	13.2	11.8	1.4
3. Chandigarh	0.8	0.8	14.7	14.7	5.7
4. Himachal Pradesh	7.5	15.9	15.5	28.4	-12.9
5. Daman & Diu	–	0.2	–	15.8	–
6. Haryana	25.4	43.9	16.6	25.1	-8.5
7. Jammu & Kashmir	17.0	20.9	23.8	25.2	-1.4
8. Goa	3.0	1.9	24.5	14.9	9.6
9. Andhra Pradesh	160.4	154.0	25.9	22.2	3.7
10. Kerala	88.5	76.6	31.8	25.4	6.4
11. Mizoram	1.7	1.9	27.5	25.7	1.8
12. Manipur	5.3	6.8	31.4	33.8	-2.4
13. Gujarat	122.4	105.2	31.5	24.2	7.3
14. Meghalaya	5.5	7.4	33.9	37.9	-4.0
15. Nagaland	3.7	5.1	34.4	37.9	-3.5
16. Lakshwdeep	0.2	0.1	35.0	25.0	10.0
17. Rajasthan	142.9	128.5	35.2	27.4	7.8
18. Sikkim	1.4	1.8	36.1	41.4	-5.3
19. Tripura	8.8	11.8	35.2	39.1	-3.9
20. Assam	75.8	96.4	36.2	40.9	-4.7
21. Arunachal Pradesh	2.8	3.7	36.2	39.4	-3.2
22. Karnataka	158.6	156.5	37.5	33.2	4.2
All India	3070.5	3203.7	38.9	36.0	2.9
23. Maharashtra	296.3	305.2	40.4	36.9	3.5
24. Uttar Pradesh	536.5	604.5	41.5	40.9	0.6
25. Pondichery	3.1	3.3	41.5	37.4	4.1
26. Madhya Pradesh	264.3	298.5	43.1	42.5	0.6
27. Andaman & Nicobar	1.1	1.1	43.9	34.5	9.4
28. Tamil Nadu	231.1	202.1	43.4	35.0	8.4
29. West Bengal	283.6	254.6	44.7	35.7	9.0
30. Bihar	420.9	493.4	52.1	55.0	-2.9
31. Orissa	165.9	160.6	55.6	48.6	7.0
32. Dadra & Nagar Haveli	0.8	0.8	67.1	50.8	16.3

Note : 1. States have been arranged in the ascending order on the basis of poverty ratio of 1987-88

Source : Planning Commission, (1998) *Ninth Five Year Plan (1997-2002)*, Vol. I and Press Release of the Planning Commission dt. 22nd Feb. 2001 regarding *Poverty Estimates for 1999-2000*.

decline in poverty from 54.9 to 38.9 % -- a fall of 16 per cent in 14 years. The average rate of decline was 1.14 per cent annum. But in the subsequent, 6 year period (1987-88 to 1993-94), poverty ratio declined from 38.9 % to 36.0 % -- a fall of 2.9 per cent in 6 years. The average rate of decline was barely 0.48 per cent per annum. During this period, (1987-88--1993-94), urabn poverty declined from 38.2% to 32.4% -- a fall of 5.8 percent (average rate of reduction of reduction 0.97 %), but rural poverty declined by 1.8 per cent only -- from 39.1 % to 37.3 % (average rate of reduction by 0.3 %). The slowdown in the reduction of poverty, particularly in the rural sector, is a matter of serious concern for the country.

The State level data presents a mixed and in a sense, a very disturbing picture. A number of states exhibited an increase in the poverty ratio. Himachal Pradesh, Haryana and Bihar are among the major states in this group. However, the entire North-Eastern region with the exception of Mizoram -- Manipur, Meghalaya, Sikkim, Nagaland, Assam, Tripura and Arunachal Pradesh experienced increase in poverty ranging from 0.6 to 0.9 per cent annum. Obviously, this underlines the need for promoting growth of the North-Eastern region if insurgency and terrorism have to be seriously controlled. States which have shown better record of poverty reduction are West Bengal, Gujarat, Kerala, Karnataka, Maharashtra, Tamil Nadu and Orissa, though some of these exhibit high proportion of population below poverty -- more than 40 per cent.

A very disturbing feature of the poverty secnario is that seven major states, viz., Maharashtra, Uttar Pradesh, Madhya Pradesh, West Bengal, Tamil Nadu, Bihar and

Orissa account for 2,319 lakh poor in 1993-94 i.e., 72.4 per cent of the total poor in the country. This shows a high concentration of the poor in these seven states.

4 NSSO 55TH ROUND AND POVERTY REDUCTION CONTROVERSY

The NSSO completed the 55th round, which has a large sample covering the period July 1999 to June 2000. According to figures published in *Economic Survey* (2000-01), NSSO 55th round shows "a significant decline in poverty to 26 per cent based on 30 days recall and 23.3 per cent on a 365 days recall methodology."

In all NSS rounds after the early 50s, the reference period has essentially been uniform - the schedules were filled by asking the respondents about their consumption for the 'past 30 days'. During the 55th round, the question on consumption of clothing, footwear, education, health and durable goods were asked only by 'past 365 days' and, for food, tobacco and intoxicants, all sample households were put both '30 day' and 'one week' questions.

TABLE 12 : Estimates of Poverty

Per cent

Year	*All India*	*Rural*	*Urban*
1973-74	54.9	56.4	49.0
1977-78	51.3	53.14	45.2
1983	44.5	45.7	40.8
1987-88	38.9	39.1	38.2
1993-94	36.0	37.3	32.4
1999-2000			
30 day recall	26.1	27.1	23.6

Note: The 1999-2000 estimates may not be strictly comparable to the earlier estimates of poverty because of some changes in the methodology of data collection.

SOURCE: Ministry of Finance, Government of India, *Economic Survey* (2000-01), p. 13.

Poverty Lines : *Rupees per capita per month*

	Rural	Urban
1993-94	211.30	274.88
1999-00	327.56	454.11

SOURCE: Planning Commission

Abhijit Sen questioned the view of Visaria. Sen writes: "Moreover, the limited results now available from the 55th round show clearly that the answers to both one week and 30 day questions have been contaminated by the presence of the other. Quite possibly, exclusive reliance on the 365-day question in case of clothing etc. has also altered responses. As a result, consumption estimates from this round are not comparable to those from previous NSS rounds, and will probably be virtually useless for any assessment of changes in consumer demand."[4] Precisely, the same position was taken by the Planning Commission, which did not accept the NSS poverty figures in view of the sharp criticism of methodology, the Planning Commission decided to use 30-day recall basis of poverty at 26.1 percent in all official documents.

Gaurav Datt, Valerie Kozel and Martin Ravallion of the World Bank in their paper 'A Model Based Assessment of India's Progress in Reducing Poverty in 1990s' suggested that the key determinants of the rate of poverty reduction at the state level are agricultural yields, growth of non-farm sector (depending on the state's initial conditions), development spending and inflation. The model has given the following findings.

1. The rate of poverty reduction in the 1990s is slightly lower than in the 1980s.

National : 0.8 % points against 1% points

Rural : 0.9% points against 0.7% points

2. Poverty reduction in the 1990s is also slower than expected from historical (pre-reform) national elasticity of poverty with respect to mean consumption i.e. 0.8% points in the 1990s as against 1.6% points in the earlier period.

The main reason for the slow decline in poverty is the pattern of growth that was promoted following the policies of liberalisation, privatisation and globalisation. The pattern of growth also affected geographical distribution. This is reflected in the diverse performance of the states in poverty reduction and hence in the overall national performance. Policies of globalisation have helped the already industrialised states much more as compared with the less industrialised states and their neglect of agriculture has been responsible for the skewed pattern of distribution in the post-reform period.

The real issue is that while most of the research studies for the decade of the nineties led to a general consensus that rural poverty at the all-India level did not show any declining trend, the results of NSS 55th round suddenly indicate a sharp reduction even in rural poverty from 37.3 per cent in 1993-94 to 27.1 per cent in 1999-2000 on the basis of 30-day recall. Ironically, the reduction in rural poverty during the 6-year period (1993-94 to 1999-2000) is greater than the reduction in urban poverty – a result, which is not in conformity with the research findings of other economists for the same period. While general consensus was being built that the second generation reforms should change its strategy towards rural development, rather than having a narrow focus, the results of the 55th round NSS only support the continuance of the reform process in its present form. This has been the subject of controversy in India.

4. Abhijit Sen, (2000), Estimates of Consumer Expenditure and its Distribution - Statistical Priorities after NSS 55th Round, *Economic and Political Weekly*, December 16.

Table 13 : Poverty in India, 1973-97

		Headcount Index		Poverty Gap Index		Squared Poverty Gap Index	
Round	Survey Period	Rural	Urban	Rural	Urban	Rural	Urban
[illegible]	Oct 73-Jun 74	55.72	47.96	17.175	13.602	7.128	5.219
[illegible]	Jul 77-Jun 78	50.60	40.50	15.025	11.687	6.057	4.526
[illegible]	Jan 83-Dec 83	45.31	35.65	12.649	9.517	4.841	3.557
[illegible]	Jul 86-Jun 87	38.81	34.29	10.013	9.100	3.700	3.395
[illegible]	Jul 87-Jun 88	39.23	36.20	9.275	9.121	2.982	3.056
[illegible]	Jul 88-Jun 89	39.06	36.60	9.504	9.537	3.291	3.293
[illegible]	Jul 89-Jun 90	34.30	33.40	7.799	8.505	2.575	3.038
[illegible]	Jul 90-Jun 91	36.43	32.76	8.644	8.509	2.926	3.121
Pre-reform	Jul 89-Jun 91	35.37	33.08	8.222	8.507	2.751	3.080
[illegible]	Jul 91-Dec 91	37.42	33.23	8.288	8.244	2.680	2.902
[illegible]	Jan 92-Dec 92	43.47	33.73	10.881	8.824	3.810	3.191
[illegible]	Jul 93-Jun 94	36.66	30.51	8.387	7.405	2.792	2.417
[illegible]	Jul 94-Jun 95	41.02	33.50	9.285	8.382	2.995	2.799
[illegible]	Jul 95-Jun 96	37.15	28.04	8.098	6.781	2.527	2.222
[illegible]	Jan 97-Dec 97	35.78	29.99	8.312	7.762	2.757	2.725
Post-reform	Jul 95-Dec 97	36.47	29.02	8.205	7.273	2.642	2.474

Source: Gaurav Datt, Has Poverty Declined since Economic Reforms, *Economic and Political Weekly*, December 11-17, 1999.

5. ECONOMIC REFORMS AND REDUCTION OF POVERTY

A natural question arises: what has been the impact of economic reforms initiated since 1991 on poverty reduction? Dr. Gaurav Datt of the World Bank in his article "Has Poverty Declined since Economic Reforms?" has drawn the following conclusions:-

1. While there was a marked decline in both rural and urban poverty rates between 1973-74 and 1986-87, there is no sign of anything comparable thereafter.
2. For the rural sector, for the period 1973-74 and 1990-91, headcount index of poverty declined at the annual rate of 2.7 per cent, the rate of decline since then (i.e. in the post-reform period) is not significantly different from zero.
3. For the urban sector, during 1973-74 and 1990-91, head count index of poverty declined at the annual average rate of 2.2 per cent, the same trend is continued in the post-reform period (1990-91 to 1996-97) at the annual average rate of 2.2 per cent.
4. While the urban sector seems to have continued its march of poverty reduction in the process of growth, rural poverty reduction was choked off by lack of rural growth. (Refer table 16).

Dr Gaurav Datt has identified stagnation in rural growth as the basic cause of slowdown in poverty reduction. This naturally puts a question mark on the very nature of the reform process in terms of rural welfare.

Planning Commission's Estimate of Poverty on the basis of 61st Round of NSS-2004-05

NSSO results on the basis of large sample survey data on household consumer expenditure (NSS 61st Round) for 2004-05 are the basis of poverty estimates. The data were collected on uniform recall period (URP) using 30-days for all items. The data was also available using 365 days for 5 frequently purchased non-food items namely, clothing, footwear, durable goods, education and institutional medical expenses and 30-days recall period for the remaining items, known as mixed recall period (MRP), the Planning Commission, using the Expert Group methodology has estimated poverty in 2004-05 using both the distributions. The following results were obtained:

1. Poverty estimates based on URP indicate 28.3% of rural population and 25.7% of the urban population was below the poverty line. For the country as a whole, 27.5% of total population was below the poverty line in 2004-05.

2. The corresponding figures obtained from MRP indicate 21.8% in rural areas, 21.7% in urban areas and 21.8% for the country as a whole was in poverty in 2004-05.

The Planning Commission in its *Approach to the 11th Five Year Plan* (December, 2006) states: "Using the methodology of the Expert Group on Estimation of Proportion and Number of Poor 1993, the percentage of

Table 14 : Number and Percentage of Population below poverty line (2004-05) based on URP Consumption

S.No.	State	Rural		Urban		Combined	
		% of persons (1)	No. of persons (in lakhs) (2)	% of persons (3)	No. of persons (in lakhs) (4)	% of persons (5)	No. of persons (in lakhs (6)
1	Jammu & Kashmir	4.6	3.7	7.9	2.2	5.4	5.9
2	Punjab	9.1	15.1	7.1	6.5	8.4	21.6
3	Himachal Pradesh	10.7	6.1	3.4	0.2	10.0	6.4
4	Goa	5.4	0.4	21.3	1.6	13.8	2.0
5	Haryana	13.6	21.5	15.1	10.6	14.0	32.1
6	Delhi	6.9	0.6	15.2	22.3	14.7	22.9
7	Kerala	13.2	32.4	20.2	17.2	15.0	49.6
8	Andhra Pradesh	11.2	64.7	28.0	61.4	15.8	126.1
9	Gujarat	19.1	63.5	13.0	27.2	16.8	90.7
10	Assam	22.3	54.5	3.3	1.3	19.7	55.8
11	Rajasthan	18.7	87.4	32.9	47.5	22.1	134.9
12	Tamil Nadu	22.8	76.5	22.2	69.1	22.5	145.6
13	West Bengal	28.6	173.2	14.8	35.1	24.7	208.3
14	Karnataka	20.8	75.0	32.6	63.8	25.0	138.9
15	All-India	28.3	2209.2	25.7	808.0	27.5	3017.2
16	Maharashtra	29.6	171.1	32.2	146.3	30.7	317.4
17	Uttar Pradesh	33.4	473.0	30.6	117.0	32.8	590.0
18	Madhya Pradesh	36.9	175.7	42.1	74.0	38.3	249.7
19	Uttarakhand	40.8	27.1	36.5	8.9	39.6	36.0
20	Jharkhand	46.3	103.2	20.2	13.2	40.3	116.4
21	Chattisgarh	40.8	71.5	41.2	19.5	40.9	91.0
22	Bihar	42.1	336.7	34.6	32.4	41.4	369.2
23	Orissa	46.8	151.8	44.3	26.7	46.4	178.5

Note: States have been arranged in the ascending order on the basis of combined poverty ratio in 2004-05.
Poverty line : ₹ 356.0 in rural areas and ₹ 538.6 in urban areas (Per capita monthly expenditure)
Source: Planning Commission, Press Release, March 2007.

population below the poverty line is provisionally estimated at 27.8% in 2004-05. Thus the average decline in percentage of population below the poverty line over the period 1993 to 2004 is 0.74 percentage points per year, much less than implied by the official 1999-2000 data. Because of the slower pace of reduction in the percentage of the poor, the estimated number of poor is now estimated be approximately 300 million in 2004-05, larger than the official estimate of 1999-2000."[5]

It may be recalled that the official estimate for poverty in 1999-2000 was 26.1% for the country as a whole and 260 million were estimated as poor.

Table 14 provides state level data on poverty ratios during 2004-05. the lowest poverty ratio was 5.4% for Jammu and Kashmir and highest poverty ratio was for Orissa (46.4%). States with poverty ratio of less than 15% were Jammu & Kashmir, Punjab, Haryana, Himachal Pradesh, Delhi and Andhra Pradesh. As against them, states with poverty ratio above 30% were Maharashtra, Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh, Chattisgarh, Uttarakhand and Orissa.

Five States, namely, Uttar Pradesh, Maharashtra, Bihar, West Bengal and Orissa accounted for 166 million poor (about 55% of the total poor estimated at 302 million). This shows the high concentration of poor in these 5 states.

Table 15 : Poverty Estimates based on URP

	1993-94	2004-05
Rural	37.3	28.3
Urban	32.4	25.7
Total	36.0	27.5

Source: Planning Commission, Press Release March, 2007.

Dev and Ravi's study on Poverty

S. Mahendra Dev and C. Ravi have also analyzed

5. Planning Commission, *Towards Faster and More Inclusive Growth, An Approach to the 11th Five Year Plan*, December 2006), p.71.

in-depth the data of the 61st round of NSS (2004-05) and compared it with the period 1983-1993. Major finding of the study are:

1. The study has estimated the 'very poor' defined as those who are below 75 percent of poverty line. There was a decline in the proportion of the very poor from 15.5% in 1993-94 to 10.3% in 2004-05. This implies the very poor accounted for 115 million among the total poor reckoned at about 316 million. Obviously, the share of *hard core* or chronic poor is quite high, around 37 percent of the total poor.
2. Data provided in Table 16 & 17 reveals that poverty continued to decline from 44.9% in 1983 to 36.0% in 1993 and further to 28.3% in 2004-05. This phenomenon was also observed in both rural and urban areas. However, it was noted that total poverty declined at the rate of 0.85 percentage points in the pre-reform period (1983-93), while the corresponding figure for the post-reform period was 0.70 percentage points per annum. From this, it can be inferred that the rate of decline in total poverty was slower in the post-reform period than in the pre-reform period. The same pattern was observed in the rural as well as urban areas.

This implies that though the GDP growth was higher in the post-reform period, yet it failed to impact poverty reduction rate significantly and a result, a higher rate of poverty reduction than observed in the pre-reform as normally expected, did not take place.

Table 16 : Percentage and Poor and Very Poor in India (URP basis)

	Poverty Ratios (in percent)			*Chang in Poverty (%age points per annum)*	
	1983	*1993-94*	*2004-05*	*1983-94*	*1994-05*
Rural					
Poor	45.8	37.3	29.2	-0.81	-0.73
Very Poor	25.5	15.4	9.6	-0.97	-0.52
Urban					
Poor	42.3	32.3	26.0	-0.92	-0.59
Very Poor	22.5	16.0	12.0	-0.61	-0.36
All-India					
Poor	44.9	36.0	28.3	-0.85	-0.70
Very Poor	24.8	15.5	10.3	-0.88	-0.48

Source: S. Mahendra Dev and C. Ravi, Poverty and Inequality-All-India and States, 1983-2005, *Economic and Political Weekly*, February 10, 2007

To understand slower rate of poverty reduction in the post-reform period, Dev and Ravi calculated Gini co-efficient for the urban and rural areas.

Table 17: Absolute Number of Poor and Very Poor in India on the URP basis

million

	1983	*1993-94*	*2004-05*
Rural			
Poor	252.0	247.2	232.2
Very Poor	140.6	102.0	76.7
	(55.8)	(41.3)	(33.1)
Urban			
Poor	72.3	77.4	83.3
Very Poor	38.4	38.0	38.4
	(53.1)	(49.1)	(46.1)
All-India			
Poor	320.4	324.6	315.5
Very Poor	179.0	140.0	115.1
	(55.2)	(43.2)	(36.5)

Note: Figures in brackets refer to percentage share of very poor to the total poor.

Source: Dev and Ravi (2007), *Op. Cit.*

From the data provided in table 18, it is evident that inequality of consumption represented by the Gini coefficient seems to have increased significantly for both rural and urban areas in the post-reform period – the rate of increase being much higher for the urban as compared to rural areas.

Mahendra Dev and Ravi from their study draw the following conclusion:

The relationship of income and Gini elasticities with the levels of headcount poverty ratios "shows that the states which have low poverty ratios had high income and Gini elasticities. The policy implication is that growth alone would not be sufficient for reduction in poverty and policies that reduce inequality are also important in these states. On the other hand, states such as Bihar, Orissa, UP and MP which have high poverty ratios show low income and Gini elasticities. It shows that growth is more important in these states than distribution policies."

Table 18 : Gini Co-efficient for rural and urban areas

	Poverty and Inequality			*%age change per annum*	
	1983	*1993-94*	*2004-05*	*1983-94*	*1994-05*
Gini Co-efficient					
Rural	30.79	28.55	30.45	-0.21	0.17
Urban	34.06	34.31	37.51	0.02	0.29

Source: Dev and Ravi (2007), *Op. Cit.*

"To conclude, the extent of decline in the post-reform period in poverty is not higher compared to the pre-reform period in spite of overall growth. Apart from other factors, an increase in inequality seems to have slowed down the rate of reduction in the post-reform period. ... However, there are two unambiguous conclusions. One is that there is no evidence of a higher rate of

decline in poverty in the post-reform period as a whole compared to the pre-reform period. Secondly, inequality increased significantly in the post-reform period as compared to the earlier decade. Higher inclusive growth that increases agriculture and non-farm growth, and a reduction in regional, rural-urban and social disparities are important for a faster reduction in poverty. Human development is equally important for poverty alleviation. Therefore, policies that increase growth and equity have to be followed simultaneously. ... There is also a need for focused intervention on the 115 million hard core poor."[6]

6. NEED FOR REDEFINING POVERTY LINE

The debate about redefining poverty has two schools of thought. Among the first school of thought are those economists who are of the view that attempts at upgrading poverty line from time to time have followed a wrong methodology which has resulted in developing a false notion that reduction of poverty is going at a fairly good pace and that by the year 2006-07, as targeted by the Tenth-Plan, India would be able to reduce poverty to a level of 19.34 percent for the country as whole and this implies the total number of poor at end of 2006-07 will be 220 million – about 170 million in the rural areas and 50 million in the urban areas. The Tenth Plan Approach Paper "mandated reduction in the poverty rate by 5 percentage points during the Tenth Plan and another 10 percentage points during the Eleventh Plan." This will still leave more than 11 percent of population, or about 130 million people, below the poverty line in 2012."[7] Professor Utsa Patnaik has contested the methodology adopted for deriving these estimates. A second school of thought includes a group of economists who argue for redefining the poverty line. Mohan Guruswamy & R. S. Abraham have raised the question of relative poverty in India since India is expected to be a super-economic power by 2020. It would be desirable to understand the poverty scenario during the last 30 years or so.

Poverty scenario in India

The absolute level of poverty is estimated by standardizing the minimum physical quantities of cereals, pulses, milk, butter etc. for a subsistence level and then multiplying the physical quantities by price quotations to arrive at a figure of per capita consumer expenditure. It may be noted that as prescribed by the Indian Council of Medical Research, these physical quantities should lead to the provision of 2,400 calories per capita for the rural areas and 2,100 calories per capita in urban areas. Obviously, the stipulation of per capita consumer expenditure should result in providing the recommended energy intake in the form of Required Daily Allowance (RDA). This procedure was accepted by the Planning Commission in 1969 and poverty line was fixed at ₹ 20 per capita monthly expenditure at 1960-61 prices. Dandekar and Rath used the criterion of ₹ 15 for rural areas and ₹ 22.5 for urban areas at 1960-61 prices.

Later, the Planning Commission appointed an Expert Group under the Chairmanship of Professor D T Lakdawala which submitted its report in 1993. The Expert Group estimated a monthly expenditure of ₹ 49 for rural and ₹ 57 for urban areas at 1973-74 prices. The Expert Group used the Consumer Price Index for Agricultural Labourers (CPIAL) for rural areas and a simple average of Consumer Price Index for Industrial Workers (CPIIW) and the Consumer Price Index for Non-Manual Employees (CPINM) for urban areas. This methodology has been used for updating poverty line and this is given the following table.

Table 19 : Poverty Line with base 1973-74 (Monthly expenditure of ₹ per capita)

	Rural	*Urban*
1973-74	49.09	56.96
1977-78	56.84	72.50
1983	89.45	117.64
1987-88	115.43	165.58
1993-94	211.30	274.88
1999-00	327.56	454.11
2004*	368.00	559.00

* Based on estimated population of 2004 and poverty ratio calculated from using latest National Sample Survey in 2004.

Source: Planning Commission

It would be of interest to know the total number of poor and poverty percentage in total population. The data reveal that between 1973-74 and 1987-88, though the poverty percentage declined from 54.9 percent in 1973-74 to 44.5 percent in 1983, the total number of poor remained around 320 million. Even in 1993-94, the number of poor was 320 million, since the period 1987-88 to 1993-94 showed a negative decline of poverty percentage of the order of 0.7 percent per annum. The fastest decline in poverty is observed during 1993-94 to 1999-00 at the rate of 3.4 percent per annum and the absolute number of poor declined to 260 million in 1999-00. But during the next five years, though the rate of growth of GDP was of the order of 6.5 percent per annum, number of poor showed a very small decline from 260 million to 250 million, indicating an annual average decline by 0.8 percent during 1999-00 and 2004. Obviously, the rate of poverty reduction slowed down, which raised a question mark about the efficacy of growth-driven strategy that is being followed in the liberalization–globalisation era (Refer table 19).

Methodological Issue

Utsa Patnaik on the basis of National Sample

6. Mahendra Dev S. and Ravi (2007), Poverty and Inequality: All-India and States, 1983-2005, *Economic and Political Weekly*, February 10, 2007, p.519-20.

7. Planning Commission, *Tenth Five Year Plan (2002-07), vol.1, p.7*

Survey data on per capita monthly expenditure and calorie intake per day has challenged the poverty estimates of the Planning Commission. Patnaik criticizes the Planning Commission for only using expenditure group data to arrive at the number of persons below the poverty line, but just glosses over the calorie intake to ensure that the associated energy intake meets the calorie norm as the basic criterion for determining the level of expenditure at which this can be ensured. Patnaik mentions:" Thus the current data are being used selectively, with only the distribution of persons by expenditure classes being used, and the associated energy intake part being ignored completely.... For example the official price-index adjusted

Table 20: Percentage of Poor and Total Number of poor in India Since 1973

Year	*Percentage of Poor (%)*	*Number of Poor (million)*	*Average Annual Rate of Decline*
1973-74	54.9	321	–0.59
1977-78	51.3	329	0.31
1983	44.5	323	0.31
1987-88	38.9	307	1.25
1993-94	36.0	320	–0.70
1999-00	26.1	260	3.40
2004*	23.6	250	0.82

* Based on the estimated population of 2004 and poverty ratio calculated using latest NSS data in 2004.

Source : National Institute of Rural Development (2004) : *Rural Development Statistics (2002-03)*

poverty line for 1999-00 for rural areas was ₹ 328 only and this has been applied to the first and last column of table 21 to read the population below this line which came to 27%. No attention was paid to the fact that at this expenditure a person could access only 1,890 calories, over 500 calories per day below the RDA (Required Daily Allowance)." However, if the norm of 2,400 calories is applied, it is revealed that 74.5 percent of population for rural areas was below the poverty line. Thus, the official method of estimation poor leaves out 47.5 per cent of total population or around 350 million persons who are actually poor.

An Estimate of the Rural Poor has been made on the basis of official estimates and MPCE (Monthly per Capita Expenditure) providing 2,400 calories. Since the norm of MPCE for 1973-74 was correctly applied, the estimate of poverty by both the methods works out to be 74.5%. But for year 1993-94 and 1999-00, the official estimates were much lower than that based on MPCE providing 2,400 calories.

Utsa Patnaik concludes her critique with the following observation: "Sometimes to justify the indirect method, it is argued in an illogical manner that the original consumption norm of 2,400 calories was 'too high'. First, it is not 'too high' because the average intake of those below it works out to less than 1,900 calories which is lower than in any other country in the world except the least developed countries. Second, even if it is accepted for the sake of argument that it is 'too high', it does not justify comparing 1999-00 'poverty' figures which are of all those persons below 1,890 calories intake, to those below 1,970 calories in 1993-94 and below 2,400 calories intake in 1973-74."

Table 21: Poverty distribution of Persons by Per capita Monthly Expenditure and Calorie intake, 1999-00, All India

Monthly Per capita Ependiture (₹)	*Calorie intake per day*	*Percentage of total persons*	*Cumulative percentage*
(1)	*(2)*	*(3)*	*(4)*
Rural			
Below 225	1,383	5.1	5.1
225-255	1,609	5.0	10.1
255-300	1,733	10.1	20.2
300-340	1,868	10.0	30.2
340-380	1,957	10.3	40.5
380-420	2,054	9.7	50.2
420-470	2,173	10.2	60.4
475-525	2,289	9.3	69.7
525-615	2,403	10.3	80.0
615-775	2,581	9.9	89.9
775-900	2,735	5.0	94.9
900 & more	3,178	5.1	100.0
All	2,149	100.0	
Urban			
Below 300	1,398	5.0	5.0
300-500	1,654	5.1	10.1
350-425	1,729	9.6	19.7
425-500	1,912	10.1	29.8
500-575	1,968	9.9	39.7
575-665	2,091	10.0	49.7
665-675	2,187	10.1	59.8
675-915	2,297	10.0	69.8
915-1120	2,467	10.0	79.8
1120-1500	2,536	10.1	89.9
1500-1925	2,736	5.0	94.9
1925 & more	2,938	5.1	100.0
All	2,156	100.0	

Note: Poverty Line ₹ 327.6 for Rural Areas and ₹ 454.1 for Urban Areas

Source: National Sample Survey Organization (1999-00), Report No. 471, *Nutritional Intake in India* for calorie intake data by expenditure groups and Report No. 454, *Household Consumer Expenditure in India – Key Results for the distribution of persons*.

Redefining Poverty Line – Basic Needs Approach

Mohan Guruswamy and Ronald Joseph Abrabham

Table 22 : Rural Poor and Percent of Rural Population

	1973-74	*1993-94*	*1999-00*	*MPCE**		
	%	%	%	*1973-74*	*1993-94*	*1999-00*
Applying Official Definition (Those with less than MPCE giving 2400 Calories	56.4	74.5	74.5	49	325	570
Official Estimates	56.4	37.3	27.1	49	206	328
Corresponding Calorie Intake	2400	1970	1890			

Source: Calculated from NSS *Reports on Consumer Expenditure, 50th Round 1993-94* and *55th Round 1999-2000.*

* MPCE is Monthly Per Capita Expenditure

Note that base year 1973-74 is the only year the official definition was correctly applied; in all later years, the nutrition norm is diluted.

of the Centre for Policy Alternatives, New Delhi have highlighted the distinction between poverty and hunger. Guruswamy et.al. state: "Poverty is an economic condition. Hunger is a physical condition that arises out of severe economic condition. While the definition of hunger in terms of calories can remain constant, the definition of poverty is relative to the present levels of general prosperity.... The present official poverty line is based only on calories and hence accounts for little else but the satiation of one's hunger. It would have been more accurate to define this as a *starvation line*, as that is exactly what it is."[8] (Emphasis Added)

The official poverty line should be renamed as 'starvation line' since apart from providing 650 grams of foodgrains per day, it makes very little provision for the other essentials of life, such as nutrition and balanced diet, provision for health, electricity and cooking fuels, clothing and miscellaneous expenditure pertaining to education, shelter and other minimum levels of expenditure to sustain life, such as travelling, washing and stitching of clothes, durable consumer goods, some expenditure on furniture, etc. A realistic and proper definition of poverty line should, therefore, include all the basic needs of human life so as to ensure a minimum level of quality.

Thus, the claim made by the Government that poverty ratio has declined from 54.9 percent in 1973-74 to about 25 percent in 2004 is spurious and gives a false sense of satisfaction to Indian polity. A dynamic concept of poverty line should, therefore, incorporate basic human needs approach and should not limit itself to minimum calorie intake needed for subsistence.

Guruswamy and Abraham have made the following components of basic human needs to arrive at a new poverty line for India which is claimed to be one of the fastest developing economies of the world.

1. Nutritional Norms and Cost involved – On the basis of the recommendations of National Institute of Nutrition (NIN) under the aegis of Indian Council of Medical Research, it is highly important that a balanced diet be provided so as the prevent underweight among children under age 5. It may be noted that as per the *Human Development Report (2005)*, 47 per cent children under age 5 are underweight. Similarly, 21 per cent of total population is undernourished in 2000-02. It may also be observed that in China, only 10 per cent children are underweight and 11 per cent of total population is undernourished during 2000-02. Obviously, India is lagging behind China in nutritional status. Mohan Guruswamy has made an effort to determine the cost of a balanced nutritious diet for an average Indian to be Rs 573 person.

2. Expenditure on Health – India spends only 1.3 percent of GDP on the provision of public health, but the private expenditure on health is 4.8 percent of GDP in 2002. Since according to the Health Ministry, barely 20 percent of Indian population is covered by public healthcare, the poor are forced to take recourse to the private sector. The 'Universal Insurance Scheme' which is targeted to meet the needs of the poor to pay annually Rs 365 per person and an individual can get insured for all inpatient medical-care upto a sum of ₹ 30,000. This implies that Rs 365 per annum or Rs 30 per month is the cost of health expenditure for the poor in India. Guruswamy includes a sum of ₹ 30 per person per month as the legitimate expenditure for obtaining healthcare.

3. Expenditure on Clothing – In fact, clothing requirements of children, men and women necessitate different norms for clothing. Similarly, weather conditions necessitate different norms for summer and winter. In the estimate prepared by Guruswamy, seasonal requirements have been disregarded for the sake of simplicity. The clothing requirements have been calculated at Rs 207 per person per annum or ₹ 17 per month.

4. Energy consumption – A housing unit with two bedrooms, a kitchen is the basis of Guruswamy to calculate energy consumption. It is assumed that each house has an electric connection. On the basis of minimum needs approach, each home needs a few bas-

8. Guruswamy, Mohan and Abraham, Ronal Joseph (2006), *Redefining Poverty : A New Poverty Line for a New India*, p.2.

electric fittings – four bulbs and two fans. It is further assumed the ceiling fans work for 12 hours a day – 8 hours during night and 4 hours during day. On the basis of these minimum requirements, per capita monthly expenditure on electricity has been calculated as ₹ 175 per month per family. Assuming a norm of 5 members of the family, this works out to be Rs 35 per month per person.

The other component of energy consumption is cooking fuel. National Family Planning Survey (1998-99) shows that at the all-India level nearly 74 percent of the population uses wood, crop residues, dung cakes and coal as cooking fuels. This proportion is 91 percent for rural areas and 30 per cent for urban areas. But all these fuels cause indoor pollution and cause such diseases as bronchitis, asthma, heart diseases and respiratory diseases. But the poor cannot afford LPG which is considered as a clean cooking fuel, as this fuel is the prerogative of the middle class and the affluent sections.

Moreover, state support towards LPG has been rising over time but kerosene has been witnessing a diminution in state support. Kerosene is a more affordable substitute for the poor. The monthly per capita expenditure on kerosene has been calculated at ₹ 20 per capita per month. This is based on the assumption that a family gets 10 to 12 litres of kerosene per month on ration cards. For a family of 5 person, a typical family consumes 2.2 litres per head and it is being sold at a subsidized price of ₹ 9 per litre. Assuming that all families are able to obtain their quota of kerosene on ration cards, the monthly expenditure on kerosene comes to ₹ 20 per person.

Thus, the total per capita monthly energy requirements entail an expenditure of Rs 55 – for electricity consumption ₹ 35 and for cooking fuel ₹ 20.

5. **Miscellaneous Expenditure** includes cost on basic purchase of books and stationery for school going children, expenditure on certain social ceremonies like birth, death or festivals etc, purchase of consumer goods, furniture, fixtures for family needs etc., it is expected this miscellaneous expenditure works out at Rs 820 per family per month or ₹ 164 per capita.

These calculations are based on the basic needs approach at minimum levels. The purpose is not to provide only for subsistence, but to move towards a more decent level of life.

Summing up, the minimum costs on the assumption of basic needs approach work out to be ₹ 840 per capita or ₹ 4,200 per month per family. [(i) Balanced nutritious diet Rs 573; (ii) Health Insurance Expenditure ₹ [illegible]; (iii) Clothing ₹ 17; (iv) Energy consumption ₹ 55 and (v) Miscellaneous Expenditure ₹ 164.]

On the basis of the holistic approach regarding the poverty line inclusive of basic needs, Mohan Guruswamy has calculated that " 69% of India's population is below the poverty line i.e. over 71 crore persons. This has to be seen against the official figure of 26 per cent persons below the poverty line i.e. nearly 2.65 times. The situation in rural India is appalling with 84% of the rural population below the more holistic poverty line; it is certainly better in urban India at a round 42 per cent".

World Bank on the basis of the international poverty lines at the rate of $1 per day has calculated in its *World Development Report (2005)* that in India for the year 1999-00, people below this poverty line were of the order of 34.7% and if we use the norm of $2 per day, then 80% of he Indian population was below the poverty line.

Dr. S. Mahendra Dev and C. Ravi's estimate of redefined poverty line

Mahendra Dev at al. in this article *'Revising Estimates of poverty'* have made an attempt to calculate population below the poverty line by including expenditure on health and education. Though it is a partial attempt to redefine poverty line, but it only points out the difference if these expenditures which are basic expenditures for life are added. As a consequence, the following results are obtained : -

Table 23 : Population below Revised Poverty Line and Official Poverty Line

	Rural	*Urban*	*Total*
1. Official poverty line	356.30	538.60	--
2. Per capita expenditure on education	10.90	40.10	--
3. Per capita expenditure on health	24.40	44.00	--
4. Adjusted poverty line (1+2+3)	391.60	622.70	--
5. Official poverty ratio	28.30	26.03	27.50
6. Revised poverty ratio including health and education	36.38	34.45	35.83

Source : Estimated on the basis of 61st Round of NSS on employment and unemployment.

The study concludes : "If we include private health and education expenditure, the rural poverty line increases from ₹ 356 to ₹ 392 while the urban poverty line increases from ₹ 539 to ₹ 623. The rural poverty ratio increased from 28.3 per cent to 36.4 per cent. Total poverty rose from 27.5 per cent to 35.8 per cent an increase of 8.3 percentage points due to inclusion of the minimum level of private expenditure on health and education."[9]

Mohan Guruswami and Joseph Abraham, however, make a more holistic attempt on the basis of basic needs approach by including other expenditures on balanced nutritious diet, clothing, energy consumption and miscellaneous expenditure.

9. Mahendra Dev, C. Ravi (2008), Revising Estimates of Poverty, *Economic and Political Weekly*, March 8, 2008, p.9.

Report of Expert Group headed by Prof. S.D.Tendulkar

Former Chief Economic Adviser to Prime Minister, Prof. S.D. Tendulakar submitted the Report of the Expert Group to Review the Methodology for Estimation of Poverty in November 2009. Prof. Tendulkar noted that the existing all-India rural and urban official poverty lines were originally defined in terms of per capita total consumer expenditure (PCTE) at 1973-74 market prices and adjusted over time and across states for changes in prices keeping unchanged the original1973-74 rural and urban underlying all-India reference poverty line baskets (PLB) of goods and services. These all-India rural and urban PLBs were derived for rural and urban areas separately, anchored in the per capita calorie norms of 2400 (rural) and 2100 (urban) per day. However, they covered the consumption of all the goods and services incorporated in the rural and urban reference poverty line baskets. The report further notes that there are three major criticisms of these poverty lines which have been commonly aired. One, the consumption patterns underlying the rural and urban PLBs remained tied down to those observed more than three decades ago in 1973-74 and hence had become outdated. Given the rise in the living standards resulting from accelerated economic growth since the nineteen-eighties, the consumption pattern of the poor has also been changing but is not reflected in the poverty lines. Two, crude price adjustment for prices was leading to implausible results such as proportion of total urban population below poverty line being higher than its rural counterpart in certain major states. In particular, it was shown by Deaton (2008) that Consumer Price Index for Agricultural Labourers that was used for the rural population understated the price rise for the rural population and hence understated the extent of rural poverty. Three, the earlier poverty lines assumed that basic social services of health and education would be supplied by the state and hence, although private expenditure on education and health was covered in the base year 1973-74, no account was taken of either the increase in the proportion of these in total expenditure over time or of their proper representation in available price indices. Taking note of above, Prof Tendulkar has suggested to incorporate new methodology whereby not only price indices are used in a more scientific & judicious manner, basket of consumption

Table 24 : Final Poverty Lines and Poverty Head Court Ratio for 2004-05

	Poverty Line (₹)		*Poverty Headcount Ratio (%)*		
State	*Rural*	*Urban*	*Rural*	*Urban*	*Total*
Andhra Pradesh	693.8	926.4	22.8	17.7	21.[illegible]
Arunachal Pradesh	773.7	925.2	26.2	24.9	25.[illegible]
Assam	691.7	871	39.9	26.1	37.[illegible]
Bihar	655.6	775.3	55.3	39.4	53.5
Chhatisgarh	617.3	806.7	56.1	23.8	48.7
Delhi	747.8	1040.3	7.7	14.4	14.2
Goa	931	1025.4	11.5	6.9	8.7
Gujarat	725.9	951.4	26.7	17.9	23.[illegible]
Haryana	791.6	975.4	18.6	23.0	20.[illegible]
Himachal Pradesh	708	888.3	9.1	12.6	9.5
Jammu & Kashmir	722.9	845.4	8.1	12.8	9.4
Jharkhand	616.3	831.2	41.6	31.1	39.[illegible]
Karnataka	629.4	908	26.1	19.6	23.[illegible]
Kerala	775.3	830.7	12.0	12.1	12.[illegible]
Madhya Pradesh	631.9	771.7	42.0	22.9	36.7
Maharashtra	743.7	961.1	29.5	18.3	24.5
Manipur	871	955	47.4	46.4	47.[illegible]
Meghalaya	686.9	989.8	15.3	24.1	17.[illegible]
Mizoram	850	939.3	31.1	11.5	21.[illegible]
Nagaland	1016.8	1147.6	19.3	25.0	20.[illegible]
Orissa	567.1	736	39.2	25.9	37.[illegible]
Pondicherry	641	777.7	0.2	1.6	1.[illegible]
Punjab	830	960.8	14.6	18.1	15.[illegible]
Rajasthan	755	846	26.4	19.9	24.[illegible]
Sikkim	728.9	1035.2	15.5	5.0	13.[illegible]
Tamil Nadu	639	800.8	21.2	12.8	17.[illegible]
Tripura	663.4	782.7	19.8	10.0	17.[illegible]
Uttar Pradesh	663.7	799.9	39.4	31.7	37.[illegible]
Uttarakhand	719.5	898.6	14.9	25.2	18.[illegible]
West Bengal	643.2	830.6	28.8	22.0	26.[illegible]
All India	**672.8**	**859.6**	**33.8**	**20.9**	**29.8**

Source: Report of the Expert Group to Review the Methodology for Estimation of Poverty, Planning Commission, Government of India, November, 2009

of poor was also enlarged, so as to take into account the expenditure made by poor on health & education. He has also noted that due to problem of methodology head count of rural poor, is largely under estimated. On the basis of new methodology adopted, Prof. Tendulkar, finds that in 2004-05, 37 percent of Indian population was Living below poverty line. This figure is significantly high as compared to figure of given by Planning Commission; according to which 27.5 percent were living below poverty line. Prof. Tendulkar's figure of head count is higher largely on account of larger basket of consumption which includes expenditure on education & health by the poor. Earlier studies on redefining poverty have also taken note of these variables and have suggested suitable modifications in the definition of poverty line. Prof. Tendulkar's report is significant as it gives official sanction to the same. Prof. Tendulkar has recommended in his report that Planning Commission and also National Sample survey organisation (NSSO) to make suitable changes in their approach in defining poverty line. We must note here that Prof Tendulkar's report gives a major discrepancy vis-à-vis earlier estimates in the count of rural poor. Prof. Tendulkar puts All India poverty figure at 41.8 percent as old estimate was only 28.3 percent. However for urban population the discrepancy was not that stark. Prof. Tendulkar's Expert Group has also given re-estimated figures of poverty for the year 1993-94.

It is important to note that using new methodology, all India figures of Poverty/ head count of poor has been put at 45.3 percent, which is higher, than figures of Planning Commission given earlier, that is, 36.0 percent. The Expert Group has also given state wise head count of poor for the years 2003-04 and 1993-94.

According to the press note issued by Planning Commision in March 2012, per cent of population living below poverty line has come down to 29.8% into 2009-10. It may be noted that as per methodology suggested by Prof. Tendulkar in 1993-94, 45% population was below poverty line, which gradually came down to 37.2 percent in 2004-2005 (Table 24A).

Table 24A : Final Poverty Lines and Poverty Head Court Ratio for 2009-10

	Poverty Line (₹)		*Poverty Headcount Ratio (%)*		
State	*Rural*	*Urban*	*Rural*	*Urban*	*Total*
Andhra Pradesh	693.8	926.4	22.8	17.7	21.1
Andhra Pradesh	693.8	926.4	22.8	17.7	21.1
Arunachal Pradesh	773.7	925.2	26.2	24.9	25.9
Assam	691.7	871	39.9	26.1	37.9
Bihar	655.6	775.3	55.3	39.4	53.5
Chhatisgarh	617.3	806.7	56.1	23.8	48.7
Delhi	747.8	1040.3	7.7	14.4	14.2
Goa	931	1025.4	11.5	6.9	8.7
Gujarat	725.9	951.4	26.7	17.9	23.0
Haryana	791.6	975.4	18.6	23.0	20.1
Himachal Pradesh	708	888.3	9.1	12.6	9.5
Jammu & Kashmir	722.9	845.4	8.1	12.8	9.4
Jharkhand	616.3	831.2	41.6	31.1	39.1
Karnataka	629.4	908	26.1	19.6	23.6
Kerala	775.3	830.7	12.0	12.1	12.0
Madhya Pradesh	631.9	771.7	42.0	22.9	36.7
Maharashtra	743.7	961.1	29.5	18.3	24.5
Manipur	871	955	47.4	46.4	47.1
Meghalaya	686.9	989.8	15.3	24.1	17.1
Mizoram	850	939.3	31.1	11.5	21.1
Nagaland	1016.8	1147.6	19.3	25.0	20.9
Orissa	567.1	736	39.2	25.9	37.0
Pondicherry	641	777.7	0.2	1.6	1.2
Punjab	830	960.8	14.6	18.1	15.9
Rajasthan	755	846	26.4	19.9	24.8
Sikkim	728.9	1035.2	15.5	5.0	13.1
Tamil Nadu	639	800.8	21.2	12.8	17.1
Tripura	663.4	782.7	19.8	10.0	17.4
Uttar Pradesh	663.7	799.9	39.4	31.7	37.7
Uttarakhand	719.5	898.6	14.9	25.2	18.0
West Bengal	643.2	830.6	28.8	22.0	26.7
All India	**672.8**	**859.6**	**33.8**	**20.9**	**29.8**

Source: Planning Commision, press note March 2012 Press Note of Poverty Estimates, 2009-10.

Table 25 : Poverty Estimates and Poverty Lines for 1993-94

	Poverty Line (₹)		*Poverty*		
State	*Rural*	*Urban*	*Rural*	*Urban*	*Total*
Andhara Pradesh	244.1	282.0	48.1	35.2	44.6
Arunachal Pradesh	285.1	297.1	60.0	22.6	54.5
Assam	266.3	306.8	54.9	27.7	51.8
Bihar	236.1	266.9	62.3	44.7	60.5
Chhatisgarh	229.1	283.5	55.9	28.1	50.9
Delhi	315.4	320.3	16.2	15.7	15.7
Goa	316.2	306.0	25.5	14.6	20.8
Gujarat	279.4	320.7	43.1	28.0	37.8
Haryana	294.1	312.1	40.0	24.2	35.6
Himachal Pradesh	272.7	316.0	36.7	13.6	34.6
Jammu & Kashmir	289.1	281.1	32.5	6.9	26.3
Jharkhand	227.7	304.1	65.9	41.8	60.7
Karnataka	266.9	294.8	56.9	34.2	49.5
Kerala	286.5	289.2	33.9	23.9	31.3
Madhya Pradesh	232.5	274.5	49.0	31.8	44.6
Maharashtra	268.6	329.0	59.3	30.3	47.8
Manipur	322.3	366.3	64.4	67.2	65.1
Meghalaya	284.1	393.4	38.0	23.0	35.2
Mizoram	316.5	355.7	16.6	6.3	11.8
Nagaland	381.7	409.6	20.1	21.8	20.4
Orissa	224.2	279.3	63.0	34.5	59.1
Pondicherry	220.3	264.3	28.1	32.4	30.9
Punjab	286.9	342.3	20.3	27.2	22.4
Rajasthan	271.9	300.5	40.8	29.9	38.3
Sikkim	266.6	362.2	33.0	20.4	31.8
Tamilnadu	252.6	288.2	51.0	33.7	44.6
Tripura	275.8	316.6	34.3	25.4	32.9
Uttar Pradesh	244.3	281.3	50.9	38.3	48.4
Uttarakhand	249.5	306.7	36.7	18.7	32.[illegible]
West Bengal	235.5	295.2	42.5	31.2	39.4
All India			50.1	31.8	45.3

Note: The estimates fo Chhatisgarh, Madhya Pradesh, Bihar, Jharkhand, Uttar Pradesh and Uttaranchal are for state as they exist after bifurcation in 2001. The estimates for 1993-94 have been calculated form the unit data using distr and state boundaries of the divided states in 1993-94.

Source: Report of the Expert Group to Review the Methodology for Estimation of Poverty, Planning Commission Government of India, November, 2009.

Definition of Poverty and Right to Food: Emerging Issues

As noted above different figures are being presented by the Government about poverty. Therefore it is difficult to understand that how many people in India are poor. Periodically varying definitions of the poverty line tend to complicate the matter further. In the absence of an appropriate definition, efforts to remove poverty cannot be meaningful. In the past various measures have been adopted by the Government to tackle the menace of poverty in the Country. Cheap grain, other foods and kerosene through the PDS, rural and urban employment programs, free education and health facilities, etc., are some key government programmes in this direction. Government has also proposed food security legislation, according to which, for all people living below poverty line, the provision would be made for access to necessary food at affordable prices.

But absence of appropriate definition is coming in way of a judicious poverty elimination programme. Recently Supreme Court has questioned the basis of defining the poverty line according to which only [illegible] percent of the population is living below poverty line. It may be noted that some time back Expert Group headed by Prof. Suresh D. Tendulkar, had suggested an improved definition for measuring poverty, on the lines of which formula for measuring poverty has also been suggested. The same has also been accepted by the Planning Commission. Before the report of the Expert Group, the government assessment of poverty was that in 2004-05 only 28 percent people were poor and the same has dropped to only 20 percent in 2007. According to new definition of poverty, necessary expenditure on health and education has also been included while assessing poverty.

But Supreme Court has questioned even the 'improved definition' of poverty. According to Prof. Tendulkar's definition, a person would be treated as poor, as on 2004-05, if his monthly income is less than Rs 446.68 in rural areas and Rs 578.8 in urban areas. Considering the data submitted by the Planning

Table 26 : Population below the Poverty line in Selected Countries

Country	National Poverty Line					International Poverty Line		
	$ per day (2005)*	Survey year	Rural %	Urban %	Total %	Survey year	Population below $ 1 a day	Population below $ 2 a day
Bangladash	1.03	2000	53.0	36.6	49.8	2000	41.3	84.0
Brazil	5.92	2002-03	41.0	17.5	21.5	2004	7.5	21.2
China	0.57	1998	4.6	< 2	4.6	2004	9.9	34.9
Egypt	1.76	1999-00			16.7	1999-00	3.0	43.9
India	0.82	2004-05*	28.3	25.7	27.5	2004-05	34.3	80.4
Indonesia	1.07	1999	34.3	16.1	27.1	2002	7.5	52.4
Mexico	6.32	2004	27.9	11.3	17.6	2004	3.0	11.6
Nepal	0.87	2003-04	34.6	9.6	30.9	2003-04	24.1	68.5
Pakistan	1.67	1998-99	35.9	24.2	32.6	2002	17.0	73.6
Sri Lanka	1.49	1995-96	27.0	15.0	25.0	2002	5.6	41.6

* Sources : Poverty line ₹ 356.0 in rural areas and ₹ 538.6 in urban areas (Per capita monthly expenditure, Planning Commission Press Release, March 2007

For other countries, except India, population below poverty—national and international are taken from World Bank, *World Development Report* (2008)

† Ravillion, Chen and Sangrula (2008); *"Dollar a-day revisted", Policy Research Paper 4620, World Bank, Washington D.C.*

Commission, Supreme Court questioning the methodology, has asked the Planning Commission, that how a person would be able to consume 2400 calories in rural areas and 2100 calories in urban areas with less than ₹20 a day in urban areas and less than ₹ 15 a day in rural areas. It may be noted that as per the basic definition of poverty, intake of 2100 calories in urban areas and 2400 for urban areas has been the basis of drawing the poverty line in India. As per this standard, 56 percent of population was estimated to be living below poverty line in 1973-74. Before 1973-74, poverty line was defined in such a way that the estimation of poverty line was based on the requisite expenditure to attain the desired quantum of calories. But estimation of poverty in 1993-94 and 1999-00 were devoid of any sense of proportion and statisticians at Planning Commission were able to bring down the number of poor by statistical jugglery and change in definition of poverty. Critics believe that as per the calorie standards, had the price data been properly used poverty figures in rural areas would have been 80 percent and in urban areas it would have been50 percent.

If we accept the data presented by the Planning Commission, we find that a person getting daily income of Rs 20 or more in urban areas and ₹15 or more in rural areas would not be called poor. If we look at the internationally most commonly accepted definition of poverty, it is US$ 1.25 a day. If we convert the same in rupees, it would amount to₹58 per day. Though even this is lower than what is required for subsistence, but a definition which gives poverty line with an amount which is nearly one third of this amount seems highly inappropriate. If Planning Commission's definition of poverty itself calls for a minimum consumption of 2400 calories in rural areas and 2100 calories in urban areas, how can this be achieved with less than ₹ 20 in urban areas and ₹ 15 in rural areas, answer to this basic question, has been sought by the Supreme Court from Planning Commission.

Some time ago, the government constituted a committee for the unorganized sector under the chairmanship of Arjun Sengupta, which reported that more than 77 percent of the countrymen are managing with less than ₹ 20 a day or less. It is easily understandable that it is not possible to meet minimum requirement of a person's food, shelter and clothing with so little. It means that more than 77 percent of the countrymen cannot even meet their basic needs, whereas poverty measured as per the mathematical method gives a figure of merely 36 per cent. Such varying figures about the number of poor create confusions and make the task of elimination of poverty difficult.

Though Tendulkar's report has tried to correct the definition of poverty by including requisite expenditure on education and health, but even that has failed to address to the realities. To make it real poverty line, government has to take a realistic view of poverty. If the government has to implement right to food earnestly, it must correct its assessment of poverty.

Conclusion

The conclusion emerges from the analysis of poverty line. Firstly, the procedure of upgrading poverty line on the basis of price index needs a review and this should be accompanied by the norm of calorie intake. Secondly, the basis of poverty line was decided four decades ago in 1969. For a developing economy with an aspiration of becoming a super-economic power by 2020, it is all the more necessary to develop a basic needs approach poverty line, instead of a uni-dimensional poverty line based on calorie intake of food primarily which is only a starvation

line. This will entail greater effort on the part of the state to take steps so that the benefits of rapid economic growth reach 'aam adami' (common man) to use a phrase of the Congress manifesto. Then, it will shake us out of our complacency about poverty in India. We have miles to go before we sleep.

7. INTERNATIONAL COMPARISON OF POVERTY

Table 24 provides data about population below the poverty line on the criteria of the national poverty lines and international poverty lines. Since the national poverty lines vary sharply from $0.57 a day for China to $6.32 a day for Mexico, these figures are not comparable. It may be noted that China's national poverty line has been derived from $0.57 day as against that of India at $0.82 a day, the Chinese national poverty line at $0.57 a day, the Chinese figure of population below poverty understates the position. This has been sought to be corrected by adopting standards of $1 a day and $2 a day as the uniform basis of comparison in the international poverty line on the Purchasing Power Parity criterion. It would, therefore, be useful to compare international poverty lines for a better comparison of the relative state of population below poverty line in different countries.

Secondly, broadly speaking, $1 a day poverty is based on what may be described as the minimum required in terms of calories per day, which is described in Indian jargon as the 'starvation line', but $2 a day poverty line takes into account besides food, other items as cloth, education, health or other minimum needs for life which is described 'basic needs line'. It may be noted that the World Development Report does not indicate any basis for both the lines used in its explanatory notes. It only mentions: "Population below $1 a day and population below $2 a day are the percentages of population living on less that $ 1.08 a day and $ 2.15 a day at 1993 international prices."[1] But we are treating them as 'starvation line' or 'basic needs poverty line' on the basis of estimation of scholars that 'basic needs poverty line' is approximately double the 'starvation line'.

On the basis of the data provided in table 24 about 10 selected countries, on the basis of $1 a day, the performance of Brazil, China, Egypt, Indonesia and Sri Lanka is far better than that of India, Bangladesh, Nepal and Pakistan. The proportion of population below $1 a day poverty line at 34.4% for 2004-05 is really a very disappointing considering the impact on reduction of poverty programmes by over five decades of development planning. This implies that nearly 381 million persons were living below the poverty line of $1 a day in 2004-05 which is very disturbing. On the basis of $2 a day, 80.4% of our population or about 892 million do not satisfy the basic needs criterion of $2 a day. This is also in conformity with figure of 77% of Indian population who are poor and vulnerable based on consumer expenditure level of ₹ 20 per day on the basis of purchasing power parity equivalent to below nearly $2 per day as the criterion in 2004-05 by the National Commission for Enterprises in the Unorganised Sector. Making a strong indictment of the growth process, the Commission mentions: " there is no doubt that this "Shining India" has expanded in the past and is still expanding at a very high rate. But this picture is spoiled by a virtually stagnant consumption expenditure and miserable working and living conditions of the 77 percent of our population who are poor and vulnerable… this is the other world which can be characterized as the India of the common people constituting more than three-fourths of the population (836 million) and consisting of all those whom the growth process has, by and large, by passed."[2]

Recent Revised Estimate of Poverty by the World Bank

Martin Ravallion and Shaohua Chen of the World Bank have updated the World Bank Poverty Line of $ 1.08 per person per day at 1993 Purchasing Power Parity dollars with a new international poverty line of $1.25 per person per day for 2005 based on the new Purchasing Power Parity prices for 2005, replacing those for 1993. As a consequence, 41.8 percent of India's population was below the new international poverty line in 2005. This implies that 461 million persons were living in poverty as per the revised estimate - a huge number indeed.

Food Price Inflation and Increase in Poverty

Food price inflation implies a sharper increase in the prices of food articles relative to that of manufactures and other non-food articles. Recent price trends indicate that while the overall rate of inflation in the Wholesale Price Index (WPI) has dropped to 8.4 percent in November 2008 from its peak of 13 percent in August 2008, but rate of inflation of food articles has gone up from 8.84 percent to 10.43 percent during the same period. However, a poor family in India spends 60-70 percent of its family income on food-related items. Higher food prices will thus impose a greater burden on the poor and may also push more persons below the poverty line. Hence, there is a need to control the increase in prices of food articles such as cereals, fruits and vegetables, eggs etc.

1. World Bank, *World Development Report* (2008) p.348.
2. National Commission for Enterprises in the Unorganised Sector (2007), *Report on Conditions of Work and Promotion of Livelihood in the Unorganized sector*, p.8.

8. TOWARDS A SOLUTION OF THE PROBLEM OF POVERTY

This requires a two-pronged strategy – (i) The [illegible]sion of sectors which promise higher labour absorption and (ii) Empowering the poor with education, [illegible] formation and health so that they can enter sectors which require higher competence and provide better remuneration which enable the poor to cross the poverty line. The following strategy can solve the problem of poverty.

1. Adopt a strategy of pro-poor growth instead of emphasizing liberalization and GDP growth

Former Prime Minister Atal Bihari Vajpayee in his Independence Day Message (15th August 2001) candidly stated: "The fruits of liberalization have not adequately reached the poor and the people living in rural areas. Inequalities have increased." It would be, therefore, futile to pursue the failed strategy of liberalization which has a focus on only 8 percent of labour force in the organized sector. The need of the hour is to take care of the 92 percent of labour force engaged in the unorganized sector. Liberalization has driven more and more people from the organized sector to the unorganized sector. There is a need to reverse this process and more and more units in the unorganized sector are enabled to graduate and join the ranks of the organized sector". The government should re-appraise them and give priority to the removal of unemployment and recognizing the 'Right to work' as a basic human right. For this, a new model of development reconciling GDP growth and employment should be developed.

In this model, emphasis should be laid on development of irrigation and watershed development with people's participation. Similarly, degraded and wastelands should be developed through participatory efforts of panchayats. Agricultural co-operatives should be strengthened to undertake food processing industries and KVIC should assigned the task of marketing. SSI sector should be helped on the lines suggested by SP Gupta Study Group. Greater emphasis should be given on housing for the poor and Economically Weaker Sections. Rural infrastructure in the form of roads, provision of power in rural areas should be strengthened and a programme of social infrastructure should be undertaken.

Besides, there is a need for promoting informal sector which is major source self-employment and absorption of casual labour.

2. Stimulating Agricultural Growth

Indian Government has been fixing the target of agricultural growth during the Ninth and the Tenth Plan at 4 percent per annum, but in practice realized 2.7% in the 9th Plan and only 1.7% in the Tenth Plan. To identify the causes of sluggish growth of agriculture, it appointed a high power Commission under the Chairmanship of Dr. M S Swaminathan, world renowned agricultural scientist. The National Commission on Farmers suggested the following 5-point action Plan:

1. Undertake Soil health enhancement through integrated measures in improving organic matter and macro-and-micro nutrient.
2. Promote water-harvesting, conservation and equitable use by-empowering panchayats to become 'pani panchayats.' A sustainable water harvesting system should be established in rain-fed areas lacking assured irrigation.
3. Keeping in view, the decline in profitability and farmer's distress, the Government should reduce the rate of interest on crop loans to 4 percent.
4. Bridge the growing gap between scientific know-how and field-level do-how both in production and post-harvest phase of farming. This could be accomplished by training farmers through the agency of Krishi Vigyan Kendras (Agricultural Science Centers) in both production and post-harvest technologies.
5. The gap between what the rural producer gets and the urban consumer pays should be narrowed down, as has been done in the case of milk by Dr. V. Kurien.

Besides, the National Commission on Farmers placing the unfinished agenda in land reform first in its list of five factors central to the present agrarian crisis states "The first and foremost task of the National Policy on Farmers should be in the area of land reform with particular reference to tenancy laws, distribution of ceiling surplus land, attention to common property and wasteland resources and consolidation of holdings.... Giving access to land and homesteads not only reduces poverty but is the bestway to bring dignity in the lives of today's excluded." (Quoted by the *Approach Paper of the 11th Five Year Plan, p.29*).

3. Increasing the productivity and job quality of the unorganized sector

The NDA government appointed 'Special Group on Targeting Ten Million Employment Opportunities', under the chairmanship of Dr. S P Gupta, the then member of the Planning Commission which submitted its report in 2002. The Special Group emphasized a shift in the strategy of development by emphasizing the growth of unorganized sector as the surest method to reduce unemployment and poverty.

To quote: "The only answer to this situation is to increase productivity and job quality of the unorganized sector. It means that all attempts should be made to implement those policies which will release the basic growth constraints and by ensuring a level playing field for this sector.... In the attempt to increase the labour productivity, more emphasis should be on the growth of

this sector rather than for substituting labour by capital. Further, to improve the job quality and its security, major changes in legislation will be needed regarding basic social security measures, working conditions, minimum wages and protection of labour interests."

There is a need to immediately implement the recommendations of the special group so that reduction in the rate of poverty reduction with higher GDP growth is halted and a reverse trend is generated.

3. Improving the share of wages in the process of growth to achieve poverty reduction

The saddest finding in the Approach Paper of the Eleventh Plan is: According to Annual Survey of industries, real wages declined even for workers in the organized sector although managerial and technical staff did secure large increase. *The wage share in our organized industrial sector has halved after the 1980s and is now among the lowest in the world.* (Emphasis added)

In this connection, the Report of the Secretary General, United Nations for the 2006 Economic and Social Council of the United Nations highlighted the centrality of employment to sustainable growth and poverty reduction. Accelerating employment growth is crucial for reducing poverty, as the Report pointed out, labour income constitutes the main source of income for the poor.

Professor Sheila Bhalla in her article 'Note on Employment, Poverty and the Structure of Aggregate Demand in South Asia' presented in the International Conference on 'Universalizing Socio-economic Security in South Asia', New Delhi 17-20 February 2008 presented the share of profits and wages in net value added in organized manufacturing in India.

Figures given in Table 25 reveal that wage share declined from 50.8% 1989-90 to 38.9% in 1994-95 and further declined to 32.4% in 2004-05. As against it, the share of profits which was merely 19.1% in 1989-90 rose to 40.65 in 1994-95 and further shot up to 55.6% in 2004-05. This dramatic rise in the share of profits as against fall in the share of wages is the cause of slow-down in poverty reduction.

Professor Sheila Bhalla also mentions: "The savings rate of the private corporate sector rose sharply every year while the trend for household savings component was flat. A large part of the private sector's investment has been financed out of its retained earnings or savings. Increases in retained earnings, in turn, have been achieved on the strength of rapidly rising share of corporate profits largely in national income accompanied by rapidly falling share of wages."

To put it more bluntly, the growth of the corporate sector is fundamentally based on exploitation of labour in the form of real wage reduction, by employing over 20 percent of the workers as temporary or casual workers without any social security.

Table 27 : Share of Profits and Wages in Organized Manufacture in India

Value in ₹ crores at current prices

	Net value added	Profits Share (%)	Wages Share (%)
1989-90	42,663	19.1	50.8
1994-95	1,05,852	40.6	38.9
1999-00	1,54,974	30.5	38.2
2000-01	1,43,621	24.9	43.1
2001-02	1,44,302	24.2	44.0
2002-03	1,72,340	35.9	39.7
2003-04	2,02,954	45.5	35.7
2004-05	2,59,907	55.6	32.4

Source: *CSO, Annual Survey of industries, various issues*

The question arises: Should the State remain a silent spectator to falling share of wages in the face of rapidly rising share of profits and still claim that it intends to follow the philosophy of 'inclusive growth'?

Obviously, this entails a larger role of the state for encouraging productivity-wage bargaining with the fundamental premise that the workers have a right to equitable share of the fruits of economic progress. Along with this, if the state deliberately and in an effective manner can promote growth of the unorganized sector, this is likely to achieve the objective of full employment. The arm of the state has to be on the side of the weaker section i.e. labour so that it can negotiate a compact with the corporate sector to evolve a mechanism for the equitable distribution of net value added. Unfortunately, the role of the state after liberalization has been to provide support to business magnates, this role needs a reversal if 'inclusive growth' has to be made just and equitable. Only then a fall in the share of wages can be halted and reversed into a rising and equitable share in net national product.

In fact, the entire policy of liberalization was based on 'survival of the fittest', the law of the jungle, whereas a civilized society should follow the law of 'survival of the unfittest' as the hallmark of its policy of inclusive growth. The policy permitted unlimited growth of profits, while denying labour 'decent work' as the ILO intended to achieve by assuring an equitable share of wages. In this, the government as a matter of policy should try to enter into a compact with industrial lobbies regarding sharing of high growth and productivity gains with labour.

4. Empowerment of the poor through education and skill formation

As a consequence of sustained growth in expenditure on education, there has been a remarkable growth in educational institutions at all levels – Primary, secondary

and tertiary. The country was able to achieve a Gross Enrolment Ratio of 96% at the primary level, though the drop-out rate for class I to VIII was 51 percent which is quite high.

At the secondary and higher secondary level, total enrolment for the age-group 14-18 years was about 40 percent, though the drop-out rate for class I to X was as high as about 62 percent.

Gross enrolment Ratio in higher education reached a level of about 11 percent in 2004-05, though world average is 23.2 percent. The country has huge infrastructure in education with 378 universiteis and 18,064 colleges. The country was able to establish institutions of excellence in the field of engineering, medicine, management and also create national level research institutions in agriculture and science. As a consequence, the country produces second largest educated and skilled manpower in the world, only next to China.

The development of a huge educational structure of 378 universities and 18,064 colleges, 1.52 lakh secondary and higher schools, and 10.43 lakhs of primary and upper primary schools is a matter of legitimate pride.

Glaring Failure in Education

However, there are glaring failures which deserve urgent attention.

- Despite nearly 58 years of development planning, the country has failed to achieve universalization of Elementary Education – a goal set by the Constitution to be achieved by 1960. Even after nearly six decades since independence, the number of children outside schools in elementary education is quite large.
- Drop-out rate among STs and SCs was even higher at 65.95% and 57.3% respectively which is much higher than the over-all drop-out rate.
- Although secondary education up to class X is not the real terminal stage, even then drop-out rate (I-X) was as high as 62%; 64% for girls and 60% for boys.
- Enrolment in Secondary and Higher Secondary level taken together was only 39.9% in 2004-05 – 44.3% for boys and 35.1% for girls which is very low.
- Mid-day meal scheme which covers about 18 crore children in primary and upper primary schools, has improved attendance and retention rate, but serious weaknesses about the implementation of the scheme to provide standard meals have been highlighted by NGOs which need remedial action.
- Glaring inter-state variations in enrolment, drop-out rates and access to secondary and higher secondary level need remedial action so that these variations can be narrowed down.
- A sharp shift in the management pattern of the schools has been noticed. The share of unaided public sector schools has doubled from 15% in 1993-94 to 30% in 2004-05. As against it, the share of Government and aid schools has come down from 85% in 1993-94 to 70% in 2004-05. This implies that parents are prepared to pay more for the education of the children, if they perceive of good quality education in a particular category of schools. Thus, there is a need to make more investment in Government and aided schools for improving the quality of education.
- To reach the objective of universalization of secondary education as our goal in future, it is necessary to strengthen the school infrastructure, both physical and human in a substantial manner.
- Even in Government and aided schools, there is a need to charge some reasonably affordable fees so that the management is provided more resources, besides state grants to improve quality of education.
- There is gross failure in the provision of vocational education since only 5% of the population in India of age-group 19-24 in 2004-05 acquired some skill, whereas the target set by the Education Commission (1964-66) was 25% by 1986. There is a need to develop effective strategies so that demand driven vocational education programmes in partnership with employers can be drawn. These glaring shortages of skilled human power are being experienced in the rapidly computerizing knowledge economy.
- Higher education continues to be elitist since Gross Enrolment Ratio is only 11% of the population in the relevant age group against the world average of 23.2% and for the countries in transition at 36.5% to which India belongs.
- The share of private unaided higher education institutions increased from 42.6% in 2001 to 63.2% in 2006. Their share in enrolment also rose from 32.9% to 51.5% during the same period. Since these schools operate purely for profit motive and charge very exorbitant fees, they price out the weaker sections of the society and become elitist. This militates against our goal of inclusive development and is thus a conspicuous failure of the educational system.
- The dispersal of technical education in the country is highly skewed. Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra account for nearly 55% of engineering colleges and 58% the enrolment in country.
- Distance education was adopted to provide opportunities for the deprived sections of the society, but universities are using these institutions as *milch cows to provide huge* surpluses for their development. Even IGNOU is charging very high fees for BCA, MCA, MBA and other vocational courses to either make them self-financing or surplus generating.

- Despite the target set for 6% of the GDP to be devoted to public expenditure in education by 1986, we have reached a level of 3.49% of GDP in 2004-05. This is another gross failure of our priorities toward education which is a potent instrument to promote inclusive growth.

It is heartening to know that in the Eleventh Plan, the Central Government envisages an outlay of ₹ 2.37 lakh crores at 2006-07 prices for education. This is four-fold increase over the Tenth Plan expenditure of 0.54 lakh crores at 2006-07 prices. The relative share in the total Plan outlay will correspondingly increase form 7.7% to 19.4%. Around 50% of the outlay is for elementary education and literacy, 20% for secondary education (IX to XII) and 30% for higher education (including technical education). The big boost to education proposed in the Eleventh Plan priorities will take care of the resource constraint and the country should devote its energies to improve effective implementation of the professed goals.

5. Empowerment through provision of better health

The strong link between poverty and health needs to be recognized. Long-term illness and expensive illness can drive even the non-poor, into poverty. To improve health care, a comprehensive approach is needed which comprises individual health, public health, sanitation, clean drinking water and knowledge of hygiene and bringing up of children.

Although India has achieved significant improvement in various health indicators like life expectancy, infant and maternal mortality rate, yet countries in similar stage of development as China, Indonesia and Sri Lanka performed much better. During 2002-04, 20% of India's population was malnourished and 47.9% of its children under age 5 years suffered from malnutrition.

42.6 million persons lived in slums in urban areas, accounting for 15% of urban population. Lack of sanitation and poor quality of drinking water lead to high incidence of diseases among slum dwellers.

Although India has developed a huge infrastructure of 1.45 lakh sub-centers, 22,670 primary health centers and 3,910 community health centres, yet due to shortage of staff and inadequate diagnostic equipment, rural population has to approach towns and city hospitals for treatment.

In recent years, as against public hospitals, private hospitals are growing at a faster rate and in 2004-05, about 58% cases for treatment approached private hospitals in rural areas, and the figure for urban areas was higher at 62%. Despite high cost in private hospitals about 3 times as compared with public hospitals, people prefer private hospitals.

National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM) are the two major initiatives to help the poor in the availability of health facilities.

In secondary and tertiary health care, both public and private sector are involved, but the system is overloaded due to shortage of primary health care facilities in rural areas especially.

There is a need to provide clean drinking water and sanitation, especially in slums, backward and remote rural regions so that they do not carry water-borne diseases. India's record on sanitation is very poor since only 33% India's population has access to improved sanitation.

Household expenditure on health is 6.1% of total household expenditure in urban areas and 4.9% in rural areas. Out of this, the share of expenditure on drugs is 77% rural areas and 69% in urban areas. The poor are the worst affected because they are frequently affected by diseases and are least able to purchase and utilize the health services and the drugs. There is a need to set up mechanisms so that at least essential drugs are made available at affordable prices.

There is a need to extend health insurance for workers in the unorganized sector so that the weakest sections of the labour force are provided assured benefits in the form of insurance cover and thus can be saved from falling into poverty trap, because periods of prolonged illness result in fall of incomes but rapid rise of expenditure.

Our achievements on health indicators are encouraging, but we have miles to go before we sleep.

6. Empowering the poor through provision of housing

There is a need to remove the shortage of permanent houses in the rural as well as urban areas. Not only that, an effort has to be made to provide the basic amenities of life such as drinking water, toilets and electricity. The country must launch a massive programme to provide housing and basic civic amenities.

The situation is much worse in rural areas than in urban areas. Government should subsidize housing for the poor and weaker sections of the society and recover the cost as part of rent and installments over a period of 20 years. At present, the amount of ₹ 30,000 being given for the construction of a house under Indira Aawas Yojana is too meagre in view of the rising cost of construction to provide a two roomed house, with a kitchen and toilet. This should be the minimum that is required by a family. This requires the limit of ₹ 30,000 to be revised.

Since rural areas are not offering enough employment opportunities, there is a push factor working and as a consequence, the urban population is increasing. In the urban areas, housing property has become so costly that it is beyond the reach of the majority of population. Most important is the price of land whose price has been sky-rocketing. The way out is that the government acquires land and does not add it as a charge from the poor and lower middle classes and starts a massive programme of housing. Construction cost should be charged from the people and price paid by the government to acquire land be treated as a subsidy for housing. It is only such an affordable price which can help the country to achieve the target of "housing for all" in a period of 20 years. This

will also generate massive employment and thus raise the income of the poor who will be drawn to build houses.

In case, this is not done, the poor will usurp some land and put up *jhuggies* and this will lead to further growth of slum population.

7. Empowerment through skill formation for our expanding IT sector

In view of the increasing use of computers and Information Technology in all walks of life, the demand for skilled labour is on the increase. Since this requires access to higher education and vocational training, only those who can afford costly education and vocational training, are able to benefit from the expanding opportunities of employment. Consequently, the poor are being priced out because they cannot afford expensive higher education and vocational training. Thus, the State should:

- provide subsidized higher education and vocational training for the poor;
- institute a large number of merit-cum-means scholarships for the poor; and
- help such institutions, both financially and otherwise, which provide education to the poor.

Such measures, if taken on an emergency basis as a national priority, can help the poor to rise in life.

8. Providing employment through National Rural employment Guarantee Scheme (NREGS)

NREGS was started by the UPA Government as a national programme to provide 100 days of employment to begin with, through asset-creating public works every year at minimum wages to one-able bodied person in every rural poor class household.

The National Rural Employment Guarantee Act came into force in 2006 in India's 200 most backward districts. In 2007, it was extended to another 130 districts and with effect from April 1, 2008, the Act is to cover all districts. Union Budget 2009-10, provided for 39,100 crores for NREGS. In this year's Union Budget (2010-11), this allocation has been enhanced to 40,100 crores. This scheme now extends to all districts of the country.

NREGS has been reviewed by the Controller and Auditor General (2007) and certain NGOs, especially the National Consortium of Civil Society Organization (CSO), have also undertaken several reviews.

The following are the major short-comings of NREGA.

- Lack of adequate professional staff
- Lack of project planning
- Bureaucratic resistance of NREGA on account of the widely held belief that it is much more difficult to make money under NREGA as compared with other employment programmes.
- Lack of transparency and absence of social audit
- Inappropriate rates of payment.

It is, therefore, vitally necessary that measures be initiated to remove these shortcomings so that the programme can deliver the benefits intended from its implementation.

Conclusion

Jeffrey Sacks in his famous work; *'The end of Poverty – How can we make it happen in our life time' (2005) mentions:*

The extreme poor lack six major kinds of capital:

- **Human Capital**: health, nutrition and skills needed for each person to be economically productive
- **Business capital:** the machinery, facilities, motorized transport used in agriculture, industry and services
- **Infrastructure:** roads, power, water, sanitation, air transport and sea ports and telecommunication systems that are critical inputs into business productivity
- **National capital:** arable land, healthy soils, biodiversity, and well-functioning ecosystems that provide the environmental services needed by the society
- **Public institutional capital:** the commercial law, judicial systems, government services and policing that underpin peaceful and prosperous division of capital
- **Knowledge capital:** the scientific and technical know-how that raises productivity in business output and the promotion of physical and natural capital

The public sector should be mainly focused on five kinds of investments – human capital (health, education, nutrition), infrastructure (roads, power, water and sanitation and environmental conservation), natural capital (conservation of biodiversity and ecosystems), public institutional capital (a well-run public administration, judicial system, police force), and parts of knowledge capital (scientific research for health, energy, agriculture, climate, ecology).

The general lesson of successful economies is that governments are wise to stick mainly to general kinds of investments – schools, clinics, roads and, basic research – and to leave highly specialized business investments to the private sector.

If the government is able to successfully discharge its general functions, it sets a process in motion which shall lead to elimination of poverty.

Basically, what is needed is a commitment to end poverty within our life time. Human forces, if set in motion, by leaders who show gigantic will, are destined to transform human society. All that is required is to make poverty the central objective and all measures should be designed to end it.

Poverty reduction requires a pro-poor strategy of growth which implies creation of more and more productive employment opportunities in those sectors which help the poor to raise their level of income.

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CHAPTER

24

THE PARALLEL ECONOMY IN INDIA

"If the "Parallel economy" poses a serious threat to stability and growth of the official economy, surely it stems from the fact that the magnitude of "black-money" is large and rigged deals are growing in volume and complexity at an alarming rate. Apart from the wide ramifications of the "parallel economy", one might also be alive to the fact that "black incomes" are accentuating the inequalities in income and wealth and breeding a new class of "black" rich in a society which is already harshly stratified."

—D.K. Rangnekar

1. PARALLEL ECONOMY AND OBJECTIVES OF PLANNING

Parallel economy connotes the functioning of an unsanctioned sector in the economy whose objectives run parallel, rather in contradiction with the avowed social objectives. This is variously referred to as *'black economy'*, *'unaccounted economy'*, *'illegal economy'*, *'subterranean economy'*, or *'unsanctioned economy'*. The term 'parallel economy' emphasizes a confrontation between the objectives of the legitimate and illegitimate sectors. For instance, in the broad long-term objectives of planning to establish a socialist pattern of society, we include full employment, removal of disparities of income and wealth, avoidance of conspicuous consumption so that more resources are available for a larger volume of saving, the removal of poverty, the attainment of self-reliance and provision of equality of opportunity. The main purpose of planning was to subordinate the capitalist spirit of an acquisitive society to the goals of planned development so that greater social welfare is promoted. Naturally, the vested interests are bound to oppose these progressive trends and the curbs that may be imposed on their unfettered right of exploitation. The principal function of the state pledged to the establishment of a democratic socialist society is to ensure that state policies and the controls are so geared that the progressive forces dominate and are able to subjugate those who attempt to frustrate the efforts of the state to establish a social order based on equality and justice for all, more especially for the downtrodden.

With the attainment of independence and the advent of planning, more avenues of investment in a large number of industries were opened. The concept of the mixed economy envisaged the co-existence of a public sector and a private sector. Both were expected to promote investment and output. The criterion in the public sector was social gain and thus it concentrated on the creation of economic infrastructure in the form of roads, railways, irrigation and hydro-electric works, etc., the development of heavy, basic and defence industries and the provision of better education and health facilities. The rest of the economy was left to be developed by the private sector.

With the expansion of economic activity in the post-independence period, the magnitude of the black sector has grown and proliferated to such an extent that it has begun to play a dominant role in moulding state policies, in changing

the structure and composition of output, in promoting a class which derives its maximum source of power from black money. Obviously, the magnitude of operations of the black money operators has resulted in the establishment of a parallel economy. D.K. Rangnekar rightly mensions: "If the "Parallel economy" poses a serious threat to stability and growth of the official economy, surely it stems from the fact that the magnitude of "black money" is large and rigged deals are growing in volume and complexity at an alarming rate. Apart from the wide ramifications of the "parallel economy", one might also be alive to the fact that "black incomes" are accentuating the inequalities in income and wealth and breeding a new class of "black" rich in a society which is already harshly stratified. The inequalities are no longer below the surface. The conspicuous consumption of the new "black" rich, their vulgar display of pomp and opulence, their unlimited accessibility to finance, their nest-eggs in various places and countries, their influence in important places, all these are now common knowledge"[1]. To understand the impact of black economy, it is essential to have an estimate of 'black income' over a period of time.

2. ESTIMATES OF BLACK INCOME IN INDIA

Several attempts have been made to quantify black incomes in India. Broadly speaking, the various estimates of black incomes made so far follow two approaches: (i) Kaldor's approach of quantifying non-salary incomes above the exemption limit of income tax and (ii) Edgar L. Feige's method of working out transaction-income on the basis of currency deposit ratio and from it deriving the black income of the economy. Kaldor's method has been used in the report on Indian Tax Reform, and later by the Direct Taxes Enquiry Committee with some modifications. D.K. Rangnekar, former Editor, *Economic Times*, used the same technique with some more modifications and later Mr. O.P. Chopra developed a series of black income by further modifying the Wanchoo Committee's assumptions. Feige's method has been used by Poonam Gupta and Sanjeev Gupta. It would be of interest to study these methods in some detail.

Estimates of black income based on Kaldor's approach

(i) Kaldor's estimate—N. Kaldor in his report on Indian Tax Reform estimated the non-salary income on the basis of the break-up of national income into (a) wages and salaries, (b) income of the self-employed, and (c) profit, interest, rent etc. Excluding wages and salaries from the contributions to net domestic product, he derived total non-salary income. For various sectors of the economy, on the basis of assumed proportions of non-salary incomes above the exemption limit, Kaldor estimated non-salary income above the exemption limit. An estimate of the actual non-salary income assessed to tax was made for each sector in order to arrive at the total non-salary income assessed to tax. The difference between the estimated non-salary income above the exemption limit and the actual non-salary income assessed to tax measures the size of the black income. (Refer table 1).

(ii) Wanchoo Committee's Estimate—Direct Taxes Enquiry Committee (Wanchoo Committee) followed the method adopted by Kaldor with suitable modifications. According to Wanchoo Committee, "the estimated income on which tax has been evaded (black income) would probably be ₹ 700 crores and ₹ 1,000 crores for the years 1961-62 and 1965-66 respectively. Projecting this estimate further to 1968-69 on the basis of percentage increase in national income from 1961-62 to 1968-69, the income on which tax was evaded for 1968-69 can be estimated at a figure of ₹ 1800 crores."[2]

(iii) Rangnekar's Estimate—Dr. D.K. Rangnekar as member of the Wanchoo Committee, in his minute of dissent considers the estimates made by the Wanchoo Committee as under-estimates. According to him, tax evaded income for 1961-62 was the order of ₹ 1,150 crores, as compared to the DTEC estimate of ₹ 850 crores. For 1965-66, it was ₹ 2,350 crores, as against ₹ 1,216 crores estimated by DTEC. The projections of black income for 1968-69 and 1969-70 were ₹ 2,833 crores and ₹ 3,080 crores respectively. Rangnekar concluded: "The compound rate of growth of "black income" was of the order of 13 per cent per annum at current prices whereas the compound rate of growth of national income for the same period was 11 per cent per annum."[3] Rangnekar further clarifies that if one took into account the leakage of foreign currency incomes and surreptitious foreign income transfers, the estimates of black income may have to be marked up by ₹ 200 crores.

(iv) Chopra's Estimate—Mr. O.P. Chopra prepared a series of unaccounted income (black income) for a period of 17 years, i.e., 1960-61 to 1976-77. Chopra uses a slightly modified methodology recommended by the Direct Taxes Enquiry Committee. Since it is difficult to obtain information on non-salary income actually assessed, the DTEC assumed the ratio of evaded income to non-salary assessable income to remain constant to the one observed in 1960-61. Chopra gives up this assumption in favour of a less demanding assumption. Chopra's methodology marks a significant departure from the DTEC approach and as a consequence, he finds a larger divergence in the two series from 1973 onwards when the income above the exemption limit registered a

1. D.K. Rangnekar, Minute of Dissent in *Direct Taxes Enquiry Committee, Final Report*, December 1971, p. 249.

2. Government of India, *Direct Taxes Enquiry Committee, Final Report*, December 1971, p. 8.

3. *Ibid.*, p. 250

significant increase. The underlying assumptions of the methodology are:

(i) Only non-salary income is evaded. While this may be true for government employees, this does not capture additional benefits given by the private sector to its salary earners, more especially, business executives.

(ii) Taxes other than income tax are evaded and the study is restricted to only that part of income which is subject to income tax. Thus tax evasion which may be due to (a) non-payment or under-payment of excise duty, (b) sales-tax, (c) customs duties, or (d) substituting non-agricultural income for agricultural income is not captured.

(iii) The efficiency of the tax administration remains unchanged.

(iv) The ratio of non-salary income above the exemption limit to total non-salary income has remained the same.

(v) The ratio of non-salary income to total income accruing from various sectors of the economy remains the same.

(vi) Unaccounted income generation in the agricultural sector has not been taken into account.

The study shows that a buoyant economy offers more opportunities for unaccounted income. During periods of recession, it may be difficult for producers to extract unaccounted money.

The crucial finding of Chopra's study is that after 1973-74, the ratio of unaccounted income to assessable non-salary income has gone up, whereas the Wanchoo Committee assumed this ratio to have remained constant. As a consequence, after 1973-74, there is wide divergence between the estimates of Wanchoo Committee and those of Chopra. (Refer table 1). Chopra also corroborates the hypothesis that tax evasion is more likely the higher the rate of tax.

(v) Gupta's Study of Black Income using Feige's method of transaction-income ratio

Poonam Gupta and Sanjeev Gupta have raised some fundamental objections regarding Kaldor's methodology used in estimating black income in India. Since the income generated in the illegal economy is not reported for the calculation of official GNP, the estimates of GNP which are used as the basis for estimation of black economy are serious under-estimates. Consequently, the exclusion of black market activity biases all the important indicators of economic activity in any society. Official statistics on income, therefore, grossly under-estimate the true size of the economy. That being so, the size of the black economy is also seriously under-estimated.

Guptas made use of Feige's method of estimating the magnitude and growth of the black market. Feige assumed that the ratio of total transactions to total income was relatively stable. Therefore, it would be more logical to calculate the total volume of transactions, both legal and illegal. The Official GNP measures only the legal economic activity. Thus, if a proportional relationship exists between transactions and income, then significant increases in this ratio would be due to the expansion of illegal (or black) economic activity.

Feige's methodology requires preparation of estimates of chequing transactions and currency transactions. Chequing transactions are equal to the average stock to demand deposits multiplied with their turnover rate (i.e., the average number of times the demand deposits turnover). Transactions supported by currency (or cash) can be estimated by calculating the turnover of a unit of currency and then multiplying it by the total currency with the public. A bench-mark year is chosen where it is assumed that there was no illegal activity or black income generation was zero. For this base year, the ratio of transactions of GNP is first obtained. Estimates of the magnitude of legal and illegal activities in the succeeding years can be obtained by dividing the total volume of transactions in each year by the base year's ratio. Subtracting measured GNP gives us the estimate of black income generated in these years.

According to this study, the absolute size of the black income in India increased from ₹ 3,034 crores in 1967-68 to ₹ 46,867 crores in 1978-79, i.e., by more than 15 times. The relative share of the black economy was 9.5 per cent of GNP in 1967-68, but it has jumped to nearly 49 per cent by 1978-79. According to Guptas: "Thus, currently almost half of the official income is being produced outside the "legal" sector. Not only is the black economy a substantial proportion of the regular economy but it has also grown at a rate faster than that of the official economy."[4]

The study further indicates that 1 per cent increase in overall taxes leads to more than 3 per cent increase in the black income relative to the official economy.

(vi) NIPFP Study on Black Economy in India

National Institute of Public Finance and Policy conducted a study under the direction of Dr. S. Acharya, formerly of the World Bank. Dr. Raja Chelliah was the overall supervisor of the Study. The study defines black income as "aggregate of incomes which are taxable but are not reported to tax authorities". The study, however, gives a broader definition of black income and calls it as "unaccounted income" for purposes of clarity. It is "the extent to which estimates of national income and output are biased downwards because of deliberate, false reporting of incomes, output and transactions for reasons of tax evasion, flouting of other economic controls and related motives."

4. Gupta P. and Gupta S., Estimates of the unreported Economy in India, *Economic and Political Weekly*, Vol. XVII, No. 3, January 16, 1982, p. 73.

In preparing the estimate of black income, for lack of sufficient data, the study follows "the minimum estimate approach," that is to say, not being able to ascertain the most probable degree of under-declaration or leakage, the study uses a degree of under-declaration which could be safely regarded as the minimum in the relevant sector.

While preparing the estimate of black income, the study excludes incomes generated through illegal activities like smuggling, black market transactions, acceptance of bribes, kickbacks etc. To prepare, a global estimate of black income, the study confines itself to six areas:

(i) ***Factor incomes received either openly or covertly while participating in the production of goods and services***—The study estimates that on account of under-reporting of output or sales or over-reporting of the costs or misclassification of personal expenses by manufacturing/trading enterprises, the GDP figures have to be revised upwards by 10 per cent.

(ii) ***Black income generated in relation to capital receipts on sale of assets***—The study assumes that in real estate transactions, the black-white ratio was 40 : 60 as the minimum average for all India. In other words, the registered value represents only 60 per cent of the 'true' value of the property. The study, however, also admits that in several areas this ratio may be an under-estimate. "For instance, the sample survey of real estate brokers in Delhi indicated that the ratio of black to white components ranged from around 45 to 55 in 1978-79, 60 to 40 in 1980-81 and 65 to 35 in 1982-83."[5] However, the study admits : "The value of property under 'Power of Attorney' transfer is also not included in our base. Thus, to that extent, our estimate is downward biased."[6]

(iii) ***Fixed capital formation in the public sector***—The key areas in which such leakages occur are found to be investments in construction and plant and machinery. The study assumes a range of 10-15 per cent of the cost of construction to be siphoned off as black income.

So far as plant and machinery are concerned, the study assumes a 5 per cent leakage only in relation to investment in plant and machinery by administrative departments and no leakage at all in relation to investment in plant and machinery by departmental enterprises.[7]

(iv) ***Black income generated in relation to private corporate sector***—The study assumes a leakage of 10-15 per cent to be a safe range in relation to private corporate investment by way of kick-backs from suppliers and contractors.

(v) ***Black income generated in relation to exports***—The study mentions : There is not much evidence of under-invoicing in relation to non-traditional exports . . .But under-invoicing is believed to exist in relation to 'traditional exports'. The study assumes a minimum of 10 per cent of FOB value of 'traditional' exports to be the amount of black income generated.

(vi) ***Black income generated through over-invoicing of imports by the private sector and sale of import licences***—The study assumes 10-15 per cent leakage in relation to private corporate sector investment which includes imported machinery as well as machinery purchased domestically. Similarly, the study assumes that half of the REP licences are sold away at 25 per cent premium.

The study after aggregating the different components of black income concludes : Our global estimate of black income ranges from ₹ 9,958 to 11,870 crores in 1975-76 and from ₹ 20,362 to 23,678 crores in 1980-81. In terms of per cent of GDP, these estimates range from 15 to 18 in 1975-76 and from 18 to 21 in 1980-81. A closer examination of the data reveals that in 1980-81, nearly 48% of black income generation was through evasion of taxes in personal income, 28 per cent due to under-reporting of output and 18 per cent due to under-registration of immovable property. In other words, these three components accounted for 94 per cent of black income generation.

NIPFP study on the basis of its findings has estimated the black income for 1983-84 on the assumption that the same percentage of GDP was generated as black income in 1983-84 as prevailed in 1980-81. The absolute amount of black income generated was estimated to be in the range of ₹ 31,584 crores to ₹ 36,784 crores in 1983-84 i.e. 18 to 21 % of GNP.

NIPFP study concludes : "A total black income generation of ₹ 36,786 crores or in round numbers ₹ 37,000 crores out of a total GDP at factor cost of ₹ 1,73,420 crores seems to be on the high side, although it turns out to less than 30 per cent of GDP as against some extravagant estimates placing it at 50 or even 100 per cent of GDP. . . .Taking our lower estimate, what we would say with some degree of confidence is that black income generation in the Indian economy in 1983-84 cannot be placed below 18 per cent of GDP at factor cost or 16 per cent of GDP at market prices."[8] (Refer table 2)

Assessment of the NIPFP Estimate

There is no doubt that the estimate of black income prepared by S. Acharya of the NIPFP has meticulously searched for available information and data and has tried to collate and present a global estimate of black income. In this sense, it makes an advance over the earlier studies in the sense that it

5. NIPFP, *Aspects of the Black Economy in India*, March 1983, pp.413-14.
6. *Ibid.*, pp., 414-15.
7. *Ibid.*, pp. 420-23
8. *Ibid.*, p. 434.

Table 1. Estimates of Black Income in India

(₹ crores)

Year	GNP at market prices	Kaldor[1]	Wanchoo Committee[2]	Rangnekar[2]	Chopra[3]	P. Gupta and S. Gupta[4]	NIPFP[5]	Suraj B. Gupta[6]
1953-54	9993	600(6.0)						
1960-61	14946				916(6.1)			
1961-62	15879		700(4.4)	1150(7.2)	716(4.5)			
1962-63	16991				837(4.9)			
1963-64	19544				1452(7.4)			
1964-65	22897				1564(6.8)			
1965-66	23948		1000(4.2)	2350(8.8)	1439(6.4)			
1966-67	27461				1685(6.1)			
1967-68	32036				1816(5.7)	3034(9.5)		
1968-69	33024		1400(4.2)	2833(8.6)	1318(4.0)	4505(13.4)		
1969-70	36580			3080(8.4)	2714(7.4)	5459(14.9)		
1970-71	40177				2062(5.1)	8900(22.2)		
1971-72	43266				1392(3.2)	12355(28.6)		
1972-73	47750				1795(3.8)	15195(31.8)		
1973-74	58863				4757(8.1)	15895(27.0)		
1974-75	69755				8611(12.3)	14518(20.8)		
1975-76	72698				7292(10.0)	18458(25.4)		
1976-77	76937				8098(10.5)	30015(39.0)		
1977-78	86860					34335(39.5)		
1978-79	96080					46867(48.8)		
1975-76							9,958 to 11,870 (15 to 18)	
1980-81	122226						20,362 to 23,678 (18 to 21)	50,977 (41.7)
1983-84	185991						31,584 to 36784 (18 to 21)	85,208 (45.8)
1987-88	294408							149,297 (50.7)

Note: Figures in brackets indicate black income as percentage of GNP at market price in the respective year.

Source: Compiled from (1) N. Kaldor, *Indian Tax Reform*.
(2) *Direct Taxes Enquiry Committee, Final Report*. December, 1971.
(3) O.P. Chopra, Unaccounted Income: Some Estimates, *Economic and Political Weekly*, Vol. XVII, Nos. 17 & 18, April 24-May 1, 1982.
(4) Poonam Gupta & Sanjeev Gupta, Estimates of Unreported Economy in India, *Economic and Political Weekly*, Vol. XVII No. 3, Jan 16, 1982.
(5) NIPFP, *Aspects of the Black Economy in India*, March 1985.
(6) Suraj B. Gupta, *Black Income in India* (1992).

much more comprehensive. But critics are nearly of a unanimous view that this is an under-estimate. This is because it is based on 'minimum estimate approach.' There is a serious element of under-estimation on various counts. Firstly, the study by confining itself to only legal activities excludes smuggling, black marketing, bribes and kickbacks. But the fact of the matter is that a considerable portion of black income is generated by illegal activities. Secondly, the study has preferred to choose the lowest figures while determining black income estimates. It would have been better if an average of the range had been used. For instance, to treat 40 per cent as black income generation in the sale of immovable property, 10-15 per cent leakage in cost of construction, 5 per cent leakage in investment in plant and machinery by administrative departments and no leakage by departmental enterprises is to close one's eyes towards reality. Thirdly, to exclude property transfers under 'power of attorney' gives another downward bias to the estimates. Besides this, to assume no leakage in defence equipment and machinery imported from abroad further depresses the estimate of black income. Fourthly, in the estimate of black income generated through under-reporting of output, the NIPFP report gives an estimate in the range of ₹ 5,715 to 8,570 crores or 28 to 36 per cent of total black income generated. If similar ranges of black income generation had been developed by the study in immovable property or personal incomes by including illegal acquisitions, its

TABLE 2. Global Estimate of Black Income Generated in India

(₹ crores)

	1975-76	1980-81
1. From gross personal income	3,741	9,813
2. Under-reporting of Output	3,318 to 4,978	5,713 to 8,750
3. Under-registration of immovable property	2,256	3,664
4. Leakages from public sector investment	335 to 503	720 to 1,071
5. Leakages from private corporate sector investment	169 to 253	217 to 325
6. Under-invoicing of exports	139	235
7. Total black income	9,958 to 11,870	20,362 to 23,678
8. GDP at factor cost, current prices	66,370	1,14,271
9. Black money as per cent of GDP (7/8 × 100)	15 to 18	18 to 21

SOURCE: Abstracted from *Aspects of Black Economy in India*, p. 431.

estimate of black income would touch 30 per cent, which it treats as extravagant. To incorporate built-in-depressors in the estimates and then to claim that black income is only 18 per cent appears to be illogical. Lastly, the findings of the Study itself reveal that during the 5-year period (1975-76 to 1980-81), black-income generation has grown from 15 to 18 per cent to 18 to 21 per cent. Even if this trend were sustained, then the assumption of assuming a constant ratio of black income transactions cannot be sustained. Need it be mentioned that black income in the post-independence period has been increasing both in absolute and relative terms. This being so, by its own momentum, on the basis of the NIPFP estimate, the black income should have been in the range of 20 to 23 per cent in 1983-84 on the basis of the 'minimum estimate approach.' If we take the lid off the various dubious assumptions of the NIPFP study, the claim that black income is less than 30 per cent of GDP seems to be very hollow.

Moreover, in an under-developed country like India, it is more relevant to determine the proportion of black money by excluding the output derived from agriculture. If agricultural output is excluded, GDP (Y−YA) works out to be 60 per cent of GDP at factor cost at current prices, and for the year 1983-84, GDP (Y−YA) would be ₹ 1,04,052 crores.

Smuggling activities of the order of ₹ 10,000 crores have been left out from the purview of the study. If 25% premium is generated on smuggled goods, the black income generation works out to be ₹ 2,500 crores. Thus, the total quantum of black income generation works out to be ₹ 37,000 + ₹ 2,500 = 39,500 crores. Calculating it as a proportion of GDP (excluding agriculture), the proportion of black income works out to be 24 per cent.

Black income (as adjusted for smuggling as percentage of GDP (excluding agricultural income)

$$= \frac{37{,}000 + 2{,}500}{1{,}04{,}052} \times 100 = 38\ \%$$

It is, therefore, cold comfort to think that black income is only 18 to 21 per cent of GDP. Considering the amenable area of black money and basing our calculations on conservative 'minimum estimates approach', the black income generation is of the order of 38 per cent.

(vii) Suraj B. Gupta's Study of Black Income

Dr. Suraj Gupta made a guesstimate of black income for three selected year—1980-81, 1983-84 and 1987-88. He believe that NIPFP estimate of black income by S. Acharya is an under-estimate and that actual generation of black income is much more. For instance, he assumes that (a) NAS underestimates GDP by 15 per cent, and that (b) 80 per cent of it accrues to income tax payers. Thus the guesstimate will straightway add 12 per cent of GDP to tax evaded income. As against the NIPFP assumption of black income generation from private corporate investment to be 15 per cent, Gupta assesses corporate tax evasion to be at least 30 per cent of corporation tax actually collected in a year.

Regarding Excise Duty evasion, Gupta quotes *Times of India* (New Delhi, 13 June 1985) main editorial which recalled that in 1973 the Excise Executive Officers Association had estimated that leakages in excise revenue amount to at least half of the duty actually paid. With corruption mounting forward in the excise department, Gupta assumes that during 1980s, excise duty evasion was at least 40 per cent of the 'potential duty' amount.

Black income from customs (Import) Duty Evasion has been taken as not less than 30 per cent of the custom duty due if there was no evasion. similarly, Suraj Gupta speaks of smuggling as a "growth industry" in India and its guesstimate has been reckoned at as ₹ 12,000 crores in 1987-88. Gupta mentions: "This major *direct* source of black income from smuggling is the evasion of custom duties and sales tax and black gains through associated hawala transactions." (p. 41) Black income is also generated by grossly under-invoicing traditional exports and misinvoicing non-traditional exports.

Three major states' taxes, viz., sales tax, state excise duty and entertainment tax are the principal sources of tax evasion. On the basis of some empirical findings,

Suraj Gupta assumes evasion of 47 per cent of the potential tax revenue in these three taxes and 30 per cent of tax evasion in the other state taxes.

Black income is also generated by siphoning off public expenditure. Suraj Gupta assumes 30 per cent of the development expenditure on states revenue as well as capital accounts is siphoned off in one form or another. Similarly, he assumes 20 per cent of expenditure as the leakage rate. NIPFP had grossly under-estimated this source of black income.

In private corporate investment, black income is generated through kickbacks from contractors and suppliers. A modest leakage of 15 per cent is assumed in this head.

The upshot of Suraj Gupta's study is the gross under-estimation of black income by NIPFP and the need to make the estimate more realistic. The estimate reveals that black income was around ₹ 51,000 crores in 1980-81, it shot up to ₹ 85,000 crores in 1983-84 and further skyrocketted to ₹ 1,49,297 crores in 1987-88. Average annual compound rate of growth of black income for the period 1980-81 to 1987-88 works out to be 16.54 per cent. As a proportion of GDP, black income has risen from 41.7 per cent to 50.7 per cent during 1980-81 and 1987-88.

It would be desirable to calculate black income as a proportion of GDP of the non-agricultural sector since there is no scope for generation of black income in the agricultural sector. Data reveal that black income as a proportion of non-agricultural GDP was of the order of 67.5 per cent in 1980-81 and it increased to 72.1 per cent in 1987-88. Such being the magnitude of black income, it is appropriate to describe the black sector as "parallel economy".

Gupta believes upper most decile of our population represented by the rich and upper middle class has appropriated most of the black income gains year after year. Average black income per family in this class in 1980-81 amount to ₹ 36,900 and in1987-88, this figure shot up to ₹ 54,093. While GDP at factor cost (at 1980-81 prices) increased by about 40 per cent during the 7-year period (1980-81 to 1987-88), black income per family grew by 46.5 per cent during the same period. Obviously, annual growth rate of black income was somewhat higher than the annual growth rate of real GDP.

3. A REVIEW OF THE VARIOUS ESTIMATES OF BLACK INCOME

IMF staff survey on the unaccounted sector of the economy has estimated black money in India at 50 per cent of Gross National Product (GNP), which was ₹ 1,45,141 crores in 1982-83 at current prices. On this computation, India's unaccounted sector is of the order of ₹ 72,000 crores.

The estimate of black income prepared by Guptas indicates the highest proportion, i.e., 49 per cent of GNP. As against it, other estimates indicate that black income was near about 10 per cent of GNP. The question arises: which one of these estimates can be considered reliable? Some economists have expressed serious doubts about the validity of the estimate of Guptas. J.C. Sandesara writes: "The estimation of black money, at any rate, for India is far too serious a business to be handled exclusively by the tool of currency-deposit ratio, and/or to be left to monetary statisticians/economists."[9] The main point of criticism is that the value of total transactions is affected by several factors, viz., the degree of monetisation, the extent of vertical integration of the economy, the rate of introduction of technical change, etc. It would be advisable to disaggregate the effect of these factors. To that extent, there would be over-estimation. But there is a serious element of under-estimation which has not been noted by the critics. A good number of transactions which are effected through 'hundis' or other near money instruments which go unrecorded in chequing or currency transactions are not covered in the estimate of total transactions. An upward adjustment on this account has to be made and it may be noted that the number and size of such transactions is quite large.

A review of the various estimates clearly reveals that the Kaldor's method of concentrating attention on official GNP seriously under-estimates the size of black income generated in the economy. There is a serious under-reporting of production and there is enough evidence about it. By corrupting excise department officials, the capitalist classes are able to evade the reporting of a significant proportion of total production.

It would not also be fair to discard the monetary approach altogether because this also serves as a cross-check on the other estimate. It is probable that truth lies somewhere between the two extremes. In that sense, more research has to be directed in this regard. If only 9-10 per cent of GNP is generated as black income, it cannot pose the threat as suggested in the phrase "Parallel economy", but if the magnitude is much larger as many economists believe, then the threat of "parallel economy" is real. Moreover, it would be more relevant if the size of black income is compared not to total GNP but to GNP minus income from the agricultural sector (Y−Ya), as Chopra has done. Such an approach is more useful for an underdeveloped country like India where agricultural income constitutes about 40 per cent of GNP.

The main findings of the various studies on black income are :

(i) The amount of black money has not only been

9. Sandesara J.C., *A Critique of the Gutmann Method: Estimates of Black Money in India* (Mimeogrophed).

growing in absolute terms, but also in relative terms as a percentage of GNP.

(*ii*) Black income which was less than 10 per cent of GNP upto 1975-76 began to grow at a much faster rate thereafter. According to NIPFP estimate for 1983-84, it was in the range of 18 to 21 per cent of GNP, though as per the estimate of Dr. Suraj B. Gupta, it was about 46 per cent of GNP in 1983-84 and rose further to about 51 per cent in 1987-88.

(*iii*) The rate of growth of black income generation is faster than the rate of growth of Gross National Product.

(*iv*) Higher rates of taxation motivated businessmen and industrialists to go for massive tax evasion.

(*v*) The political system winked at the growth of black income but did not take effective measures to curb the growth of unaccounted income.

4. IMPACT OF BLACK INCOMES ON THE ECONOMIC AND SOCIAL SYSTEM

The creation of a parallel economy as a consequence of the growing proliferation of black money in every sector of the economy has very serious and in a number of ways pernicious influences on the working of the Indian economy. It would be of interest to study their impact on the Indian economic and social system.

First of all, the direct effect of black income is the loss of revenue to the state exchequer as a consequence of tax evasion, both from direct and indirect taxes. Moreover, tax evasion does not include loss of revenue resulting from unreported production or illegal economic activity. Since the Government is not able to plug the leakage of tax evasion, it has to resort to other avenues of raising funds. So it imposes more taxes on commodities or raises the existing rates of taxation on commodities. As a consequence, India developed a regressive tax structure. Direct Taxes Enquiry Committee in this connection mentioned : "Black money and tax evasion, which go hand in hand, have also the effect of seriously undermining the equity concept of taxation and warping its progressiveness. Together, they throw a greater burden on the honest taxpayer and lead to economic inequality and concentration of wealth in the hands of the unscrupulous few in the country."[10] It is the salaried person (who cannot escape taxation) who suffers and the dishonest tax-payer is able to get away and then use the evaded income in luxurious and ostentatious consumption. Emphasizing this fact, D.K. Rangnekar mentions : "So while the tax paying public finds its own income falling, the non-tax paying public is having a free run of swelling concealed incomes thereby adding a new dimension to the problem of inequality of incomes and wealth."[11]

Secondly, the availability of black incomes with businessmen and capitalists and the consequent inequalities of income place a large amount of funds at their disposal. Easy money as it obtains, finds ready outlets in non-essential articles of conspicuous consumption. This has a demonstration effect on all classes of people. As a consequence, the consumption pattern is tilted in favour of the rich and elite classes, at the cost of encouraging the production of articles of mass consumption. A rise in the overall consumption leaves less resources for investment in priority areas. These distortions in the product-mix in favour of non-essential consumption have adverse effects on production and thus they distort the objectives of planning.

Thirdly, black money encourages investment in precious stones, jewellery, bullion, etc. This has an adverse effect on growth via its demonstration effect.

Fourthly, black money has encouraged diversion of resources in the purchase of real estate and investment in luxury housing. There is large scale under-valuation of property and in this way, lot of black money is made white. This has also pushed up the prices of land to astronomical heights because of speculative purchases of land by black money operators. As a consequence, the middle classes are priced out in the purchase of land for houses. Not only that, a lot of nation's resources are used in only making inputs available for luxury housing. Since most of these buildings are registered at under-valued prices, the Government loses by way of tax revenues when these buildings are transferred as gifts or are bequeathed.

Fifthly, a part of the black incomes is held in cash and as a consequence there is an abundance of liquidity which becomes available through the accumulation of savings held in the form of cash, bullion, gold, silver, etc. This is popularly termed as 'black liquidity'. Thus whenever the Government attempts to control excess demand with the help of measures of credit control or rationing, such attempts are frustrated by the huge liquidity provided by black money. Since this liquidity results in heavy inventory build-up, it becomes a threat to price stability.

Sixthly, black money results in transfer of funds from India to foreign countries through clandestine channels. Such transfers are made possible by violations of foreign exchange regulations through the device of under-invoicing of exports and over-invoicing of imports. The country thus finds itself in a paradoxical situation "where capital and more particularly foreign exchange resources are scarce, (the country) becomes a de facto lender of aid and capital to economically advanced and wealthier nations, with the concealed outflow of funds."[12] The situation has worsened further over the years.

10. *Direct Taxes Enquiry Committee*, Final Report, December 1971, p.5.

11. *OP. Cit., p.249.*

12. *Ibid.*, p.6

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An International Study (Ingo Walter : "Secret Money—the Shadow World of Tax Evasion and Capital Flight by Fraud") estimates that during1975 to 1983 over $ 120 Billion (or ₹ 1,55,000 crores) was transferred by residents of developing countries into clandestine assets abroad. In this race, Mr. S. Gurumurthy writes, "India is no exception. The buccaneers of the private sector would no doubt lead in number and in volume. That the public sector is no different is not a secret either. Dr. Raja Chelliah and colleagues have confirmed with the help of retired government officials and public sector executives that foreign suppliers usually provide a "cushion" of three per cent to seven per cent on imports of the public sector. Where does this cushion go? Its destination is predictably—clandestine Indian assets abroad."[13] These deals are related not only to development projects but also defence contracts. On account of the secrecy guaranteed by the foreign banks it is practically impossible to pin down and prove these bribes. They are not paid directly but according to Ingo Walter, "international bribes can be routed through "agents fees" to independent third parties acting on behalf of the payer."

Prof. J. D. Agarwal, Director, Indian Institute of Finance, Delhi on the basis of a research study published in *Finance India*, December 1996 has estimated capital flight from India to USA for the three year period — 1993, 1994 and 1995 to be of the order of US $ 15.8 billion (₹ 57,000 crores) at US/World average prices. This capital flight through abnormal trade pricing has affected foreign exchange reserves of India adversely, and is responsible for the trade deficit of US $ 13.115 billion during 1993-95. Had this flight of capital not taken place, India's foreign exchange reserves would have been around US $ 40 billion. Had this money been used to repay external debt, our external debt at the end of 1995-96 would have been US $ 83.5 billion; instead of US $ 99.0 billion. This money laundering sends wrong signals to the NRIs interested to invest in India. MNCs and FIIs also get dissuaded to invest in India. A part of the money kept abroad, generated through abnormal trade pricing is brought back to the country through Hawala route. This brings about distortion in exchange rate and although the government has declared convertibility on current account, divergence between the official and unofficial exchange rate still continues. Outlining the reasons for such massive capital flight, Prof. Agarwal mentioned : Political uncertainty, craze for foreign exchange, tax evasion instinct, reaping fruits of Hawala transactions, use of foreign exchange as a hedge for business transactions as well as other transactions, such as pleasure, shopping, travel, medical expenses and expenses on study abroad etc. The use of capital flight is considered as the best route to convert black money into white money.

13. Gurmurthy S., Bribery and Capital Flight, *Financial Express*, July 23-26, 1987

Seventhly, black money requires for its protection, proliferation and expansion of a service organisation composed of musclemen, touts and brokers to combat the forces of law and order, on the one hand and on the other hand, there are income tax advisers, or chartered accountants in the pay of black money operators. Then there are contact men, better known as liaison officers who negotiate favours from top bureaucracy and political bosses through bribes of black money. This has developed a new black money culture in the business world.

Last but not the least, black money has corrupted our political system in a most vicious manner. At various levels, MLAs, MPs, Ministers, party functionaries openly and shamelessly go on collecting funds. At the local levels, the local leaders receive money from small businessmen and traders. At the state level, Chief Ministers and Ministers tap big business. After the ban on company donations imposed by the Government of Mrs. Indira Gandhi in 1968, the pernicious influence of black money in our political system penetrated very deeply. Mr. Prem Shankar Jha writes in this connection : "After 1968, pre-eminence within the Congress shifted to those who could raise the largest amount of black money for the party... Those who raised black money for the party were able to raise other funds to strengthen their power bases."[14].

National policies are, therefore, being bent in favour of the big business under the pressure of black money. Thus, it is the parallel economy which does the backseat driving, while the political leadership only acts as the mouth-piece of big business to justify the abolition of controls or introduction of a dual system of prices in the name of productivity or national interests. It was due to the pernicious impact of black money on the Indian economy and polity that the Wanchoo Committee concluded : "It is, therefore, no exaggeration to say that black money is like a cancerous growth in the country's economy which, if not checked in time, is sure to lead to its ruination."[15]

5. FACTORS RESPONSIBLE FOR GENERATION OF BLACK MONEY

There are several factors responsible for the generation of black money. It would be relevant to discuss those factors so that a correct understanding about the genesis, growth and expansion of black money can be made. The principal factors are :

14. Prem Shankar Jha, Black Money and Crime, *Times of India*, December 7, 1981.
15. *Direct Taxes Enquiry Committee, Final Report*, Dec. 1971, p. 9.

(i) Divergence between the acceptable net rate of return and legally permissible rate of return—There is a school of thought which believes that the chief factor responsible for generation of black incomes is that individuals expect a higher net rate of return than the legally permissible rate of return. In this connection, the higher marginal rates of taxes assume special importance. The Chambers of Commerce and Industry hold a unanimous view that very high rates of taxation on incomes above a certain limit are in fact expropriatory in nature. For instance, at one time, the marginal rate of income tax was as high as 97.5 per cent and this was tantamount to near nationalisation of all incomes beyond a certain level. The high marginal rates led many experts on public finance to describe that we are "the most highly taxed nation." These high rates were gradually brought down to 40% by former Finance Minister Dr. Manmohan Singh by 1996. Mr. P. Chidambram has further reduced them in 1997-98 budget to 30 % for individual and 35% for corporations.

However, there is another school of thought led by economists of the left who believe that the argument of high marginal tax rates is over-played. They assert that actually paid rates on declared incomes are not as high as determined by the officially prescribed marginal rates of taxation. Consequently, a reduction in rates of taxation, would not result in reduction in tax evasion but it only grants more relief to the tax evaders.

Dr. K.N. Kabra in his empirical study of high rates of income tax and tax evasion has worked out the actual income taxes paid at various levels of income during the period 1971-72 and 1978-79. His study reveals the following :

(*i*) Tax evasion was of the order of ₹ 1,890 crores in 1971-72 and it jumped to three times this figure (at nearly ₹ 5,400 crores) in 1978-79. Evaded tax as a percentage of potential tax revenue was nearly 78 per cent in 1971-72, it declined to 72 per cent in 1975-76 but started rising thereafter and was of the order of 82 per cent in 1978-79. It follows that reduction in tax rates could not control the propensity towards tax evasion

(*ii*) There was a dramatic increase in actual tax collection from ₹ 874 crores in 1974-75 to ₹ 1,214 crores in 1975-76—an increase of almost 40 per cent. But this spurt in actual tax revenue was the result of tightening up of tax administration during emergency, coupled with a vigorous drive for unearthing black incomes. However, buoyancy in tax revenue was short-lived and with the wearing down of the effects produced by measures taken during emergency, actual tax collections registered a decline.

The upshot of Kabra's analysis is that whereas it may be conceded that higher marginal rates of taxation motivate tax evasion because of its expropriatory nature, a reduction in the marginal rates of taxation, even though substantial, is no guarantee that tax evasion would not be resorted to, if the costs and risks involved in tax evasion are considerably less than the amount of money converted into black income. In other words, elasticity of increase in tax revenue as a consequence of the reduction in the marginal rate of taxation is less than unity. Kabra writes : "In a regime which induces reduction in tax evasion by a method "soft" on tax evaders (like cut in tax rates) rather than by "harder" method which enhances the costs and risks of tax evasion, it would be difficult to expect a better tax compliance through "soft-methods."[16]

(ii) Black money generation as a consequence of controls, licensing system—There is a school of thought which firmly believes that the system of controls, permits, quotas and licences which are associated with maldistribution of the commodities in short supply results in the generation of black money. The Wanchoo Committee explaining this factor as a source of black money observed, "In spite of the vigilance exercised by the Government, controls and regulations came to be used by the unscrupulous for amassing money for themselves. Since considerable discretionary powers lay in the hands of those who administered controls, this provided them with a scope for corruption—'speed money' for turning a blind eye to the violation of controls. All this gave rise to trading in permits, quotas and licences, malpractices in distribution and in the process, it generated sizeable sums of black money."[17]

Dagli Committee on Controls and Subsidies concurring with DTEC observed : "Price and distribution controls have in the past led to the generation of black money on a significant scale. Any price control without any adequate machinery of distribution and speedy arrangement for increasing supplies is potentially a source of black money generation."[18]

Dagli Committee pointed out rent control leads to "pugree system" and is, therefore, another source of black money. Similarly, the system of licences requires large number of inspectors for completing various formalities and thus good amount of hush money has to be paid.

(iii) Donation to political parties—Ever since the Government decided to ban donations to political parties

16. Kabra K.N., *The Black Economy in India*, p.88
17. *Direct Taxes Enquiry Committee, Final Report*, Dec 1971, p.9.
18. *Report of the Committee on Controls and Subsidies*, May 1979, p. 368.

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in 1968, it prompted businessmen to fund political parties, especially the ruling party, with the help of black money. Ostensibly, this decision was taken to reduce the influence of big business on the electroral process, but in practice what happened was precisely the opposite. Businessmen everywhere have by now learnt that they should pay a certain charge out of the black money to the coffers of political parties and then be sure that the political leaders will only bark but not bite. Big business, in the process, has been able to tame the political leadership and thus, the latter has started speaking the language of big business etc.

(iv) Ineffective enforcement of tax laws—Whereas the Government has an armoury of tax laws pertaining to income tax, sales tax, stamp duties, excise duty etc., their enforcement is very weak due to widespread corruption in these departments. The high rates of these taxes induce businessmen to avoid recording of these transactions. This evasion largely goes unchecked and thus sets in a chain reaction for the generation of black money at the wholesale, retail as well as production levels.

(v) Generation of black money in the public sector—Every successive five-year plan planned for a larger size of investment in the public sector. The projects undertaken by the public sector have to be monitored by the bureaucrats in Government departments and public sector undertakings. Tenders are invited for the various works and these tenders are awarded by the bureaucracy in consultation with the political bosses. Thus, a symbiotic relationship develops between the contractors, bureaucracy and the politicians and by a large number of devices, costs are artificially escalated and black money is generated by underhand deals. Instability of the political system has given a further momentum to this process. The rapidity with which ministers are changed or dropped or cabinets reshuffled, has added another dimension to the problem. Since the ministers are not sure of their tenure and in a majority of cases, the tenure is very short, the principle 'Make hey while the sun shines' is adopted by most of them. The large number of scandals that are unearthed by the Opposition only support the contention that huge investment in the public sector is a big potential source for black money generation.

6. CORRUPTION AND DEVELOPMENT IN INDIA

Transparency International (TI) has been preparing Corruption Perception Index (CPI). It was noted that India's rank in CPI slipped to 71 among 102 countries surveyed in 2002 whereas it was 88 among 158 countries surveyed in 2005. Its score declined from 2.9 in 1998 to 2.7 in 2002 and rose again to 2.9 in 2005 and further to 3.5 in 2007. For the year 2009 this index has declined to 3.4. For the year 2011 this index has further declined to 3.1. This is not a healthy development.

TABLE 3: India's Rank in Corruption Perception Index (CPI) (1995-2011)

Year	*No. of Countries*	*Corruption Perception Index (CPI)*	*Rank*
1995	41	2.78	35
1996	54	2.63	46
1997	52	2.75	45
1998	85	2.90	66
1999	99	2.90	72
2000	90	2.80	69
2001	91	2.70	71
2002	102	2.70	71
2005	158	2.90	88
2006	163	3.3	70
2007	180	3.5	72
2009	180	3.4	84
2010	178	3.3	87
2011	182	3.1	9.5

Source: Corruption Perception Index, Transparency International, Berlin.

A close perusal of the data in Table 3 reveals that India has been at the bottom and ranked as a highly corrupt country and that no serious effort has been made by the Government to improve its position in CPI. This fact was highlighted by Mr. K.R. Narayanan, the then President of India in his address to the Lok Sabha in 1997: "Sheer opportunism and valueless power politics have taken over the place of principles and idealism, relationship between people, groups and parties . . . and corruption is corroding the vitals of politics and our society."

Transparency International has estimated that by way of corruption a sum of ₹ 26,768 crores is extracted by officials at various levels in India from citizens in the following sectors—education, health, power, telephone, railways, land and building administration, judiciary and the public distribution system.

The dismantling of the system of controls initiated in 1991 Industrial Policy has resulted in a slight improvement in level of corruption. The demand for transparency at a result of Right to Information Act is also acting positively in reducing the level of corruption but we have miles to go before we reach the levels of least corrupt sociaties like New Zealand.

Table 4: Corruption Perception Index for Selected Countries (2011)

Country	*Corruption Perception Index (CPI)*	*Rank among 180 countries*
New Zealand	9.5	1
Sweden	9.3	4
Switzerland	8.8	8
Canada	8.7	10
Germany	8.0	14
United Kingdom	7.8	16
Japan	8.0	14
United States	7.1	24
Malaysia	4.3	60
China	3.6	75
Brazil	3.8	73
India	3.1	95
Indonesia	3.0	100
Pakistan	2.5	134
Bangladesh	2.7	120

Source: Transparency International Report (2011)

Note: CPI score 10 (highly clean) and 0 (highly) corrupt. The lower the CPI, greater is the degree of corruption.

The data given in Table 4 reveal that the index of corruption in India is 3.1, and thus, it is far behind the levels of achievement by New Zealand, Sweden and Switzerland with CPIs above 9. At the other end of the spectrum, Pakistan, Indonesia and Bangladesh can be classed as very highly corrupt countries. While India has performed somewhat better than this latter group of countries, the Indian government should initiate measures to improve its CPI closer to the levels achieved by countries such as New Zealand and Sweden. Decline in Corruption Perception Index for India in recent years is a matter of concern.

Defining Corruption

It is not easy to define corruption. But in a narrow sense, corruption is mostly concerned with 'bribery' and it takes several forms:

(a) Demanding and accepting pecuniary favours by public persons (both public officials and politicians); either for performing an assigned job or for extending out-of-turn favours;

(b) Offering bribes, particularly for undue and out-of-turn favours;

(c) Pilferage and seepage of public funds;

(d) Use of public office for personal pecuniary gains;

(e) Demanding and accepting commissions, etc.

In a developmental sense, corruption appears as a factor reflecting deviation from the avowed objectives of the State. Consequently, "institutions designed to govern the inter-relationships between the citizens and the state are used instead for personal enrichment and the provision of benefits to the corrupt."[19]

19. Rose-Ackerman (1999), *Corruption and Government: Causes, Consequence and Reforms*, p. 9.

Causes of Corruption

In social science literature, the causes of corruption have been studied by various persons. The main causes revealed by the studies are:

(1) Wherever there is a scarcity of goods and services, corruption raises its head and these scarce goods are made available to the needy at the price which includes a premium.

(2) The system of controls and licenses provided bureaucrats opportunities to force the people to pay hush money. It became a major cause of corruption in the post-independence development model of the country.

(3) Complex laws and procedures which are prescribed by the state for certain approvals and sanctions provide dishonest bureaucracy enough scope to harass the public and thus force it to pay the officials.

(4) Low salaries of public servants, especially at the lower levels. Bribes act as incentive payments to clear files.

(5) Bribery of politicians buys influence, and bribery by politicians helps to buy votes.

(6) Higher echelons of bureaucracy acting as intermediaries to get kickbacks from the public and share them with the politicians.

(7) Regularisation of 'illegal colonies', the regularization of violation of building bylaws, political protection given to slum dwellers to use water, electricity without any charge, has also been a source of corruption for both government officials and politicians.

(8) Protection provided to industrialists and businessmen to steal power also led to corruption by department officials and in some cases, connivance of politicians was also found for receiving kickbacks.

(9) High costs of election campaigns and contesting of elections also is responsible for corruption. The business firms finance the politicians to fight elections and in turn, the politicians grant various kinds of favours to businessmen.

(10) Increasing tolerance in the Indian society about corruption, treating it as a way of life also perpetuates the growth of corruption. Failure of the society to create institutional structure to tackle cases of corruption, more especially in high places, creates a feeling of helplessness about corruption among the masses.

In short, corruption raises the cost of development, it breeds inefficiency in departments to produce inferior quality of goods—roads, water works, substandard houses built by the PWD, etc. it also reduces the realization in the form of tax revenue to the government and thus it lowers the capacity of the government to reduce budget deficits. It is equally true that corruption creates black or parallel economy, but black economy has its own dynamism to perpetuate corruption.

For the growth of a healthy society, it is vitally important that corruption should be eliminated or considerably reduced so that the phenomenon of black money does not destroy the vitals of the society. The real problem of identifying corruption, however, has been highlighted by Kautilya in the following words:

"Just as it is impossible not to taste honey or poison that one may find at the tip of one's tongue, so it is also impossible for one dealing with government funds not to taste, at least a little bit, of the King's wealth. Just as fish moving under water cannot possibly be found out either as drinking or not drinking water, so government servants employed in the government work cannot be found out (while) taking money (for themselves)."

7. A SURVEY OF MEASURES UNDERTAKEN TO UNEARTH BLACK MONEY

It would be desirable at this stage to make a survey of the measures undertaken to unearth black incomes since independence and to assess their success so that further course of action can be decided. The principal measures undertaken were :

(i) **Measures to check tax evasion**—One of the main causes of black income generation and then its conversion into either white money by various measures or into black wealth is tax evasion. Therefore, plugging loopholes in tax evasion by a large number of legal and administrative measures was undertaken. Most of these measures were based on the recommendations of various committees and commissions, viz., the Taxation Enquiry Commission (1953), Nicholas Kaldor's proposals for Indian Tax Reform (1956), the Direct Taxes Administrative Enquiry Committee (1958), Recommendations by the Administrative Reforms Commission (1969), the Direct Tax Enquiry Committee (1971). Most of these recommendations pertained to improvement in tax laws. But more important than that, the various committees felt that tax administration was too weak and ineffective. The penalties imposed under the tax laws were not deterrent enough and the tax administration machinery was not able to bring to book the tax evaders. During 1965-69, all the measures taken against tax evasion yielded only ₹ 105 crores by way of fines and penalties.

While it is customary to make the income tax officials as scapegoats in the matter, the fact of the matter is that the political support needed by the Tax Administration did not come forth and thus even the income tax officials who pursued their task honestly and vigorously were demoralised. This is evidenced by the fact that when state support was given in 1975, then in one year income tax revenues jumped from ₹ 874 crores in 1974-75 to ₹ 1,214 crores in 1975-76, an increase by 39 per cent, but as state support declined, tax revenues also started declining. The rot at the political level only demoralises the tax administration and makes it dysfunctional.

(ii) **Demonetization**— In 1946, demonetization was resorted to but the Direct Taxes Enquiry Committee in its interim report admitted: "Demonetization was not successful then, because only a very small proportion of total notes in circulation was demonetized. Notes demonetized in 1946 were of the value of ₹ 143.97 crores as against the total notes issued of the value of ₹ 1,235.93 crores."[20]

Another demonetization was attempted with effect from January 16, 1978 of high denomination notes, i.e., ₹ 1,000, ₹ 5,000 and ₹ 10,000. The high denomination notes as on that date aggregated to ₹ 146 crores. Notes tendered to the Reserve Bank of India amounted to ₹ 125 crores as per data available till August 1981.[21] Obviously, demonetization failed to make a serious dent on unearthing black money.

Demonetization assumes that all black incomes are held in the form of cash balances, but the fact of the matter is that it is only a small part of the total black incomes which is held in liquid form. The rest are in circulation. Secondly, businessmen invent a number of clandestine ways to circumvent demonetization. So the net effect of this limited and partial measure to destroy black incomes is too insignificant.

(iii) **Voluntary Disclosure Schemes**—From time to time, various voluntary disclosure schemes were floated by the Government. These schemes were nothing but a camouflaged version of reduction in tax rates at higher income levels. Mr. H.R. Machiraju estimated the results of all the various schemes and methods used to unearth black incomes. Up to 1968 a total concealed income of the order of ₹ 519 crores was declared on which ₹ 131 crores were paid as tax, this further highlights the failure of the Government to unearth black incomes. The Direct Taxes Inquiry Committee, therefore, categorically opposed the introduction of any further voluntary disclosure schemes since they "placed a premium on fraud and are unfair to the honest tax payers." The DTEC mentioned: "*They were more or less schemes for converting black money into white on payment of what turned out to be in most cases, a small amount of conscience money*" (emphasis added). Disclosure made in the name of minors, ladies and *benamidars* has, on the other hand, contributed to

20. *Interim Report of Direct Taxes Enquiry Committee*., published as a paper laid on the Table of the Lok Sabha.
21. Refer RBI Report on *Currency and Finance*, 1980-81, p.94.

perpetuating evasion, and rendering investigation in many a case of suspected tax evasion difficult or even futile. The fact that in the last of the three schemes, namely block scheme, as many as 77 thousand and odd out of a total of 1,64,226 disclosures were from persons not previously assessed to tax would bear ample testimony to this misuse of the scheme. We were informed by the Central Board of Direct Taxes that there were several instances of the same set of persons taking advantage of all the three schemes which would belie the theory that such schemes help to rehabilitate the repentant tax evader who is desirous of mending his ways."[22]

Ignoring the recommendations of the Direct Taxes Enquiry Committee, the Government again introduced a Voluntary Disclosure Scheme of Income and Wealth in 1975. The fear psychosis generated by the emergency had a profound effect. As a consequence, a sum of ₹ 746 crores was realised as tax. This certainly terrified the black money operators and most of them were on the run. But this atmosphere was shortlived. Neither the Janata Government after 1977 nor the Congress Government after resuming power in 1980 took up the task of unearthing black incomes seriously.

(iv) **Special Bearer Bond Scheme**—Special Bearer Bonds Scheme (1981) was intended for canalising unaccounted money for productive purposes. The Special Bearer Bonds, 1981 of the face value of ₹ 10,000 each were issued at par with a maturity period of 10 years. The holders of these bonds were to be entitled to receive ₹ 12,000 on maturity. In other words, they carry an interest of 2 per cent per annum. Complete immunity was granted to the original subscriber or possessor of the bonds from being questioned about the possession of bonds or about the sources of money from which the same were acquired. As per data provided in the budget (1982-83), Special Bearer Bonds were subscribed to the tune of ₹ 964 crores.

V.L. Mehta, in a very sharp comment condemned the SBB Scheme in the following words. "Such efforts, as the Bearer Bonds Scheme to tackle the problem, are only half-hearted measures. By controlling inflation for the time being, the Bearer Bonds Scheme, might to a certain extent, alleviate the situation, but it has, at the same time *provided an opportunity for parallel economy to function more brazenly and also more effectively*. (Emphasis added). There is thus a great danger of black incomes being generated on a larger scale than hitherto, adding considerably to the volume of large black incomes that is already there."[23] It is strange, he further laments, "possession of currency has to be accounted for but not the possession of the Bearer Bonds."[24]

22. Dircet Taxes Enquiry Committee, *Final Report* December 1971, p. 12.

23. Mehta V.L., *Unemployment, Inequality, Parallel Economy—A Solution* (1982), pp. 83-84.

24. *Ibid.*, p. 84.

(v) Voluntary Disclosure Scheme (1997)

Finance Minister Mr. P. Chidambaram while presenting 1997-98 budget announced a Voluntary Disclosure Scheme (VDS). The Finance Minister in this connection observed. The scheme is very simple. Irrespective of the year or nature of the source of funds, the amount disclosed either as cash, securities or assets, whether held in India or abroad would be charged to tax at 30 per cent for individuals and 35 per cent for corporations. Total immunity would be granted for any action under the scheme under the Income Tax, Wealth Tax Acts and FERA.

The futility of launching amnesty schemes or VDS schemes becomes evident when it is realised that the

Table 5: Declarations Under Various VDS Schemes

Schemes	*No. of Cases*	*Incomes Declared (₹ crores)*	*Tax Collected (₹ crores)*
1. VDS 1951	20,912	70.2	10.9
2. VDS 1965	1,16,227	197.2	50.3
3. VDS 1976	2,45,570	746.1 *	249.0
	13,422	844.7 **	7.7
4. Special Bearer Bonds (1981)			964.3
5. VDS 1985 #	15,39,987 *	2,940.4	388.0
	5,36,843 **	7,838.0	70.8
Total (1 to 5)	**19,22,696** *	**3,953.8**	**698.2**
	5,40,265 **	**8,682.7**	**78.5**
6. VDIS 1997	4,66,031	3,3000	10,500

\# The Scheme was in operation for 17 months from November 1985 to March 1987.

* For Income Tax

** For Wealth Tax

Source : Ministry of Finance, Government of India.

amount of black money estimated by the Parliament Standing Committee on Finance and Black Money for the year 1994-95 was of the order of ₹ 3,00,000 crores (at 1980-81 prices) or ₹ 11,00,000 crores at current prices. This implies that voluntary disclosure schemes could unearth tip of the iceberg (Refer table 5), but the repetition of such schemes only breeds a sense of frustration among honest tax payers. It leads to a general feeling that non-compliance of tax laws can be indulged in with impunity and got periodically cleared through VDS.

There is no doubt that keeping the maximum tax rate as 30 per cent, the government was able to garner ₹ 10,000 crores from tax evaders, but given the widespread growth of black money, this is really the tip of the iceberg. The basic question is : Should the government now act against tax dodgers with an iron fist so that the phenomenon of black money can be contained within reasonable limits? The honest tax payers belonging to the salaried class did

get some relief by a reduction in tax, but the government knew it fully well that with the implementation of the Fifth Pay Commission Report, the salaried class will have to pay more tax. In this way, the loss due to reduction of high tax rates would be compensated by the additional tax revenue arising from higher pay packets. But the phenomenon of 'black economy' or 'parallel economy' remaining more or less intact, the real question is to follow a tax policy in the post-VDIS period which targets the business classes through strong administrative measures to pay the tax due to the government.

In the connection, some suggestions have been made. First, the imposition of a uniform rate of 35 per cent corporation tax on all companies needs to be reviewed. It would be prudent to introduce a slab system and charge only 15 per cent on smaller companies upto a profit of ₹ 50,000. The slab should be increased further and three or four slabs be made, before the maximum marginal rate of 35 per cent is charged.

Secondly, VDIS had proved that reasonable tax rates lead to better compliance and this principle should be extended to excise duty, sales tax and stamp duty as well. This will help to plug the generation of black money via production and trade channels. If this policy is pursued, a big dent would be made in checking the growth of black money year after year.

Table 6 : Maximum Marginal Rate of Personal Income Tax, 1994

Country	*Per cent*	*Country*	*Per cent*
India	30.0 *	China	45.0
Denmark	65.0	South Korea	45.0
France	56.8	U. K.	40.0
Germany	53.0	Indonesia	35.0
Sweden	50.0	Brazil	35.0
Japan	50.0	Mexico	30.0
Egypt	48.0	Russia	30.0
U. S. A.	47.5	Singapore	30.0

* For 1997-98

Source : Tata Services Ltd., *Statistical Outline of India* (1996-97)

Thirdly, the system of discretionary controls which has been dismantled in some sectors after the liberalisation phase started in 1991, should now be extended to other sectors. This will also have a salutary effect in plugging the generation of black money.

Fourthly, it It would be, desirable to stabilise the present rates and impress upon the tax evaders the futility of evading such low level of tax rate and inviting penalties. A sustained pressure has the potential of developing new culture among the tax payers to pay reasonable tax and have peace of mind.

As a consequence of the efforts of international division of the Income Tax Department, multinational companies paid a record ₹ 10,000 crores during 2006-07which was 40 per cent higher than the previous year's collection from this set of companies. The surge in tax figure in unprecedented as the normal increase is 15-20 percent. This is the outcome of the pressure of the I.T. Department to persuade MNCs to be more transparent and thus cough out a realistic tax return.

Lastly, it would be more desirable to have lower penalties. To speak of a penalty of 300 per cent only encourages the tax payers to bribe officials in Income Tax Department so as to save them from the penal rates. In no case, should the penalty be more than 100 per cent. It is ironical that the tax administration became more friendly to tax evaders and has been cajoling them to come forward and declare unaccounted income. But it would be much more desirable if the same friendly approach is adopted towards honest tax payers who are harassed by the Income Tax Department even on flimsy grounds. Let the system learn to be much more friendly to the honest than the dishonest.

A survey of the measures taken so far reveals that the Government has miserably failed to tackle the problems created by black money. Its approach in combating parallel economy has been half-hearted, misconceived and in some cases, it has collaborated with the black money operators in legitimizing black money. People have, therefore, lost faith in the capacity of the Government to eradicate this evil.

8. EVOLUTION OF A POLICY PACKAGE TO CONTROL PARALLEL ECONOMY

Broadly speaking, there are two schools of thought on the question of arresting and eliminating the generation, growth and expansion of black money. There are economists who believe that within the framework of the mixed economy as obtaining in India, black money can be eliminated and its size can be brought within manageable limits so that it does not pose a threat to the very objectives of national economic policies. On the other hand, there is another group of economists who believe that mixed economy is only a euphemism for capitalist system and there is no hope of controlling black economy in the framework of the mixed economy that prevails in India.

Fundamentalist View

Since tax evasion is basic to the phenomenon of black money generation, the question arises : What motivates tax evasion? Meena Gupta and Thavaraj provide an answer : "It is obvious that tax evasion is a disease associated with an economic system based on private property. The disease assumes epidemic proportions when

environmental pollution affecting the social, political, administrative and ethical systems exceeds the limits of tolerance."[25] A similar view has been expressed by Dr. V.M. Dandekar in the following words : "If one had any notions on this point, one would have suggested that if large incomes do not pay taxes they should, the remedy is not to lower the tax rates but abolish altogether incomes above a certain limit."[26]

Sunanda Sen goes a step further and calls for a change in the character of the state since mixed economy does not provide the requisite framework for the purpose. She writes : "The failure of the government's recent drive to curb smuggling is illustrative of the self-defeating nature of controls in a partially planned economy... attempts to control such evasion through a manipulation of instruments open to the state in a mixed economy are not likely to meet with much success unless the reforms are extensive enough to change the character of the state itself."[27]

The fundamentalist view, therefore, does not see any merit in making certain marginal adjustments in tax rates because this will not serve any useful purpose in controlling black money, nor does it see any merit in removing all controls, but it feels that if tangible results have to be achieved, the abolition to private property or at least fixing a ceiling on property is essential so that the motivation for acquiring more wealth itself is blunted.

The Moderate View

There are two variants of the moderate view. One is typified by Kabra who considers the fundamentalist view as "naive, one-dimensional view of the state in as much as it fails to recognise a need for partial, effective controls, without necessarily changing the character of the state in its essentials."[28] It would, therefore, be inadvisable not to initiate measures within the framework of the mixed economy. In support of their contention, they advance the argument that there are mixed capitalist economies in which the extent of black money is much smaller, which are much better managed and in which ethical standards in politics are much better. They, therefore, plead for internally consistent but extensive controls, so that they are relatively strong in comparison with the forces operating the parallel economy. As a consequence, the control mechanisms should make the economy perform much better, not only in the narrow sense of acquiring more revenue or making certain essential goods available, but in the broader sense of creating a social order based on equality and justice.

Prem Shankar Jha who represents the other variant, believes that "by far the worst effect of the regime of controls is that it has perverted the operation of the profit motive in the economy. Instead of being harnessed to increasing production, it is now harnessed to the exploitation of shortage."[29] Four sets of reforms that can have a dramatic effect on the parallel economy, according to Prem Shankar Jha are : (i) lifting of price controls on all products except a few basic consumer goods (where dual pricing is in any case preferable to controls); (ii) the exemption of savings from taxation; (iii) the indexation of direct tax rates to the cost of living; and (iv) the liberalisation of the tax laws governing the depreciation allowance, to permit firms to write off capital at a rate of their own choosing.[30] Jha, broadly speaking, represents the view of the private sector lobby which believes that controls are at the root of prevailing shortages and the operations of the free market mechanism will be able to usher in an era of plenty, remove shortages and thus reduce the size of black market economy.

In the light of these two broad view-points, we discuss in the following section the concrete measures suggested for controlling the parallel economy in India.

(i) **Rationalisation of tax structure**—Various suggestions have been made by different groups of economists in this regard. Most of them are aimed at reduction of tax rates. For instance, it has been argued that marginal tax rates on higher incomes should be reduced, there should be liberalisation of tax laws regarding depreciation and writing off of capital; there should be complete exemption of savings from taxation, direct taxes should be indexed to cost of living, etc. If one closely analyses all these suggestions made by Federations of Chambers of Commerce and Industry and some economists who are votaries of more freedom for the private sector, then one reaches the conclusion that all these suggestions are aimed at reducing rates of direct taxes or providing more and more legal avenues of tax avoidance so that the overall burden on the business classes is considerably reduced. The argument of indexation to cost of living is fallacious because inflation by its very nature distributes incomes in favour of business classes and cost of living index is mainly associated with the working class.

The real problem is that even at these modest rates of taxation as obtain today, those in high income brackets do not want to pay taxes and rather like to evade on a massive scale. It is this aspect which needs to be attended to. For this purpose, the 'Soft State' attitude has to be basically altered in favour of 'strong state' which should be keen to realise tax revenue from persons who fall in

25. Gupta, Meena and Thavaraj MJK, "Tax Evasion and Development", *Economic Times Annual*, 1974.
26. Dandekar, V.M. "Next Step on the Socialist Path", *Economic and Political Weekly*, Special Number (1972), p. 1555.
27. *Ibid.*
28. Kabra K.N., Op. Cit., p.79
29. Prem Shankar Jha, Four Necessary Reforms—Curbing the Parallel Economy, *Times of India*, November 23, 1981
30. *Ibid.*

high income ranges. Obviously, this would require gearing up of tax administration to ensure better tax compliance.

(ii) Removal of controls that are considered unnecessary—A school of thought believes that controls and licensing procedures are all unnecessary, they hinder productivity, obstruct the free play of market forces and should, therefore, be withdrawn.

The Government, in pursuance of this reasoning, lifted control on cement and introduced a dual system of pricing. Even the price of levy cement was raised from ₹ 28 per bag of 50 Kgs. to about ₹ 37. The cement manufacturers fixed the price of open market cement at ₹ 65 per bag. But what have the later developments shown? The price currently is ₹ 240 per bag and the Government is considering measures to halt the further rise of the price of cement. The abolition of controls has helped to remove shortage of cement, but the other result that the forces of competition in the course of time will lower the price of cement per bag, has not been achieved. In other words, the benefits of liberalisation have been passed on the manufacturers rather than the consumers.

In fact, the ineffective use of controls is responsible for the present state of affairs. The absence of controls creates much worse situations in which businessmen by creating artificial scarcities carry on unbridled exploitation and thus generate black money. Dagli Committee rightly diagnosed the problem : "Leakages in the distribution system even where price control, is accompanied by distribution controls, is another potential source of black money generation. If follows, therefore, that distribution control should be attempted after making sure of the machinery of distribution, and price control should not be attempted without control over distribution."[31] The logic of the Dagli Committee is not to abolish price controls, but to rationalise them and support them with an effective system of distribution. To recommend abolition of all controls in order to speed-up the growth rate of the economy is like the suggestion of removal of breaks from a car so that it can travel faster. The distortions in investment pattern in favour of hotellers, cosmetic manufacturers and other luxury item producers is the direct result of the manipulations of black money operators, and is not the consequence of statism, but the absence of effective management by the State over affairs of the economy.

(iii) Appropriation of the gains of investment of black income in real estate—A very significant outlet for black income is investment in real estate. Speculation in real estate business is rampant in urban areas. These investments result in very high "capital gains". A very large proportion of black income gets congealed in such residential buildings. Dr. Amit Bhaduri suggests that the most effective way to attack black money system is to appropriate the gains from property speculation. He, therefore, recommends the setting up of "a Corporation in each state and the Union territory to deal in transactions in real estate property, where all private buyers and sellers will have to transact through the corporation for legalisation of urban property transactions. The basic idea can, therefore, be put in a nutshell : neither nationalisation nor "ceiling" on urban private property; but nationalisation of all private transactions in urban real estate."[32] These Corporations, Bhaduri suggests, can be based on the STC pattern wherein the seller of say an imported car has to register with the STC and a buyer can only purchase it through the STC. Since the Corporation will be able to know the capital gains accruing from these transactions, it will provide an opportunity to the state to tax these capital gains appropriately. This will act as a double-edged weapon against black money. On the one hand, it will slow down the transactions in urban property thus breaking the back of the speculative boom and on the other, it will bring more revenue to the state.

Dr. K.N. Kabra examining Bhaduri's proposal mentions : "The political pre-conditions for making such a move are not vastly different from those involved in nationalisation of such properties. The feasibility of the proposed remedy on political grounds does not seem to be meaningfully different from that associated with ceilings etc.[33] Kabra, therefore, presents a modified proposal. Since most of the urban property created with the help of black incomes is registered at understated values, Kabra recommends that the state should acquire the right to compulsorily purchase properties at their understated purchase price or construction costs. To enhance the effectivity of the measure, Kabra considers it essential that the right to transfer use of property by means of granting power of attorney be restricted. This will limit benami sales or real estate.

The basic idea underlying both the proposals is to limit the use of black money in real estate and enable the State to appropriate the gains arising therefrom.

The ultimate aim of both the proposals is to seriously limit investment of black incomes in real estate. Kabra goes to the extent of saying that an all-India ceiling on total value of urban estates should also be enforced to improve the effectivity of the remedy. If that were so, it only implies that whereas the fundamentalist proposition is rejected by Kabra, he imperceptibly and implicitly moves nearer to fundamentalist position. The proposals of appropriating the gains of investment of black income in real estate should be given a fair and honest trial. One more comment which seems pertinent must be made in this context. It would not be advisable to reject Bhaduri's proposal on the basis of administrative feasibility as

31. *Report of the Committe on Controls and Subsidies*, May 1979, p. 368.

32. Amit Bhaduri, Menace of Black Money—A Feasible Remedy, *The Times of India*, August 12, 1981.

33. Kabra, K.N., *Op. Cit.*, p. 167.

Kabra does. If this position is taken, the same criticism becomes equally applicable to Kabra's proposal. To consider the economic system a slave of the present administrative set-up will prevent us from taking up any task of gigantic dimensions. To tame parallel economy is a gigantic task and if a meaningful dent has to be made in it, then the administrative set-up must be geared to meet the challenge.

(iv) Establishment of the institution of Ombudsman —The institution of Ombudsman, on the pattern of Sweden, has been discussed for a long time in India. On the basis of the recommendations of the Administrative Reforms Commission (1966), a Lok Pal Bill was introduced for the first time in 1968-69. The Bill was passed by the Lok Sabha, but could not be passed in Rajya Sabha as the Lok Sabha was dissolved. The Lok Pal Bill was introduced in the Lok Sabha for the eighth time on the 14th August 2001. However, it has not been passed so far to become a law. A bone of contention was whether the office of the Prime Minister should be brought within the ambit of the Lok Pal. The NDA government agreed that the office of the Prime Minister shall also be within the jurisdiction of Lok Pal. The Bill, however, excludes from its purview, the President and Vice-President of India, the Speaker of the Lok Sabha, the Chief Justice of India or any other judges of the Supreme Court, the Comptroller and Auditor General of India, the Chief Election Commissioner and Election Commissioners, and the Chairman and other members of the Union Public Services Commission. It may be noted that eight unsuccessful attempts have been made so far to pass legislation in the Parliament to make it mandatory for ministers and legislators to ensure annual declaration of their assets and liabilities. This only underlines the hard reality that while political leaders talk of maintaining integrity and honesty, but when it comes to brass tacks, they create hurdles on one pretext or another to pass legislation binding them to social norms.

Lok Ayukta, the ombudsman at the State level has been set up in Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Rajasthan and Uttar Pradesh. However, a review of the state legislation reveals that in some states, it is designed to be toothless. In several states, on the completion of the first term, for several years, the Lok Ayukta was not appointed. A study made by Shukla and Singh (1988) observed: "While the institution has potentiality and scope for operation, it may or may not be allowed to operate freely by other structures/systems of the society."[34]

Another study made by Vinod Pavrala (1996) revealed that though a large number of complaints were received about corruption cases in Andhra Pradesh which clearly indicated that the people in general were eager to avail of the opportunity to combat corruption, but since the recommendations of the Lok Ayukta were routinely ignored by the government, people became disillusioned with the effectivity of the Lok Ayukta to deal with cases of corruption.

The package of measures discussed above are all steps in the right direction within the socio-economic framework of the mixed capitalist economy. Their success depends on the sincerity and vigour with which they are implemented. However, if the State apparatus means business, black money can be brought within manageable limits. But if a symbiotic relationship develops between the capitalist classes, the bureaucracy and political structure in the country, as it obtains today, the chances of controlling the menace of parallel economy appear to be bleak. The crucial issue, therefore, is the nature of state structure, its attitude towards black money, the degree of tolerance and connivance with black money operators.

Present State of black money and post-reform efforts to limit it

Finance Minister Mr. P. Chidambram stated in his budget speech (2008-09): "The UPA Government inherited a tax to GDP ratio of 9.2 per cent in 2003-04. At the end of 2007-08, the ratio has risen to 12.5 per cent ... Many people are surprised by the buoyancy in tax revenues, especially in direct taxes. I am not. I have always maintained that moderate and stable tax rates coupled with a tax administration that shows no fear or favour will bring high revenues to the exchequer."

The experience of moderate and stable tax rates with the maximum marginal rate of taxation at 30 per cent has indicated a continuous growth in Gross Tax Revenue. During 2003-04 to 2007-08, tax revenue shot up from ₹ 254,348 crores to ₹ 585,410 crores — an increase by 130 percent in the short span of 4 years. The implies an annual average compound growth rate of 23.2% in tax revenues which is commendable. But if we segregate it between direct taxes (income tax and corporation tax) and indirect taxes (customs, excise duties and service tax), the growth in direct taxes was much higher and for the first time, the share of direct taxes surpassed that of indirect taxes and reached a figure of 52% in 2007-08 as against 41.2% in 2003-04. This certainly indicates better tax compliance for which the tax administration can claim legitimate credit. Obviously, tax evasion has indicated a decline.

There is no doubt that even today tax evasion takes place in indirect taxes and this generates black income, but evidence of growth of Gross Tax Revenue only reinforces the conclusion that the magnitude of black money generation has come down. Quite a good number of businessmen prefer to pay moderate corporate tax and save themselves from the risks and costs involved in keeping black income safe.

Besides this, the dismantling of the system of controls and licences undertaken after the introduction of Industrial Policy 1991 has also reduced the scope of the

34. Shukla K.S. and S.S. Singh (1988), Lokayukta (Ombudsman in India: A Socio-Legal Study), New Delhi: The Indian Institute of Public Administration.

bureaucracy and the political class to make hush money.

Since the emphasis of new economic reforms was on accelerating growth of the economy by greater use of private sector, both Indian and foreign, there was a big change in economic environment. There is no debate on ceiling of the assets of companies under the MRTP Act or appropriated of the percent tax system a big portion of the income and wealth of the capitalist class with the help of confiscatory measures. Consequently, the state is not concerned about designing measures to control black money. But this should not imply that black economy has ceased to exist Rather it would be more appropriate to state that the scope of black economy has become relatively less. This is the general feeling, though researchers have not made serious empirical studies to support this prevailing impression.

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CHAPTER

25

UNEMPLOYMENT IN INDIA

"Jobs, rather than men, should wait."

—Sir William Beveridge

"Jobless growth is joyless growth for those impacted by globalisation. We have to provide meaningful employment in the agricultural sector to address these concerns."

—M.S. Swaminathan

1. NATURE OF UNEMPLOYMENT IN INDIA

India is a developing economy, the nature of unemployment, therefore, sharply differs from the one that prevails in industrially advanced countries. Lord Keynes diagnosed unemployment in advanced economies to be the result of a deficiency of effective demand. It implied that in such economies machines become idle and demand for labour falls because the demand for the products of industry is no longer there. Thus Keynesian remedies of unemployment concentrated on measures to keep the level of effective demand sufficiently high so that the economic machine does not slacken the production of goods and services.

This type of unemployment caused by economic fluctuations did arise in India during the depression in the 1930's which caused untold misery. But with the growth of Keynesian remedies, it has been possible to mitigate cyclical unemployment. Similarly, after the Second World War, when war-time industries were being closed, there was a good deal of frictional unemployment caused by retrenchment in the army, ordnance factories, etc. These workers were to be absorbed in peacetime industries. Similarly, the process of rationalization which started in India since 1950, also caused displacement of labour. The flexibility of an economy can be judged from the speed with which it heals frictional unemployment.[1]

But more serious than cyclical unemployment or frictional unemployment in a developing economy like India is the prevalence of chronic under-employment or disguised unemployment in the rural sector and the existence of urban unemployment among the educated classes. It would be worthwhile to emphasize here that unemployment in developing economies like India is not the result of deficiency of effective demand in the Keynesian sense, but a consequence of shortage of capital equipment or other complementary resources.

1. To some extent frictional unemployment is unavoidable. Unemployment ranging between 2 to 3 per cent among industrial workers is considered natural and inevitable.

2. ESTIMATES OF UNEMPLOYMENT IN INDIA

That a large number of workers are forced to remain jobless both in rural and urban areas is true beyond dispute.

The Committee of Experts on Unemployment under the chairmanship of B. Bhagwati in its report submitted to the Government in May 1973, observed: On the basis of the data, the likely number of unemployed in 1971 may be reasonably taken at 18.7 million including 9 million who are without any job whatesoever and 9.7 million who work for less than 14 hours per week may be treated at par with the unemployed. Out of this, 16.1 million (86 per cent of total) unemployed are in the rural areas and 2.6 million in the urban areas. Unemployed as a percentage of total labour force worked out to 10.4 per cent for the country as a whole, 10.9 per cent for the rural areas and 8.1 per cent for the urban areas. (Refer table 1).

Table 1. Unemployment in India, 1971

(In millions)

	Total	*Rural*	*Urban*
1. Total number of unemployed	18.7	16.1	2.6
2. Total labour force	180.4	148.4	32.0
3. Total Unemployed as per cent of total labour force	10.4	10.9	8.1

Source : Committee of Experts on Unemployment (1973).

Extent of Under-employment

According to N.S.S. data (19th round), the Committee on Unemployment estimated that 8.5 million persons in rural areas and 1.2 million persons in urban areas were working less than 14 hours per week. They were so severely underemployed that the Committee preferred to treat them as 'nearly unemployed' and included them in the category of unemployed. Besides this, 23.50 million persons (i.e., 15.9 per cent of rural labour force) working less than 28 hours per week were severely under-employed. Similarly, 3.4 million persons (i.e., 10.5 per cent of urban labour force) working 15 to 28 hours per week were severely under-employed. Taken together 26.9 million persons (14.9 per cent of total labour force) were severely under-employed (Refer Table 2)

Unemployment Estimates

A person working 8 hours a day for 273 days of the year is regarded as employed on a standard person year basis. On the basis of the recommendations of the Committee of Experts on Unemployment Estimates set up by the Planning Conmission, three estimates of unemployment were generated in the 27th Round of NSS.

Table 2. Estimate of under-employed in the labour force (1971)

Hours in a week	*No. of unemployed (in million)*	*Percentage of underemployed in labour force*
Less than 14 hours		
Rural	8.5	5.7
Urban	1.2	4.0
Less than 28 hours		
Rural	23.5	15.9
Urban	3.4	10.5
Total	26.9	14.9

Source: Compiled from *Report of the Committee on Unemployment*, May 1973.

(i) Chronic unemployment or 'usual Principal status employment' is measured in number of persons i.e., persons who remained unemployed for a major part of the year. This measure is more appropriate to those in search of regular employment e.g., educated and skilled persons) who may not accept casual work. This is also referred to as 'open unemployment'.

(ii) Weekly status unemployment (measured in number of persons), i.e., persons who did not find even an hour of work during the survey week.

(iii) Daily status unemployment (measured in person days or person years, i.e., persons who did not find work on a day or some days during the Survey week.

The usual status (US) unemployment rate is generally regarded as the measure of open unemployment during the reference year; the current weekly status (CWS) unemployment rate also measures chronic unemployment, but with reduced reference period of a week. The current daily status (CDS) is considered to be a comprehensive measure of unemployment, including chronic unemployment as well as under-employment, on weekly basis.

Table 3: Magnitude and rate of unemployment in India

	1980		*1977-78*
	millions	*%*	*%*
Usual status	12.02	4.48	4.23
Weekly status	12.18	4.54	4.48
Daily status	20.74	7.84	8.18
Total Labour force	268.05		

Note: Rates of unemployment have been worked out as a proportion of the number of unemployed persons to the total labour force.

Source: Compiled from *Sixth Five Year Plan* (1980-85)

From the data given in table 3, it is obvious that no serious dent could be made into the problem of

unemployment. Nearly 12 million persons fall in the category of usual status or open unemployment. The overall rate of usual status unemployment for the country as a whole rose from 4.23 per cent in 1977-78 to 4.48 per cent in 1980. On daily status basis, unemployment was 7.84 per cent in 1980.

Employment Perspective of The Eight Plan

Taking 28 million as the backlog of unemployed in 1990, net additions to the labour force during 1990-95 are expected to be 37 million. Thus the total number of persons

TABLE 4. Projection of Unemployment for 1990-2000

	Million
1. Backlog of unemployed in the beginning of 1990	28
2. New entrants to the labour force during 1990-95	37
Total unemployed for the 8th Plan (1+2)	65
3. New entrants to the labour force during 1995-2000.	41
4. Total unemployed for the 9th Plan	106

SOURCE : Compiled from the Planning Commission, *Op.cit.*

requiring employment during the Eight Plan would be around 65 million. It is expected that during 1995-2000, labour force would increase by 41 million. Thus by the year 2000 AD, the total number of job seekers would be around 106 million. The Planning Commisson, therefore, concluded: "Employment growth in the aggregate over the estimated employment of 300 million in 1990 would have to be about 4 per cent compound per annum if the goal of providing employment to all is to be achieved by the end of the Eight Plan, and over 3 per cent per annum if it is to be attained by 2000 AD."[2]

3. VARIOUS SCHEMES TO REDUCE UNEMPLOYMENT AND UNDER-EMPLOYMENT

Following the publication of the Bhagwati Committee report in 1973, the Government took the following measures to provide employment and alleviate under-employment.

Rural Works Programme. The emphasis under the programme was on the construction of civil works of a permanent nature as would contirbute to the mitigation, if not the total eradication, of the scarcity condition in the areas concerned.

2. Planning Commission, ***Employment, Past Trends and Perspectives for 1990s.***

Marginal Farmers and Agricultural Labourers. Under the scheme, families were to be assisted with subsidised credit support for agricultural and subsidiary occupations like dairy, poultry, fishery, piggery-rearing, horticultural operations, etc.

Small Farmers Development Agencies. The object of the scheme was to make available to small farmers credit to enable them to make use of the latest technology to practise intensive agriculture and divrsify their activities.

Integrated Dry Land Agricultural Development. Under the scheme, permanent works like soil conservation, land development and water harnessing were undertaken. These programmes were labour-intensive and were expected to generate considerable employment opportunities.

Agro-service Centres. The schemes provided for assistance for self-employment to the unemployed graduates and diploma-holders in mechanical, agricultural and electrical engineering and allied fields and graduates in agriculture and science with experience in industry or agriculture. It aimed to help in establishing work-shops, organising agricultural machinery, repairing and hiring facilities and other technical services like supply of spare parts, inputs, etc.

Area Development Schemes. These schemes related to the development of adequate infrastructure facilities like roads, market complexes, etc. in areas commanded by ten major irrigation projects.

Crash Programme for Rural Employment. The primary objective of the scheme was to generate additional employment through a network of rural projects of various kinds which are labour-intensive and productive. The scheme had a two-fold purpose. Firstly, a project in each block was to provide employment to 100 persons on an average ccontinuously over a working season of 10 months in a year. Secondly, each project was to produce works or assets of durable nature in consonance with the local development plans. The various types of projects included schemes relating to minor irrigation, soil conservation and afforestation, land reclamation, flood protection and anti-waterlogging, pisciculture, drinking water and construction of roads.

The various schemes under the Fourth Five-Year Plan or the Crash Plan could not succeed in removing rural unemployment and under-employment because efforts were not made to organise the army of the rural unemployed into appropriate supply camps to be shifted to places of demand at the desired minimum wage. The Auditor-General in his report to the Lok Sabha presented in August 1974 brought out the tragic fact that the various 'crash' and rural employment programmes on which the Central

Government had spent ₹ 170 crores during the Fourth Plan that been wholly infructuous.

4. EMPLOYMENT GUARANTEE SCHEME OF MAHARASHTRA

Maharashtra Government introduced the Employment Guarantee Scheme (EGS) in 1972-73. The scheme was the first of its kind to give recognition to the 'right to work' enshrined in the Constitution. It embodied a commitment by the State to provide work to a person who comes forward to offer labour.

The main objectives of the Schemes were as under:

(*a*) To provide gainful and productive employment to an individual in approved rural works which raise the productivity of the economy.

(*b*) The works undertaken should produce durable community assets in the area.

(*c*) Productive works of labour-intensive nature like minor irrigation, water and soil conservation, nalla bunding, canal excavation, land development, afforestation, etc. should be undertaken.

(*d*) The works should be implemented departmentally and not through contractors so that at least 60 per cent of the works expenditure is incurred on wages to workers and 40 per cent in the form of materials, equipment, supervisory experts and administrative services.

The scheme was intended to provide employment guarantee only in rural areas. The guarantee was restricted to the provision of unskilled manual work and was limited to adults, i.e., men and women over 18 years of age.

The scheme was particularly designed to help the economically weaker sections of rural society. It is this potential group which would demand employment under the Employment Guarantee Scheme.

A review of the progress of the scheme during the 10-year period (1972-73 to 1982-83) revealed that while the expenditure incurred on the implementation of various programmes under EGS has been increasing, the number of mandays of employment generated as a result of these programmes has declined continuously over the years. During the first seven years, the progress of the scheme was good in as much as the mandays of employment generated increased from 45 lakhs in 1972-73 to 20.54 crores in 1979-80 along with the increase in expenditure from ₹ 1.89 crores in 1972-73 to Rs. 102.2 crores in 1979-80. However, since 1980-81, the trend of mandays of employment generated declined to12.8 crore mandays with an expenditure of ₹ 130 crores in 1982-83. As against an expenditure of ₹ 5.3 per manday of employment generated in 1979-80, this increased to ₹ 10.2 in 1982-83.

Since the average daily wage of an unskilled labourer was raised to ₹ 6 per day, part of the explanation for the reduction in mandays of employment generated could be found in it. The other part of the explanation was provided by the rise in prices. A part of the rise in expenditure per manday of employment might be also due to leakages and malpractices that have become a part of our administrative culture.

Only productive works with unskilled wage component of more than 60% were taken up under EGS. Modifications of the scheme permitted individual beneficiary schemes to be also taken up in the case of lands owned by small and marginal farmers. In such cases, 50 per cent of the expenditure was be borne by the concerned cultivator/ beneficiary. Besides this, a horticulture programme covering a total of 10 lakh hectares was launched during the Eighth Plan (1992-97) at Government cost on lands of SC/ST/ small cultivators. On other lands, Government and the beneficiaries were to bear the expenditure on materials in the ratio of 75:25.

According to the Eighth Plan, "the scheme has resulted in a significant reduction in the incidence of unemployment in rural areas. Average daily unemployment rates in rural Maharashtra have declined from 7.20% in 1977-78 to 3.17% in 1987-88. It would have also contributed to some extent towards the decline in rural poverty from 60.4 per cent in 1977-78 to 36.7 per cent in 1987-88. The scheme has also helped in keeping an upward pressure on wages in rural areas. The EGS has benefitted a large number of women too, with nearly 60 per cent of the workers on EGS sites being women."[3]

Prof. V. M. Dandekar was of the view that the scheme "was a right step in the right direction, however, EGS is not a scheme but an approach to development. EGS is the first scheme to recognise the 'Right to Work'. It has, therefore, made significant positive impact on employment, earnings and levels of living of rural people in Maharashtra. This experiment could well be a model for similar schemes in other states so that minimum level of living is guaranteed to every citizen in India." But a major criticism of the scheme is that it provides subsistence wages only. The answer to a decent standard of living lies in rural industrialisation.

The scheme has been in operation in Maharashtra for over 35 years since its inception in 1972-73. But the question that is relevant is : Has it helped to reduce poverty in rural Maharashtra ? Maharashtra fixed a monthly per capita expenditure of ₹ 362 as its state specific line in 2004-05, but the extent of rural poverty was of the order of 29.6 percent in 2004-05. This is even higher than the all-India average level of 28.3 per cent for rural poverty in 2004-05. Therefore, there is a need to reconsider the utility of the scheme since it has failed to make a significant impact on poverty.

3. Planning Commission, ***Eighth Five Year Plan*** (1992-97), Vol. II, p. 32.

5. NATIONAL RURAL EMPLOYMENT PROGRAMME

The Food for Work Programme was restructured and renamed as National Rural Employment Programme (NREP) from October, 1980. This was implemented as centrally sponsored programme with 50 per cent central assistance. Additional employment of the order of 300-400 million mandays per year for the unemployed and underemployed was envisaged under the NREP. Besides this, the NREP aimed to create community assets for strengthening rural infrastructure. These included drinking water wells, community irrigation wells, village tanks, minor irrigation works, rural roads, schools and Balwadi buildings, panchayat ghars etc.

A critical assessment of the projects undertaken brought out the following shortcomings:

(i) "Works implemented through NREP are often, not coordinated or integrated with the requirements of families identified for assistance under IRDP. Potentiality of NREP worked to assist newly liberated bonded labourers or to support the attempts of agricultural workers to secure minimum wages fixed under the law is also not always appreciated. Stereo-typed earth excavation works mainly relating to Kachcha village roads, reminiscent of the old famine relief works, are undertaken ignoring the fact that this programme has a crucially supportive role to play for the beneficiary oriented development programme of IRDP and other area development programmees."[4]

(ii) There is a tendency to go in for building construction with high material components. This runs counter to the basic objectives of NREP. The principal purpose of NREP is to utilise local resources, both in terms of materials and manpower towards the generation of more employment.

Total employment generation under NREP was 1,775 million mandays as against the target of 1500-2000 million mandays during the Sixth Plan.

The revised guidelines provided for earmarking 25% outlays for social forestry, 10% for works of direct benefit to Scheduled Castes and Scheduled Tribes. For ensuring the durability of assets created, the ratio of wage and non-wage expenditure was prescribed to be maintained at 50:50.

Review of the progress of NREP during the first four years of the Seventh Plan revealed that ₹ 2,940 crores, was spent during 1985-86 and 1988-89 but as against it, the employment generated was of the order of 1,477 million mandays. In other words, while more funds have been pumped into the programme, commensurate increase in employment generation did not come about. Besides this, on the basis of the studies conducted by National Institute of Rural Development, Indian Institute of Public Administration and Gandhi Labour Institute, highlighted some of the shortcomings of the programme: "It is revealed that employment being provided under the programme is for a very short duration and cannot make an impact on the levels of living of the rural people. The wages paid under NREP are often lower than the market wage rates. The selection of the beneficiaries is not proper, in as much as the poorest of the poor for whom the programme is meant are sometimes left out altogether."[5]

There is no doubt that NREP was a step in the right direction. To supplement it, a new Rural Landless Employment Guarantee Programme (RLEGP) was also launched.

6. RURAL LANDLESS EMPLOYMENT GUARANTEE PROGRAMME

The Rural Landless Employment Guarantee Programme (RLEGP) was launched on the 15th August 1983 with the objective of generating gainful employment, creating productive assets in rural areas and improving the overall quality of rural life.

The programme was funded by the Central Government on 100% basis. Resources were allocated to the States/Union Territories on the basis of the prescribed criteria giving 50% of weightage to number of agricultural labourers, marginal farmers and marginal workers and 50% weightage to incidence of poverty. Wages were paid to the workers under the Schedule of employment in the Minimum Wages Act. Part of the wages were required to be paid in the form of subsidized foodgrains. It was also stipulated that the wage component on a project should not be less than 50% of the total expenditure on the project. The programme included projects of social forestry, Indira Awaas Yojana and Million Wells Scheme.

The progress of RLEGP during the Seventh Plan (1985-86 to 1988-89) revealed that during the first four years, a sum of ₹ 2,412 crores was utilized and this helped to generate employment to the tune of 1,154 million mandays.

As a result of the RLEGP, social forestry programme 5.2 lakh hectares of land was covered and 533 million plants were planted during the 3-year period. Besides this, 4.27 lakh houses at a cost of ₹ 425.5 crores were constructed upto Dec. 1988. The cost per dwelling unit worked out at ₹ 9,954.

The Government decided to merge NREP and RLEGP. The merger was based on the premise that the

4. Planning Commission, *Sixth Five Year Plan—Mid-term Appraisal* (1983), p. 57.

5. Planning Commission, *Seventh Five Year Plan* (1985-90) *Mid-term Appraisal*, (1988), p. 40.

objectives and implementation in the field of these two programmes were by and large similar. But it may be pointed out that merger of NREP and RLEGP is merely tinkering with the problem. A much more serious consideration should be given to develop a much tighter administration of rural employment scheme to eliminate malpractices so that real beneficiaries can be helped to cross the poverty line. Improving effectivity of implementation is the crux of the matter and not administrative reorganisation.

7. IRDP, NREP, RURAL POVERTY AND EMPLOYMENT

A multiplicity of agencies have been carrying on the task of providing rural employment. They included : Employment Guarantee Schemes, Food for Work Programme, Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers (MFAL), Drought Prone Area Programme (DPAP) and Desert Development Programme (DDP), Command Area Development Programme (CADP), etc. The Sixth Plan (1980-85) proposed that "such multiplicity of programmes for the rural poor operated through a multiplicity of agencies should be ended and replaced by one single integrated programme operative throughout the country." This programme was named as the Integrated Rural Development Programme (IRDP).

Philosophy behind the IRDP Programme

A large body of economic experts have shown in their studies that whereas economic growth may be able to raise per capita incomes in developing countries, it may not be accompanied by a reduction of poverty as well as elimination of unemployment and under-employment. Rather the process of economic growth in third world countries, India being no exception, has benefitted relatively developed areas and better-off people. In other words, the percolation of benefits of economic growth to backward areas and the poor people have not taken place.

To remedy this situation, it was thought necessary that a direct attack on poverty should be made. This necessitated progammes for alleviating rural poverty by endowing the poor with productive assets or skills so that they can employ themselves usefully to earn greater incomes and thus cross the poverty line. To achieve this objective, the Sixth Plan conceived of two important programmes—IRDP and NREP. The basic strategy was to promote self-employment of the poor households through IRDP so that with the transfer of productive assets, they may earn incomes that help them to cross the poverty level. The NREP (National Rural Employment Programme) was to provide wage employment to fill in the periods of seasonal and sporadic underemployment. It was also intended to enlarge absorptive capacity of labour in rural areas in non-agricultural occupations by creating infrastructure—social and economic—which help to increase the productive capacity of the economy.

Targets and achievement

The IRDP was initiated on October 2, 1980 in all the 5,011 blocks in the country. During the 5-year period (1980-85) in each block 600 poor families were to be assisted. In this way, a total of 15 million families of about 75 million persons below the poverty line were targeted to be beneficiaries. For each block a uniform allocation of ₹ 35 lakhs was to be shared between the Centre and the States on a 50-50 basis.

The programme was based on a graded scheme of subsidies which amounted to 25 per cent of the capital cost of small farmers, 33.3 per cent for marginal farmers, agricultural labourers and rural artisans and 50 per cent for tribal beneficiaries. Following the Antyodaya principle, the programme was intended to reach the poorest households first and later to reach other poor people in an ascending order.

Community works were eligible for 50 per cent subsidy. Nearly 20 per cent of the outlay was to be utilised for administrative and infrastructural support and the balance of 80 per cent is meant for subsidies to beneficiaries for acquisition of assets.

The major weaknesses of the programme were as under:

(i) Selection of ineligible families, though the Government claims to be below 8 per cent, is in fact larger.

(ii) Training was not imparted to majority of the beneficiaries.

(iii) In about 22% cases, no incremental income was generated.

(iv) Adequate infrastructure facilities were not available to beneficiaries. The input facility was available to barely 40% cases, marketing in 14% cases and repair facility in 5% cases.

The programme assisted a total of 108 lakh families, out of which 50% of belonged to SC/ST categories, thus achieving the target set for the plan. But the percentage of women beneficiaries was only 34%, which was below the target of 40%.

Besides this, the Government decided to introduce the Family Credit Plan by enlarging its magnitude. Under the scheme, multiple assets could be given to more than one member of the family to enable the household to cross the poverty line. The level of investment per family was targetted at ₹ 20,000-25,000 under the scheme. With a view to encourage higher levels of investment per family, security norms for IRDP were enhanced. Banks were earlier required not to obtain mortgage of land as security for loans up to ₹ 2,000. This limit was raised to ₹ 5,000. In addition, banks were not to obtain collateral security for moveable assets up to ₹ 15,000.

The IRDP was started in 1980-81 in all blocks of the country and continued as a major self-employment scheme till April 1, 1999. Then, it was restructured as the Swaranjayanti Gram Swarozgar Yojna (SGSY) which aimed at self-employment of the rural poor. According to the Mid-term Appraisal of Ninth Five Year Plan (1997-2000) published in October 2000, since the inception of the programme till 1998-99, 53.50 million families have been covered under IRDP at an expenditure of ₹ 13,700 crores. During the first two years of the Ninth Plan (1997-98 and 1998-99), about 3.37 million families reported to have been covered.

The average investment per family remained at sub-critical levels, too inadequate to generate income of ₹ 2,000 per family per month as the programme had envisaged. At the beginning of the Ninth Plan, an investment of ₹ 16,753 per family was not much higher in real terms as compared with ₹ 7,889 at the beginning of the Eighth Plan. Such low-level per family investment cannot finance self-employment projects to yield adequate income on a sustained basis.

Critical Assessment of the Programme

Various evaluation studies about the programme were made which reveal that the actual percolation effect of the programme was much less in terms of poverty alleviation as compared with the impressive figures doled out by Government reports in terms of subsidies, bank credit and poverty line crossers.

Firstly, there has been misclassification of the 'poor' among the beneficiaries. It would not be appropriate to treat all the 16.56 million beneficiary households as poor. On the basis of the NABARD surveys of IRDP, Professor Nilkanth Rath concluded: "The NABARD (1984) survey showed it would not be improper to suggest that at least 15 per cent of those identified as poor and helped under IRDP did not really belong to the category of the poor."[6]

Similarly, Professor Indira Hirway, Gandhi Labour Institute, Ahmedabad on the basis of a study of four selected villages in Gujarat concluded: "Firstly, the non-poor households dominate among participants: about 55 to 75 per cent of the participants are non-poor in these villages. And secondly, the non-participants mainly belong to the lowest three deciles of consumption levels."[7] Indira Hirway also observed that spatially IRDP and the schemes for beneficiaries have reached mainly the developed villages. The study showed that "in spite of the running of the special programmes for more than five years, irrigated and agriculturally prosperous villages had more unequal distribution of household consumption levels than the rainfed villages, which indicated that with the growth the roots of inequalities were perhaps getting stronger in these village economies."[8]

Secondly, the non-percolation effect of the IRDP may be due to two factors—(i) there may be leakage in the loans and subsidies granted to beneficiary households, and (ii) there may be misuse of loans. Under the IRDP, the principal type of asset creation for which loans (and subsidies) were given was in the form of livestock including dairy animals, goats, sheeps, cows, bullocks, bullock carts, camels and camel carts. NABARD survey showed that 40 to 50 per cent of investment was accounted for dairy, goats and sheep. Bullocks, camels (with or without carts) accounted for another 20 per cent, minor irrigation accounted for 13 to 14 per cent and non-farm activities accounted for barely about 25 per cent. In other words, nearly two-thirds of the loans (and subsidies) were in the form of livestock.

IRDP was, therefore, seen as a scheme for distributing milch animals without any concern whatsoever whether feed and fodder for such animals would be available or not and whether there was any demand or market for the products. The Mid-Term Appraisal of the Ninth Plan criticising this aspect mentions: "Large number of milch animals are often bought at the same time in cattle fairs, pushing up their price. The difference in price and the quality of financed assets over their market price, along with cost of time, out-of-pocket expenses and payments to middlemen raises transaction cost to the borrower by an estimated 20 per cent. Thus, although the interest rate on bank loans under the programme is 12 per cent, the effective rate is between 30 per cent and 35 per cent. This entirely nullifies benefits of average subsidy amount of one-third." (p. 139). The leakages, according to Indira Hirway, amounted to 25 to 30 per cent of the total participants.

Thirdly, "although IRDP requires that the beneficiaries should be selected from the poorest groups below the poverty line, it has so happened that in quite a few states a sizeable number of beneficiaries selected belong to the category of small and marginal farmers. The percentage of such beneficiaries varies from state to state and is sometimes as high as 30 per cent. This has resulted because of the relatively better viability of small and marginal farmers from credit angle and the preference of block officials and credit agencies extending assistance to them."[9] In other words, the benefits of the programme are appropriated by the upper layers of the poor, to that extent the poorest of the poor continue to be by passed. This distortion needs to be rectified if the spirit of 'Antyodaya'—reaching the poorest of the poor—has to be the foremost consideration in the process of implementation.

Fourthly, studies about the distribution of individual subsidies for the creation of productive assets revealed that

6. Nikanth Rath, 'Garibi Hatoao' Can IRDP do it ? *Economic and Political Weekly*, February 9, 1985, p. 24116.
7. Indira Hirway, Critique of Target Group Approach: A Study in Gujarat, *Indian Journal of Agricultural Economics*, Conference Number, July September, 1984, p. 282.
8. Indira Hirway, *Op. Cit.*, p. 293.
9. Planning Commission, *Sixth Five Year Plan* (1980-85) *Mid-term Appraisal* (1983), p. 49.

system of brokerage and widespread corruption has emerged. Influential members of the village community in collusion with the bureaucracy and officials of co-operative department and other credit agencies charge a brokerage for getting subsidies and credit sanctioned to poor villagers. In many situations it is the story of the same animal going round with different beneficiaries, and the net 'benefit' being the subsidy.

Lastly, the most relevant question is: How many of the poor beneficiaries have been lifted above the poverty line as a consequence of the transfer of assets to them under the IRDP? Professor Nilkanth Rath on the basis of NABARD Surveys reached the following conclusion: "The percentage of beneficiaries whose income had risen above the poverty line of ₹ 3,500 came to 47 per cent of the eligible beneficiaries (i.e., excluding the 15 per cent who were not poor), or 40 per cent of all beneficiaries . There was considerable variation among states. But these are at current prices. When adjusted for price changes between 1979-80 and the survey period it was found that only 22 per cent of the eligible beneficiaries, or 18.7 per cent of all beneficiaries had been able to cross the poverty line."

Professor Rath considered treats even this figure of 18.7 per cent of all beneficiaries as poverty line crossers, as an over-estimate, since according to him, in calculating post-investment income, none of the surveys had deducted the annual repayment instalment as cost. Rath, therefore, mentioned: "If this legitimate expense is taken into account, the percentage of beneficiaries who might have crossed the poverty line will come down very considerably."[10] If this is adjusted, the proportion of beneficiaries who would have really risen above poverty would come down to less than 10. "Therefore, it would not be far wrong to estimate that at the end of 2 years of operation of IRDP about 3 per cent of the poor households in rural India would have been helped to live above poverty, even if for a while only."[11]

Professor Rath believes that the poor are not interested in assets, but in income. This view considers the assets—a cow, a herd of sheep or goats or bullock cart or a well or a pump as the instruments of income generation. But the fact of the matter is that the asset creation approach has failed in its objective of income-generation and, therefore, Professor Rath pleaded for a large-scale programme of assured wage employment for the rural poor on the lines of Maharashtra Employment Guarantee Scheme (EGS) or National Rural Employment Programme (NREP).

Professor Indira Hirway does not consider Professor Rath's approach as balanced. It over-emphasizes the role of wage-employment ignoring the role of self-employment in our rural society. Professor Hirway makes distinction between two categories of poor: (i) those who have at least some asset or have some skill, education or enterprise to take up self-employment, and (ii) those who neither possess any asset nor have any skill, enterprise, education etc. to take up any activity independently. The poor belonging to the first category should be dealt with under IRDP self-employment approach and the poor under the second category should be covered by the NREP or EGS wage-employment approach. It is, therefore, argued that self-employment or wage-employment should be provided to the poor on the basis of their suitability and acceptability. Indira Hirway is right because in the Indian rural society, about 63 per cent of the rural work-force is self-employed. It would be impossible to provide wage employment to such a big proportion of the rural working population, whatever may be the scale of NREP or EGS that the country may embark on.

The moot question, therefore, is : What should be done to improve the participation of the poor in the IRDP and NREP so that the percolation effect of these programmes becomes more significant. Mid-Term Appraisal of the Ninth Plan, after reviewing the shortcomings in the working of the IRDP brought out the following conclusions:

First of all, the basic concept of the IRDP remains flawed. The massive amounts spent on subsidies have by and large not accrued to beneficiaries would be much better spent on watershed development, rural infrastructure and social security.

Secondly, IRDP suffers from the bsic misconception that provision of credit is one-time event rather than a continuing relationship between the lender and the borrower. It is unrealistic to expect that the problems of the poor will be resolved just on the basis of an "injection" of credit (The medical terminology is significant). As against it, in the Grameen Bank programme of Bangladesh, most loanees start with small loans and as the relationship with it improves, the Bank provides more loan to the same person. Recovery often goes hand in hand with fresh loans. This practice helps the poor to gradually improve their capability to earn income and thus cross the poverty line on a sustainable basis. This is the consequence of a continuing relationship developed by the poor with the Grameen Bank.

Thirdly, there is still an under-emphasis on activities which required no fixed assets such as trading, service and even simple processing activities. Bangladesh and Philippines finance a much larger component of petty trading and service actiities. There is a need to enlarge the scope of IRDP responding to a change in the pattern of demand and not restrict it to only "approved" activities.

Fourthly, IRDP does not look into the problems of already existing micro-enterprises. How can one enthuse the rural poor to become tailors, weavers, shopkeepers or cattle owners if the problems faced by the existing asset owners are ignored? It is this aspect which needs attention.

Lastly, IRDP totally lacks "social intermediation", a process by which poor borrowers are encouraged to organize themselves into groups, are given training in the

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10. Nilkanth Rath, *Op. cit.*, p. 243.
11. *Ibid.*, p. 243.

importance of regular savings and credit discipline and are instilled a sprit of self confidence. This function is being eminently performed by Grameen Banks of Bangladesh and has been taken up by some co-operative banks and self-help grousp (SHGs) in India. In the sphere of social intermediation, mention may be made of Rashtriya Mahila Kosh (RMK) and Women Development Corporations, though they are still small compared to IRDP.

The basic issue is: Unless grassroot implementation of the programme is improved, the percolation effects of the programme in terms of helping the poor to cross poverty line will not show significant results.

8. JAWAHAR ROZGAR YOJANA

Prime Minister Rajiv Gandhi announced on 28th April, 1989 the launching of the Jawahar Rozgar Yojana (JRY). All the existing rural wage employment programmes were merged into JRY. This implies that National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP) have been merged so as to be brought under this umbrella programme referred to as Jawahar Rozgar Yojana.

Main features of the Scheme

(i) As a result of the operation of NREP and RLEGP during 1980-81 to 1988-89, rural employment programmes reached only 55 per cent of the village panchayats around the country. JRY aimed at reaching every single panchayat.

(ii) The scheme will be administered by the village panchayats to implement rural employment programmes benefitting 440 lakh families living below the poverty line in India.

(iii) Whereas in the earlier rural employment programmes, Central and State assistance was provided on 50:50 basis, JRY has stipulated that Central assistance will finance 80 per cent and the States share will be 20 per cent.

Objectives of JRY

Primary Objective — Generation of gainful employment for the unemployed and under-employed, men and women in rural areas.

Secondary Objectives — JRY had several secondary objectives :

(i) creation of sustained employment by strengthening the rural infrastructure;

(ii) creating community and social assets;

(iii) creating assets in favour of the poor for their direct and continuing benefits;

(iv) to produce positive impact on wage levels; and

(v) to bring about over-all improvement in quality of life in rural areas.

Target Groups and Special Safeguards

JRY was specially targetted to help people below the poverty line. Preference was to be given to Scheduled Castes, the Scheduled Tribes and freed bonded labourers. At least 30 per cent of the employment was to be provided to women under the JRY.

Modification under JRY

Based on the experience gained in the implementation of the Jawahar Rozgar Yojana (JRY) and to achieve the objective of providing 90-100 days of employment per person in backward districts, JRY was modified from 1993-94 and was implemented in the following three streams:

First Stream: On the existing pattern with two sub-schemes, namely Indira Awaas Yojana (IAY) and Million Wells Scheme (MWS)

Second Stream: An intensified JRY in 120 identified backward districts with additional allocations

Third Stream: Special and innovative projects

First Stream of JRY

Under this stream of JRY, two sub-schemes, viz. Indira Awaas Yojana (IAY) and Million Wells Scheme (MWS) were implemented. 10 per cent of the total resources of JRY were earmarked for the IAY and 30 per cent for the MWS.

Works to be undertaken under first stream of JRY

1. Social forestry works on Government and community lands belonging to panchayats etc. road side plantations, plantations along canal banks or on wastelands or on sides of railway lines etc.
2. Soil and water conservation works
3. Minor irrigation works, such as, construction of community irrigation wells, drains and field channels
4. Construction/renovation of village tanks for providing irrigation as well as drinking water
5. Construction of community sanitary latrines
6. Construction of houses for scheduled castes/scheduled tribes and freed bonded labourers
7. Construction of rural roads.
8. Land development and reclamation of waste lands or degraded lands.
9. Construction of community centres, panchayat ghars, Mahila Mandals, Market yards, dispensaries, anganwadis, balwadis etc.
10. Construction of school buildings, etc.

Million Wells Scheme (MWS)

The Million Wells Scheme was launched as a sub-scheme of NREP/RLEGP during 1988-89 to provide open

irrigation wells, free of cost, to poor small and marginal farmers belonging to SCs/STs and freed bonded labourers.

Since the beginning of the programme in 1988-89, a total 10.0 lakh wells were constructed with an expenditure of ₹ 4,021 crores by 1996-97. Additional 1.9 lakh wells were constructed during 1997-98 and 1998-99 at a cost of ₹ 937 crores.

Indira Awaas Yojana (IAY)

Indira Awaas Yojana was aimed at providing houses, free of cost, to the members of the SC/ST, freed bonded labourers. From 1993-94, the scheme was extended to other poor categories (besides SC/ST) as well. The permissible expenditure for each house under IAY which was fixed at ₹ 14,000 was enhanced to ₹ 20,000 with effect from 1st August 1996 in view of the rise in the cost of building materials.

Under Jawahar Rozgar Yojana, during 1989-90 to March 2001, a total of 67.5 lakh houses were constructed with a total expenditure of ₹ 11,324 crores. Average cost of construction of a house was ₹ 16,776.

Third Stream — Innovative and Special Employment Projects

Under the third stream of JRY, special and innovative projects which aim at prevention of migration of labour, enhancing women's employment, special programmes through voluntary organisations aiming at drought proofing as well as watershed development/wasteland development resulting in sustained employment were undertaken. Besides this, Operation Black Board was undertaken to provide assistance for construction of class rooms and school buildings. During the 5 year period (1989-90 to 1993-94), as against the target of 4,332 million mandays, the States generated employment of the order of 4,283 million mandays, nearly 97 per cent of the target. The total expenditure incurred was ₹ 14,010 crores. This implies that ₹ 32.7 per manday were spent for the purpose. This was a very encouraging achievement.

Employment Assurance Scheme (EAS)

On the model of the Employment Guarantee Scheme of Maharashtra, the Government introduced Employment Assurance Scheme (EAS) with effect from 2nd October 1993 in rural areas in 1,778 blocks of 261 districts. The scheme aimed at providing assured employment of 100 days of unskilled manual work to the rural poor who are in need of employment and seeking it. The assurance of 100 days extends to all men and women over 18 years and below 60 years of age. A maximum of two adults per family were to be provided employment under the scheme.

The average employment provided per person was 41.3 days in a year, as against the target of 100 days of employment. To make the scheme more enduring to enable beneficieries to cross the poverty line, it would be more desirable to reach the target of 100 days of employment per year.

Evaluation of Jawahar Rozgar Yojana (JRY)

During 1992, the Government of India undertook concurrent evaluation of JRY through reputed research institutions covering all districts in the country. More concerns of the concurrent evaluation were :

Areas of Concern pointed out by the Report are:

(a) In majority of cases, panchayat heads were not given any training for undertaking JRY works.

(b) The workers who belonged to the category of 'ineligibles' also took advantage of the programme.

To sum up, Jawahar Rozgar Yojana made some headway in providing employment but the target of providing 90-100 days of employment for every registered person is a distant goal judged by the achievement made so far. The total absence of voluntary organisations in its implementation was a serious weakness of JRY. To improve the quality of construction of houses, more liberal amount per house should be provided, failing which the poor quality houses would after a few years need heavy repairs.

Jawahar Gram Smridhi Yojana (JGSY) introduced in April 1999 as a successor to Jawahar Rozgar Yojana (JRY) is being implemented as a centrally sponsored scheme on a cost sharing ratio of 75:25 between the Centre and the States. Under the programme, all works that can result in the creation of durable assets are taken up. Under the scheme, during 2000-01, with a Central allocation of ₹ 1,650 crores, 88.5 million mandays of employment was generated.

Swaran Jayanti Gram Swarozgar Yojana (SGSY) was introduced in April 1999 as a result of restructuring and combining the Integrated Rural Development Programme (IRDP) and Million Wells Scheme (MWS) into a single self-employment programme. It aimed at promoting micro-enterprises and helping the rural poor into self-help groups. It was implemented as a Centrally Sponsored Scheme on cost sharing ratio of 75:25 between the Centre and the States.

Swaran Jayanti Shahari Rozgar Yojana (SJSRY): The Urban Self-employment Programme and Urban Wage-Employment Programmes of the Swaran Jayanti Shahari Yojana, which substituted in December 1997 various programmes operated earlier for poverty

alleviation. SJSRY was funded on 75:25 basis between the Centre and the States. During the 3-year period (1997-98 and 1999-2000), a total of ₹ 353 crores were spent of SJSRY generating 21.8 million mandays of employment.

9. EMPLOYMENT POLICY IN THE NINTH PLAN

Labour Force Growth and Employment Requirements

Job opportunities will need to be created for 53 million persons during 1997-2002 as a consequence of labour force increase, for 58 million during 2002-07 and thereafter for 55 million during 2007-12.

TABLE 5 : Combined Incidence of Unemployment and Under-employment

Activity Status	*Proportion of labour force*	*Remarks*
1. Labour force	100.00	Working or seeking work on usual status basis.
2. Employed	89.55	Usual status employed staying in workforce when classified by their weekly status.
3. Unemployed	2.02	Incidence of open unemployment on usual status basis.
4. Under-employed	8.43	Usual status employed going out of work when classified by their weekly status.
5.Unemployed & underemployed	10.45	Open unemployment on usual status and the incidence of loss of work by the usually employed when classified by their weekly status.

SOURCE: Compiled from Planning Commission, *Ninth Five Year Plan (1997-2002)*, Vol. I, February 1999.

Strategy of Employment Generation in the Ninth Plan

The basic problem, which keeps people in a state of poverty, is the poor quality of employment in terms of inadequate level of income for workers. The educational level of the workers reveals that 70 per cent of the workforce is either illiterate or educated below the primary level. In industries other than agriculture, where skill development for higher productivity necessitates a reasonable level of educational standard, 52 per cent of workforce was below the primary level of education, 26 per cent being illiterate. (Refer table 6). The Ninth Plan, therefore, as a part of its strategy intended to focus on the growth of sectors which have high employment absorption capacity of a relatively less educated labour force. It mentioned, "The focus on agriculture, trade and transport and construction reflect this imperative."

It is really a sad commentary on our planning process that even after five decades of planned development, nearly 84 per cent of the workforce engaged in agriculture is either illiterate or with an educational level below primary. It is, therefore, vitally necessary that education and skill development programmes which are essential features of empowerment be strengthened.

TABLE 6: Percentage Distribution of Labour Force by Level of General Education (1993-94)

	Illiterate	*Literate upto primary*	*Middle and above*	*Total*	*Share in workforce*
Agriculture	60.8	22.8	16.4	100.0	56.6
Other than Agriculture	25.8	26.0	48.2	100.0	43.4
All industries	45.6	24.2	30.2	100.0	100.0

Note : Ususal status principal and subsidiary workers

SOURCE : Compiled from NSS 50th Round Data on Employment and Unemployment.

As a part of enlarging employment and increasing the quality of employment, the Ninth Plan emphasized, "It is necessary to increase public investment in agriculture especially for strengthening irrigation and other rural infrastructure in backward areas so that sustained agricultural growth, and, therefore, acceleration of employment growth is facilitated."[12] Besides this, the Ninth Plan intended to emphasise horticulture – an employment intensive sector.

The Ninth Plan underlined the fact that Rural Non-farm Sector has increased its share of productive employment from about 15 % in 1978 to 22 % in 1987-88 and further to 23 % in 1993-94. This sector has registered an employment growth rate of 5 per cent between 1987-88 and 1993-94, which is very heartening. This trend should be strengthened. This necessitates a decentralized pattern of industrialisation so that rural areas can undertake small business and manufacturing on an increasing scale.

In the industrial sector, the Ninth Plan mentioned: "Consumer goods industries account for two-thirds of manufacturing employment and over a little over one-third of GDP from Manufacturing. ... A large domestic demand offers a tremendous scope for expansion of output and

12. *Ninth Five Year Plan* (1999), Vol. I, p. 208.

employment in this sector."[13] Although the Ninth Plan emphasized that on account of "immense potential of creating new jobs at low cost, the VSI (Village and Small Industries) sector has been accorded high priority by providing incentive and support to facilitate their growth and employment."

Referring to other sectors, the planners underlined the high growth rates of employment experienced in construction of the order of 5.33 per cent per annum during 1983 to 1993-94. The planners lamented that though housing, rural roads, schools, hospitals and dispensaries are all part of the construction sector, large private sector investment has not been forthcoming in construction sector with the policies of liberalisation of infrastructure building.

Trade and transport have shown a growth rate of 3.5 % and 3.59 % respectively during 1987-88 to 1993-94. Investment in transport needs to be strengthened still further.

Regarding the service sector, Ninth Plan stated that the growth rate of employment in this sector has been of the order of 5.39 % per annum during 1987-88 to 1993-94 compared to barely 1.84 % per annum between 1983 and 1987-88. But the irony of the strategy of employment outlined in the Ninth Plan is not to compute the employment growth in education and health sector if policies of building human capital, as suggested by Nobel Laureate Amartya Sen, have to be buttressed. This appears to be a basic fallacy on the employment growth strategy. To achieve the objective of 'education for all' and 'health for all' could result in tremendous growth of employment, more especially in the rural sector, which displayed serious deficiencies in this regard.

An assessment of the Employment Strategy

However, it may be mentioned that the Ninth Plan does not make employment as a central objective of the policy, though it speaks of generating it as a corollary of the growth process. The Macro Dimensions of the plan are couched in the traditional paradigm of saving, investment, GDP growth rates. In this connection, it would be relevant to heed the advice given by the *Human Development Report* (1996) which states that a *clear political commitment to full employment is the essential condition for development*. The Report mentions : "Where employment creation has been most successful, it has been the result of a deliberate strategy. Rather than assuming that employment would materialise automatically, political leaders have identified it as a central policy objective." It further emphasises : "Employment needs to be restored to its place among the top policy concerns of economic management. The macro-economic framework agreed to between governments and the Bretton Woods Institutions need to focus on employment — not just inflation, GDP growth, short and medium term reforms and short-term fiscal and budgetary targets. They need to set employment targets, which are essential to human development and to sustained future growth."[14]

Employment Policy — Choice Between Blood Transfusion System and 'Haemopoietic System'

Two strategies have been employed for generation of employment in the rural economy — Jawahar Rozgar Yojna (JRY) and Employment Assurance Scheme (EAS) on the one hand and Infrastructure Development to promote employment on the other.

The *Draft Mid-term Appraisal of the Eighth Plan* mentioned in this regard, "All the employment generated under JRY kind of programmes from year to year do not represent a net addition to employment, as employment generated under these programmes is not self-sustained from year to year and the employment generated during one year terminates itself during that year and a similar quantum of employment has to be created the next year to maintain employment level."[15] The Appraisal, therefore, recommended that employment generated under JRY type of programmes, except EAS, where a person can get guaranteed employment for 100 days in a year if he wants, should not be included in the estimates of growth of employment. The reason being, that employment elasticities used for various sectors of the economy relate to usual status employment. That apart, the basic question is : Should the country continue to spend year after year huge sums of money to generate the JRY type of self-terminating employment? Such attempts aimed at reduction of poverty to help the disadvantaged sections are figuratively described as 'blood transfusion' to remove some pain, but are basically incapable of curing the disease (poverty). In other words, blood transfusion kind of JRY programmes help to provide temporary relief, but the basic need of the society is to develop 'Haemopoietic System' which increases the vitality of the economy and thus its capacity to generate blood. It is this self-sustaining kind of employment that can take us to the goal of full employment along with goal of removal of poverty.

The Maharashtra Employment Guarantee Scheme was introduced in 1972 and has been described as a model safety net for those without work by the UNDP *Human*

13. *Ibid.*, P. 210.

14. United Nations Development Programme (1996), *Human Development Report*, pp. 92-93.

15. Planning Commission, *Draft Mid-term Appraisal of the Eighth Five Year Plan* (1992-97), September 1996, p. 67.

Development Report (1996). It generated 89.4 million person days of work in 1990-91. It provided employment to about 2.5 per cent of the state's labour force and eliminated some 7 per cent of the state's rural unemployment. But mere emphasis or employment generation did not make a serious dent on poverty. The poverty ratio in Maharashtra was 52.94 per cent in 1973-74, it came down to 40.1 per cent in 1987-88 and further declined to 36.86 per cent in 1993-94. In a period of 20 years (1973-74 to 1993-94), there was a decline in poverty by 16.08 per cent, i.e., a yearly decline of 0.8 per cent. Even in 2004-05, the poverty level in Maharashtra was 30.7 per cent, while the all-India poverty ratio was 27.5 per cent. The question which needs an answer is : Why such cost effective and widely accepted and acclaimed Employment Guarantee Scheme failed to lift the bulk of the population above the poverty line ? It is due to the fact that with its focus on employment generation through use of labour intensively, the EGS simultaneously did not generate enough productive assets in the rural areas. For this purpose, the government should provide necessary funds and technology to improve rural areas, more especially the backward rural areas. Infrastructure development in the form of irrigation, electricity generation, transport and communications, marketing network etc. is necessary. Besides these, agro-industries and related industries need to be developed to make a simultaneous and concerted attack on the problem of unemployment and poverty.

Strengthening the Informal Sector

As indicated earlier, the formal sector in 1995 providing organised employment to 10 or more persons accounts for only 27.53 million workers being employed in them. The rest of the 312 million workers (about 92% of total) were engaged in agriculture as wage labourers, or self-employed in informal sector or seek employment in the service sector. Bulk of them were employed in the informal SSI sector which is seriously plagued with the problem of industrial sickness. Despite all talk about helping small scale units, the fact remains that mortality rate among the SSI units has been high, and more and more of bank credit gets sunk in these units. But this is also true that SSI sector is the principal source of employment and has the capacity to absorb a very large chunk of the labour force.

But the informal sector is mainly self-employed sector in which due to lack of capital, skill and technology, most of the employment continues to be low level employment. There is a need to strengthen the resource base of this sector both in terms of capital and technology and skill formation so that productive employment yields a higher level of income. Obsessed with the policies of privatisation, liberalisation and globalisation of the economy, the entire focus of the economic policies is on the corporate sector. The trickle down approach is destined to failure to solve the problems of poverty and unemployment. The solution of the unemployment problem requires a paradigm shift in our policy.

The East Asian miracle has demonstrated that these HPAEs (Highly Performing Asian Economies) "governments have been less vulnerable and less responsive than other developing-economy governments to organised labour's demand to legislate a minimum wage. Rather, they have focused their efforts on job generation, effectively boosting the demand for workers. As a result, employment levels have risen first, followed by market and productivity driven increases in wage levels."

"In the HPAEs the incomes of urban and rural workers with similar skill levels have risen roughly at the same pace; more over the over all gap between urban and rural incomes is smaller in the HPAEs than in other developing economies. ... The gap between formal and informal sectors in East Asia is only 20 per cent. Smaller income gaps contribute to social stability, thus enhancing the environment for growth."[17]

To sum up, India should avoid lopsided development — with either good growth but little human development (the Haryana experience), or good human development with little growth (experience of Kerala). There is no doubt that higher economic growth is essential but it is also necessary to ensure that the structure and quality of growth is directed to supporting human development, reducing poverty, protecting environment and ensuring sustainability.

India today is following policies which have resulted in a dualistic economy with a modern sector integrated into the global economy existing side by side with lower-productivity informal sector. In this way, we are conducting a zero-sum game — better employment opportunities for some, but loss of opportunities for the rest of the bulk of the population. It is this dualistic character which has to be altered. The *Human Development Report* (1996) quotes in this context the experience of a few countries : "Birdsall, Ross and Sobot explain how in the Republic of Korea, the rapid rise in employment and income fuelled the demand for education. Families had more disposable income, but they also saw the potential returns to investing in their children's future as the wage differentials between the skilled and unskilled jobs increased."

"The pattern of growth — with full employment and rising wages — was one reason behind the reduction in poverty and inequality that accompanied high growth in Japan, Mauritius, the Republic of Korea and Singapore."[18]

17. World Bank (1993), *The East Asian Miracle*, p.19.
18. UNDP (1996), *op. cit.*, p.92

India should, therefore, learn a lesson from the experience of East Asian Economies so that GDP growth, productivity, employment and wage increase can be moved together in the process of economic and human development. Employment friendly growth process can ensure growth with equity.

10. CHANGING DIMENSIONS OF UNEMPLOYMENT AND EMPLOYMENT

From data provided in table 7, certain disturbing trends in the unemployment rates become evident in the post-reform period. Although the reforms were introduced in 1991, yet the year 1991-92 was particularly a depressed year and the reform process really got a going by 1993-94. Thus, 1993-94 to 2004-2005 — the 11-year period can be considered as the period of liberalisation. It may be noted that all categories of unemployment showed a declining trend during the period 1977-78 to 1993-94, but the trend got reversed during 1993-94 and 2004-05. Unemployment as measured by UPS criterion declined from 4.23 per cent in 1977-78 to 2.56 per cent in 1993-94, but indicated an increase to 3.06 per cent in 2004-05.

Table 7: Unemployment Rates: Alternative Measures

(Percentage of Labour Force)

	Usual Principal Status (UPS)	*Current Daily Status (CDS)*
Rural		
1977-78	3.26	7.70
1983	1.91	7.94
1987-88	3.07	5.25
1993-94	1.80	5.63
1999-2000	1.96	7.16
2004-05	2.5	8.28
2009-10	2.1	6.8
Urban		
1977-78	8.77	10.34
1983	6.04	9.52
1987-88	6.56	9.36
1993-94	5.21	7.43
1999-2000	5.23	7.74
2004-05	5.3	8.28
2009-10	3.7	5.8
All-India		
1977-78	4.23	8.18
1983	2.77	8.28
1987-88	3.77	6.09
1993-94	2.56	6.03
1999-2000	2.81	7.31
2004-05	3.06	8.28
2009-10	2.5	6.6

Note: These estimates are based on NSS data combined with Census data.

Source: Planning Commission, *(2001) Report of Task Force on Employment Opportunities*. NSSO, 61st Round (2004-05) Table 2.1. NSSO, 66th Round (2009-10)

Even the most comprehensive measure of unemployment, viz., current daily status (CDS) unemployment rate declined form 8.18 per cent in 1977-78 to 6.03 per cent in 1993-94, but the declining trend reversed to 8.28 per cent in 2004-05.

The same situation can be observed with respect to both urban and rural areas. However, it may be noted that whereas CDS rate for urban areas increased very slightly from 7.43 per cent in 1993-94 to 8.28 per cent in 2004-05, this very rate increased much faster from 5.63 per cent in 1993-94 in the rural areas to 8.28 per cent in 2004-05. Though we notice a decline in unemployment rates in 66th Round of NSSO, it does not seem to be any deviation from the earlier trend. This is so because between 2004-2005 and 2009-10 we find addition to labour force to be only 9.2 million which is much less than the earlier period. This may be due to change in methodology. The same phenomenon could be observed in all measures of unemployment both in the rural and urban areas. This underlines the relative neglect of the rural economy in the first phase of economic reforms.

Usual Principal Status (UPS) measures open unemployment throughout the year, but current daily status (CDS) besides taking into account open unemployment also measures under-employment. From the data given in table 7, it becomes obvious that whereas the UPS rates are modest, the CDS rates are quite high. In other words, the major problem of the Indian economy is not open unemployment but under-employment.

Changing Occupational Structure

Table 8: Sector-wise Share of Employment by Current Daily Status

(CDS basis) (%)

Industry	*1983*	*1993 94*	*1999 2000*	*2004 -05*	*2009 -10*
Agriculture	65.42	61.03	56.64	52.06	53.2
Mining and Quarrying	0.66	0.78	0.67	0.63	.60
Manufacturing	11.27	11.10	12.13	12.90	11.00
Electricity, water, etc.	0.34	0.41	0.34	0.35	.30
Construction	2.56	3.63	4.44	5.57	9.6
Trade hotel, and restaurant	6.98	8.26	11.20	12.62	10.8
Transport, storage and communication..	2.88	3.22	4.06	4.61	4.3
Financial, insurance, real estate, and business services	0.78	1.08	1.36	2.00	2.10
Community, social, and personal services	9.10	10.50	9.16	9.24	6.10

Source: NSSO 66th Round and earlier Rounds. (2009-10)

From sector-wise share of employment, by current daily status (CDS), as provided by 66th Round NSSO it is clear that, agriculture though is a major source of employment even now, its importance has come down from 65.42 per cent in 1983 to only 53.2 per cent in 2009-10. Major gainer in employment is trade, hotel and restaurant with about 10.8 per cent employment coming from this sector in 2009-10, up from 6.98 percent in 1983. Another sector which has gained significantly in terms of its share is construction – up from 2.56 per cent in 1983 to 9.6 percent in 2009-10. Manufacturing and Financial, insurance, real estate and business services have also shown a gain in employment. On the whole changing distribution pattern of GDP is getting partially reflected in changing occupational share as shown by the Table 8.

We have grouped the data into primary, secondary and tertiary sectors. In the primary sector, there is a deceleration of growth rate of employment during post-liberalisation period (1994-2000). In the secondary sector, the combined effect of manufacturing and construction resulted in a modest improvement in the growth rate from 2.90 per cent in the pre-liberalisation decade to 3.14 per cent in the post-liberalisation period. However, in the tertiary (or service) sector, there is a deceleration in growth rate of employment to 2.42 per cent in the post-liberalisation period as against 3.53 per cent in the pre-liberalisation decade. This was mainly the consequence of a sharp deceleration in employment growth in the community, social and personal services to 0.55 per cent in the post-liberalisation period as against 2.90 per cent in the pre-liberalisation decade.

Table 9: Share of Different Sectors in Increase of Employment (million)

Increase Period I	1983 (1)	1993-94 (2)	Increase during (1983-93)	Share in Increase (%)
Primary	208.99	245.16	36.17	50.5
Secondary	41.66	55.53	13.87	19.3
Tertiary	52.11	73.76	21.65	30.2
Total	**302.76**	**374.45**	**71.69**	**100.0**

Period II	1993-94	1999-2000	Increase During 1994-00	Share in Increase (%)
Primary	245.16	239.83	-5.33	-23.6
Secondary	55.53	66.91	11.38	50.4
Tertiary	73.76	90.26	16.50	73.2
Total	**374.45**	**397.00**	**22.55**	**100.0**

Source: Compiled and computed from the data given in Task Force Report.

From Table 9, two patterns in employment generation may be noticed - the first pattern pertains to the period 1983 to 1993-94. In this pattern, nearly 51 per cent of additional employment came from the primary sector, 19 per cent from secondary sector and 30 per cent from tertiary sector. In the second pattern that developed during 1993-94 and 1999-2000, nearly 50 per cent of the additional employment was generated in the secondary sector and 73 per cent in the tertiary sector; however, in the agriculture sector, there was a fall in employment by nearly 24 per cent. The post-liberalisation period thus appears to be one, which neglected agriculture. The virtual stagnation of the agricultural sector in terms of output and deceleration in terms of employment appears to be the distinguishing feature of this pattern.

Unemployment Rates - Urban and Rural Differences

Data provided in table 10 reveal that unemployment rates are traditionally higher in urban areas than in rural areas. As against an unemployment rate of 10.3 per cent in 1977-78 in urban areas, the rural unemployment rate was 7.7 per cent (CDS basis). There was a significant fall in the rural unemployment rate in 1987-88 to 5.3 per cent, but the urban unemployment rate was of the order of 9.4 per cent, significantly higher. After 1993-94, the period of liberalisation rural unemployment rate again increased to 8.28 per cent while urban unemployment also marginally increased to 8.28 per cent during 1993-94 to 2004-05. High levels of unemployment in the urban areas could be explained by a larger proportion of organised sector unemployment which forces people to either remain employed or unemployed, since the chances for getting engaged in low productive activities are relatively fewer. As against this, the rural areas indicate higher levels of disguised unemployment. Gradual and continuous decline of urban unemployment rates till 1993-94 and even a very marginal increase in 2004-05 may be due to greater attention being given to urban areas in the development process, but the increase in unemployment rates in rural areas may be due to the neglect of rural areas in the post-reform period. It may be also be due to a shift in the composition of employment from self-employment to casual labour.

Though we find a decline in both rural and urban unemployment rates as per NSSO Round 66th to 6.8 percent and 5.8 percent respectively. But at the same time we also find unprecedented increase in number of casual labour by 219 million.

Table 10: Unemployment* among Urban and Rural Areas

(As percent of labour force)

Survey Period	Rural Areas	Urban Areas
1977-78	7.7	10.3
1983	7.9	9.5
1987-88	5.3	9.4
1993-94	5.6	7.4
1999-2000	7.2	7.7
2004-05	8.28	8.28
2009-10	6.8	5.8

* Unemployment rate on current daily status basis

Source: National Sample Survey Organisation Surveys.

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Unemployment Rate by Age Group

Table 11 provides information about youth unemployment rate. Youth are defined as persons in the age group 15-29. It may be noted that youth unemployment rate was of the order of 12.1 per cent for India - 15.5 per cent for urban areas and 11.0 per cent for rural areas in 1999-2000. It may be worth recording that youth unemployment rate was higher in 1999-2000 as against that of 1993-94, which again reinforces the conclusion that the policies of liberalisation failed to tackle the problem of youth unemployment. The youth unemployment rate in the urban areas was 15.5 per cent in 1999-2000 as against 15.0 per cent in 1993-94, but unfortunately the youth unemployment rate in the rural areas showed a significant increase form 8.6 per cent to 11.0 per cent during 1993-94 and 1999-2000. This only underlines the stark reality that the situation of rural youth unemployment worsened during the reform period. Since 15-29 age group accounts the new entrants to the labour force, this only signifies the failure of the reform process to create enough jobs to absorb the new entrants.

Table 11: Unemployment Rates* by Age Group: 1999-2000

(As percent of labour force)

Age Group	Unemployment Rate		
	Rural	*Urban*	*Combined*
15-19	13.3	19.0	14.4
	(8.8)	(16.6)	(10.3)
20-24	11.8	18.7	13.5
	(9.8)	(19.2)	(12.0)
25-29	8.7	10.9	9.2
	(7.4)	(10.4)	(8.1)
Sub Group	11.0	15.5	12.1
(15-29)	(8.6)	(15.0)	(10.11)
30-34	6.1	4.9	5.8
35-39	5.0	3.7	4.6
40-44	4.8	2.7	4.2
45-49	4.6	2.4	3.9
50-54	4.5	2.1	3.9
55-59	4.6	2.0	4.0
60 & above	3.5	3.8	3.5
All Age Groups	7.2	7.7	7.3
	(5.6)	(73.4)	(6.0)

* Unemployment Rates are on Current Daily Status.

Figures in parenthesis give the comparative estimates for 1993-94.

Source: *NSSO 50th (1993-94) and 55th (1999-2000) Round Surveys.*

Unemployment Rates by Level of Education

Table.12 and 12A provide information about unemployment rates by level of education on the basis of UPSS criterion. It may be noted that as the level of education improves, unemployment rates indicate an increase. The illiterate and literate upto primary are prepared to take up any job that comes their way, but it is not so among the educated. The educated labour is defined as those with education level secondary and above. The distressing fact is that unemployment rate for the educated in 2004-05 was more than three times the unemployment rate for the population as a whole. Nearly a similar situation or rather a worse situation, could be observed for 1993-94 and 1999-2000 as well. Obviously, the growth of job opportunities was much less than the increase in the number of educated.

Data provided in table 13 reveal that educated unemployment in 1993-94 among the educated youth was 18.5 per cent in 1993-94 - 20.8 per cent in urban areas and 17.0 per cent in rural areas. This has indicated a decline and it was of the order of 14.8 per cent in 1999-2000 – 18.3 per cent in urban and 12.5 per cent in rural areas. But still the level of unemployment among the youth continues to be quite high. A more distressing fact of the emerging educated unemployment is that the incidence of unemployment among the educated youth with some technical education

Table 12: Unemployment Rates* by Level of Education

(As percent of labour force)

Education Level	Unemployment Rate		
	1987-88	*1993-94*	*1999-2000*
Not literate	1.1	0.2	0.2
Literate upto primary	1.9	0.9	1.2
Middle	5.3	3.4	3.3
Secondary	8.7	6.2	5.5
Higher Secondary	—	8.7	7.8
Graduate & above	9.9	9.3	8.8
Educated (Secondary & Above)	9.0	7.7	7.1
All	2.7	1.9	2.2

*Unemployment rates on usual principal and subsidiary Status (UPSS)

Source: *NSS Surveys, 43rd Round (1987-88), 50th Round (1993-94) and 55th Round (1999-2000).*

was much higher at 27.3 per cent in 1993-94 and it slightly declined to 23.7 per cent in 1999-2000. Very often, it is argued that a cure of the unemployment among the educated is vocationalisation of the education system. Even at the present low level of vocationalisation, the absorption capacity of the economy to provide jobs to technically educated manpower is low. This really stresses the need for enlarging work opportunities commensurate with the vocationalisation of education.

Table 12A: Unemployment Rates' by Level of Education 2004-05

(As percent of labour force)

Education Level	*Unemployment Rate 2004-05*			
	Male		*Female*	
	Rural	*Urban*	*Rural*	*Urban*
Not literate	0.3	1.0	0.2	0.3
Literate upto primary	1.0	2.1	1.1	2.9
Middle	1.6	4.2	3.4	8.0
Secondary	3.2	4.3	9.5	13.4
High Secondary	4.7	4.3	17.1	15.0
Graduate & above	6.3	6.1	28.8	17.7
Educated				
Secondary & Above	4.4	5.1	15.2	15.6
All	**1.6**	**3.7**	**1.8**	**6.9**

Source : NSSO 61st Round.

TABLE 13 : Unemployment Rates' among Educated Youth (%)

	Secondary Education & Above			*All types of Technical Education*		
Year	*Rural*	*Urban*	*Combined*	*Rural*	*Urban*	*Combined*
1983	20.4	30.0	20.7	25.0	23.9	24.4
	(2.5)	(10.7)	(4.2)			
1987-88	15.9	16.6	16.2	24.0	20.7	22.1
	(3.8)	(12.1)	(5.4)			
1993-94	17.0	20.8	18.5	29.0	25.9	27.3
	(2.9)	(10.8)	(4.6)			
1999-2000	12.5	18.3	14.8	22.8	24.5	23.7
	(3.7)	(11.2)	(5.4)			

* On Usual Status Basis

Note: 1. Technical Education comprises of additional Diplomas or certificates in Agriculture, Engineering/ Technology, Medicine, Crafts and other subjects.

2. Youth means age group 15-29.

3. Figures in brackets show unemployment rate among the youth as a whole.

SOURCE: *NSS Surveys*.

Table 13 A : Unemployment Rates among Educated Youth (%) 2004-05

	2004 – 05	
	Secondary Education & Above	*All types of Technical Education*
Rural		
Male	9.1	15.2
Female	20.8	32.5
Urban		
Male	13.3	17.5
Female	26.7	24.5

Table 13 A shows data on Educated Youth Unemployment in 2004-05. We note a very high incidence of unemployment in youth who hold diploma and certificates (technically educated youth) in rural and urban areas (both male & female). Incidence of unemployment was more pronounced in urban female youth (both above secondary education and technical education)

11. STRUCTURE OF EMPLOYMENT IN INDIA

The structure of employment may be studied by recognising the following characteristics: (i) Distinction between organised and unorganised sector, and (ii) the relative share of self-employment, regular salaried employment and casual labour. It would be of interest to examine the structure from these two points of view.

Organised Vs. Unorganised Sector Employment

The organised sector usually refers to employment in the public sector and in private sector establishments employing 10 or more persons. It is commonly believed that wages in the organised sector are much higher than in the unorganised sector. Moreover, the organised sector being regulated also provides greater job security and other benefits. Within the organised sector, jobs in the public sector receive much higher wages and accompanying benefits than those in the private sector for similar skills. Besides this, public sector offers greater job security.

Data given in table 14 reveal that the share of organised sector employment in total employment, which was of the order of 7.93 per cent in 1983 as well as 1993 declined to 7.08 per cent in 1999-2000. The orgnaised sector employment, which was 24 million in 1983, increased to 27.37 million in 1994 indicating a growth rate of 1.20 per cent per annum during 1983-94. However, during the post reform period (1994-2000), organised sector employment crept up slowly from 27.37 million in 1994 to 28.22 million in 1999-2000, indicating a growth rate of merely 0.53 per cent per annum. This was largely the consequence of virtual stagnation of employment in the public sector during 1994-2000 and growth rate was (-) 0.03 per cent per annum, but the private sector employment grew from 7.37 million in 1994 to 8.70 million in 1999-2000 indicating a growth rate of 1.87 per cent per annum. But since the public sector accounted for over 69 per cent of total employment in the organised sector, enlargement of private sector employment was not able to effectively offset the deceleration experienced in the public sector employment.

Self-employed, Regular Salaried and Casual Labour

Data on the basis of category of employment is given in table 15 separately for rural and urban areas. In rural areas, in 1999-2000, 56 per cent of the workers were

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Table 14 : Total Employment and Organised Sector Employment

Sector	Employment (million)					Growth rate (% per annum)			
	1982-83	1993-94	1999-00	2004-05	2009-10	1982-83 to 1993-94	1994-00	1999-00 to 2004-05	2004-05 to 2009-10
1. Total population	718.21	895.05	1004.10	1092.33	1174.0	2.12	1.93	1.75	1.44
2. Total labour force	277.34	343.56	377.88	419.7	428.9	2.05	1.03	2.00	.44
3. Total employment	269.36	334.54	367.37	384.9	400.8	2.04	0.98	1.97	.82
4. Organised sector employment	24.01 (100.0)	27.37 (100.0)	28.11 (100.0)	26.5 (100.0)	27.6	1.20	0.53	–0.30	.82
5. Public sector	16.46 (68.6)	19.44 (71.0)	19.41 (69.1)	18.2 (68.7	17.2 (64.1)	1.52	-0.03	–0.60	–.56
6. Private sector	7.55 (31.4)	7.93 (29.0)	8.70 (30.9)	8.3 (31.3)	9.9 (35.9)	0.45	1.87	+0.36	+3.58
7. 4 as % of 3	7.93	7.30	7.08	6.9	6.9				
8. 2 as % of 1	43.0	42.7	40.4	35.2	36.5				

Note: 1. Total employment figures are on Current Daily Status (CDS) basis.
2. The organised sector employment figures are as reported in the Employment Market Information System of Ministry of Labour and pertain to 31st March of 1983, 1994 and 1999.
3. Figures in brackets indicate the percentage of employment in the public sector and private sector to total organised sector employment.
* 2008

Source: Economic survey (various issues) NSSO 61st Round p. 2.25, NSSO 66th Round..

self-employed, about 7 per cent were regular salaried workers and 37 per cent were casual labourers. The proportion of self-employment in rural areas was around 43 per cent in 1977-78 and it has shown a decline over the last two decades. The share of regular salaried workers has slightly increased from 7.7 per cent in 1977-78 to 8.8 per cent in 2004-2005. But there has been an increase in casual labour from 29.7 per cent in 1977-78 to 34.6 per cent in 2004-05. The increase in casual labour is a reflection of the conversion of marginal cultivators into agricultural labourers.

The situation is very different in urban areas. The share of self-employment, though significant, has remained more or less about 43 per cent during the entire period - 1977-78 to 2004-2005. Similarly, the regular salaried workers have been around 40 per cent and only 18 per cent of urban workers are casual labourers. The scenario, by category of employment, was more or less stable in the urban areas during 1977-78 to 2004-05.

Taking the country as a whole, whereas in 1977-78, about 59 per cent were self-employed, 14 per cent were regular salaried workers and 27 per cent were casual labour. The situation changed by the year 2004-2005 and 53.8 per cent were self-employed, 16.2 per cent were regular salaried workers and 29.9 per cent were casual labourers. By 2009-10, Situation was reversed and 33.5 percent of work force was found under the category of casual labour, while self employed declined to 51 percent and regular salaried accounted for 15.6 percent. In other words, the regular salaried workers proportion has remained almost constant for more than two decades and the decline is witnessed in self-employment which was converted into higher proportion of casual labour upto 1999-2000. Situation was changed slightly in 2004-05. Since casual labour is not associated with job security and other associated benefits, increase in the proportion of casual labour is generally treated as an index of deterioration in the quality of employment.

Table 15: Distribution of Workers (Usual Status) by category of Employment

(Percent of total workers)

Year	Category of Employment		
	Self-employment	Regular salaried	Casual
1. Rural Areas			
1977-78	62.6	7.7	29.7
1983	61.0	7.5	31.5
1987-88	59.4	7.7	32.9
1993-94	58.0	6.4	35.6
1999-2000	56.0	6.7	37.3
2004-05	57.3	7.8	35.0
2009-10	54.2	7.3	38.6
2. Urban Areas			
1977-78	42.4	41.8	15.8
1983	41.8	40.0	18.2
1987-88	42.8	40.3	16.9
1993-94	42.3	39.4	18.3
1999-2000	42.1	40.1	17.8
2004-05	43.8	41.1	15.1
2009-10	45.1	41.4	17.5
3. Rural and Urban combined			
1977-78	58.9	13.9	27.2
1983	57.4	13.9	28.7
1987-88	56.0	14.4	29.6
1993-94	54.8	13.2	32.0
1999-2000	52.9	13.9	33.2
2004-05	53.8	16.26	29.9
2009-10	51.0	15.6	33.5

Source: *NSSO Surveys.*

12. QUALITY OF EMPLOYMENT

Quality of employment in an economy can be judged by certain indicators. Some of the important indicators are:

1. Wages received by the workers.
2. Number of days during the year for which casual labourers were employed.
3. Share of workers engaged in organised and unorganised sectors.
4. Proportion of workers engaged in self-employment, regular salaried employees and casual labour.
5. Distribution of work opportunities among primary, secondary and tertiary activities.
6. Productivity of workers based on their levels of skills and educational attainments.

Wages Received by Workers

Table 16 provides data about growth in average daily wage earnings of workers in rural areas for the period 1993-94 to 1990-00 and 1990-00 to 2004-05.

We note deceleration in the growth of average daily wage earnings after 1999-2000, as growth of daily wages in casual labour in all activity came down to 1.51 per cent in case of rural males and 1.21 per cent in case of rural females. Similar trend is noticed even in public works.

Table 16: Growth of Average Daily Wage Earnings in 1993-94 prices in Rural India

	Rural Males		*Rural Females*	
	1993-94 to 1999-00	*1999-00 to 2004-05*	*1993-94 to 1999-00*	*1999-00 to 2004-05*
Public Works	3.83	3.15	5.04	2.01
Casual Labour in Agriculture	2.8	1.21	2.94	0.93
Casual Labour in non-agriculture	3.7	0.62	5.07	1.32
Casual Labour in all activities	3.59	1.51	3.19	1.21

Source: *NSSO Surveys for 1978-88, 1999-2000 and 2004-05.*

Regarding the deployment of workers in the organised and unorganised sectors, data reveal that as a consequence of shedding the load of redundant workers in the public sector and also as a consequence of reduction of workers in the private organised sector following technological upgradation, the share of workers in the organised sector indicated a decline and this resulted in an increase of the share of workers in the unorganised sector. This trend is definitely indicative of a deterioration in quality of employment.

Unemployment Rate and Population Below the Poverty Line

According to the NSS 55th Round, UPS or Open Unemployment is of the order of 2.81 per cent of labour force, but Current Daily Status (CDS) unemployment is of the order of 7.32 per cent. This includes persons who may be provided work for part of the year and may be available for work on a daily basis. In other words, this is a comprehensive measure of unemployment and under-employment. But despite this, 55th Round also found that 26.10 per cent of the population was living below the poverty line. In other words, there is a substantial proportion of population, which may be only superficially employed, but is unable to meet the subsistence requirements (Ashok Mathur, 1998) and falls below the poverty line. This segment of the population does not satisfy Dandekar and Rath (1976) income criterion for being considered as employed. This segment would be included in the category of non-employment, to differentiate it from wholly or partly unemployed.

Since CDS, according to the 55th Round (1999-2000) was 7.32 and poverty percentage was 26.10 per cent (on 30-day recall), non-employment works out to be (26.10-7.32)=18.78 per cent. Obviously, policies will have to be initiated not only directed at open unemployed or semi-employed but also those who fall under the category of non-unemployed.

13. TASK FORCE ON EMPLOYMENT OPPORTUNITIES (2001)

The Planning Commission constituted a Task Force on Employment Opportunities under the Chairmanship of Dr. Montek Singh Ahulwalia, the then member, Planning Commission to examine the existing employment and unemployment situation in the country and to suggest strategies of employment generation for providing employment opportunities to one crore people on an average.

But the Task Force of the Planning Commission which submitted its Report in 2001 opted to pursue the failed strategy on the employment front even for the next 12 years as given in the projections. The employment projections given in the report reveal that with 6.5 per cent GDP growth, employment will increase from a level of 397 million in 1999-2000 to 468 million in 2012 - an increase of 71 million in a period of 12 years, giving an annual average growth of 5.9 million. With 8 per cent GDP growth, employment is expected to increase by 84 million - an annual average of 7 million and with 9 per cent of GDP growth, the employment is expected to grow by 98 million - an annual average of 8.2 million. In other words, the Task

Force failed to suggest a strategy with which an annual average growth rate of 10 million jobs can be achieved as specified in its terms of reference. This failure is due to the fact that the Task Force is concentrating on the enlargement of the organised sector employment as the main vehicle of employment generation. However, facts reveal that share of organised sector in employment has plummeted from around 10 per cent in the late 1980s to 7 per cent in the late 1990s. To hope that the organised sector, which accounts for merely 7 per cent of total employment will generate enough employment of the order of 10 million jobs per year over the next 10 years is to live in a fool's paradise.

It would, therefore, be desirable to examine some of the recommendations of the Task Force to understand the logic of our assessment of the recommendations of the Ahluwalia Task Force:

1. It is necessary to encourage private corporate sector to invest in agriculture and related activities by facilitating the creation of organised and corporatised entities like Integrated Agricultural Complexes and Food Parks that would attract commercial investment.

2. Degraded and wasteland, can be taken out of the purview of tenancy laws and agro-companies allowed to buy, develop, cultivate and sell this land.

3. The active involvement of larger industrial units, including MNCs and cooperatives where possible, in the Food Processing Industries, is essential ... Major national and international food processing companies should be approached to ascertain the nature of the problem which limit their activities at present.

4. A phased process of dereservation of small-scale industries should be completed in the next four years.

5. In the construction sector, the present bias against large construction firms should be removed.

6. Retail trade is characterised by small establishments and modernising retail trade involving large departmental stores is often considered detrimental to the employment objective. The switch to modern retailing will certainly improve the quality of employment in the sector.

7. The road transport sector, at present, is dominated by small operators. This is a sector where considerable economies of scale exist. Emergence of modern and large transport companies will not only improve the efficiency of the sector but will also provide better conditions for workers in this sector and in associated roadside activities like repair services and hotels, etc.

8. Reforms of Labour Laws: India's Labour Laws have evolved in a manner, which has greatly reduced the flexibility available to employers to adjust the labour force in the light of changing economic circumstances. The most important change needed is to abolish the requirement of prior permission of government for retrenchment, layoffs or closure by deleting chapter V B from the Industrial Disputes Act.

The Contract Labour (Regulation and Abolition) Act needs to be suitably amended to allow all peripheral activities to be freely outsourced from specialised firms, even if it means employees of the specialised firms provide the services on the premises of the outsourcing units.

The catalogue of the above recommendations of the Task Force only reveals that most of its recommendations were employment-restricting, rather than employment generating. With this approach, to reach the goal of providing 10 million additional jobs per year as indicated in the terms of reference was well nigh impossible.

Issue of Labour Flexibility

The first issue is that of labour flexibility. The supporters of labour flexibility argue that this helps to stimulate growth. Gerry Rogers of the ILO has examined the issue of security versus performance. The impact of security on levels of employment "is a complex relationship. It is sometimes said that much security is bad for employment – that people with greater security of employment and income put less effort into their work and so are less productive. In other words, greater security reduces output and employment. But in reality the empirical evidence is mixed. High levels of security, for instance, in some public sector enterprises, may make adjustment or innovation difficult, and so adversely affect economic performance. But countries such as Sweden, which have maintained high levels of employment security, or countries such as Netherlands which have ensured high levels of income security, have also performed well in terms of employment. There is no sign that legislation to increase employment security in Chile or Korea in the 1990s had adverse effects on employment. On the contrary, when the Asian financial crisis struck, it could be seen that the mechanisms for security were too weak, and the crisis had unnecessarily large effects on unemployment, incomes and poverty." Thus, to assume that security restricts employment is not the correct assessment. Infact, labour flexibility will give the employers unbridled right of exploitation and trespassing the legitimate rights of workers. There is a need to bring about synergy between the interests of labour and employers so as to promote growth, rather than aggravate dissipation of energy in conflict.

14. S.P. GUPTA SPECIAL GROUP ON TARGETING 10 MILLION EMPLOYMENT OPPORTUNITIES PER YEAR

The *Task Force on Employment Opportunities* headed by Dr. Montek Singh Ahluwalia, submitted its report to the Planning Commission on July 1, 2001. The Report was sharply criticised by economists, sociologists, policy-makers and trade union leaders. The Task Force suggested measures like the boosting of private sector investment in agriculture, development of integrated agricultural complexes and food parks by the corporate sector, giving contracts to agro-companies for developing degraded waste lands, encouraging large industrial units,

including MNCs to participate in the development of food processing industries, and involving large firms in various activities like construction, retail trade and road transport, among others. In other words, the total responsibility for employment generation should be given to the corporate sector. For facilitating this process, the report suggested the total de-reservation of small industries in the next four years and reform of the labour laws by deleting chapter VB of the Industrial Disputes Act so as to give the employers an unbridled right to hire and fire labour. The policy-makers, however, reportedly felt that such a strategy, if followed, would create greater resistance because it is anti-labour and relies exclusively on the corporatisation of the economy for growth in GDP. It is also largely believed that most of the recommendations are employment restricting, rather than employment generating.

Although the Planning Commission did not formally reject the Report of the Task Force, yet it sidelined this Report completely by appointing the S.P. Gupta Special Group on Targeting 10 Million Employment Opportunities on September 5, 2001.

Estimate of Employment And Unemployment

(1) On the basis of the NSS data, the Special Group estimated the number of unemployed to be of the order of 26.58 million in 1999-2000, as against 20.13 million in 1993-94 (current daily status basis). The growth rate of unemployed persons works out to be 4.74 per cent per annum for the period, 1993-94 to 1999-00, as against a decline in the number of unemployed persons during the period, 1983 to 1993-94. This only underlined the fact that unemployment rate, which was 8.33 per cent in 1983, declined to 5.99 per cent by 1993-94, but increased to 7.32 per cent in 1999-2000. The Special Group Report mentions: "The present rising unemployment is primarily an outcome of a declining job creating capacity of growth, observed since 1993-94. The employment growth fell to 1.07 per cent per annum (between 1993-94 and 1999-2000) from 2.7 per cent per annum in the past (between 1983 and 1993-94) in spite of acceleration in GDP growth from 5.2 per cent between 1983 and 1993-94 to 6.7 per cent between 1993-94 and 1999-2000" [20]. Explaining the situation, the Special Group Report mentions: The employment elasticity of 0.52 during the 1980s and early 1990s went down to 0.14 in the late 1990s. The organised sector's employment generating capacity (measured in terms of employment elasticity) came down to near zero and has been negative in most cases in the public sector. This is primarily due to

(i) The present policy of shedding excess labour that this sector is carrying in order to meet the growing market competition, often known as rightsizing;

Table 17 : Employment and Unemployment in India (1983 to 2010[CDS])

	1983	1993-94	1999-00	2004-05	2009-10	Employment Growth Rate (% per annum)			
	(Million persons)					1983-1993-94	1993-94 1999-2000	1993-94 to 2004-05	2004-05to 2009-10
All India									
(1) Population	718.20	894.01	1003.97	1092.83	1174.1	2.0	1.95	1.85	1.44
(2) Labour force	261.33	335.97	363.33	419.65	428.9	2.43	1.31	2.09	0.44
(3) Work force	239.57	315.84	336.75	384.91	400.8	2.7	1.07	1.87	0.81
(4) No. of unemployed (2-3)	21.76	20.13	26.58	34.74	28.1	-0.08	4.74	5.02	-4.16
(5) Unemployment rate (%) (4 ÷ 2x100)	8.33	5.99	7.32	8.28	6.6				
Rural									
Population	546.61	658.83	727.50	779.82	824.8	1.79	1.67	1.55	1.13
Labour force	204.18	255.38	270.39	303.17	306.3	2.15	0.96	1.66	0.20
Workforce	187.92	241.04	250.89	278.08	285.4	2.40	0.67	1.40	0.52
No. of unemployed	16.26	14.34	19.50	25.10	20.9	-1.19	5.26	5.31	-3.60
Unemployment rate (%)	7.96	5.61	7.21	8.28	6.8				
Urban									
Population	171.59	234.98	276.47	313.10	349.3	3.04	2.74	2.64	2.21
Labour force	57.15	80.60	92.95	116.47	122.6	3.33	2.40	3.33	1.03
Workforce	51.64	74.80	85.84	106.83	115.4	3.59	2.32	3.25	1.55
No. of unemployed	5.51	5.80	7.11	9.64	7.2	0.49	3.45	4.31	-6.65
Unemployment rate (%)	9.64	7.19	7.65	8.28	5.9				

SOURCE: Planning Commission (2002), *Report of Special Group on Targeting Ten Million Employment Opportunities per year. NSSO 61st Round, NSSO 66th Round*

20. Planning Commission (2002), *Report of the Special Group on Targeting Ten Million Employment Opportunities per year*, p.2.

(*ii*) The trend towards increasing capital intensity per unit of output; and

(*iii*) The pattern of growth moving in favour of capital-intensive sectors.

If we go beyond the data analysed by S P Gupta Committee and includes the figures of 2004-05 (61st Round NSSO), we find acceleration in rate of unemployment (Table 17). But again in 2009-10 we find a fall in unemployment rate.

(2) The inter-state employment rates show greater regional disparities in 1999-2000 as compared to 1993-94. In 1999-2000, the unemployment rate in Kerala was 20.97 per cent of the labour force and the lowest rate of 2.96 per cent was observed in Himachal Pradesh.

(3) Table 19A provides bearkup of unemployment in rural and urban areas, state wise. Except Karnataka, Rajasthan, Punjab, Himachal Pradesh and Bihar all states show higher incidence of unemployment in rural areas.

Table 18 Break-up of Unemployed—Rural & Urban

In million person years

	1983	*1993-94*	*1999-2000*	*2004-05*	*2009-10*
All India	21.76 (100.0)	20.13 (100.0)	26.58 (100.0)	34.74	28.1
Rural	16.25 (74.7)	14.33 (71.2)	19.47 (73.3)	25.1	20.9
Urban	5.51 (25.3)	5.80 (28.8)	7.11 (26.7)	9.64	7.2

Note: Figures in brackets are percentages of the total (All-India) figures.

Source: Derived from Table 20.

In 1999-2000, the states which show higher unemployment rates than the national average of 7.32 per cent are Kerala (20.97 per cent), West Bengal (15.0 per cent), Tamil Nadu (11.78 per cent), and Assam and Andhra Pradesh (8.03 per cent each). On the other extreme are states which show low unemployment rates including Uttar Pradesh (4.08 per cent), Punjab (4.03 per cent), Rajasthan (3.13 per cent) and Himachal Pradesh (2.96 per cent).

The data provided in Table 20 reveals that the youth unemployment rates (pertaining to the age group 15-29 years) are very high in Kerala and West Bengal. In the urban areas, seven states show very high youth unemployment rates, viz. Kerala, West Bengal, Assam, Orissa, Bihar, Himachal Pradesh and Maharashtra. The Special Group, therefore, opines: "This shows that apart from the genuine problem of employment for the rural sector, positive policies are needed to generate employment in the urban sector and especially among the youth, educated and skilled. This is especially needed because the organised activity, which dominates the urban sector, is suffering from a near jobless growth."[21]

Data above shows a higher rate of unemployment at all India level and also in many states in 2004-05, as compared to 1999-2000. Maximum incidence of unemployment is found in Kerala, Tamil Nadu, West Bengal, Orissa, Andhra Pradesh, Punjab and Maharashtra (Rural unemployment); Kerala, Orissa, West Bengal Assam, Maharashtra, Tamil Nadu (Urban unemployment), as rate of unemployment in these states is found to be more than the rate of unemployment at all India level. (Table 19 A)

(3) The unemployment rate is much higher in lower consumption classes than in the upper ones, with the former recording a nearly 100 per cent higher unemployment rate than the latter. This has a significant implication for the population below the poverty line (Refer Table 21).

Table 19 : Inter-state Unemployment Scenario

State	*Unemployment Rate*		
	1993-94	*1999-00*	*2009-10*
Kerala	15.51	20.97	16.7
West Bengal	10.06	14.99	7.0
Tamil Nadu	11.41	11.78	11.7
Assam	8.03	8.03	6.5
Andhra Pradesh	6.69	8.03	7.0
Orissa	7.30	7.34	7.9
Bihar	6.34	7.32	5.7
Maharashtra	5.09	7.16	6.3
Haryana	6.51	4.77	5.5
Gujarat	5.70	4.55	5.0
Karnataka	4.94	4.57	4.2
Madhya Pradesh	8.56	4.45	6.5
Uttar Pradesh	3.45	4.08	5.3
Punjab	3.10	4.03	6.5
Rajasthan	1.31	3.13	3.3
Himachal Pradesh	1.80	2.96	4.4
All-India	**5.99**	**7.32**	**6.6**

Note : Figures are based on the Current Daily Status. States have been arranged in the descending order of unemployment rates in 1999-2000.

Source: *Report of the Special Group (2002), NSSO 66th Round*

Table 19 A : Inter-state Unemployment Scenario (2009-10)

State	*Unemployment Rate 2004-05*		
	Combined	*Rural*	*Urban*
Kerala	16.7	17.3	14.8
West Bengal	7.0	7.2	6.5
Tamil Nadu	11.7	14.1	8.0
Assam	6.5	6.6	5.4
Andhra Pradesh	7.0	7.5	5.5
Orissa	7.9	8.1	6.3
Bihar	5.7	5.4	8.8
Maharashtra	6.3	6.7	5.6
Haryana	5.5	6.1	4.3
Gujarat	5.0	6.0	3.1
Karnataka	4.2	4.0	4.7
Madhya Pradesh	6.5	6.7	5.5
Uttar Pradesh	5.3	5.6	4.5
Punjab	6.5	6.2	7.1
Rajasthan	3.3	3.1	3.9
Himachal Pradesh	4.4	4.3	6.7
All-India	**6.6**	**6.8**	**5.8**

Note : Figures are based on the Current Daily Status. .

Source: *NSSO, 66th Round.*

21. *Ibid.*, p.32.

Although figures published by NSSO in its 61st Round show change in scenario, as we find acceleration in growth of employment. We witness this trend in both rural and urban areas. But if we compare the growth of employment with growth of labour force, we note a dismal picture, as both the number of unemployed as well as rate of unemployment has increased since 1999-2000. This is because of the fact that rate of growth of labour force has surpassed that of population. Thus even acceleration in rate of growth of employment has failed to bring any reduction in absolute number of unemployed and also the rate of unemployment. Rather rate of unemployment has increased to all time high level at 8.28 per cent.

Organised vs. Unorganised Sector Employment

Employment in the organised sector has been hardly 8.34 per cent, of which the public sector accounts for 5.77 per cent and private sector only for 2.57 per cent in the total employment generated during 1999-2000.

The organised sector is dominated by the public sector which accounts for 70 per cent of the total employment in this sector. This is mainly in the areas of (i) mining, (ii) electricity and water, and (iii) community and social services. These three collectively constitute nearly 60 per cent of the public sector employment figures and unfortunately, all of them show negative employment elasticity. This only underlines the fact that the public sector contributed to a very small extent in total employment generation during 1993-94 to 1999-2000. This implies that the public sector has shown virtually jobless growth, when its employment elasticity was 0.015. Further, in future a large part of this sector's potential may be negated by the impending downsizing policy (often called as right-sizing) of the government, which affects the former significantly.

Table 20: Youth Unemployment Rates (15-29 years) for Major States in 1999-2000

States	*Rural*	*Urban*
Kerala	36.3	34.3
West Bengal	26.6	24.0
Tamil Nadu	18.1	15.6
Assam	14.6	26.6
Andhra Pradesh	9.9	14.8
Orissa	11.3	25.5
Bihar	11.0	24.4
Maharashtra	10.4	16.5
Haryana	8.1	8.3
Gujarat	6.7	8.5
Karnataka	5.8	10.5
Madhya Pradesh	4.9	14.6
Uttar Pradesh	6.1	12.5
Punjab	7.0	9.5
Rajasthan	4.4	88
Himachal Pradesh	6.1	20.5
All-India	**11.0**	**15.4**

Source: NSSO, 55th Round

The main source of employment generation is the unorganised sector of the economy including self-employment and small business wherein the contribution is as high as 92 per cent of the total employed labour force. Its main employment generating activities are: (a) agriculture and allied activities; (b) trade, restaurants and hotels including tourism; (c) some social sectors like education and health; (d) small and medium enterprises (SMEs) mainly in the rural non-farm sector; and (e) transport and construction. It may be noted that SMEs account for nearly 80 per cent of the manufacturing employment and their employment elasticity is 3.8 times higher than that of the organised sector. Thus, in order to achieve a more favourable effect on employment, what is needed is a shift in the composition of manufacturing in favour of SMEs.

Table 21: Unemployment Rates by Household Monthly Per Capita Expenditure Class (1999-2000)

(Percentage of labour force)

Monthly Per Capita Expenditure (₹)	*Unemployment Rate (CDS)*	*Monthly Per Expenditure (₹)*	*Unemployment Rate (CDS)*
RURAL		**URBAN**	
0-225	11.31	0-300	9.61
225-255	9.62	300-350	9.67
255-300	8.12	350-425	8.20
300-340	7.46	425-500	9.20
340-380	6.56	500-575	9.20
380-420	6.18	575-665	8.63
420-470	6.48	665-775	8.19
470-525	6.14	775-915	7.18
525-615	5.60	915-1120	6.65
615-775	6.06	1120-1500	5.68
775-950	5.57	1500-1925	4.67
950 & above	5.25	1925 & above	4.10
All	**7.21**	**All**	**7.65**

Source: *NSS Survey 55th Round (1999-00).*

Agriculture is another source of employment generation as it accounted for 57 per cent of India's total employment in 1999-2000. Between 1983 and 1993-94 its employment elasticity was as high as 0.70, but in the post-reform period (1993-94 to 1999-2000), its employment elasticity has declined to 0.01. "But given an appropriate policy, this sector can still be a gold mine for generating faster employment by changes in the sectoral composition of agriculture in favour of labour-intensive high value areas like horticulture, floriculture, agro-forestry, minor irrigation, watersheds, etc."[22].

22. Hashim S.R. (2000), Employment and Unemployment in a Society in Transtion, *Indian Journal of Labour Economics*, Vol. 43, No.1

TABLE 22 : Present Employment Scenario in India (1983 to 1999-2000)

Employment in Million
Growth Rate per cent per annum

	Current Daily Status			Employment Growth Rate		GDP Growth Rate (% per annum)		Employment elasticity	
	1983	1993-94	1999-2000	1983-1993-94	1993-94-1999-2000	1993-1993-00	1993-94-1999-00	1983 to 1993-94	1993-94 to 1999-00
	1	2	3	4	5	6	7	8=4/6	9=5/7
1. Agriculture	151.35 (63.18)	190.72 (60.38)	190.94 (56.70)	2.03	0.02	2.9	3.1	0.70	0.01
2. Mining and quarrying	1.74 (0.73)	2.54 (0.80)	2.26 (0.67)	3.66	-1.91	6.2	4.7	0.59	-0.41
3. Manufacturing	27.69 (11.56)	35.00 (11.08)	40.79 (12.11)	2.28	2.58	6.0	7.8	0.38	0.33
4. Electricity, gas and Water Supply	0.83 (0.34)	1.43 (0.45)	1.15 (0.34)	5.29	-3.55	8.4	6.8	0.63	-0.52
5. Construction	7.17 (2.99)	11.02 (3.99)	14.95 (4.44)	4.21	5.21	4.9	6.3	0.86	0.82
6. Trade, hotels and restaurants	18.17 (7.58)	26.88 (8.51)	37.54 (11.15)	3.81	5.72	5.6	9.2	0.68	0.62
7. Transport, storage & communications	6.99 (2.92)	9.88 (3.13)	13.65 (4.05)	3.36	5.53	6.1	8.7	0.55	0.63
8. Finance, insurance, real estate & business services	2.10 (0.88)	3.37 (1.07)	4.62 (1.38)	4.54	5.40	10.1	8.4	0.45	0.64
9. Community, social & personal services	23.52 (9.82)	34.98 (11.08)	30.84 (9.16)	3.88	-2.08	5.7	8.4	0.68	-0.25
All	**239.57 (100.0)**	**315.84 (100.0)**	**336.75 (100.0)**	**2.70**	**1.07**	**5.2**	**6.7**	**0.52**	**0.16**

Note: Figures in brackets are percentages of total employment in the respective columns.
Source: Compiled and computed from the *Report of the Special Group* on *Targeting Ten Million Employment Opportunities per year (2002)*

The other employment generating areas identified [illegible] unorganised sector are trade, restaurants and tourism, [illegible] information technology (IT). They are all witnessing [illegible] growth of above 9.0 per cent per annum and have [illegible] high employment elasticities. The transport, [illegible]ction and the other service sectors are also equally [illegible]ed for high growth and employment intensiveness.

The Special Group Report concluded its analysis of [illegible] employment situation by claiming: "To sum up, with [illegible] changes in the inter- and intra-sectoral composition [illegible] adopting appropriate labour-intensive technology, [illegible] in the unorganised sector can be significantly [illegible]. The appropriate organised sector, especially its [illegible] sector component, has a rather low employment [illegible]ting potential, being handicapped as it is by a [illegible]e employment elasticity with the exception of the [illegible]cial sectors and potentiality in certain parts of the [illegible] sector like education, health, etc. But these two have [illegible] weightage of 3.3 per cent to the total employment. [illegible]nity and social services need a major change in composition in favour of health, education, etc. and only then can they substantially contribute to the growth. Already a significant increase in the weightage of this sector in this group is in sight. It was 25.8 per cent in 1993-94 and has gone up to 33.3 per cent now. These two sub-sectors together show a growth rate of around 4.5 per cent per annum as compared to this sector's growth of 0.2 per cent per annum between 1993-94 and 1999-2000. Given the Tenth Plan target on education, literacy and health standards, the scope of its growth and potential employment generation is very high."[23].

"As the absorption capacity for high skill jobs has its own limit in the organised sector, the future plan for education and training should keep in mind the type of skills needed for many newly emerging activity sectors like IT, tourism, financial services and the vast unorganised SSI and services sector including new areas in agriculture and the non-farm rural activities."[24]

23. *Ibid.*, pp.27-28.
24. *Ibid.*, p.29.

The Future Strategy

On the basis of the data collected and analysed by the special Group, it was found that in the unorganised sector, the employment elasticity was as high as 0.213 in 1999-2000 whereas in the organised sector, it was as low as 0.066, i.e. almost a jobless growth. Moreover, in the year 1999-2000, the total contribution to employment by the organised sector was only 8 per cent of which the private sector segment's contribution was hardly 2.5 per cent. The balance 92 per cent came from the unorganised sector. The Special Group, therefore, opined: "On this basis, one can see that even if the organised sector grows at the rate of 20 per cent per annum and the private organised sector grows at 30 per cent per annum, their contribution to the total employment will increase hardly by 1.5 to 2 per cent of the total over the Tenth Plan. This proposition, however, remains hypothetical since given the capital intensity in this sector as of today (above 5.5), this high growth will not be sustainable because of the saving investment constraint of the economy. On the basis of this ground reality, the Group concluded that "for exclusively generating the desirable high level of employment, we have to target the unorganised sector, including small and medium enterprises, which also cover a large part of the services sector of the economy."[25]

The data reveals that in 1999-2000, the unorganised sector contributed nearly 59 per cent to the GDP, but its contribution to employment was of the order of 92 per cent. In addition, its contribution to exports was also substantial. But of late, because of the opening up of the economy with the resultant de-regulation and market orientation including the withdrawal of several key subsidies, the unorganised sector in general, and some of its components in particular, are facing growing sickness and a slowing down of activities. During 1993-94 and 1999-2000, as a consequence of the policies of liberalisation, the flow of bank credit of scheduled commercial banks increased significantly towards the organised sector from 46.2 per cent in 1993-94 to 62.9 per cent in 1999-2000, whereas in the unorganised sector, it fell from 53.8 per cent in 1993-94 to 37.1 per cent in 1999-2000. This was despite the fact that the unorganised sector continued to provide employment to 92 per cent of the workforce in the economy. This trend affects the growth rate and efficiency of the unorganised sector and needs to be reversed. The Special Group, therefore, recommended:

"To sum up the employment strategy for the future, to meet the plan's employment goals one has to encourage the use of labour-intensive and capital-saving technology in general, and to rejuvenate the growth of the unorganised sector in particular, which at present accounts for 92 per cent of the country's employment and enjoys more than seven times labour intensity per unit of production, as compared to the organised sector. However, the unorganised sector needs to be made more productive in order to sustain itself against domestic and international competition by proper choice of programmes and policies compatible with India's economic reforms and the WTO rules."[26]

Drawing lessons from international experience, the Special Group Report repudiated the view of some economists, especially that of the chairman of the Task Force of the Planning Commission on Employment Opportunities, Dr. Montek Singh Ahluwalia, that the organised sector with its better productivity and high job quality is going to replace unorganised small business totally to provide higher growth, better quality of life and employment in the economy. But facts, pertaining to most developed and newly industrialised economies, reveal that small business is providing major employment opportunities and also surviving alongside with the highly organised large sector.

The Special Group Report, therefore, categorically mentioned: "The case for encouraging the growth of the organised sector is certainly supported by its capacity to invest in major infrastructure (in most cases, they are capital-intensive) to give support systems to the rest of the economy, but for the generation of employment, their growth cannot be regarded as the answer."[27]

It has been argued by the Task Force on Employment Opportunities that the present Industrial Disputes Act (1956) should be amended to enable the employers to have complete freedom to hire and fire employees. Such a change in legal conditions will make the organised sector more employment-friendly and the employment generation in this sector can be improved. The Special Group examined this question, but it held the following view: "With considerable excess labour being carried by the public sector in the organised segment and a jobless nature of growth in the organised sector as a whole, the immediate effect may turn out to be net labour shedding. This should be assessed against the present high level of unemployment. In this context, one should also remember that the social security support in India is much below the standard provided in developed countries, because of which their tolerance level of unemployment is very high.... One should remember that the contribution of total employment by the organised private sector is hardly 2.5 per cent and, therefore the potential of generating sizeable employment in this sector, even by changing the law, will be insignificant over the Tenth Plan period."[28] But the given the fact that the organised sector (especially the public sector) is already carrying excess labour, the immediate effect will be more of firing than hiring.

25. *Ibid.*, p.4.

26. *Ibid.*, p.7.

27. *Ibid.*, p.9.

28. *Ibid.*, p.90

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The Special Group strongly feels: "*The only answer to this situation is to increase productivity and job quality of the unorganised sector. It means that all attempts should be made to implement those policies, which will release the basic growth constraints and by ensuring a level playing field for this sector.... In the attempt to increase the labour productivity, more emphasis should be laid on the growth of this sector rather than for substituting labour by capital. Further, to improve the job quality and its security, major changes in legislation will be needed regarding basic social security measures working conditions, minimum wages and protection of labour interests.*" [29]

Employment Generation: 50 Million job Opportunities over the Tenth Plan

According to the Special Group's exercise, of the proposed 50 million job opportunities to be generated over the Tenth Plan, nearly 20 million should come from specific employment programmes and 30 million from growth buoyancy. Most of the selected specific programmes are based on creating tangible assets and hence they are expected to generate continuous employment, rather than creating one-time employment only. It may be noted that 70 per cent of the new employment opportunities will come from the growth of SMEs and from self-employment.

The S.P. Gupta Special Group Report was thus a path-breaking document which emphasized emphasis on unorganised sector if the growth process has to be made more inclusive to promote the interests of 92 per cent of labour force.

15. UNEMPLOYMENT RATES

The results of the 61st Round of NSSO Survey Employment and Unemployment are based on a large sample size. Data given in Table 23 reveals that unemployment rate based on current daily status in 2004-05, for males was 8.0 per cent (up from 7.2 percent in 1993-94) in rural areas and at 7.5 percent (up from 7.3 percent in 1993-94) in urban areas. The corresponding figure for females was 8.7 percent (up from 7.0 percent in 1993-94) in rural areas and 11.6 percent (up from 9.4 percent in 1993-94) in urban areas.

Unemployment on CDS basis for males in 2009-10 was 4 percent in rural areas and 5.1 percent in urban areas as per 66th Round. For females it was 8.0 percent and 9.1 percent for rural and urban areas respectively.

Table 23: Unemployment Rates for the 50th Round (1993-94) and 61th Round (2004-2005) and 66th Round (2009-10) NSSO.

	Males			Females		
	Usual	CWS	CDS	Usual	CWS	CDS
Rural Areas						
1993-94	2.1	3.9	7.2	1.5	3.7	7.0
2004-05	2.1	3.8	8.0	3.1	4.2	8.7
2009-10	1.9	3.2	6.4	2.4	3.7	8.0
Urban Areas						
1993-94	4.8	5.6	7.3	7.1	7.3	9.4
2004-05	4.4	5.2	7.5	9.1	9.0	11.6
2009-10	3.0	3.6	5.1	7.0	7.2	9.1

Note:1. Unemployment rates are number of persons/person days unemployed per 100 persons (or person days)
2. CWS: Current Weekly Status, CDS Current Daily Status
Source: *NSSO 61th Round on Employment and Unemployment* conducted in July 2004-June 2005 and NSSO 66th Round (2009-10).

Moreover, unemployment rates on current daily status were much higher than those on basis of usual status in 2004-05 and 2009-10 when compared with 1993-94, this underlines the fact that instead of open unemployment, the more serious problem is under-employment. This indicates non-availability of regular employment for a majority of workers.

Table 24: Employment and Unemployment by Usual Principal Status

	1983	1993	1999-00	2004-05	2009-10
Labour Force (million)	277.34	343.56	377.88	428.7	438.9
Work Force (million)	269.36	333.54	367.37	415.0	427.9
No. of Unemployed (million)	7.98	9.02	10.51	13.7	11.0
Unemployment Rate (As % of Labour force)	2.88	2.62	2.78	3.19	2.51

Rate of Growth (% per annum)

	1983 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05	2004-05 to 2009-10
Labour Force	2.06	1.60	1.3	0.48
Work Force	2.09	1.57	1.1	0.61

Source: Various rounds of NSSO Surveys on Employment and Unemployment

We find that rate of increase is work force has been less than increase in labour force in all the three period under consideration in Table 24, there is a need for faster

[29] Ibid., pp. 10-11

employment growth for not only absorbing the additions to the labour force but also reducing the unemployment rate.

The share of agriculture in total employment has come down from 61.03% in 1993-94 to 58.5% in 1999-00 and further declined to 50.2% in 2006-07. (Table 8) With declining share of agriculture in GDP, the scope for absorbing substantial additional labour force in agriculture is limited. Unfortunately, employment growth in manufacturing is disappointing. There is a need to strengthen it. However, it is the service sector particularly transport, trade and communications along with construction which is contributing to employment growth.

Employment growth in the Organised Sector

Annual employment growth in organized sector covered by Employment Market Information System of Ministry of Labour decelerated from 1.20 percent during 1983-94 to (–)0.30 percent per annum during 1999-2004. (Refer Table 25).

Table 25: Annual Employment Growth in Organised Sector

In percent

	1983-94	1993-2004	2004-2009
Public Sector	1.52	-0.60	–0.56
Private Sector	0.45	+0.36	+3.58
Total organized sector	1.20	-0.30	+0.82

The public sector annual employment growth declined to –0.60% during 1994-2004 from 1.52% during 1983-94. It remained negative even during 2004-09 at –0.56 percent. While it was expected that the private sector would compensate or more than compensate it by pushing up private sector employment growth, but the expectations of the advocates of economic reform were belied by the actual employment growth in private sector marginally declined from 0.45% during 1983-94 to just +0.36% during 1994-2004. This was due to the increasing capital intensity in the organized private sector. While shedding the load of surplus workers in public sector should continue, there is an urgent need to step up employment growth in the organized private sector.

16. EMPLOYMENT POLICY OF THE ELEVENTH PLAN

Scenario of employment and unemployment on the eve of the 11th Plan

The Approach Paper of the 11th Plan has highlighted the following issues:

1. Average daily status unemployment rate, which had increased from 6.1% in 1993-94 to 7.3% in 1999-00 increased further to 8.3% in 2004-05. (p. 72)
2. Agricultural employment has increased at l than 1% per annum, slower than the growth non-agricultural employment.
3. Among agricultural labour households which resent the poorest groups, there was a sh increase in unemployment from 9.3% in 199-9 a high level of 15.3% in 2004-05.
4. Non-agricultural employment expanded rob at an annual rate of 4.7% during 1999-2005 bu growth was entirely in the unorganized sector mainly in low productivity self-employment
5. Employment in the organized sector actu declined by 0.38% per annum during 1994-20 despite fairly healthy GDP growth. This is a c for frustration among the educated youth have rising expectations.
6. According to Annual Survey of industries, wages stagnated or declined even for worke the organized sector although managerial and tec nical staff did secure large increase.
7. The wage share in our organized industrial se has halved after the 1980s and is now among lowest in the world. One reason for this is incre ing capital intensity of the organized sector. other is outsourcing.

Employment Requirements during the Eleventh Plan (2007-2012)

On account of the increasing participation of males, the total increase in labour force will be around million during the 11th Plan. To this may be added present backlog of about 35 million. Thus, the tota requirements of the 11th Plan work out be 100 millio

The planners aims to provide 65 million additi employment opportunities. As a consequence, the proach Paper states: "This will not create full emp ment, but it will at least ensure that the unemployment falls somewhat." (p. 73) However, even this modest implies that the rate of growth of non-agricultural emp ment would need to accelerate to 5.8% per annum f 4.7% in 1999-2005. In other words, a massive revers required from the negative employment growth in organized sector witnessed during the last decade.

Promotion of employment generation in the 11th Plan

To generate more employment in the economy, 11th Plan states its strategy in the following wo "Additional employment opportunities in the future be generated mainly in the services and manufactu sector and policy initiatives are needed to support Measures would need to be taken in the Plan to boos particular, *Labour intensive manufacturing sector* such food processing, leather products, footwear, textiles

service sectors such as tourism and construction." (Emphasis added, p 73-74).

11th Plan does not pin any hope on the private organized sector when it states: "Employment growth in the private organized sectors will therefore continue to be small (at most an addition of 2 million during the 11th Plan) if trends on the capital-labour ratio continue." (p. 75)

"This objective can be achieved if policies are put in place that restrain increase in capital intensity by encouraging corporate entities to enter more labour intensive areas. An addition of about 9 million jobs over the plan period occur with the same capital stock as assumed earlier if the capital-labour ratio of the corporate sector does not increase any further." (p.75)

The planners state: "Organized sector employment would double over the 11th Plan if this optimistic assumption is made, but this would still leave about 55 million new workers for the unorganized sector to absorb." (p.75)

The planners, therefore, fall back on village and small scale enterprises (VSE) which will have to provide most of the new employment during the 11th Plan, at least 40% of which will have to created in rural areas. Obviously, this necessitates remedial action pertaining to the problems of VSEs and home based workers, particularly women. The most important of these is the timely and adequate availability of credit. But there are others e.g. requirement of permissions from a number of government agencies and maintenance of large number of registers and submission of several returns. In short, a congenial and friendly environment has to be created so that these enterprises can provide the huge volume of employment expected of them. In this connection, 11th Plan recommends the scheme of Rural Business Hubs to foster many complementarities that do exist between village and small enterprises and the corporate sector.

There is a need to review the definition of a small enterprise. To limit the cut-off point to 10 workers is not in the interest of such enterprises. There is a need to raise the limit to 19 workers as recommended by the Second National Commission on Labour. Similarly, it would be very desirable to provide them exemption from the payment of excise. If all these measures are taken up on an urgent basis by the State Governments, many of these enterprises will be able to graduate upwards and join the category of organized sector.

Besides this, the 11th Plan hopes to create 3 million additional jobs in thrust areas of education, health and agricultural extension. About 1.5 million jobs of school teachers will be created.

To sum up: The 11th Plan aims "thereby to increase the organized sector employment ambitiously, by at least 10 million. Along with the public sector, organized sector jobs would then expand by over 15 million, a growth rate of about 9% per annum." (p.78). This would still leave nearly 50 million new workers to be absorbed in non-agricultural unorganized employment.

Critique of employment policy

Keeping in view the performance of the last decade of negative employment growth in the organized sector, the Plan is over-ambitious about a huge reversal in the form of 15 million jobs. It may noted that total employment in the organized sector in 2004 was 26.4 million – 18.2 million in the public sector and 8.2 million in the private sector. To hope to increase 10 million jobs in the private organized sector as against the total of 8.24 million jobs at present implies 121% addition to the existing job creating potential. The estimates are thus highly over-optimistic and utterly unrealistic. Not only that, to expect profitable public enterprises to increase job potential in the face of loss making units reducing jobs by about 2 million is also unrealistic. The total job potential of Central Public Sector Enterprises in 2005-06 was of the order of 1.65 million. Again to think of an expansion in their employment by 2.0 million in the next 5 years appears to be improbable, more so in view of the fact that state level public sector undertakings are mostly incurring huge losses year after year and would not be able to contribute to increase in employment.

It is really interesting to observe that the advocates of economic reform have begun to wear a neo-Gandhian garb and are pinning their hopes on the unorganized sector especially village and small enterprises to provide 50 million jobs during the 11th Plan. The reformers systematically destroyed the modicum of protection in terms of reservations for SSI sector and are still pursuing the policy of dereservation to do away with reservations in 300 items left by now. Not only that, bank credit was diverted to large sector and competition was their slogan with interests of the consumers being used as a plea. Now that it became evident that growth alone does not have higher employment generation potential, they are now realizing their folly because the country is faced with the phenomenon of demographic dividend for the next 30 years and the rate of increase of labour is force likely to remain above 2.5% per annum.

But even now, a careful perusal of the measures proposed to boost unorganized sector employment include provision of timely and adequate credit, improvement of technology so as raise productivity of the small sector, eliminating the plethora of inspections and maintenance of different registers and abolition of excise on their output. But the country has been frequently made familiar with these problems during the last two decades. Even the Report of the Special Group headed by Dr S. P. Gupta, former member, Planning Commission has been gathering dust over the last 5 years. Moreover, the 11th Plan does not provide a concrete plan to energize the unorganized sector, but puts the entire burden on the State Governments

without even suggesting a concrete plan for action. With this environment, it is not possible to achieve the target of 50 million additional jobs in the unorganized by sheer rhetoric. It requires grassroot change in policies.

17. ALTERNATIVE MODEL OF DEVELOPMENT FOR STIMULATING GROWTH OF EMPLOYMENT

The basic question, which should be answered, is: What is the alternative model of development, which can stimulate employment growth along with GDP growth? The basic problem with the present model of development so far followed is to treat GDP growth as the principal indicator of development. So all parameters that are presented in the Economic Survey are in the nature of GDP, per capita GDP, investment and saving, exports and imports, WPI and CPI, but nowhere is the effect on employment or its quality studied. In other words, GDP growth and employment growth are not interwoven into the same model. It is assumed that as a result of GDP growth, employment will grow as a dependent variable. But the more important issue is that instead of only emphasising on GDP growth, it is more important to consider the content of GDP and how it is derived. It is this aspect, which has been ignored. It would be, therefore, important to identify major sectors contributing to employment growth and focus policies to derive maximum GDP growth from these sectors.

As per data available, the major contributors of employment growth in 1999-2000 are: Agriculture (60 %), manufacturing (12%), trade (9 %) and community, social and personal services (8%). These 4 sectors taken together contribute about 89 per cent of total employment. It may also be noted that in the manufacturing sector, 86 per cent of employment is contributed by small industries and large and medium units contribute only 14 per cent. Similarly, in trade bulk of trading is conducted by small establishments.

Top Priority to Agriculture, Irrigation and Watershed Development

From the above, it follows that if the employment objective has to be dovetailed with GDP growth objective, agricultural growth should receive top priority. From a reading of the Report of the Task Force on Employment Opportunities, it appears that the assumption is that saturation limit in agriculture has been reached so far as employment is concerned. That is why, the Task Force assigns employment elasticity of 0.10 to agriculture for the period 2000-2012. This is based on the premise that the scope for agricultural employment growth has been nearly exhausted. This is really far from the stark reality. There is no doubt that in green revolution areas, sufficient succ has been achieved. But even in them, we have yet to ach peak international levels of productivity. there is considerable scope in agriculturally back states such as Bihar, Uttar Pradesh, Madhya Prad Rajasthan and Orissa. Expansion of irrigation and water development can play a significant role in raising agricul productivity as also enlarging the scope for employm opportunities. For instance, under Rajiv Gandhi Water Management Mission, which was started in 1994, Ma Pradesh is implementing the largest programme of wate development in the country. Under this mission, lakh hectares have been treated, which resulted in signifi improvement in agricultural productivity and raising o ground water level in 3,294 villages. The watershed villa have also shown their capacity to withstand succe droughts. Pani Roko Abhiyan (Stop Water Flowing A Campaign) launched by the Madhya Pradesh Govern has recorded the highest success of community particip in India. It has spawned over 43,000 user groups, 19 self-help groups and 7,500 women's thrift groups. M significantly, the area under irrigation increased by 59 cent in comparison to pre-project area. There is a dro 34 per cent in wasteland, while fodder production is 37,000 tonnes. This has led to enlargement of employ and also helped to cure under-employment in the state. Mission Model of Madhya Pradesh for water development has been adopted in Andhra Pradesh in in Orissa in 2000 and in Rajasthan in 2001.

In the post-reform period, there has bee considerable slowing down of agricultural develop programmes. Irrigation is the basic input, which help enlarge the programme of high yielding varieties (HY as also increases fertilizer consumption. Data re that during pre-reform decade (1980-81 to 1990 area under irrigation increased from 54.1 million hec to 70.8 million hectares in 1990-91, indicating an incr of 30.9 per cent, but in the post-reform period, area u irrigation increased from 70.8 million hectares in 199 to 83.6 million hectares in 1999-00, indicating an incr by barely 18 per cent. This slowing down of irrigation an impact on the expansion of HYV as well as increa fertilizer consumption. As against 50.8 per cent incr in area under HYV, the increase during 1990-91 to 19 98 was 16.9 per cent — a considerable slowdown. Simil as against an increase of 127.3 per cent in fert consumption during 1980s, fertilizer consump increased by barely 34.4 per cent in the 1990s. slowdown of agricultural development programme have an impact on employment generation in agricult the 1990s. For increasing employment generation, it w be necessary to accelerate agricultural develop programmes.

Moreover, it would not be wise to give development of degraded and wastelands to

as suggested by the course would be to inv programmes on the lin Management Mis employment and ment in agriculture. A m is that it pins fait develop Integrated A degraded and wastela of development ensur of big business. like India because it not help a big b This should be rep model.

The Task Force sug should be given to Food processing techniques to would be to pr to undertake certain brands ne Khadi and Village In involved.

Promoting SSI Sect Generation

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Housing for the Po

Another Sector, wh ment, is the housi 35 million persons be built afresh

companies as suggested by the Task Force. Rather a more prudent course would be to involve panchayats to organise these programmes on the lines of the Madhya Pradesh Watershed Management Mission Model. This will help generate employment and also take care of under-employment in agriculture. A major problem with Ahulwalia Taskforce is that it pins faith on the private corporate sector to develop Integrated Agricultural Complexes and bring degraded and wastelands under cultivation. This model of development ensures more money to be put in the pockets of big business. This model is unsuitable for a country like India because it is a capital-intensive model and would not help a big breakthrough in employment generation. This should be replaced in favour of a people's participatory model.

The Task Force suggests that food-processing industries should be given to Multinationals Corporations (MNCs). Food processing does not involve highly sophisticated techniques to bring in MNCs. Rather a better course would be to provide support to agricultural co-operatives to undertake food processing. For only marketing, certain brands need to be developed and for this purpose, Khadi and Village Industries Commission (KVIC) may be involved.

Promoting SSI Sector for Employment Generation

In the manufacturing sector, major contributor to employment growth is the small scale and informal sector, often referred to as unorganised sector. Policies of reservation of SSI sector products have done immense harm to the growth of this sector. They have also resulted in slowing down the growth of employment by this sector. The Government should stop any moves for further reservation of SSI items. It should again place the garments sector under the reservation category. The major problem with SSI units is credit and upgradation of technology. If the Government provides much higher amount of credit as indicated by the Nayak Committee and recently supported by the S P Gupta Study Group on development of small scale enterprises, it would go a long way in enlarging employment. SSI sector has proved its competitive ability even in the international sector, since it contributed ₹ 54,000 crores in the form of export-earnings. The large corporate sector has a total employment potential of 3.63 million according to *Annual Survey of Industries* (1997-98) whereas the small sector had an employment of 17.9 million in 1999-2000.

Housing for the Poor

Another Sector, which can be a major generator of employment, is the housing sector. According to Census (2001), 35 million persons live in temporary homes which need to be built afresh and 58 million live in semi-permanent housing which need upgradation. The Census also revealed that 74 million households lived in predominantly one-roomed houses and predominant roofing materials used in them was grass, straw and thatch. Year after year, after the rains, these houses need repairs. It is a well-known fact that housing is a labour intensive activity and the State, to meet its goal of "shelter for all" can certainly provide considerable help. It is really unfortunate that the Task Force on Employment opportunities does not make a mention of this self-help activity in which state support by providing housing for the poor, housing for the Economically Weaker Sections (EWS), Night Shelters for the houseless destitutes and housing in rural areas by intensifying Indira Awas Yojana (IAY) can promote considerable amount of housing activity and in the process provide sustainable housing and generate employment. Availability of credit by state can play a useful role.

In urban areas, according to Census (2001), 42.6 million persons in 607 towns/cities lived in slums. They account for 15 per cent of the population of these cities. Most of the people living in slums lack sustainable housing and basic amenities like drinking water, toilets, lighting, etc. Rehabilitation of slums can be another major area of employment generation.

Provision of Rural Infrastructure

Provision of infrastructure, more especially rural infrastructure, is another source of employment generation, which can simultaneously accelerate the process of development. Economic infrastructure in the form of expansion of roads, connecting rural areas with urban centres, converting unmettalled roads into metalled roads and developing four-lane highways — all these labour-intensive projects should be encouraged. The Prime Minister's Gram Sadak Yojana aimed at connecting all villages with a pucca road is a highly labour-intensive project. The public sector can play a tremendous role in this area and this will in turn generate more employment and also promote trade and industry.

Expansion of Social Infrastructure

On the social infrastructure front, education and health services need to be considerably improved. Rapid expansion of primary schools to reach the goal of universalisation of literacy and strengthening and expanding middle school education so as to improve the education level of the masses, more especially in the era of information technology revolution, can also promote employment. Strengthening the National Literacy Mission can be a very useful step in this regard.

Health services, more especially in the rural areas, need considerable expansion and quality improvement. Since the country has accepted "Health for All" as an objective, expansion of these services will promote demand for doctors, paramedical personnel and other related activities like diagnostic centres, will also enlarge employment.

Need for Reformed outlook towards Informal Sector

Dr. S R Hashim, former member Planning Commission in his presidential address at the 41st Annual Conference of the Indian Society of Labour Economics emphasised the need for promoting informal sector which employs a very large proportion of casual workers and self-employed in the total labour force. The basic idea is not to perpetuate informal and insecure jobs forever, "but for making it easier and more fruitful for the job seekers to find self-employment in productive work, at least during the transition during which the total economic structure is transformed into a more organised system.[30]" A number of very useful and down to earth suggestions have been given by Dr. Hashim in this regard:

The first thing that is required in this context is to create an environment in which informal economic activity does not appear to be illegal, undesirable, or a nuisance activity, but is looked upon as a useful productive and respectable activity. For this, first of all, the legal and regulatory hurdles should be removed. Hurdles in the form of availability of scarce inputs to the informal sector, besides the difficulties in availability of credit and marketing should be specially attended.

Secondly, in the urban sector, several hurdles mostly arise from locational earmarking of activity. For instance, commercial activities are not allowed in residential areas. Even vegetable selling is not allowed, though due to proximity, it is convenient to the consumer. Similarly, attitude of the municipal authorities towards vendors and small production units in residential areas needs a radical change. If the state cannot provide useful avenues of employment, it has no right to destroy or damage the equipment, which helps to earn a living. In this context, the whole concept of planning has to be changed. Quite a large number of open spaces be made available to the people to conduct informal activities within the residential areas. Gradually, these persons who merely make a living be allowed to graduate as owners of small shops and workplaces. Various studies with respect to informal sector have emphasised the need to encourage footloose and home-based economic activities.

Employment Potential of Information Technology (IT)

Information Technology (IT) has opened large avenues for educated youth in the country. It is estimated that one segment of IT industry i.e. computers - both hardware and software, computer engineers and systems analysts are having a million jobs at present. Besides this, IT sector provided 2.2 million jobs to computer professionals and other related personnel engaged in IT sector. NASSCOM-McKinsey Report (1999) has estimated that by the year 2008, IT-enabled services will provide 11 million jobs and generate a revenue of US $ 17-18 billion. In this sense, IT industry has great future in expanding employment opportunities. But a disturbing aspect of the present situation is that IT-education is very costly and IT-jobs are the preserve of the better-off sections of the society. To enable the poor to acquire IT education, the Government should make provision in the form of subsidies or charge differential fees. The Government has a major role to play in expanding computer education to rural areas in the country so that the capabilities of the people are developed to acquire better quality jobs in the IT sector.

Special Employment Programmes

Special Employment Programmes as measures of poverty alleviation are able to generate about 3 to 4 million jobs very year. But year-after-year, a provision of about ₹ 7,000 crores has to be made for the purpose. Besides the food subsidy costs ₹ 12,000 crores and kerosene and LPG subsidy ₹ 13,000 crores. As against the provision of ₹ 32,000 crores for poverty alleviation programmes generating 3-4 million jobs, the allocation for irrigation is a meagre ₹ 1,700 crores and for afforestation ₹ 400 crores. Evaluation of these programmes reveals that out of every ₹ 100 spent, ₹ 10 to 15 goes to the poor worker as against the stipulation of ₹ 60 to be provided in the form of wages. The rest is being pocketed by bureaucracy, contractors and politicians. It would, therefore, be more desirable to spend these resources in the form of high quality infrastructure particularly minor irrigation, watershed development and rural roads. Improvement in rural infrastructure will improve agricultural productivity, which in turn will lead to enlargement of employment.

Conclusion

Former Prime Minister Atal Bihari Vajpayee in his Independence Day Message (15th August 2001) candidly stated: "The fruits of liberalisation have not adequately reached the poor and the people living in rural areas. Inequalities have increased." It would be, therefore, folly to pursue the failed strategy of liberalisation, which has a focus on 8 per cent of labour force. The need of the hour is to take care of the 92 per cent of the labour force engaged in the unorganised sector. Liberalisation has driven more and more people from the organised sector to the unorganised sector. There is a need to reverse this process so that more and more units in the unorganised sector are enabled to graduate and join the ranks of organised sector. The Government should re-appraise and revitalize reforms through giving primacy to removal of unemployment" and recognizing the 'Right to Work' as a basic human right. For this purpose, a new model of development reconciling GDP growth and employment growth should be developed. In this model, emphasis should be laid on the development of irrigation and watershed development with people's participation. Similarly, degraded and wastelands should be developed through participatory efforts of the panchayats. Agricultural co-operatives should be strengthened to undertake food processing activities and KVIC be assigned the task of marketing. Further dereservation of SSI products be stopped and SSI sector

30. Hashim S.R. (2000), Employment and Unemployment in a Society in Transtion, Indian Journal of Labour Economics, Vol. 43, No.1.

be helped on the lines suggested by S.P. Gupta Study Group; greater emphasis be given on housing for the poor and EWS category; rural infrastructure in form of roads should be strengthened and a programme of expansion of social infrastructure in the form of education, health, safe drinking water, sanitation etc., should be undertaken. Besides, there is a need for promoting informal sector, which is the major, source of self-employment and casual labour. The concept of city planning should be reoriented to develop more sympathetic attitude towards informal sector so as to remove hurdles in its way. Gradually, the persons employed in the informal sector be allowed to graduate to become owners of small shops and establishments. IT sector should be encouraged to spread its outreach to rural and remote areas. The state must ensure that IT education does not remain the preserve of the better-off sections, but by a system of subsidies and differential fees, IT education is made available to the economically weaker sections. Instead of spending huge sums on poverty alleviation programmes whose trickle down effects are very weak, it would be more prudent to spend these resources on development of rural infrastructure in the form of minor irrigation and watershed development which in turn will raise productivity and enlarge employment. It is such a model of development that can reconcile GDP growth and employment and provide growth with social justice. India should first provide 'work for all' and being a society in transition, should proceed to achieve 'decent wok for all' as its ultimate objective.

It is heartening to note that according to the Planning Commission, as against 3.9 million employment opportunities created during 1993 and 1999, additional employment generated during 1999 and 2002 averaged 8.4 million per year. There is a need to increase it to 10 million per year.

18. EMPLOYMENT GUARANTEE ACT – 2005

The National Common Minimum Programme of the UPA Government adopted in September 2004 had pledged the following regarding provision of employment: "The UPA government will immediately enact a National Employment Guarantee Act. This will provide a legal guarantee for at least 100 days of employment to begin with on asset-creating public works programmes every year at minimum wages to at least one able-bodied person in every rural and urban poor and lower middle class household."

The Government, on the advice of the National Advisory Council, passed the National Rural Employment Guarantee Act. The main features of the Act are :

1. Every household in rural India will have a right to at least 100 days of guaranteed employment every year for at least one adult member. The employment will be in the form of casual manual labour at the statutory minimum wage, and the wages shall be paid within 7 days of the week during which work was done.
2. Work should be provided within 15 days of demanding it, and the work should be located within 5 kilometer distance.
3. If work is not provided to anybody within the given time, he/she will be paid a daily unemployment allowance, which will be at least one-third of the minimum wages.
4. Workers employed on public works will be entitled to medical treatment and hospitalization in case of injury at work, along with a daily allowance of not less than half of the statutory minimum wage. In case of death or disability of a worker, an ex gratia payment shall be made to his legal heirs as per provisions of the Workmen Compensation Act.
5. Five percent of wages may be deducted as contribution to welfare schemes like health insurance, accident insurance, survivor benefits, maternity benefits and social security schemes.
6. For transparency and accountability, all accounts and records of the programme will be made available for public scrutiny.
7. The District Collector/Chief Executive Office will be responsible for the programme at the district level.
8. The gram sabha will monitor the work of the gram panchayat by way of social audit.

Role of State Government

For the implementation of the Scheme, each State Government shall prepare an Employment Guarantee Programme. The main features to the included in the Programme are:

(*i*) Only productive works that are based on economic, social and environmental benefits, contributing to social equity, and have the ability to create permanent assets will be taken up under the Programme.

(*ii*) The works shall be located in rural areas.

(*iii*) When wages are *directly linked with the quantity of* work, they shall be paid according to the schedule of rate fixed by the State government. For unskilled labourers, this schedule shall be so fixed that seven hours of work shall fetch wages equal to the statutory minimum wage fixed by the state.

Cost of Employment Guarantee Programme:

The National Advisory Council (NAC) prepared the cost of employment guarantee programme at 1% of the GDP or nearly ₹ 40,000 crores at 2004-05 prices. The basic question is: Since the funding of the Employment Guarantee Programme will be overwhelmingly provided by the Central Government, shall the Government be able to provide the necessary financial support? Jean Dreze, an NAC member and a key formulator of this law pointed out: "As the Finance Ministry's own recent studies and reports show, there are vast possibilities of broadening the tax net in India, reducing tax evasion and razing the tax/GDP ratio. As things stand, India's tax/GDP ratio is very low in international perspective about 15 percent, compared with 37 percent in OECD countries." Given our far lower tax/GDP ratio, Dreze is of the opinion that funds for

National Rural Employment Guarantee Act (NREGA) could just as well come from increasing revenues through systematic tax reforms as well as increased taxes.

Critique of the Programme

Jean Dreze, a social activist and co-author with Amartya Sen in *Hunger and Public Action* (1989) and *India: Development and Participation* (2002) is of the view that the EGA is very different from employment generation schemes such as Employment Assurance Scheme (EAS) and Jawahar Rozgar Yojana (JRY) etc. because under the existing schemes, people have no rights and, therefore, no bargaining power. By the same token, the administration is also not accountable. But the proposed Employment Guarantee Act gives people work entitlement as a matter of right, indeed a legal right enforceable in Court. This will strengthen the bargaining power of the people and help them to claim their due. It will make the administration accountable because if employment is not provided, the unemployment allowance will have to be paid and local officials will have to answer for it.

Another important feature of the NREGA is that for the first time, an attempt has been made at the National level to work out an Employment Guarantee Scheme with 80 percent funding by the Central Government.

However, critics have raised several issues – at the conceptual as well as the operational level about NREGA. It would be desirable to consider these issues:

First of all, it is alleged that the EGA lacks a long-term perspective. Indira Hirway stated: The Act "neither mentions the long-term consequences of the act, (that is its success lies in the fact that the act is not needed in the long run) nor does it mention how the assets generated will be directed to expand the mainstream employment. It needs to be accepted that the act should not result in the creation of a large permanent army of unskilled workers to be supported by the national exchequer. This is something the country just cannot afford."[31] Quoting the several failures of Maharashtra Employment Guarantee Scheme which has been hailed as the biggest such programme in the world that has been implemented for over 30 years, costing the State more than ₹ 9,000 crores and generating 370 crore mandays has not produced adequate results either in terms of poverty reduction or reduction in unemployment. Indira Hirway mentioned: "The programme still continues after 30 years without any decline in the demand for unskilled wage work under the scheme. In 1975, it generated 110 mn mandays, in 2000-01, and in 2001-02 it generated 162 mn mandays."[31]

"No dramatic achievements have been made in poverty reduction or in unemployment reduction in the State. Infact, Maharashtra has done poorly as compared with other states. According to official data, the incidence of poverty in Maharashtra is 30.7 percent (2004-05) which puts it at 15th rank among the major states of India. The state was seventh in 1973-74. As per the Planning Commission, the rate of unemployment in Maharashtra was 5.09 percent in 1993-94 and it rose to 7.16 percent in 1999-00. As against this, the all-India unemployment rate was 5.99 percent in 1993-94 and it rose to 7.32 percent in 1999-00. Obviously, the percentage growth in unemployment during 1993-94 and 1999-00 was 40.7 percent in Maharashtra as against 20.0 percent at the all-India level. Thus, the much trumpeted Maharashtra EGA did not achieve commendable results either at the front of poverty reduction or unemployment reduction. The NREGA also promises to provide temporary relief like its predecessor the Maharashtra EGS, but the basic need is to develop 'Haemopoietic System' which increases the vitality of the economy and thus its capacity to generate bloods (employment). It is this self-sustaining kind of investment that can take us to the goal of full employment along with the goal of removal of poverty.

The second issue concerns 100 days of employment. This is a reiteration of the lean reason employment to be provided to the unemployed. But the question which needs an answer is: Since there are workers who will be unemployed both in the busy and lean reason, it would be desirable to provide employment throughout the year. It shall provide the much-needed continuity to the programme and also help in the long-term planning of productive assets on a sustained basis.

The third issue pertains to one member of the household. If the purpose is to provide an employment guarantee, then why should it be limited to one member of the household. It should be a universalized employment guarantee. In this sense, there appears to be no justification for limiting it one member of household.

Fourthly, there appears to he asymmetry in the programme. The Centre passes the legislation, it also provides 90 percent of funding, but the states are expected to implement the programme. Obviously, the efficiency and integrity of the state administration will determine the quality of implementation. Jean Dreze in a very candid manner pointed out: "In states like Bihar and Uttar Pradesh, where governance is in doldrums, it would be naïve to expect an Employment Guarantee Programme to take off in a hurry. Quite likely, it will take years, in spite of the legal obligations (the governments of these states have little regard for law)."

"However, I think that the administrative hurdles can be overcome quickly in many parts of India, especially those that have a strong tradition of relief works during droughts as well as a good potential for labour intensive public works. I am thinking, for instance, of large parts of Rajasthan, Madhya Pradesh, Chhatisgarh, Andhra Pradesh, Jharkhand and Orissa. If the guarantee of employment becomes effective in these states within a year or two, it will be a major achievement."

Jean Dreze is basically correct. It would be unwise

31. Indian Hirway (2004), Providing Employment Guarantee in India: Some Critical Isues, *Economic and Political Weekly*, November 27, p. 5120.

to withhold the programme for the sake of inefficient and ineffective state Governments. Success achieved in some good states can certainly prompt a delayed reaction among the laggards as well, fearing the democratic backlash from their people. The Central Government, being the major provider of funds, can also discipline the non-performing states by curtailing the provision of funds and provide more funds to states with better records of performance.

Last, but not the least, is the question of paying minimum wages. This implies a state-specific minimum wage, since there is no all-India minimum wage. For the purpose of the financial cost of the programme, the NAC used ₹ 60 per day as a benchmark figure for the wage cost per day of employment. This is a rough average of state-specific minimum wages. However, experience the world over indicates that such programmes have been successful in countries where wages have been less than the market wages. K. Subbarao's study of such programmes in South Korea, Argentina, South Africa and Bangladesh leads him to conclude that the programmes have been targeted well and have been financial sustainable only when the wage rate has been kept below the market wage rate."[32] Similarly, in Maharashtra, it was observed that when wages were below the market wage rate till about mid-80s, EGS was considered successful and it reached the poor. But after the wages were raised, the poorest were thrown out in favour of less poor and the non-poor. It also imposed higher financial burdens on the state, but the objectives of the programme were observed more in their breach than in their compliance. To overcome this, it would be imperative that the Central Government should fix an-all India minimum wage for this programme. The state governments should desist from paying a higher minimum wage than that specified by the Centre. Besides, even if the state governments pay a wage rate lower than that, but adhere to provide employment for a larger duration during the year to the poor, there should be no objection on the validity of its functioning. The real issue is: EGA should target the poor and the unemployed. It should build productive assets such as roads, percolation tanks, water-harvesting and irrigation works so that they act as impetus to agricultural growth. This will at a subsequent stage facilitate raising wages and also stop migration from rural to urban areas. A growth-oriented programme will eventually lead to elimination of EGS which should be the ultimate goal.

EGS - A Challenge And An Opportunity

In view of the criticism of the proposed draft of EGS Bill, the Government while getting the approval of the Parliament on August 17, 2005 moved the following amendments:

1. Minimum wage fixed should not be less than ₹ 60 for each day of 100 days of guaranteed employment. This was agreed in view of the fact that minimum fixed in various states ranged between Rs 25 in Meghalaya to Rs 134 in Kerala. In case, minimum wage fixed in a state is lower than that fixed by the state government, there is a risk of its being challenged in the court. The Supreme Court had already held that " providing labour or service at less than minimum wage falls within the meaning of 'forced Labour' attracting condemnation of Article 23; that the state cannot be permitted to take advantage of the helpless condition of the affected persons and extract labour on payment of less than the minimum wage". This amendment will ptovide safety to the Government for the NREGA being challenged in the courts on the issue of payment of minimum wage.

2. The scheme has been universalized to all persons living in the rural areas instead of its being available only to the families' below the poverty line'. In the list prepared by the gram sabhas of the poor families, many non-poor families were enrolled and quite a number of poor families were left out. This was due to corruption at the village level and the pressure of better-off groups to take advantage of the benefits to the BPL families. Moreover, the experience of Maharashtra EGA has revealed that in order to prevent leakages, it is better to introduce the principle of self-selection. Experience shows that the educated youth do not offer their labour for manual work. Moreover, many people engaged in some other work prefer to continue in that employment, rather than seek employment in seasonal casual manual work. Besides, this, NREGA is recognition of the 'right to work' and this can accomplished only in a universalized scheme, rather than in restricted scheme.

3. There will be one-third preference for women in areas where the number of applicants is very large.

4. Any number of persons of a family can participate in the scheme, provided they share among themselves the maximum annual cap of 100 mandays. This implies that if two members of a family are enrolled and selected for the scheme, each will be entitled to 50 days of employment.

5. The Central Government will provide 90 percent of money for the scheme. It will also compensate states if a fund crunch affects employment generation.

6. The Government also promised to bring a similar scheme for urban areas.

To conclude: National Rural Employment Guarantee Act is a historic measure to implement its promise of 'Right to Work' by the UPA Government. Its success will depend on the quality of implementation.

Noted economist Lord Meghanad Desai dismissed the Centre's ambitious National Rural Employment Guarantee Scheme as a mere 'palliative'. It is a temporary measure, 'a waiting room' and not a cure for the problem. A sure way to solve rural unemployment, according

32. Subbarao K (2004), 'Public Workfare: International Experience', paper presented at the National Workshop on Protecting the Vulnerable Poor in India: The Role of Social Safety Nets, October 6-8, New Delhi.

to him, would be if rural people came to urban areas and worked in the manufacturing sector. This may result in more slums, but rural people would get "better and more secure income."

Dr. C.H. Hanumatha Rao has underlined the fact "Maharashtra EGS, though continued for three decades could not result in a sharp reduction of poverty in rural Maharashtra, because it was not linked to the building up of rural infrastructure e.g. irrigation, rural roads, water harvesting measures, agricultural research and extension and and institutional credit. From this experience, it follows that effective implementation of EGS should be based on two-fold objective: to use the scheme for productive activities which have the potential for sustained employment generation; and to minimise leakages of benefits from the scheme to the non-poor. To achieve this, it would be necessary to coordinate and integrate EGS with the on-going programme for Bharat Nirman' involving the development of rural infrastructure like irrigation, roads, water supply, electrification, housing etc. EGS quickly graduating into a programme for infrastructure development as an integral part of Bharat Nirman provides an efficient and the least risky way for sustainable rural development and poverty eradication". *(Economic Times*, 5th September 2005)

Dismal Experience of NREGA: Lessons for future

The National Rural Employment Guarantee Act came into force on February 2, 2006 and was implemented in 200 of India's most backward districts. The Ministry of Rural Development described it as a revolutionary measure to transform the rural economy. In 2007, it was extended to another 130 districts and with effect from April 1, 2008, the Act covered all districts.

For its progress and the weaknesses during its implementation, two kinds of reviews are available – (i) the implementation of NREGA has been reviewed by the Controller & Auditor General (2007) and (ii) Certain NGOs, especially the National Consortium of Civil Society Organisations (CSOs), have also undertaken several reviews.

The CAG Report underlines the fact that the guidelines indicated in the NREGA have not been followed. The Report specifically mentions lack of provision of professional staff to implement the scheme.

(1) Lack of professional staff – Every State government was required to appoint in each block, a full time Programme officer, exclusively responsible for the implementation of NREGA. The state Government, however, directed Block Development Officers (BDOs) to take "Additional charge" to implement NREGA. CAG report finds that 19 states had not appointed these officers in 70 percent of the blocks surveyed. The point which needs to be highlighted is that NREGA is not a programme that can work of on "additional charge"

Besides this, one employment guarantee assistant (ESA) was to be appointed in each gram panchayat. According to CAG report, 52% of the 513 gram panchayats surveyed had not appointed ESA.

In addition, the state government was to create panels of accredited engineers at the district and block level. They were expected to undertake costing of works to be undertaken, to make measurements of the works done to release payments to labour as stipulated in NREGA. The CAG found that the panels were missing in 20 states surveyed.

As a consequence of shortage of staff, there were delays in execution of works and payment of wages on account of lack of measurements; delays in wages payments of two to three months were noticed. Consequently, labour households preferred to undertake other jobs, even if the payments were relatively low, but prompt.

All this resulted in a situation where out of 20.1 million households employed in NREGA, only 2.2 million (i.e. 10.5%) received the full 100 days employment and wages as promised by the Act. The average employment per household was 43 days in 2006-07 and 42 days in 2007-08, as revealed by the Ministry of Rural Development.

(2) Lack of proper project planning – NREGA specifically mentions the creation of durable productive assets, in the form of roads, improving rural infrastructure drought-proofing, watershed development, water conservation etc. The survey found that the focus is on rural connectivity and wells. Other meaningful projects for rural transformation were conspicuous by their absence.

(3) Bureaucratic resistance to NREGA – CSOs found that whereas Panchayati Raj Institutions leaders are keen to implement NREGA, secretaries and executive officers of gram panchayats were seen to be working overtime to convince these leaders of the "Perils" of getting entangled in NREGA. On account of the detailed procedures and rules under NREGA, an impression has been created that it is much more difficult to make money under NREGA. Given relatively few chances of corruption, it is better to go in for other programmes that are relatively less strict. In Rajnandgaon district, Chhattisgarh, according to NGOs Reports "Sarpanches fear that getting work done under NREGA is tantamount to going to jail and that the unemployment allowance will have to be given out of the sarpanch's pocket".

(4) Lack of transparency and absence of social audit – Although NREGA has provisions for transparency in the process of implementation, in actual practice, data on work done and payments made for various kinds of jobs is kept as a closely guarded secret. As a consequence, there is a mockery of social audit. Even some of the

fake NGOs are prepared to verify social audit by charging a ridiculously low fee per panchayat. As a consequence, the most radical provisions of NREGA are violated with impunity.

(5) Inappropriate Rates of Payment – NREGA stipulates that projects shall not be implemented by employment of contractors, because contractors do not pay labour statuary minimum wage and get most of the work done by machines. Muster rolls are faked, labour is underpaid, bogus workers are shown as paid workers while actual work is done by machines. The schedule of rates is not observed in practice. Studies by NGOs reveal that employment guarantee assistants (EGAs) employed by panchayats themselves work as contractors. Besides this, in Chattisgarh, the Study of 50 percent of NREGA works supposed to be implemented by rural labourers and other staff are invariably found using machinery.

CAG report (2007) has brought out glaring deficiencies of NREGA in the following words:

"The main deficiency was the lack of adequate administrative and technical manpower at the block and gram panchayat level. The lack of manpower adversely affected the preparation of plans, scrutiny, approval, monitoring and measurement of works, and maintenance of stipulated records at the block and gram panchayat level. Besides affecting the implementation of the scheme and provision of employment, this has also impacted adversely on transparency, and made it difficult to verify the provision of the legal guarantee of 100 days of employment on demand. Planning was inadequate and delayed, which resulted in poor progress of works. Systems for financial management and tracking were deficient, with numerous instances of diversion/ misutilisation, and delay in transfer of state share. ... Maintenance of records at the block and gram panchayat level was extremely poor, and the status of monitoring, evaluation and social audit was also not up to the mark." (CAG (2007).

Besides these deficiencies which require remedial action, the NGOs also found in their studies, wherever social mobilization of rural workers was successful, public pressure led to improved implementation of the scheme, reduction in the use of contractors and machines, reduced corruption in bureaucracy and also resulted in better payment of minimum wages. Obviously, continuous mobilization of rural poor is a basic necessity for securing the intended benefits of NREGA.

A study by the Centre for Environment and Food Security (CEFS) about the progress of the programme in Orissa revealed that the Government had claimed that out of a budgetary provision of ₹ 890 crores for 2006-07, the state government was able to utilize ₹ 733 crores (i.e. 82.4%). As a result 57 days of wage employment was provided during the year. Not a single household was denied wage employment in 19 NREGs districts. The government also claimed that 1.54 lakh families in the State completed 100 days of wage employ during 2006-07.

However, the research team of CEFS revealed the hollowness of these claims. Out of ₹ 733 crores spent under NREGS, more than ₹ 500 crores was unaccounted for, probably siphoned off and misappropriated by government officials. The research team also found that not a single family in the 100 sample villages was able to secure 100 days of wage employment. Very few families got 20-40 days, the rest mostly between 5-20 days, if at all. Fake job cards and fabricated muster rolls exaggerated the benefits of the scheme. The social audit was non-existent. Thus, the ground reality was highly distressing despite tall claims of the government of the success about NREGS implementation.

At the same time, it also necessary to take the following measures to strengthen the support structure of the NREGA.

(i) Appointing full-time professionals for implementing NREGA at all levels which is vitally necessary to implement the scheme.

(ii) Provision of full-time employment guarantee assistants at the panchayat level to make rural people aware of the benefits of the scheme and induce them to take advantage of the scheme.

(iii) Specific efforts should be made to reduce the time gap between work done and payment received by rural lobourers in NREGA.

(iv) To use Management Information System (MIS) and improve the system of monitoring of the scheme as also to check leakages and misappropriation of funds.

(v) To undertake a massive programme of generating awareness about the scheme with the help of information technology.

(vi) To revise the schedule of rates periodically so that changes in statutory minimum rates of wages are made consistent with their revision.

(vii) To prepare a shelf of projects at the district levels with the help of programme officers and other technical staff as well as Panchayati Raj Institution leaders so that projects cleared at the district level can be implemented at the grassroots level.

(viii) To make a study of various states with a view to learning from their experience of implementing NREGA and thus develop a spirit of competition among the states to take advantage of the scheme.

(ix) NREGA payments should be made through post-office accounts. Andhra Pradesh Government has made use of this method. The state had 6 lakh accounts till 2005. By 2008, the number of accounts jumped to 70 lakhs and authorities are being forced to strengthen the postal infrastructure so that it can handle the new responsibilities. This can also limit

to a large extent fake muster rolls and corruption in the scheme.

(x) NREGA is a comprehensive employment programme. This implies that other employment generation programmes should be merged with it so that the alternative of shifting to another attractive programme from the point of view of misappropriating funds is closed. This will also help to rationalise various employment generation programmes.

The report card of the UPA government towards the implementation of NREGA reveals that as against the budgetary provision of ₹ 10,800 crores for 2007-08, the actual utilization was of the order of ₹ 4,196 crores i.e. only 39 percent of budgetary provision. This is really a sad commentary on the implementation of a flagship programme of the UPA government.

There is no denying the fact that NREGA is conceptually a very important national programme initiated at the level of the Central Government, but its record of implementation reveals that there are widespread complaints of corruption and pilferage of funds and very low level of utilization of budgeted provision. It has not succeeded in creating sufficient productive assets for strengthening rural infrastructure. It has, therefore, failed to impact on the poor rural households and if deterioration is not checked, the programme will lose the enthusiasm and momentum generated for the programme in 2006, describing it as a revolutionary project to impact on the life of the poor.

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CHAPTER

26

INEQUALITY AND CONCENTRATION OF ECONOMIC POWER IN INDIA

"Where a large number of concerns engaged in the production or distribution of different commodities are in the controlling hands of one individual or family or group of persons.... concentration of economic power will also be clearly considered to exist."

—Report of the Monopolies Inquiry Commission (1965)

1. GROWTH OF LARGE INDUSTRIAL HOUSES SINCE INDEPENDENCE

Under the Industrial Policy Resolution, 1948, the Government accepted the concept of a mixed economy for India with clearly defined roles for both public and private sectors. One important aspect of the development of the private sector since Independence has been the spectacular rise of a few large enterprises in the country—commonly known as monopoly capital. The term 'monopoly capital' refers to the existence of an economic situation in the capital market of a country where a small number of units—whether giant corporations or big business houses—acquire a dominant share in the corporate private sector's stock of industrial capital. The existence and growth of monopoly capital has a tremendous effect on the character of the State and the social and economic legislation that may be brought forth by it. There is considerable evidence of the growth of monopoly capital in India.

The Monopolies Inquiry Commission (1965) found that 75 business houses controlled 1,536 companies—a business house or business group was defined to comprise all such concerns which were subject to the ultimate and decisive decision-making power of the controlling interest in the group. The Industrial Licensing Policy Inquiry Committee (Subimal Dutt Committee) accepted the concept of large industrial houses which "should include those business concerns over which a common authority holds away". These business concerns, though separate for legal or taxation purposes, function in unison as parts of a common organisation under the overall guidance, direction and support of a closely-knit group of persons. While the day-to-day affairs of the concerns are independently carried on by those with whom the authority rests under proper legal sanction, the ultimate source regulating overall policies can be traced to a common authority."[1] The Dutt Committee listed 20 larger industrial houses in 1963-64 each with total assets of ₹ 35 crores. Through the system of multiple applications to foreclose capacity and by taking advantage of liberalisation of industrial licensing, the large business houses have proliferated in a number of industries. The growth of large industrial houses is shown in Table 1.

1. Government of India, *Report of the Industrial Licensing Policy Inquiry Committee* (1969), p. 12.

TABLE 1: Assets of 20 Top Industrial Houses

Assets (₹ Crores)

	1972	1981	1989-90	*Compound Annual Rate of Growth (1972 to 1989-90)*
Tata	642	1,840	8,531	15.5
Birla	581	1,692	8,473	16.0
Reliance	-	271	3,600	33.3
Thapar	136	430	2,177	16.7
JK Singhania	121	520	2,139	17.3
Larsen & Toubro	79	220	1,682	18.5
Modi	58	242	1,399	19.3
Bajaj	63	215	1,391	18.8
Mafatlal	184	535	1,344	11.7
MA Chidambaram	-	-	1,273	10.5
Hindustan Lever	78	247	1,209	16.4
United Breweries	36	-	1,189	21.4
TVS Iyengar	51	227	1,177	19.1
I.T.C.	75	-	965	15.2
Shri Ram	121	269	934	12.0
ACC	134	343	903	11.2
Oswal Agro	-	-	870	-
Mahindra & Mahindra	58	408	774	15.5
Essar	-	-	756	173.0
Kirloskar	86	398	736	12.7
Total	**2511**	**7,857**	**41,522**	**16.9**

SOURCE: CMIE, *Basic Statistics Relating to the Indian Economy*, August, 1993.

Data given in Table 1 reveal that the total assets of top 20 industrial houses which were of the order of ₹ 1,346 crores in 1963-64 increased to ₹ 2,511 crores in 1972. They further shot up to ₹ 7,857 crores in 1981 and zoomed to ₹ 41,522 crores in 1989-90. The rate of growth of assets of the top 20 houses during the period 1972 to 1989-90 works out to be 16.9 per cent per annum.

In 1989-90, Tatas were at the top with assets of the order of ₹ 8,531 crores, closely followed by Birlas with assets of ₹ 8,473 crores. Among the top 20 business houses, the top 5, viz., Birla, Tata, Reliance, Singhania and Thapar, accounted for total assets of ₹ 24,930 crores in 1989-90 i.e., 60 per cent of the total assets of 20 business houses. Need it be mentioned that this proportion was 60.3 per cent in 1981. There is, therefore, evidence of a high degree of concentration even among the top 20 business houses as also among those who occupied the first five ranks. It may also be worth observing that Reliance group showed a meteoric growth rate in its assets from ₹ 271 crores in 1981 to ₹ 3,600 crores in 1989-90—an annual average compound growth rate of 33.3 per cent. It improved its position to rank no. 3 among the top 20 business houses, whereas it did not occupy any rank in 1972. It was at rank no. 6 in 1981. Another business house M.A. Chidambaram showed a growth of its assets from ₹ 44 crores in 1980 to ₹ 1,273 crores in 1989-90, thus jumping from rank no. 47 in 1981 to rank no. 10 in 1989-90. With greater liberalization and removal of MRTP and FERA restrictions, the business houses, specially the top 20, have shown very high growth rates in their assets in recent years.

2. GROWTH OF MONOPOLIES AND CONCENTRATION OF ECONOMIC POWER IN INDIA

Under the Industrial Policy Resolutions of 1948 and 1956 as well as through licensing procedures and guidelines, the Government sought to restrict the scope and the growth of the private sector. However, it was soon observed that many of the large enterprises in the private sector operated under conditions of virtual monopoly and oligopoly. Taking advantage of the absence of foreign competition and sheltered markets, the large enterprises entered into combinations, eliminated internal competition openly or secretly, got effective control of the markets for their products and thus exploited their helpless consumers. Many of them managed to create artificial scarcities (by restricting their production) and created the impression of excessive demand for their products. They influenced government policies to their own advantage and secured favourable tax measures and fiscal incentives for exports and foreign collaboration agreements. They were able to mobilise vast financial resources from the market and the public sector financial institutions and banks. Naturally, these private sector enterprises have come to enjoy considerable economic power and demonstrate the same through their monopoly power and restrictive trade practices in the market.

Monopolies Inquiry Commission (MIC)

The Government appointed the Monopolies Inquiry Commission to enquire into monopoly power and restrictive trade practices of the private sector which submitted its report in 1965.

Definition of concentration of economic power

The Monopolies Inquiry Commission was concerned with the two manifestations of economic power, viz., monopolistic practices and restrictive practices. "One such manifestation is the achievement by one or more units in an industry of such a dominant position that they are able to control the market by regulating prices or output or eliminating competition. (monopolistic practice). Another is the adoption by producers and distributors, even though they do not enjoy such a dominant position, of practices which restrain competition and thereby deprive

the community of the beneficent effects of competition."[2] restrictive practice).

Causes for the growth of big business houses and concentration of economic power

Economies of scale brought about largely by technological advances are responsible for the growth of large industrial units. But the growth of big business houses was actually fostered by the unique managing agency system under which powerful business families set up and managed a series of concerns—Tata Sons, Birla Brothers, Shriram Associates, etc., were well-known managing agencies at one time. Even after the system was legally abolished, the original business families have continued to hold and manage a number of companies.

(i) **Inter-company investment.** An important cause of the growth of large industrial houses and concentration of economic power is the inter company investment. Economic concentration may be in the same line of business (industry-wise concentration) or in non-competing lines of business (inter-industry concentration). In both cases a large amount of resources come to be controlled by a business group. The investor company acquires the status of a holding company and other companies become its subsidiaries. Along with inter-company investment interlocking of directorship is also achieved so that the power of decision-making in a large number of companies is monopolised by a few big business magnates, all closely related to one another.

(ii) **Government policy.** The greatest responsibility for the growth of large industrial houses and concentration of economic power lies with the Government. As the Dutt Committee pointed out, the Government never specified clearly to the licensing authority the objective of preventing concentration of economic power or monopoly. So much so, a few industrial houses were able to take multiple licences for the same product. The system, therefore, did not encourage the growth of new enterprises outside the business groups. The MIC categorically concluded: "We are convinced that the system of controls in the shape of industrial licensing however necessary from other points of view, has restricted the freedom of entry into industry and so helped to produce concentration."[3]

Further, foreign collaborations also helped the strong and the entrenched industrialists vis-a-vis the small industrialists.

(iii) **Grabbing of business and industrial opportunities by big business houses.** When rapid industrial development was planned under the Second Five Year Plan, the industrial houses which were already in the field were quick to seize the abundant opportunities for their growth and expansion. They had the necessary knowledge, finance and personnel. They were able to take advantage of the financial facilities and tax incentives provided by the Government. Motivated by the capitalist spirit of an acquisitive society, they created monopolies and thus excluded new entrants into the industrial sector. They resorted to extensive bribing of the licensing authorities to get monopoly control of their products. Besides, the existence of seller's markets enabled them to grab higher profit ratios at the expense of the consumers. By manipulating the loopholes of the Company Law they were able to multiply the capital stock of the companies through issue of bonus shares.

(iv) **Control over banking companies.** Prior to bank nationalisation in 1969, the banking system was controlled by large industrial houses. The bank deposits collected from the general public were used almost exclusively for financing of industries owned and controlled by large industrial houses. It is universally accepted that the commercial banks played a significant role in the creation of industrial empires. Even after bank nationalisation, the situation has not changed very much.

(v) **Public Sector Financial Institutions.** Another important factor for growing concentration of wealth and economic power is the nature of the working of public sector financial institutions. The Dutt Committee showed that about 56 per cent of the total assistance provided by the IFCI, the IDBI, the ICICI, and other financial institutions had gone to the large industrial houses.

(vi) **Control through diversification and technological integration.** Proliferation of industrial units in different industrial categories is commonly referred to as diversification. On the other hand, combining the various stages of production under common ownership and control is referred to as technological integration. Most of the big industrial houses have made use of both techniques for increasing their monopoly power.

The MIC revealed on the basis of market shares of different business groups that the Birlas controlled 66 per cent of the production of cars, 75 per cent of cotton textile machinery (looms), 27 per cent of electric fans, 24 per cent of railway wagons and 16 per cent of room air conditioners. Similarly, Tatas had their net widespread in steel ingots, special tools, industrial machinery, oils and soaps etc. Not only that, through the process of interpenetration of business groups and by collaboration with individual companies or other business groups, the growth of monopoly capital was promoted still further.

Monopolies and Restrictive Trade Practices Act (1970)

Follow-up action on the Report of the MIC

2. *Report of the Monopoly Inquiry Commission* (1965), p. 1.
3. Ibid., p.8

culminated in the passage of the Monopolies and Restrictive Trade Practices Act in 1970.

Under this Act, a permanent statutory commission (called the Monopolies and Restrictive Trade Practices Commission) was set up to investigate, case by case, the effects of such practices on the public interest and recommend suitable corrective action.

A review of the working of the MRTP Act reveals lack of commitment on the part of the Government towards the Act. The Government seems to have made up its mind about the future course of industrial policy in which emphasis is on raising the tempo of industrial production. The problem of checking economic concentration and monopoly has been relegated to the background for the time being. Obviously, reduction of concentration of economic power and breaking monopoly seems to occupy a low priority in State policy aiming at industrial growth.

Reversal of Policies Towards MRTP

As a first step towards reversal of policy, the Government announced that large industrial houses would be allowed to set up industries in 90 "zero industry" districts in the country—districts rich in resources but without any industry whatsoever—big business houses will not attract the provisions of MRTP Act. To help the big business houses to set up units in backward districts, infrastructural facilities were provided on a top priority basis.

A major decision announced by the then Union Finance Minister, Mr. Vishwanath Pratap Singh, while presenting the 1985-86 Budget related to raising the limit of assets for MRTP companies from ₹ 20 crores to ₹ 100 crores. The immediate impact of raising the assets limit was the delinking of almost 49 out of 101 large industrial houses from the provision of the (Section 26) MRTP Act. Obviously, the aim is not to have a pattern of growth in which investment is judiciously allocated between large, medium and small sectors, but to have excessive dependence on large corporate sector.

Industrial Policy (1991) and MRTP Act

The Industrial Policy (1991) stated the following with regard to MRTP Act. "The interference of the Government through the MRTP Act in investment decisions of large companies has become deleterious in its effects on Indian industrial growth. The pre-entry scrutiny of investment decision by so-called MRTP companies will no longer be required. Instead emphasis will be on controlling and regulating monopolistic, restrictive and unfair trade practices rather than making it necessary for the monopoly houses to obtain prior approval of Central Government for expansion, establishment of new undertakings, merger, amalgamation and takeover and appointment of certain directors. The thrust of policy will be more on controlling unfair or restrictive business practices. The Government is guided in this policy by considerations of facilitating investment by big business houses rather than imposing a ceiling on their assets.

3. COMPETITION POLICY AND COMPETITION LAW

The Government of India appointed a committee on Competition Policy and Law under the chairmanship of Mr. S V S Raghavan in October 1999 for shifting the focus of the law from curbing monopolies to promoting competition in line with the international environment. The Committee submitted its Report to the Prime Minister on May 22, 2000.

The Committee recommended enactment of Indian Competition Act, along with the setting up of a Competition Commission of India (CCI), repeal of the Monopolies and Restrictive Trade Practices (MRTP) Act, 1969, and the winding up of the MRTP Commission.

Competition Act (2002)

Following the Report of the Raghavan Committee, the Government of India passed the Competition Act in December 2002 which was enforced as an All-India Legislation. The main provisions of the Act are:

1. No enterprise or association of enterprises or person or association of persons shall enter into any agreement in respect of production, supply, distribution, storage, acquisition of goods and services, which causes or is likely to cause an appreciable adverse effect on competition within India. Any agreement in violation of the above shall be void.

However, this shall not apply to any agreement entered into by way of joint venture if such agreement increases efficiency in production, supply, distribution, storage, acquisition or control of goods or provision of services.

2. Any agreement made at any level of the production chain of goods and services will be void if it makes :

(a) tie-in arrangement;
(b) exclusive supply agreement;
(c) exclusive distribution agreement;
(d) refusal to deal;
(e) resale price maintenance.

No enterprise shall abuse its *dominant position* by: (a) directly or indirectly imposing unfair or discriminatory price in the purchase or sale of goods and services;

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'*Dominant position*', according to the Act, means a position of strength enjoyed by an enterprise in the relevant market which enables it to operate independently of the competitive forces, thus adversely affecting its competitors or consumers.

'*Predatory price*' means the sale of goods or provision of services, at a price which is below cost.

4. No enterprise or enterprises shall enter into a combination which causes or is likely to cause an appreciable adverse effect on competition in the relevant market in India and such a combination will be held void.

The combination would include acquisition of one or more enterprises or merger or amalgamation of enterprises.

The maximum limit of assets above which a combination is declared void shall be:

(a) either in India, the assets of the value of more than ₹ 1,000 crores or turnover of more than ₹ 3,000 crores, or

(b) in India or outside India, in aggregate, the assets of the value of more than $ 500 million or turnover of more than $1,500 million.

However, the provision of this section shall not apply to share subscription or financing facility or any acquisition, by a public financial institution, foreign institutional investor, bank or venture capital fund, pursuant to any covenant of a loan or agreement or investment agreement.

5. For the purposes of this Act, a Commission to be called "Competition Commission of India" (CCI) shall be constituted which shall consist of a Chairperson and not less than two and not more than 10 other Members to be appointed by the Government. The Chairperson and every other member shall be a person who is qualified to be a judge of a High Court or has special knowledge or professional experience of not less 15 years in international trade, economics, business, commerce, finance, accountancy, management, industry, public affairs or administration. The Chairperson or members shall hold office as such for a term of 5 years, and shall be eligible for re-appointment.

The Chairperson and other members shall not, for a period of one year on which they cease to hold office, accept any employment in, or connected with the management or administration of, any enterprise which has been a party to a proceeding before the Commission under this Act.

Duties, Powers and Functions of CCI

It shall be the duty of the Commission to : (i) eliminate practices having adverse effect on competition, (ii) promote and sustain competition, (iii) protect the interests of consumers, and (iv) ensure freedom of trade carried on by other participants, in markets in India.

In order to determine whether an agreement has an appreciable adverse effect on competition, the Commission will give due regard to the following factors:

(*i*) creation of barriers to new entrants in the market;
(*ii*) driving existing competitors out of the market;
(*iii*) foreclosure of competition by hindering entry into the market;
(*iv*) accrual of benefits to consumers;
(*v*) improvements in production or distribution of goods or provision of services; or
(*vi*) promotion of technical, scientific and economic development by means of production of goods or provision of services.

To inquire whether the enterprise enjoys *dominant position*, the Commission shall give due regard to the following :

(*i*) market share of the enterprise;
(*ii*) size and resources of the enterprise;
(*iii*) size and importance of the competitors;
(*iv*) economic power of the enterprise including commercial advantage over competitors;
(*v*) vertical integration of the enterprises or sale or service network of such enterprises;
(*vi*) dependence of consumers on the enterprise;
(*vii*) monopoly or dominant position whether acquired as a result of any statute or by virtue of being a government company or a public sector undertaking or otherwise;
(*viii*) entry barriers;
(*ix*) countervailing buying power;
(*x*) market structure and size of the market;
(*xi*) social obligations and social cost;
(*xii*) relative advantage, by way of the contribution of economic development, by the enterprise enjoying a dominant position having or likely to have appreciable effect on competition.

While determining 'relevant market', the Commission shall give due regard to the "relevant geographic market" and "relevant product market".

7. The Competition Commission may institute an inquiry on: (a) the receipt of a complaint, (b) on a reference by the Central Government or a State Government or a statutory authority and (c) depending upon its own knowledge or information.

8. In case of matters referred to or initiated upon its own information by the Commission, if it finds that there

exists a *prima facie* case, it shall order an investigation into the case.

9. The Commission may constitute one or more benches to be called "Mergers Benches" to exclusively deal with cases referred to it.

10. The Commission may pass all or any of the following orders after inquiry:

(*a*) to discontinue an impugned agreement or to discontinue abuse of dominant position;

(*b*) to impose such penalty, as it may deem fit, which shall not be more than 10 per cent of the average turnover for the last three preceding years, on enterprises which are parties to such agreements or abuse;

(*c*) In case of a cartel, a penalty equivalent to three times of the amount of profits made out of such agreements by the cartel, 10 per cent of the average turnover of cartel for the last preceding three financial years, whichever is higher;

(*d*) To award compensation to affected parties.

11. The Commission may order direct division of an enterprise enjoying dominant position to ensure that such enterprise does not abuse its dominant position.

12. If the Commission does not pass orders or issue directions on a case within 90 days from the initiation of an inquiry, the combination shall be deemed to have been approved by the Commission.

13. Even in case of agreement entered into outside India, the Commission shall have the power to inquire into it if such agreement has or is likely to have an appreciable adverse effect on competition in the relevant market in India.

14. The Commission shall not be bound by the procedure laid down by the Code of Civil Procedure, 1908, but shall be guided by the principles of natural justice and thus have the power to lay down its own procedure.

15. Every order passed by the Commission shall be enforced by the Commission in the same manner as a decree or order made by a High Court or a principal civil court.

16. If any person contravenes, without any reasonable ground, any order of the Commission or fails to pay the penalty imposed under this Act, he shall be liable to be detained in civil prison for a term which may extend to one year and shall also be liable to a penalty not exceeding ₹ 10 lakhs.

17. If any person, being a party to a combination makes a false statement, he shall be liable to a penalty which shall not be less than ₹ 50 lakhs, but which may extend to ₹ 1 crore.

CCI and its Relation with Central Government

18. The opinion of the Commission on a reference made by the Central Government shall not be binding on the Central Government in formulating competition policy.

19. The Central Government may, by notification and for reasons to be specified therein, supersede the Commission for such period, not exceeding six months.

As a consequence of the passing of the Competition Act (2002), the Monopolies and Restrictive Trade Practices Act, 1969, stands repealed and the Monopolies and Restrictive Trade Practices Commission stands dissolved.

Assessment of the Competition Act (2002)

A close perusal of the law reveals that there is merely a change of nomenclature. Instead of Monopolies and Restrictive Trade Practices, there is substitution of "dominant position" and "appreciable adverse effect on competition". Whereas the MRTP Act precisely defined the Monopolies and Restrictive Trade Practices, the Competition Law has listed factors which result in dominant position, but left the determination of extent of dominant position extremely vague. Whether more than 75 per cent control of the market share as conceived by MRTP Commission would be considered a dominant position or a relatively small share (say 60 per cent) will be considered monopolistic has been left totally undefined. This may result in different benches of the Competition Commission to set different norms. Such an eventuality will create hurdles in the working of the CCI.

Moreover, tie-in arrangement, exclusive dealing contracts, resale price maintenance, creating barriers to new entrants, foreclosure, creating situations of monopoly, duopoly or oligopoly were all part of the lexicon of the MRTP. One wonders at the need to scrap an established institution like MRTP Commission and replace it by another under a new name, the Competition Commission of India with precisely same functions, duties and powers.

Competition (Amendment) Act 2007

The Parliament passed the Competition (Amendment) Bill in September 2006. The Competition Act (2007) has laid down strict norms for disclosure of mergers and acquisition (M & As) making it mandatory for companies to inform the Competition Commission of India (CCI) about the deal within 30 days or face penalties.

The threshold limits prescribed for M & As are as under :

1. The merged entity will inform CCI if its turnover is above Rs. 3,000 crores or has assets of above ₹ 1,000 crores.

2. In case a foreign company buys a domestic company, the turnover and asset threshold limits of the merged company are fixed at $ 1.5 billion and $ 500 million respectively.

3. If the merged entity's turnover is less than the threshold limit, it will still have to inform the Commission if the group turnover is above $ 6 billion or has an asset

value of $ 2 billion.

The purpose of the Act is to prevent cartelisation, predatory pricing and deliberate attempts to prevent market access by a group of companies. In case any agreement between companies results in a cartel, they may have to pay hefty penalities up to thrice the value of profits earned.

MRTPC would continue to deal with pending cases even two years after the passage of the CCI Act and would be dissolved thereafter, thus transferring all powers of the MRTPC to CCI.

The CCI will be an expert body, which would function as a market regulator to prevent and regulate anti-competitive practices in the country. It will also have advisory and advicacy function in its role as a regulator.

According to the Act, a three member quasi judicial Competition Appellate Tribunal (CAT) would be established that would be headed by a judge of the Supreme Court or the chief Justice of a High Court. For non-compliance with the provisions of the CCI Act and with the orders of the Commission, the Act empowers the CCI to impose a penalty of up to ₹ 25 crores or up to three-year imprisonment or both in cases of continued contravention of its orders.

According to survey made by the United Nations Industrial Development Organization (UNIDO), India was ranked at 41st position in competitiveness among 100 countries, even lower than that of Thailand, Mexico and Malaysia.

World Economic Forum (WEF) for 2008 puts India at the 48th rank among 131 countries.

In a recently brought out report, *Doing Business in 2007, How to Reform*, he placed India at 134th rank among 175 countries in the matter of number of days it took to get official clearances to start business in India.

Transparency International (TI) has been preparing Corruption Perception Index (CPI) places India at rank 72 in 2007 among 180 countries. Corruption, it may be noted, is a big hindrance in promotion competition.

All the Surveys given above indicate that the competitive spirit, which was unleashed after the introduction of economic reforms, did not gather enough strength so as curb monopolistic tendencies in the Indian market.

However, a word of caution may be put here. Market forces, however, cannot be allowed to have an unbridled sway as to undermine the economic and social welfare of the people. This underlines the fact that promoting sustaining competition is not an end itself but only a means to achieve the ultimate objective of protecting the interests of consumers and enabling entrepreneurs to operate freely in their trade and business but they must abide by the cardinal principles of legitimacy, economic and social justice so that the weaker sections of the society benefit.

The Act appears to have been made with the strong determination to prevent cartelisation or other monopolistic practices. Its effective implementation in the coming years would determine the extent to which it succeeds in achieving the objectives laid down.

4. GROWTH AND INEQUALITY

ESCAP (Economic Commission for Asia and the Pacific) in its annual report for 2006 has clearly stated: "Increasing inequality in tandem with high growth has been a point of growing concern in the Asia and Pacific Region. Though perfect equality is probably unattainable, inequality becomes a problem when differences in income across sections of society are deemed to be excessive, with the definition of excessive varying across countries and societies or become self-perpetuating". Referring to China and India, ESCAP report mentions: "In some countries, such as China, India and Thailand, the income gap has a significant urban-rural bias and these income differences have increased over the 1990s." Consequently, the phenomenon observed in the Indian economy is: It has started growing at a fast rate of 7 per cent per annum, the rich are reaping the benefits of development. The poor are disillusioned since the benefits do not percolate to raise their level of living.

The common argument is: Let us increase the rate of growth of the economy to 8-10 per cent. Ultimately, all will benefit. So don't worry about the poor. But the hard reality is that salaries are growing at the rate of 15 per cent per year in the private sector in India – the highest in the world. Fresh IIM graduates are getting Rs 5,000 per day for 365 days in the year. But millions of poor rural labourers are paid ₹ 60 a day, that too only for 100 days in a year under the Employment Guarantee programme. Such glaring inequalities are unethical and their continuance is dangerous for social stability.

In this regard, the corporate sector is particularly guilty. It would be of interest to have a look at the annual remuneration of the Managing Directors (MD) of several companies during 2009-10.

The corporate heads are appropriating heavy amounts in the form of salaries and commissions. Top 10 CEOs, several of whom are promoters of the companies received a heavy amount.

Top 10 CEOs, drawing huge salaries take home ₹ 365.77 crores (Table 2). When the CEOs draw such hefty amounts as salaries and commissions, they are also obliged to pay heavy amounts to professionals employed in their companies at lower levels.

This high salary syndrome in the private sector and the multinationals operating in India has resulted in raising demands by the professionals in the public sector for higher pay and perks. In case the public sector does not bridge the gap, there is a flight of professionals from the public sector to the private sector. A classic example is the reported salary differential between the salary of CMD of State Bank of India and the MD of ICICI Bank — Rs 6 lakhs vis-a-vis Rs 150 lakhs per annum in year 2004-05.

Table 2: Annual Remuneration in the Corporate Sector (2010-11)

Name	*Salary (Rs in Cr)*	*Company/Designation*
1. Naveen Jindal	67.21	CMD, Jindal Steel Power
2. Kalanidhi Maran	64.40	CMD, Sun Network
3. Kavery Maran	64.40	JMD, Sun Network
4. Sunil Mittal	27.51	Bharti Airtel
5. Brijmohan LalMunjal	26.75	Hero Moto Corp
6. Pawan Munjal	26.47	MD & CEO, Hero MotoCrorp
7. BG Raghupathy	25.92	CMD, BGR Energy Systems
8. Pankaj R Patel	25.00	CMD, Cadila Health care
9. Sajjan Jindal	20.80	Vice-CMD, JSW Steel
10. Debu Bhattacharya	17.31	MD, Hindalco Industries

Source : Rediff.com>>Business, Nov. 2011.

The prevailing situation has its dangers for the social stability of the society. The expansion of the Naxal movement is a sign of revolt by the rural people and the tribals in the 'Shining India' with a high rate of growth. Had growth been inclusive, it would have prevented the spread of Naxal movement. The poor look upon themselves as the victims of development, because they are being ousted from their land and dwelling places in the name of building dams. The tribals are victims of a policy which give contracts to big forest contractors, and thus deprives the tribals of their ancestral right on forests as a means of livelihood. It is, therefore, necessary that the state must turn the poor, especially the rural poor and tribals, *from victims of development to partners of development*. This can be done only by a programme of empowering the rural poor and tribals in the development projects and not excluding them.

5. INDIA AS AN ECONOMIC SUPERPOWER

During the last decade, a perception is growing in the world that China and India are becoming two major economic superpowers in the world. Consequently, business firms, more especially multinational corporations, are moving towards India and China so as to take advantage of the prevalent and fast growing market in these two countries. Accompanied with this phenomenon is rise of business tycoons in India. According to *Forbes List 2008*, India added to its list 16 new billionaires taking its total

Table 3: GNI and Per Capita of GNI of Select Countries in 2010

Country	*Population (Million)*	*GNI*		*GNI PPP*	
		$ Billion	*$ Per Capita*	*$ Billion*	*$ Per Capita*
1. USA	309.3	14,635	47,340	14635	47,310
2. China	1,338.0	5,957	4,270	10,221	7,640
3. Japan	127.4	5,601	41,850	4,411	34,610
4. *India*	1170.0	1,712	1,270	4,159	3,400
5. Germany	81.8	3,341	43,070	3,115	38,100
6. UK	62.2	2,271	38,200	2,230	35,840
7. France	64.9	2,606	42,370	2,254	34,750
8. Italy	60.4	2,051	35,700	1,923	31,810
9. Russian Federation	141.7	1,431	9,900	2,726	19,240
10. Spain	46.07	1,388	31,750	1,465	31,800
11. Korean Republic	48.8	1,014	19,890	1,422	29,110
12. Canada	34.1	1,549	43,250	1,309	38,370
13. Mexico	113.4	1,024	8,930	1,632	14,400

Source: World Bank , *World Development Indicators (2011).*

Table 4: Growth Rates of GDP in Selected Economies

Country	*Average Annual GDP Growth*			*Average Annual Population Rate (%)*		
	*1990-2000**	*2000-05+*	*2010*	*1990-04**	*2000-05+*	*2010*
1. USA	3.5	2.8	3.0	1.2	1.0	0.8
2. China	10.6	9.6	10.40	0.9	0.6	0.51
3. Japan	1.3	1.3	4.0	0.2	0.2	–0.08
4. *India*	6.0	6.9	8.80	1.7	1.5	1.38
5. Germany	1.8	0.7	3.69	0.3	0.1	–0.25
6. UK	2.7	2.3	2.09	0.3	0.2	0.67
7. France	2.0	1.5	1.4	0.4	0.6	0.54
8. Italy	1.6	0.7	1.53	0.1	-0.1	0.48
9. Russian Fed.	-4.7	6.2	4.03	-0.2	-0.4	–0.07
10. Spain	2.6	3.1	–0.14	0.7	1.4	0.35
11. Korean Republic	5.8	4.6	6.16	0.8	0.5	0.26
12. Canada	3.1	2.6	3.21	1.0	1.0	1.16
13. Mexico	3.1	1.9	5.52	1.6	1.0	1.23

Source: * World Bank, *World Development Indicators* (2006) and *World Development Report (2011).*

to 53. The combined net worth of these 53 billionaires was of the order of $ 335 billion – equal to one-third of India's GDP. In 2010, number of bilionaires was 49, with total net worth of billion. But more striking feature is that 10 billionaires has total net worth of $ 144.7 billion, which was 65.4 percent of net worth of all 49 billionaires. Simultaneously, there is the growth of the Indian middle class which is, according to a study by the National Council of Applied Economic Research (NCAER), around 28.4 million households by 2009-10. The income range of the middle class has been defined as ₹ 2 lakhs to ₹ 10 lakhs per annum. This implies that by 2009-10, about 153 million persons will be covered in the middle class. Along with this, 3.8 million households comprising a population of 20 million are estimated to be rich i.e. an income level of over ₹ 10 lakhs per annum.

All these developments have created an impression in the world that India is growing as an economic superpower and so the mad rush towards India by big business all over the world.

To understand the situation, it would be worthwhile to examine the Gross National Income on Purchasing Power Parity basis (PPP) of the world's economies with a total GNI (PPP) above $1,000 billion. Table 3 provides information for 13 economies which fall in this range. GNI (PPP) has been used since it provides us an idea about the size of the market in the country.

Although GNI (PPP) per capita of India in 2009 was only $ 3,400, but on account of the large size of its population of the order of 1,170 million, GNI (PPP) was of the order of $ 4,159 billion and thus, India was ranked at No. 4 in the world. USA was ranked at No. 1, followed by China and Japan. But latest figures released by international agencies have taken India to number 3 in terms of GNP (PPP). But even though India was fourth in the world in total GNI, in terms of per capita GNI, USA was 13.9 times that of India, Japan 10.2 times and China 2.25 times that of India.

Table 4 reveals that the Indian economy experienced an average annual growth of GDP the order of 6 per cent during 1990-2000 and it further improved to 6.9 per cent during 2000-05. Along with this, the population growth rate during 2000-05 came down to 1.5 per cent per annum.

Obviously, India can be ranked at No. 2 in GDP growth during 1990-2005, only next to China which experienced a growth rate of a little over 10 per cent in GDP during 1990-2005. GDP growth in India has been further rising and has been reckoned at 9.6 percent during 2006-07 but slightly fell to 7.6 percent in 2009. It is expected to six again to 9 percent in 2010-11. Consequently, India can take pride along with China for being reckoned among the fastest growing economies of the world. With population growth rate declining to 1.5% the per capita GDP growth will also get accelerated and if this trend continues for over the next two decades, the gap between the per capita GDP of India as compared with the high income economies of the world will further narrow down. India has, therefore, to keep up its momentum of GDP growth to rise to the level of 10 per cent so as to level up with the growth rate in China. Thus, the whole question boils down to sustaining this high GDP growth rate during the next two decades.

Table 5 : List of Indian Billionares (2011)

World Rank	*Name*	*Net worth $ Billion*
6	Lakshmi Mittal	31.1
9	Mukesh Ambani	27
36	Azim Premji	16.8
42	Shashi & Ravi Ruia	15.8
56	Savitri Jindal & Family	13.2
81	Gautam Adani	10
97	Kumar Birla	9.2
103	Anil Ambani	8.8
110	Sunil Mittal & Family	8.3
130	Adi Godrej & Family	7.3
130	Kushal Pal Singh	7.3
154	Anil Agarwal	6.4
159	Dilip Shanghvi	6.1
182	Shiv Nadar	5.6
265	Malvinder & Shivinder Singh	4.1
310	Kalanithi Maran	3.5
347	Uday Kotak	3.2
376	Micky Jagtiani	3
393	Subhash Chandra & Family	2.9
440	Pankaj Patel	2.6
440	Indu Jain	2.6
440	G.M.Rao	2.6
512	Cyrus Poonawalla	2.3
540	Rajan Raheja & Family	2.2
564	Desh Bandhu Gupta	2.1
595	N.R. Narayana Murthy & Family	2
595	Gautam Thapar	2
595	Sudhir & Samir Mehta	2
595	Aloke Lohia	2
651	Venugopal Dhoot	1.9
651	Chandru Raheja	1.9
692	Nandan Nilekani & Family	1.8
736	Ajay Kalsi	1.7
782	Rahul Bajaj	1.6
782	Senapathy Gopalakrishnan & Family	1.6
833	Brijmohan Lall Munjal	1.5
833	K. Anji Reddy	1.5
879	Vijay Mallya	1.4
879	Ajay Piramal	1.4
879	Vikas Oberoi	1.4
938	Baba Kalyani	1.3
938	Rama Prasad Goneka	1.3
993	Keshub Mahindra	1.2
993	K Dinesh & Family	1.2
993	Rakesh Jhunjhunwala	1.2
993	Brij Bhushan Singal	1.2
1057	Yusuf Hamied & Family	1.1
1057	S.D. Shibulal & Family	1.1
1057	Bhupendra Kumar Modi	1.1
1057	Mangal Prabhat Lodha	1.1
1140	Ramesh Chandra	1
1140	Anu Aga	1
1140	Ashwin Dani	1
1140	Harindarpal Banga	1
1140	Moftraj Munot	1
Total Net Worth		246.5

Fobes list 2012 released in March, 2012 report 1226 number of billionaires globally. Out of these number of Indian billionaires is 48, with total net worth of $ 194.6 billion. The list is given in table 5A.

Table 5A : List of Indian Billionares (2012)

Rank	*Name*	*Networth $ Billion*	*Source*
19	Mukesh Ambani	22.3	Petrochemicals, Oil & Gas
21	Lakshmi Mittal	20.7	Steel
41	Azim Premji	15.9	Software
80	Savitri Jindal & family	10.9	Steel
113	Sunil Mittal & family	8.1	Telecom
116	Kumar irla	8.0	Commodities
118	Anil Amani	7.8	Diversified
124	Dilip Shanghvi	7.4	Pharmaceuticals
133	Shashi & Ravi Ruia	7.0	Diversified
153	Kushal Pal Singh	6.4	Real Estate
189	Gautam Adani	5.4	Commodities, Infrastructure
205	Shiv Nadar	5.0	Information Technology
270	Uday Kotak	4.1	Anking
290	Micky Jagtiani	3.8	Retail
314	Anil Agarwal	3.5	Mining, Metals
314	Malvinder & Shivinder Singh	3.5	Healthcare
401	rijmohan Lall Munjal	2.9	Motorcycles
401	Cyrus Poonawalla	2.9	Iotech
464	Kalanithi Maran	2.6	Media
521	Adi Godrej & family	2.4	Diversified
521	Jamshyd Godrej	2.4	Diversified
521	Rishad Naoroji	2.4	Diversified
578	Indu Jain	2.2	Media
578	Pankaj Patel	2.2	Pharmaceuticals
601	Desh andhu Gupta	2.1	Pharmaceuticals
601	Ajay Kalsi	2.1	Oil
601	Rajan Raheja & family	2.1	Diversified
683	G. M. Rao	1.9	Infrastructure
719	Rahul ajaj	1.8	Motorcycles
719	Suhash Chandra	1.8	Media
764	N.R. Narayana Murthy & family	1.7	Software
764	Chandru Raheja	1.7	Real Estate
854	Senapathy Gopalakrishnan & family	1.5	Software
854	Vikas Oeroi	1.5	Real Estate
913	Nandan Nilekani & family	1.4	Software
913	Ajay Piramal	1.4	Pharmaceuticals
913	K. Anji Reddy	1.4	Pharmaceuticals
913	Gautam Thapar	1.4	Engineering, Paper
960	Venugopal Dhoot	1.3	Electronics
960	rij hushan Singal	1.3	Steel
1075	enu Gopal angur	1.1	Cement
1075	Ashwin Dani	1.1	Paints
1075	Yusuf Hamied	1.1	Pharmceuticals
1075	Rakesh Jhunjhunwala	1.1	Investments
1153	K. Dinesh & family	1.0	Software
1153	Mangal Prahat Lodha	1.0	Real Estate
1153	Vijay Mallya	1.0	Liquor
1153	hupendra Kumar Modi	1.0	Telecom
Total Net Worth		194.6	

Source :

Rise of Big Business Tycoons in India

In the sixties and the seventies, there was a big debate in India regarding the growth of monopolies and all this led to the passage of the Monopolies and Restrictive Trade Practices MRTP Act (1970). All proposals of new investment or expansion of investment were referred to the MRTP Commission for clearance. But the Industrial Policy of 1991 dismantled all these restrictions and freed big business to undertake heavy investments. In the era of globalization, though there does not seem to be any significant decline in the poverty in developing economies, wealth of a few has definitely increased.

Post Globalisation period saw the emergence of a large number of billionaires in India. Forbes list of billionaires (2008) included 53 billionaires from India with a total net worth of $334.6 billion (₹ 14,59,000 crores). According to Forbes List 2008, there were 1125 billionaires (with total net worth $4400 billions) in the whole world out of which 53 Indian billionaires had a share of 7.6 percent in the total net worth of the global billionaires.

According to Forbes List (2009), India had 24 Billionaires with total net worth of 106.8 billionaires of Forbes list 2008. It may be noted that the net worth of 36 Indian billionaires in Forbes List (2007) was $191 billion. Thus there was a spectacular increase by 75 percent in the net worth of Indian billionaires in 2008. But there was 68 percent decline in the net worth of Indian billionaires in 2009. As a result of 29 Indian billionaires dropping off from the list of Billionaires, China for the first time has more billionaires than India. But Indian survivors, whose net worth 106.8 billions were lot richer than their Chinese counterparts that were worth 44 billions only.

According to Forbes list 2012, released in March 2012 total numbers of billionaires have increased to 1226. Number of Indian billionaires has fallen to 48 in 2012 as compared to 55 in 2011. Number of billionaires from China has increased to 133 (including billionaires of Hong Kong). Another notable point in the Forbes list 2012 is that 267 billionaires are from Asia only, indicating that economic condition of emerging economies is fast improving. Where as previously more than half of billionaires used to come from USA, Forbes list 2012 has only 425 (34.7 pecent) billionaires from USA. Number of European billionaires has also come down in percentage terms and this year hardly 25 per cent billionaires come from Europe.

We find many billionaires from India in the Forbes List 2010 who are self made. Some of them are Sunil Mittal of Airtel, Ramesh Chandra of UNITECH, Gautam Adani of Mundra, Grandhi Rao, son of a commodity trader and G.V. Krishna Reddy, son of a farmer.

The new crop of billionaires which has come up after 1990 has surpassed several big names in the list of big business houses like Birlas, Singhania, Bajaj, Mafatlal, Mahindra and Mahindra, to quote only a few, who were considered industrial giants during 1970s and 1980s. From among the big names in 1970s, the only ones which could find a place in the Forbes list (2010) are Kumar Mangalam Birla, Indu Jain (Bennet Coleman & Co.), Adi Godrej, Vijay Mallya, Rahul Bajaj and 1980s witnessed the rise of Dhirubhai Ambani, Shashi & Ravi Ruia and Baba Kalyani.

Quite a large number of billionaires in the Forbes List blossomed after the introduction of economic reforms in 1991. Besides the software giants, they were Subash Chandra of Zee, Sunil Mittal of Bharti Group, Uday Kotak of Kotak Mahindra, Kalanithi Maran of Sun Media group and Savitri Jindal of Jindal steel. There was a meteoric rise in the case of many families.

The Billionaire Club spearheads the corporate sector in India. Out of them, the top 10 account for a total net worth of $ 114.5 billion as per Forbes List 2012. This accounted for 59 per cent of total net worth of all the 48 Indian billionaires in 2012. This indicates the growth of monopoly capital in India in which top 10 billionaires were in possession of nearly 59 percent wealth of all the billionaires. Rise of Indian business may give a feeling of proud but at the same time it also indicates rising inequalities in the country.

Myth and Reality of India as an Economic Superpower

An economic superpower may have a hundred billionaires, but the basic question that stares in the face of the country's polity and economy is: Do the billionaires impact on the state of unemployment, poverty, deprivation, hunger in the country? If the level of the masses does not improve, but only a very small section of the country's population appropriates economic resources in their favour, then the country cannot claim to be a real economic superpower, though it may parade its handful of billionaires as symbols of this great power. It would be worthwhile to examine the reality of the status of economic superpower in India.

First of all, consider the employment situation in the country. Total employment in the organized sector declined from 273.7 lakhs in 1994 to 287.1 lakhs in 2011, indicating an annual average negative growth rate of 0.25 per cent. But classifying it further into public sector and private sector reveals that the rate of growth of employment in the private sector moved from 0.44% during 1983-94 to 1.97 % during 1994-2010. Though organised private sector share in employment has improved, large business houses are not able to generate employment which is higher than the increase in labour force. The contribution of the billionaires in this regard is, therefore, disappointing.

Table 6 : Employment in Organized Sector in India

Lakh Persons as on 31st March

	1994	*2010*
Public Sector	194.45	178.6
Private Sector	79.30	108.5
Total	273.75	287.1
Growth Rate of Employment		
	1993-94	**1994-2010**
Public Sector	1.53	-0.55
Private Sector	0.44	1.97
Total	1.20	+0.25

Source: Government of India, *Economic Survey (2006-07).*

According to National Sample Survey data, both the usual status and current daily status unemployment have increased during 1999-00 and 2004-05, the increase is sharper in the case of females than of males. CDs unemployment in 2004-05 has increased to 8.3 per cent in 2004-05.

Secondly, if we consider the poverty ratio, then on the basis of uniform recall period, poverty ratio declined from 36% in 1993-94 to 27.5% in 2004-05. In absolute terms, there were 300 million persons who live below the poverty line in 2004-05. Among them, the very poor (those are below 75% of the poverty line) were 115 million, the obvious conclusion is: the extent of decline in poverty ratio in the post-reform period was only 0.70 per cent annum (1994-2004) as against 0.85 per cent in the pre-reform period (1983-94). The slowdown in poverty decline is due to a significant increase of inequality in the post-reform period. Thus, there was an enclave type development in post-reform period, which pushed growth rate further, but failed to percolate its effects among the poor.

After the adoption of methodology suggested by Tendulkar Committee, poverty ratio was restimated at 37.2 percent (2004-05). As per the press release issued by planning commision , poverty ratio has been shown to have declined by 7.3 percentage points from 37.2 percent in 2004-05 to 29.8 percent in 2009-10. However the basis for determining poverty line has been subject to wide critism.

Thirdly, National Family Health Survey (2005-06) reveals certain startling facts:

1. ***Anaemia among children and adults :*** 79.2% children in the age 6-35 months were found to be anaemic and this percentage was higher for rural areas at 81.2 percent. Besides this, 56% of married women in the age group 15-49 years were found to be anaemic. Among married men in the age group 15-49 years, 24.3% were found to be anaemic.
2. Percentage of children who are stunted (too short for age) was 38, and for those who were wasted (too thin for height) was 19. Similarly, under-weight children under age 3 were as high as 46 per cent. This does not reflect well about the health of the nation.
3. A look at the availability of basic facilities reveals that only 68 per cent households had electricity – 93% in urban areas and merely 56 per cent in rural areas. Piped drinking water was available to only 42% of total population – 71% in urban and only 28% in ruralareas. Toilet facility was available only to 45% of the total population – 83% in urban and 26% in rural areas.

Table 7: Percentage of Households with basic Amenities (2005-06)

	Total	*Rural*	*Urban*
Have Electricity	67.9	93.1	55.7
Use piped drinking water	42.0	71.0	27.9
Have access to toilet facility	44.5	83.1	25.9
Live in a pucca house	41.4	74.1	25.5

Source: National Family Health Survey (2005-06)

A pucca house was available to only 41% of the population – 74% in urban and 26% in rural areas. The upshot of the analysis is that Bharat (Rural India) suffers grievously in the lack of civic facilities and only 25% rural population has access to piped drinking water, toilet facility and a pucca house. The situation is better in India (urban areas) where nearly 3/4th of the population has access to basic civic amenities.

4. In 2004, about 20% of the population was undernourished.
5. Low birth rate babies (weight less than 2.5 kg. at the time of birth) were of the order of 30%.
6. India ranks at No. 126 on the basis of human development index (HDI) in 2004. Its HDI was 0.611 – among the medium HDI countries in the range 0.5 – 0.8.

Thus, we have a 'shining India' with 53 billionaires, a booming rich and middle class of the order of nearly 150 million which sucks away the major benefits of high growth rate. On the other hand, there is a 'suffering India' living more especially in rural areas and slums in urban areas which has a population of over 900 million. The myth of being an economic superpower explodes when we look at the living conditions of 900 million. Unless the condition of the vast majority of Indian population improves, it would be downright improper to consider India as a real economic superpower.

6. GROWTH OF THE INDIAN MIDDLE CLASS

Another development of great significance is the growth of the Indian Middle Class. A common perception was the Indian middle class was of the order of 200-250 million. During the last five decades, Indian middle class has been growing in numbers as a reflection of the process of development. But no attempt was seriously made to

estimates its size and economic strength. The existence of a huge middle class had a very strong impact on increasing the demand for consumer durables viz., refrigerators, washing machines, coolers, air conditioners, mopeds, scooters, motor cycles, cars etc. This prompted the industrialists to make a systematic study of the size of the middle class. National Council of Applied Economic Research (NCAER) made a study entitled "*The Great Indian Middle Class*." Since the middle class has, of course, been defined in many ways, mainly cultural, sometimes in terms of education or lifestyles, most of these variables were not quantifiable. NCAER has made an attempt to study the numbers falling in various income categories and then defined the middle class in terms of annual income ranging between a Rs 2-10 lakhs. Its publication "*The Great Indian Middle Class*" has made the following findings:

1. The Middle Class, defined as households earning Rs 2-10 lakhs annually forms increased over 15 per cent per annum. Between 1995-96 and 2001-02, the total middle class households increased forms 4.5 million to 10.7 million – an increase by 138 per cent. By 2009-10, they are expected to grow to 28.4 million accounting for a total population of 153 million.

2. At the bottom of the middle class tier is the category defined as 'seekers' who have just moved into the middle class bracket with income Rs 2-5 lakhs. These people have grown by a little over 15 % annually between 1995-96 and 2001-02. This group of nearly 9 million households are the primary buyers of most durable goods and services, such as entry-level cars, colour television and refrigerators. However, their AC penetration is low (13% only).

3. There is the category referred to as 'strivers' numbering 1.7 million households with an annual income Rs 5-10 lakhs. They have a distinct profile as compared with their lesser cousins. They are growing at the fast rate of 18 per cent annually. A large majority of them (50 per cent of such households own better quality cars, larger apartments and better quality refrigerators, washing machines and ACs).

4. Rich class with annual income over Rs 10 lakhs accounted for only 0.8 million households in 2001-02, but is expected to rise to 3.8 million by 2009-10, indicating an annual increase of 21.4 per cent. This class buys high class durable goods – such as luxury cars, big bungalows, totally airconditioned residences and offices as well as guzzling soft drinks and costly liquors.

5. As a result of economic prosperity resulting from GDP growth of the order of 6.1 per cent per annum and the distribution of income in favour of the middle class and rich households, the demographic pattern is undergoing a rapid change. Since the economy has grown during 2001-02 and 2005-06 at the rate of over 7 per cent of GDP per annum, this process is being fuelled further. Consequently, the size of the middle class will rapidly increase from 10.7 million in 2001-02 to 28.4 million households by 2009-10 – average growth rate 12.9 per cent.

6. Urban households account for nearly two-third of the total households and rural households are a poor one-third. Obviously, growth of middle class is more or less an urban phenomenon. Table 9 reveals that the share of the rural households among the deprived will increase from about 82 per cent in 2001-02 to 84 per cent in 2009-10; similarly, the share of the 'Aspirers' will increase in rural areas from about 48 per cent in 2001-02 to 61 per cent in 2009-10. This implies that the pattern of growth developed after the reform process has introduced is biased towards urban areas.

Table 9 : Size of Different Income Classes in Rural and Urban Areas

Class	*Income Range*	*Share of Urban Households %*		*Share of Rural Households %*	
		2001-02	2009-10	2001-02	2009-10
Deprived	Below Rs 90,000	18.2	15.8	81.8	84.2
Aspirers	Rs 90,000-Rs 2,00,000	41.5	38.8	48.5	61.2
Middle Class	Rs 2,00,000 – Rs 10,00,000	64.8	66.6	35.2	33.4
Rich	Over Rs 10 lakhs	77.1	77.8	22.9	22.2
Total		28.4	31.2	71.6	68.8

Source: NCAER (2006), *The Great Indian Middle Class.*

7. The distribution of households among various categories shows that the lowest income class (deprived) is expected to fall from 72 % to 52 % — a dramatic shift of nearly 20 per cent. As against it, the aspirers tend to show a rise from about 6 % to 13 % during 2001-02 and 2009-10. Obviously, the growth process is fiercely promoting the middle class and the rich.

8. Metropolitan towns like Mumbai and Delhi witnessed a fast growth in the Indian middle class. For instance, the middle class in Delhi grew from 0.26 million in 1995-96 to 1.21 million in 2001-02 i.e. nearly a five times jump in a span of 6 years. There was a boom in small trading centres or B-Class cities like Nagpur, Vadodara, Ahmedabad, Surat and Vijayawada also.

To conclude: It may be mentioned that the growth process is leading to a rapid increase of the Indian middle class, confined more to the cities and metros. In that sense, it does not adequately promote inclusive growth, but it leads to greater concentration of income in the urban areas *vis-à-vis* rural areas.

7. INDIAN MNCs: MERGERS AND ACQUISITIONS

Business confidence among bigger Indian companies has been growing. Several of them have grown so strong that they have acquired several companies in developed countries and acquired the status of Multi-

national Corporations. The phenomenon became so powerful that *The Economist* described it as an "Indian invasion." A few mergers and acquisitions which evinced worldwide attention may be mentioned in this connection.

Lakshmi Mittal has become the biggest steel producer in the world through a series of takeovers and has his eye on Arcelor Europe's largest steel company.

Tata Steel has emerged as the world's fifth-largest steel company after acquiring Corus for $12 billion.

Aditya Birla Group of Hindalco has acquired an important place among global aluminum giants, taking over Novelis for $6 billion.

Anil Aggarwal of Vedanta/Sterlite has taken over Konkola, Zambia's biggest coppermine from Anglo American.

Jindal Steel and Power Ltd. (JSPL) won a contract to mine Bolivia's huge El Mutun Iron ore deposit, and convert part of it into steel.

Dr. Reddy's Labs and Suzlon Energy are some other important companies which have shelled out over a billion dollars in taking over foreign companies.

Bharat Forge has become the largest producer of forgings in the world after having taken over six plants abroad.

Tata Group has acquired stake in a number of ventures abroad totalling upto 19.6 billion by March 2008.

Not only that, some of the major targets of Indian companies are:

Hindujas intend to buy Telecom Italia for $ 12 billion, Reliance Industries Limited want to take over GE Plastics for $10 billion and Scottish Woods Group for $ 4 billion. Appollo has a target of acquiring UK Hospital for $ 2.34 billion. OVL has set its eyes on Sakhalin (Russia) for $ 8 billion.

Recently in May 2005, Vijay Mallya of UB (United Breweries) Group has acquired 100 per cent equity in Whyte and Mackay for £795 million (₹ 4,783 crores).

Thus, there is the rise of Indian MNCs. They are acquiring high level of confidence to bid major companies over the globe. A number of other bids are emerging. As a consequence of globalization, Indian MNCs are spreading over the globe and sharing economic power in the world. This implies that there is an outflow of Indian capital to various parts of the world. It adds to national pride when Indians acquisitions are from Britain , the former colonial master or from USA, the world's biggest capitalist country.

Table 10: Some Major Overseas forays by the Tata Group

Year	*Tata Company*	*Acquired Company*	*Country*	*Value (in $ million)*
2000	Tata Tea	Tetley	UK	407
2004	Tata Motors	Daewoo Commercial	S. Korea	102
2005	Tata Steel	Natsteel	Singapore	285
2005	VSNL	Teleglobe	Canada	239
2006	Tata Steel	Millenniem Steel	Thailand	404
2006	Tata Tea	Energy Brands Inc	US	677
2007	Tata Steel	Corus Steel	UK	12,100
2007	Tata Power	PT Bumi Resources Tbk	Indonessia	1,100
2008	Tata Chemicals	General Chemical Industrial Products (GCIP)	US	1,005
2008	Tata Motors	Jaguar Land Rover from Ford Motor Co.	US	2,300

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CHAPTER

27

PRICES, PRICE POLICY AND ECONOMIC GROWTH

"The origin of inflation is often to be found in the panicky nervousness of unstable governments in politically unsettled communities. Given political stability there is no reason why India should not be able to carry out her future plans without generating serious inflationary pressure on the price level."

—Bhabatosh Datta

1. PRICE MOVEMENT SINCE INDEPENDENCE

A proper study of price movements and the value of the rupee since 1950-51 requires the existence of wholesale price index (WPI) of all commodities with 1950-51 as the base year. The Government of India started with such a price index. Unfortunately, the Government gave up the series in the middle of the sixties and started a new series with 1960-61 as the base year. In fact, in its anxiety to prevent people from making a real comparison of the continually rising price level and rapidly declining purchasing power of the rupee since 1950-51, the Government has been changing the base year every decade--from 1950-51 to 1960-61, later to 1981-82 and finally to 1993-94. The usual plea taken by the Government is that the new series has a considerably larger coverage of items, grades and markets and that it is also based on a larger number of quotations. Whatever be the reasons, with the change in the base year every decade, we are unable to make any valid and broad comparison of price movements since economic planning was introduced in 1950-51.

Price situation during 1951-71

One of the declared objectives of the First Plan was to *combat inflationary pressures*. Aided by bumper crops the First Plan largely succeeded in achieving this objective. At the end of the First Plan period, the general price index number stood at 99 (with 1952-53 = 100) but the index number of food articles had declined to :

Food articles	: 95
Cereals	: 88
Pulses	: 77

Accordingly, during the First Plan the price situation was very favourable and the common man was happy.

The success of the First Plan and the favourable movement of prices encouraged the Government of India to launch more elaborate plans and undertake a greater degree of deficit financing. Throughout the Second Plan period, there was a gradual and steady rise in prices; the price level rose by 20 per cent by 1964-65.

The price position during the Third Five-Year Plan deteriorated badly. The Chinese invasion of India towards

the end of 1962, the Indo-Pakistan conflict in 1965 and the consequent increase in defence expenditure and above all the serious famine conditions of 1965-66 were responsible for rapid rise in prices. Demestic Production of cereals and pulses declined in 1965-66 to 72 million tonnes as against the target of 100 million tonnes. The price position became really difficult because of extensive hoarding and blackmarketing in foodgrains and other essential goods. Between 1961 and 1966, the rise in the prices was :

foodstuffs 40 per cent;
cereals over 45 per cent; and
pulses 70 per cent.

The next two years were years of *acute inflation* – galloping inflation – when the index number of wholesale prices shot up by 14 per cent and 11 per cent respectively.

Fortunately the bumper harvest of 1967-68 saved the situation and inflationary rise in prices was completely arrested.

Galloping Inflation during the Seventies

The upward movement of prices during the Fourth Plan (1969-74) was extremely significant. For instance, rise in the price level during the first three years of the Fourth Plan ranged between 7 points to 9 points. In the fourth and the final years, however, the price level rose by 19 points and 47 points respectively.

Large influx of refugees from Bangladesh, heavy expenditure of the Government on the refugees, the widespread failure of Kharif crops in 1972-73 and the complete failure of the Government takeover of wholesale trade in wheat resulted in an unprecedented rise in price level during 1973-74 with all the characteristics of a galloping inflation. This was aggravated by a sudden rise in crude oil prices towards the end of 1973.

The world-wide inflation of this period and the depreciation in the external value of the rupee vis-a-vis many currencies of the world, pushed up the costs of imports and aggravated the domestic price-inflation. Reflecting the cumulative impact of these factors, the wholesale price index (WPI) of all commodities stood at an all-time high of 331 in September 1974 (with 1961-62 = 100).

This degree of inflation created a veritable crisis in the country and an extreme lack of public confidence in the ability of the Government to manage the price situation. The Government under Ms Indira Gandhi – took a number of fiscal and monetary measures to check the rise in prices :

(*a*) as use of compulsory deposit scheme (CDS) to impound part of the income of people,

(*b*) imposition of limits on declaration of dividends and credit squeeze by the RBI.

(c) the use of MISA against smugglers, hoarders and black-marketeers.

All these steps had a favourable impact on the price situation. There was a dramatic change in the price front since September 1974 when the prices started falling, as for example :

TABLE 1. Price trend during 1975-76 (1961-62 = 100)

	WPI of all Commodities
September 1974	331
March 1975	309
March 1976	283

SOURCE : *RBI Bulletin* (Various Issues).

The steep decline in prices during this period was of considerable significance to the economy in that it created an environment of stability and confidence, gave relief to the public that had been squeezed by inflation in the preceding two years, and helped greatly to dampen the psychology of scarcity.

Price Movement during Janata rule (1977-79)

A review of price movement (Table 2) during 1977-78 and 1978-79 brings out the fact that the Janata Party Government was indeed successful in holding the price line and in fact, a positive achievement of the Government's short-term demand and supply management policies.

TABLE 2. Price situation during the Janata rule

		WPI of all commodities 1970-71 = 100
March	1977	183
January	1978	184
January	1979	185

SOURCE : *Economic Survey*, 1981-82 and *RBI Bulletin*, various issues.

Conditions in the beginning of 1979 were highly suitable for continuance of price stability. The buffer stock of foodgrains had crossed over 20 million tonnes. The production of foodgrains was a record 131 million tonnes. Industrial production had recorded a rise of 9.5 points in 1978 over the previous year. Availability of critical industrial raw materials like cement, steel and

other metals and coal, the lack of which restrained industrial growth in the past, was extremely satisfactory. At the same time, the country had over ₹ 5,000 crores worth of foreign exchange reserves which could be used effectively to import goods that were in short supply within the country. Despite all these favourable factors, the stability in price level which was managed with such great effort was upset callously by an inflationary budget introduced in February, 1979 by the then Finance Minister, Mr. Charan Singh. Besides the heavy dose of indirect taxation, the budget provided for an overall deficit of ₹ 1,365 crores--a record again at that time–which exerted pressure on prices. Prices started rising almost the day after the budget was presented in Parliament. In February, 1979 the index number of wholesale prices stood at 185 (1970-71 = 100) but by January, 1980 it had risen to 224 (in a matter of 10 months).

Price Movement during the Eighties

The Congress Party which returned to power in January 1980 regarded inflation as its number one problem. Initially the price situation appeared to be hopeless. The poor agricultural crop of 1979-80 and the consequent adverse effect on industrial production and the hike in oil prices by 130 per cent in 1980 alone were responsible for boosting the price level still further.

For example, the wholesale price index (WPI) rose by 38 points in 1980-81-- i.e. from 218 to 256 an increase of 17 per cent in one year. The Government of India was prompt in taking anti-inflationary measures on both demand and supply side. On the demand side, Government made a series of adjustments in the cash reserve ratio of the commercial banks to check the growth of liquidity in the banking system. The commercial banks were also asked to confine their lending operations within certain limits. In January 1984, the Government announced its decision to curtail public expenditure by 3 to 5 per cent, imposed a temporary ban on fresh Government recruitment, and so on. The objective of these monetary and fiscal measures was to check the increase in the volume of money supply in the country and to check effective demand.

On the supply side, the Government attempted to increase the supply of goods and services through both short-term and long-term measures. Short-term measures included larger releases of wheat, rice, sugar and edible oils through the public distribution system and imports of foodgrains and edible oils to augment domestic availability. For some essential commodities, appropriate price bands were determined and suitable market intervention operations were undertaken to maintain stability of prices. By and large, inflationary situation was under control during the 1980's that is, during the Sixth and the Seventh Plans and the annual rate of inflation ranged around 7 per cent.

Price situation in the Nineties

The price rise since the beginning of 1990 was almost engineered by the Government itself : through deliberately raising administered prices and indirect taxes on commodities and services. The increase in the prices of foodgrains on mere political considerations and the gulf-surcharge which raised the prices of petroleum products to an unprecedented level, heavy fiscal deficit resulting in expansion of money supply were the other factors behind the rise in prices : the average annual rates of inflation were quite high – between 10 per cent and 14 per cent till 1994-95 also known as double digit inflation.

Since then, the inflationary situation came under control with a noticeable decline in the prices of primary food articles as well as manufactured food products. In fact, the average rate of inflation since 1991 is shown below (Table 3)

Table 3: Average Annual Inflation Rate

	All Commodities	*Primary Articles*
1991-1996	10.6	11.3
1996-2005	4.91	4.61
2005-2011	6.12	10.5

Source: *Economic Survey*, 2006-07

The inflation rate has steadily declined from 10.6 (1991 to 1996) percent to 4.91 percent (1996-2005). But we note rise in prices of primary products in recent years, which is a cause of worry.

Recent Rise in Inflationary Pressure

The price situation was stable and largely comfortable during the Tenth Plan (2002-07) period (see Table 4). Later during 11th Five year plan, we find accelaretion in price level. Price rise in primary commodities was relatively higher than general price level.

Table 4: Price Situation Since 2002-03

	Annual Rate of Inflation-all commodities	*Primary commodities*
2002-03	3.4	3.3
2003-04	5.4	4.2
2004-05	6.4	3.7
2005-06	4.4	2.9
2006-07	5.3	6.9
2007-08	4.7	7.7
2008-09	8.4	9.8
2009-10	10.2	22.1
2010-11	7.9	9.9

Source: *Economic Survey*, 2011-12.

It would be clear from Table 4 that the annual rate of inflation (average of 52 weeks) was around 5 per cent during the best part of Tenth Plans (it was around 4 percent during the Ninth Plan too.

2. CAUSES FOR RISE OF PRICES IN INDIA

The Government of India has always been under the impression that

(*a*) Some inflationary rise in prices is inherent in rapid economic development – and GDP growth has been around 7 to 8 percent. Besides, it has formulated and perfected various policies to keep inflation in check.

(*b*) RBI has always given the impression that by using monetary policy of rate of interest and cash reserve ratio, it could control the volume of money supply and volume of demand so as to maintain the annual rate of inflation around 5 percent – such an annual rate of inflation is permissible and manageable in the context of economic growth.

(*c*) Since 1991 the annual rate of increase in wholesale prices has been regularly declining and has been ranging between 4.5 and 6.5 percent.

Accordingly, the UPA government unlike previous governments which had regarded inflation as number one economic problem for decades, came to ignore inflation. Instead, it was more interested in raising the annual rate of growth of GDP to 10 percent by the end of the Eleventh Plan. But the Government was shocked when prices of wage goods or essential commodities of common consumption rose since May 2006. For instance, table 5 shows the annual rate of price rise of some selected commodities:

Table 5 : Rate of rise in prices of selected commodities

	2006-07	2009-10
Foodgrains	12.5	13.2
Wheat	18.7	12.2
Pulses	33.9	22.4
Potatoes	46.6	N.A
Fruits	9.5	N.A

Source : Economic Survey 2011-12

This range of growth of prices has occurred many times in the past and the Government managed to control them. But this time inflation in primary articles are not getting controlled and prices are rising unabated. In the recent months from April 2009 to October 2009, spurt in prices of primary articles was much more disturbing (Table 12).

The spurt in prices in 2006-07 was peculiar because the UPA Government had come to power by promising to promote the welfare of the common man. Inflation in essential commodities directly affects the purchasing power of the common man and the Government was forced to take action to check inflation, even if its macro-economic impact is not large. The policy to control the rise in prices of essential goods should be solely through supply management.

But in its anxiety and avoidable worry, the Government resorted to fiscal and monetary measures. It contracted import of 5 million tonnes of wheat at a time of global shortage and high prices of wheat. It reduced import duties on the import of foodgrains, oils and oilseeds. It stopped the export of pulses and fresh vegetables. At the same time, RBI raised the interest rate and cash reserve ratio to reduce liquidity with banks and prevent them from lending to traders and speculators. The RBI also announced that it would be comfortable only when the annual rate of inflation is in the comfortable zone of 5 percent.

In the mean time, prices of essential goods have stabilized or started declining with fresh crops coming to the market.

Both the Prime Minister and the Finance Minister have shown extreme anxiety and even nervousness. As a matter of fact, India has, over a long period, preferred both demand and supply management to control inflationary rise in prices. In this connection, we may quote Bhalatosh Datta's statement:

"The origin of inflation is often to be found in the panicky nervousness of unstable governments in politically unsettled communities. Given political stability, there is no reason why India should not be able to carry out her future plans without generating serious inflationary pressure in the price level."

To argue that inflationary rise in prices in India in recent years is due to only one set of causes or factors — demand pull, cost push or structural factors is not correct.

In fact, a strong inflationary pressure has been built into the Indian economy for a long time, partly through ever-mounting demand on the one side and inadequately rising supply, on the other. The expanding demand for goods and services is due to the rapid multiplication of our population, rapid economic growth, rising money incomes, expansion in money supply and liquidity in the country and rising volume of black money etc.

Now, supply of goods and services too has been rising in India but the rise in supply has not been proportionate and matching the rise in demand; this is due to monsoon agriculture, use of backward technology, bottlenecks in transport and power and shortages of various inputs. At any given time, therefore, there is demand-supply imbalance; but it is possible through careful management by the Government to bring about demand-supply equilibrium, and thus maintain the stability of price level in he country.

It would be too simplistic to hold any one of the factors as solely responsible for inflationary rise in prices in India in recent years. Actually, all of them collectively have contributed to the price situation in India in recent years.

A. Demand-Pull Factors

(i) *Mounting Government Expenditure*--Government expenditure has been steadily and continuously increasing over the years. The total expenditure of both Central and State Governments including Union Territories had risen from nearly ₹ 740 crores in 1950-51 to ₹ 37,000 crores in 1980-81; and nearly ₹ 20,78,135 crores in 2010-11. The annual average rate of investment by the government under the five year plans has risen from ₹ 1,000 crores in the 1950's to ₹ 30,000 crores in the 1980's and to over ₹ 80,000 crores during the 1990s and ₹ 3,08,550 crores during the Tenth Plan Period (2002-07). Mounting Government expenditure implies a growing public demand for goods and services and consequent rise in prices. Besides, continuous increase in Government expenditure has the effect of putting in large money incomes in the hands of the general public – expenditure of the Government becomes income for the people, thus stoking the fire of inflation.

(ii) *Deficit Financing and increase in money supply*--The Government of India was responsible for adopting deficit financing as a method of financing economic development. While the extent of deficit financing was quite modest in the first three plans, the magnitude of deficit financing rose rapidly from the Fourth Plan onwards. The magnitude of revenue and fiscal deficits of the Central Government (alone) as percentage of GDP is given in Table 6.

TABLE 6 : Fiscal and Revenue Deficit in India since 1981-82

As per cent of GDP

Year	*Revenue deficit*	*Fiscal deficit*
1981-82	0.2	5.4
1990-91	3.3	6.6
2000-01	4.0	5.6
2006-2007	1.9	3.5
2007-2008	1.1	2.7
2008-2009		
2009-2010	5.2	6.4
2010-11 (RE)	3.3	4.4
2011-12(RE)	4.9	5.9
2012-13(BE)	3.4	5.1

SOURCE: *Economic Survey, (2007-2008), Interim Budget 2009-2010.*

Revenue deficit has been rising since 1981-82. Fiscal deficit has however been rising at a much faster rate. The disturbing fact is the method of financing the fiscal deficit, through borrowing from the market at high rates of interest.

Mounting Government expenditure, financed through deficits directly pushes up the money supply in the country and consequently pushing up the public demand for goods and services. Table 7 gives us an idea of the growth of money supply with the public and the aggregate monetary resources with the public. Money supply with the public (M1) consisting of coins and currency notes and demand deposits of the public with commercial banks had gone up from 23,120 crores in 1980-81 to ₹ 17,29,870 crores in 2011-12 (74.8 times).

More important than money supply with the public is the total volume of liquidity with the public i.e., aggregate monetary resources (M3) of the public consisting of M1 plus time deposits with banks had increased from ₹ 55,360 crores in 1980-81 to ₹ 7344070 crores by the year 2011-12 an increase by 132 times in 31 years. This enormous increase in money supply and aggregate monetary resources with the general public has a direct influence on the level of prices. During the five years from 2005-06 to 2011-12, money supply increased by 13.07% per annum.

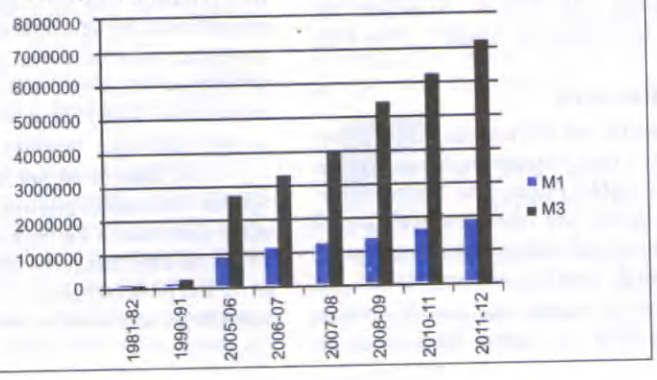
TABLE 7. Money supply and aggregate monetary resources with the public

(₹ crores)

Year	*Money Supply with the public (M_1)*	*Aggregate monetary resources (M_3)*
1981-82	23,120	55,360
1990-91	92,890	2,65,830
2005-2006	8,26,375	27,29,545
2006-07	9,66,089	33,16,093
2007-08	11,50,953	40,06722
2008-09	12,59,707	47,94,812
2009-10	14,39,270	56,02,700
2010-11	16,38,350	65,04,120
2011-12	17,29,870	73,44,070

Source : *RBI Bulletin*, July 2008, June 2012

Figure: Money Supply (M1) and Aggregate Monetary Resources (M3)



An important factor for any spectacular rise in prices in all countries is the ***expansion in money supply***—in fact, without monetary expansion, inflation cannot be sustained at all for any length of time. India is no exception to this. The Government of India has been responsible for the inflationary situation in the country through its policy of deficit financing and the State Governments contributed their share through their persistent financial indiscipline and reckless expenditures. The situation is being brought under control.

(iii) ***Role of Black Money.***—It is well-known that there is a huge accumulation of unaccounted money in the hands of tax evaders, smugglers, builders and corrupt politians and government servants The extent of black money was estimated to be ₹ 6,00,000 crores in 1997-98 and nearly 25,00,000 croes in 2006-07. There is considerable slush money with politicians and Government servants, especially those dealing with licensing, registration, collection of taxes, etc. A large part of the unaccounted money is used in buying and selling of real estate in urban areas, extensive hoarding and black marketing in many essential wage goods, such as cereals, pulses, sugar, edible oils, etc. There is no denying the fact that one of the important factors responsible for inflationary pressures in recent years is the existence and the pernicious role of black money.

(iv) ***Growth of population.*** While discussing the role of demand-pull factors for inflationary rise in prices in India, we should emphasise the pressure of growing population on aggregate demand and on the price level. The Planning Commission realised this fact quite early when it accepted that the major explanation for the continued uptrend of wholesale prices during the Second Plan was "undoubtedly the rising pressure of population and of money incomes." Increase in population by 18 to 19 million every year — it used to be around 14 to 15 million two decades ago — implies continued increase in demand for foodstuffs and other materials. It is the continually rising population which is responsible for the persistent gap between demand and supply, in almost all consumer goods and services, thus exerting continuous pressure on prices. Decline in population growth rate during 2001-2011 to 1.61 percent per annum is a healthy development as against 1.9 per cent during 1991-2001.

B. Cost-Push Factors

If supply of goods and services can be increased to correspond with every increase in demand, price level will tend to be stable. Prices, rose whenever the production of foodgrains and other consumer goods declined or was stagnant and traders took advantage of supply shortage through hoarding and speculation.

(i) ***Fluctuations in output and supply.*** In this connection, we may refer to violent fluctuations in foodgrains output. The production of foodgrains was 89 million tonnes in 1964-65. In the next year (1965-66) production of foodgrains declined sharply to 72 million tonnes, *a fall of 17 million tonnes, indicating 20 per cent decline in a single year.*

Again, after touching a record output of 132 million tonnes in 1978-79, foodgrains production declined to 110 million tonnes in the next year – a decline of 22 million tonnes in just one year.

Another classic example was that in 2001-02, foodgrains production touched the peak level in 213 million tonnes, but in the next year 2002-2003, it sharply declined to 174 million tonnes–decline of 38 million tonnes in one year. In 2004-05, foodgrains production again declined to 198 million tonnes, picking up during 2005-06 and 2006-07 to reach a level of 216 million tonnes. Such fluctuations in the output of foodgrains in certain years were a major factor in the rise of foodgrains prices as well as of general prices.

Apart from fluctuations in agricultural production, market arrivals have also tended to be erratic. In fact, the upward pressure on agricultural prices is also due to large hoarding by big farmers, and hoarding and speculation in foodgrains by traders and blackmarketeers. At one time, hoarding was done only by middlemen but now big farmers have also joined the traders in this vicious game. With increased credit facilities from the co-operative societies and commercial banks, even small farmers have now more holding capacity. They hold on to their stock in anticipation of higher prices.

(ii) ***Taxation, as a factor in rising costs and prices.*** Cost-push factors consist mainly of rise in wages, profit-margins and rise in other costs. In this connection the government and the public sector were responsible, to a large extent, for pushing up the price level in the country. With every budget, the government imposed fresh commodity taxes and gave an opportunity to the trading classes to raise the prices, often more than the levy of the taxes.

(iii) ***Administered prices.*** The public sector enterprises too were continuously raising the prices of their products and services which generally constitute raw materials for other industries. There has been regular upward revision of several administered prices such as those of petrol, diesel, coal, etc., pushing up the price level further. Every rise in administered prices adds fuel to the inflationary potential in the country.

(iv) ***Hike in oil prices and global inflation.*** — Serious inflationary pressures were also created because of the sharp hike in the price of crude oil since September 1973 and the consequent upward revision of the prices of oil and oil-based goods. In the year 1980 alone, there was 130 per cent increase in all fuel prices by the OPEC.

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The gulf-surcharge which raised the prices of petroleum products to an unprecedented level in one single jump was major cause for rise in prices during 1990-91.

In recent years, the price of crude in the international market has been steadily rising due to two major factors (a) rapid economic development of China, India and other countries necessitating rapid increase in demand for oil; and (b) inadequate supply because of curtailment of oil production as a result of political conflicts and uncertainties in major oil producing countries in the Middle East, Africa and South America. Already curde prices range around $ 110 per barrel.

In this type of scenario, it is difficult to control the general price level which, in turn, will affect the development process.

C. Other Factors

The failure of the Government policy on the price front at various times was a serious factor in the inflationary rise in prices. We can cite a few specific instances.

In 1973, the Government nationalised the wholesale trade in wheat along with a threat to introduce a similar measure for rice. This measure completely upset the normal trade in wheat and the price of open market wheat shot up.

The Government failed to procure adequate amount of foodgrains for the public distribution system, nor was it able to import the necessary quantity from foreign countries.

The Government of India has generally followed a highly vacillating and anti-peasant policy in fixing procurement prices. This is equally true in fixing and controlling prices of such essential goods as sugar, vanaspati, soap, cloth, etc. Nor are the price and other controls properly enforced, thus giving great scope for rampant black-marketing to exist, for the benefit of the traders and middlemen.

There are now strong lobbies in India which argue for the dropping of all farm support prices on the one hand, and all sops to farmers in the form of subsidized fertilizers and free or highly subsidized electricity and irrigation water, on the other. This line of thinking is based on the following arguments:

(i) The Indian farmers have come of age and need no more artificial supports for their products and for their inputs.

(ii) Support prices to major cereals and sugar have led to serious distortions in crop pattern in the country. This has resulted in excessive production of major cereals and water-guzzling sugarcane at the expense of minor cereals, pulses and oilseeds.

(iii) Price support programmes and control of agricultural prices have generally worked in favour of middlemen and traders and rarely benefiting urban consumers at the expense of the rural folk.

India is now ushering in a regime of free enterprise and removal of licenses and controls. The case for dismantling support prices, farm subsidies, etc. is becoming strong.

Consequences of Inflation

Apart from uncertainties in production, inflation had caused certain serious imbalances in the Indian economy. Price relationships were badly distorted and production pattern had gone out of line with demand. Besides, capital resources available in the country were often diverted from long-term to short-term uses and production had also shifted from essential and controlled goods to non-essential and free goods.

Adverse effect on production. As a result of inflation, prices of certain important articles of consumption such as textiles had increased to very high levels forcing demand for such goods to decline specially from the poorer sections of the country. With increasing expenditure on essential goods, the expenditure on the other goods had declined. While demand had declined, production too had declined due to shortage of raw materials, transport, power, and so on. Production had also been adversely affected by frequent labour troubles such as strikes and lockouts.

Adverse effects on the distribution of income. The really serious effects of inflation are on the distribution of income in India. Inflation has brought about a mal-distribution of incomes. The producers, traders and speculators have gained enormously through ever-rising profit margins and through illegal gains and windfall profits, due to hoarding, speculation and blackmarketing. On the other hand, people living on past savings, fixed interest and rental incomes and old-age pensioners have been literally ruined due to continuous depreciation in the purchasing power of the rupee. The working classes have suffered badly, particularly the unorganised workers —the vast majority of them working in small establishments--whose money wages have remained almost stationary, despite persistent rise in the price level in the country for the last so many years. Inflation has thus brought about shifts in the distribution of income from the poor and the weak to the rich and the powerful.

3. CONTROL OF INFLATION IN INDIA

The Government of India has worked out a wide range of measures to control inflation and to ensure stable conditions as well as to prevent speculators from taking an undue advantage of the conditions of scarcity.

Since inflationary is often the outcome of shortages in basic goods and services and a rapid growth in money supply and bank credit, various types of measures relating to money supply, pricing and distribution of commodities have been pressed into service.

Demand Management

The price policy since 1973-74 has relied predominantly on fiscal and monetary measures with a view to check the demand of the general public for goods and services.

(i) ***Fiscal measures.*** The Government of India has generally insisted on controlling its own expenditure and keeping in check both its revenue deficit and fiscal deficit – this has been a major instrument of inflation - control. In January 1984, the Government of India announced a package of programmes to curtail public expenditure, to postpone fresh recruitments to Government jobs etc. In practice, however, the Governments--both Central and State Governments--have been spending taxpayers' money recklessly and wastefully. Besides they have always adopted a policy of deficit budgetting, revenue deficit and fiscal deficit. Thus, instead of checking prices, Government policy has actually pushed up prices.

It was only since 1990-91 that the Government of India has appreciated the importance of reducing fiscal deficit. The Budget of July 1991-92 took the first decisive action to limit the fiscal deficit by bringing it down from 8.4 per cent of GDP in 1990-91 to 6.2 per cent in 1991-92 and to 4.9 per cent in 1992-93 and further to 3.1% in 2007-08. This was in compliance with the conditions imposed by IMF. Since then the Government has tried to check and if possible to reduce fiscal deficit.

(ii) ***Monetary measures.*** The monetary policy of RBI consists of extensive use of general and selective credit control measures. The main thrust was to restrict bank-credit against inflation- sensitive goods and to influence the cost and availability of commercial bank credit to industry and trade. The RBI relied heavily on selective credit controls on bank loans against foodgrains, cotton, oil-seeds and oils, sugar and textiles so as to discourage speculative hoarding.

During the Eighties and Nineties, monetary policy was directed essentially to prevent any excessive increase in liquidity and at the same time to ensure that the genuine credit requirements of the industrial sector and the priority sectors were adequately met. The cash reserve ratio (CRR) was raised from 6 to the statutory maximum of 15 per cent gradually. These steps resulted in a large measure, in mopping up excess liquidity in the economy, moderating monetary and credit expansion and consequently helped in bringing down the rate of inflation.

In general, RBI uses its monetary policy to achieve a judicious balance between the growth of production and control of the general price level. RBI uses Bank Rate, CRR. SLR and open market operations to increase bank credit and expansion of business activity (in times of business recession) or to contract bank credit and check business and speculative activity (in periods of inflation).

Supply Management

Supply management is related to the volume of supply and its distribution system. Through increase in domestic supplies, large releases from official stocks of foodgrains and widening and streamlining of the network of public distribution, the Government attempts to prevent an undue increase in the prices of essential commodities. Let us touch on some of the important aspects of this policy.

(a) ***Fixation of Maximum Prices.*** For eliminating the incentive for hoarding and speculative activity in foodgrains, the State Governments are asked to fix the wholesale and retail prices of foodgrains. Further, the Government also fixes minimum procurement prices (MSP) for major crops on the recommendation of the Agricultural Prices Commission (APC). Prices of other important goods like cloth, sugar, vanaspati, etc., were also controlled in the past.

(b) ***The system of dual prices.*** The Government adopted a system of dual prices in the case of goods like sugar, cement, paper, etc. Under this system, the weaker sections of the community are supplied these goods through fair price shops, at controlled prices and the rest are allowed to purchase their requirements at higher prices from the open market. Dual pricing generally failed to serve the purpose; rather, it created confusion in the market and led to erratic price movements. Hence dual pricing of cement was given up and price of cement is allowed to be determined by market forces of demand and supply.

(c) ***Increase in Supplies of Foodgrains.*** The Government used to increase supplies of foodgrains and other essential goods in times of internal shortage through larger imports. This became largely unnecessary except in the case of edible oils. During 1970's and 1980's the Central Government took advantage of the success of green revolution and gradually built up large reserves of foodgrains; at one time, reserves exceeded 45 million tonnes. During the last few years, the Food Corporation of India (FCI) used the open market sale of rice and wheat to check market prices of these essential foodgrains. For example, during 1995-96, one million tonnes of rice and 3.5 million tonnes of wheat were sold by the FCI in the open market to check market prices.

(d) ***Problem of oilseeds and edible oils.*** In the 1990's, steep rise in the prices of edible oils along with those of pulses, tea and sugar were responsible for rise in the general price level. The Government prepared medium

and long-term plans to step up the production of oilseeds in the country. The Government announced higher support prices for groundnut, soyabean and sunflower seed–the last two crops offer the maximum scope for augmenting the supply of edible oil in the country.

In the short period, the Government has been relying on imports of edible oils, at reduced or concessional import duties even though it has found out that imports do not necessarily bring down prices for the domestic consumers.

(e) Public Distribution System (PDS) and consumer protection. An important aspect of the Government's policy is the strengthening of the PDS even covering rural areas. The Government set up a network of fair price shops numbering nearly 4,00,000 which cover a population of over 500 million and which distribute wheat, rice, sugar, imported edible oils (palm oil), kerosene, etc. The public distribution system serves two purposes. Firstly, it helps to hold down prices. Secondly, it provides essential commodities to low income groups now commonly called below poverty line (BPL) families at relatively low prices.

But whenever the PDS is hard pressed due to inadequate supply, prices of essential goods tended to rise.

(f) Other relevant measures— Since 2000-01, the following important measures have been taken by the Government to control inflation :

(i) Adoption of OGL (Open General Licence) import policy for importing sugar, pulses, oils etc.

(ii) Adjustment in trade and tariff policies in recent Central Government budgets to ensure that domestic prices of industrial products remain competitive;

(iii) Substantial reduction in excise duties on a number of items expected to accelerate the pace of industrial revival and raise industrial growth.

Inflation has been by far the most pressing problem for the common man in India for the last many years. Over the years, the Government has experimented with various anti-inflationary policies at different times and has largely succeeded in controlling inflation. Containment of inflation largely depends upon containing fiscal deficit and checking monetary expansion. Besides these, it would be necessary to promote the expansion of agricultural production, and manage the supply of foodgrains and other essential commodities like edible oils and sugar among the poorer sections of the people.

4. PRICE POLICY IN A FAST DEVELOPING ECONOMY

Inflation inherent in economic growth

Economic development since 1951 has consisted of a large, continuous and sustained investment. To finance such investment, the Government had to resort to heavy taxation, extensive borrowing and deficit financing. The first two methods of financing economic development consisted mainly of transferring financial resources from the general public to the Government and were broadly non-inflationary–though indirect taxes definitely could push up prices through fueling cost-push factors. The last method, viz., deficit financing, i.e. financing extra expenditure through borrowing from the Reserve Bank– led to increase in the supply of money with the general public and consequently increase in the demand for goods and services. At the same time, the supply of consumption goods did not increase proportionately with the increase in the demand for them. Accordingly, inflationary pressures were generated in the country, initially at a mild rate but during the Fourth Plan at a galloping rate.

While some inflationary pressure is inevitable in a developing economy, it is, however, essential that it does not hinder a steady and rising rate of economic growth. From the Sixth Plan onwards, the rate of economic growth steadily rose in India. By the end of the Tenth Plan the rate of growth touched 9 percent. It is anticipated that the GDP may rise by about 9 percent during the next five years – it may even touch 10 percent. Such a rate of growth with equivalent or more rise in demand is bound to exert constant and continuous pressure on the price level. At the same time, the rate of increase in production of essential agricultural goods may not match the increase in demand. There is, thus, inherent inflationary pressure in India. Accordingly, the control of inflation and maintenance of relatively stable prices are crucial for a successful implementation of plan programmes. But control of inflation became extremely difficult at certain times because of internal and external conditions :

(a) internally, bottlenecks in critical sectors like power, coal and rail transport, and stagnant agricultural production; and

(b) externally, higher inflationary international environment and unfavourable terms of trade and heavy adverse balance of payments.

Necessarily, therefore, the control of inflation was given top priority in all five year plans and needed all the ingenuity and imagination of the Government.

Objectives of price policy

We may set out the important objectives of price policy suitable for India during the Eleventh Tenth Plan period:

(a) The price policy should attain and maintain price stability primarily in respect of food articles, but, to the extent possible, in all prices.

(b) The price policy should provide necessary incentives to stimulate production of all essential agricultural goods;

(c) Aggregate demand should be made equal to aggregate supply; monetary and fiscal measures have an important role to play in this sphere.

(d) It should protect the vulnerable sections of

the community, by effectively checking the rate of increase of foodgrains prices (but this should not reduce incentives to greater production in agriculture).

(e) Price policies should be such as to establish some consistent relationships between agricultural prices, prices of manufactures and the prices of various services.

Components of Price Policy for Growth

The price policy designed to achieve the above objectives may have the following components :

(i) Price Control and Regulation

The Government has accepted the policy of liberalisation in all economic activities and accordingly it has relaxed in most cases, removed controls on prices and distribution of goods. At the same time the Government is also aware that free competition and free market prices are not fully or universally applicable in India because

(a) there are still serious demand–supply gaps in some essential goods; (b) investment has to be guided into particular channels; and (c) special consideration has to be shown to the needs of the vulnerable sections of the community.

Necessarily, therefore, prices foodgrains and other wage goods will have to be regulated and administered to some extent, though the regime of price controls and regulations has been largely removed.

In situations of acute scarcity, price control (assuming it is effective) prevents the traders and middlemen from charging a higher prices even though they can do so considering the prevailing demand. Ill-administered price controls result in the loss of revenue to the exchequer, of resources to the producers and increased shortage of goods and services for the consumers. Besides, our past experience in India has been that price controls and regulation have been important sources of tax evasion and creation of black money in India. The Government has accepted all these arguments and has gradually established a free market economy with minimum of controls and regulations.

In fact, price control has been removed in respect of most commodities and now exists only for bulk drugs and petroleum products.

(ii) Policy of Administered Prices

The Government of India follows administered price policy in respect of commodities which are either vital industrial raw materials, produced wholly or largely in the public sector such as steel, fertilisers, coal, and petroleum products. The Government also fixes the rates and charges of public utilities like railways and state electricity boards. The products and services produced by the public sector in India constitute important raw materials for other industries and are subject to serious output and price fluctuations. Administered prices are normally set on the basis of cost plus a stipulated margin of profit. There are two basic objectives of administered prices :

(i) to fix and maintain the prices of essential raw materials so as to avoid cost and price escalation; this has special significance during a period of shortages and rising prices; and

(ii) to ensure economic prices to uneconomic units so that the latter too can earn profits.

Whenever there is a change in cost, the administered price is also changed. As the Government is generally slow and sluggish in its actions, the change in administered prices may not be proportionate to change in cost and, besides, the change in price may come much later than change in cost. In fact, this has been a major criticism against administered prices in India. As the administered prices are often inadequate to meet cost escalation, basic industries like fertilisers and cement were unable to generate sufficient financial resources for modernisation and expansion. As already mentioned the present policy of the Government is to give up administered price regime altogether. Prices of steel, cement, fertilizers etc. are decontrolled and allowed to reflect market forces. Prices of petrol and diesel generally fluctuate according to international prices of crude oil. Only price of kerosene is controlled. However, during 2007–08, crude oil prices shot up in international markets but prices of petrol and diesel were not allowed to rise in the same proportion.

(iii) The System of Dual Prices

It is a commonly accepted principle in India that the basic needs of the weaker sections of the community should be met and for this the Government should subsidise the prices of certain basic goods. This does not mean that the benefit of subsidy and low price should go even to those who do not require them. At the same time the burden of subsidy should not fall on the producers of these basic goods but should be spread on the community as a whole. Such a policy is (a) in the interest of the vulnerable sections, and (b) it does not discourage the producers from expanding production and making investment in the particular sector. In the well-known cases of sugar and cement, dual pricing did help the sugar mills and cement factories to obtain an overall return at a level to encourage production and investment, and at the same time meet the minimal consumption requirements of the Government and of the community.

Originally started with the price of steel, dual pricing was extended to many other essential goods such as major foodgrains, sugar, edible oils, and cheaper varieties of cotton cloth. Dual pricing was a form of short cut price control and it enabled the Government to acquire essential goods at lower controlled prices for its own use, even though it was supposed to benefit the

weaker sections. The Government is the single largest user of steel, cement, paper, sugar etc. Besides, the system of dual pricing should help in increased production. In practice dual pricing in India is the result of the Government's admission that it has failed to regulate price of essential goods in the economy. Moreover, in certain cases (sugar for example) the dual price system often resulted in an abnormal rise in prices in the open market. Dual pricing will have to be continued in the case of major cereals (rice and wheat) and sugar for some more years.

(iv) Procurement/Support prices

A proper price policy will have to include measures directed towards production, purchase, movement, sale and distribution of cereals, pulses, and oilseeds. The level at which the agricultural prices should be stabilised is important from the point of view of production and consumption. In fixing foodgrains prices, two aspects are kept in mind :

(a) The Government fixed and guaranteed such procurement prices for various foodgrains as would provide suitable incentives to the producers. The volume of production increased considerably under the influence of the "green revolution". This policy was modified and even given up and instead encourage contract farming, new crops, new technology.

(b) The retail prices of cereals were fixed in such a way that the interests of the BPL consumers were safe-guarded and at the same time there is no scope for hoarding and speculation. Food zones are abolished and inter-state movement of the foodgrains is still largely the monopoly of the Food Corporation of India.

At one time, holding the price line coveed not only cereals, but all basic consumption goods as for instance pulses, sugar, oils and vanaspati, cloth, kerosene, etc. At present procurement and support prices cover only rice and wheat and sugarcane. Controls over all other prices of cereals, pusles, oilseeds etc. have been dismantled.

The Government of India announces support prices on the recommendations of the Agricultural Prices Commission, redesignated as Commission for Agricultural Costs and Prices. The Commission is guided in recent years by the three-fold objectives of

(a) raising productivity through assured remunerative prices to farmers;

(b) procuring sufficient quantities of rice and wheat for running the public distribution system; and

(c) promoting a desirable inter-crop balance.

The basic framework for determining support prices for major cereals has been relatively fair. The interests of both farmers and general consumers have been well protected. But there are a number of distortions : One is the announcement of higher minimum prices by state Governments to satisfy local interests. Another is that minimum support prices for coarse grains, pulses and oilseeds are of a notional nature and *are not backed by an organised system of official procurement*. In these cases also, support prices should be rationally determined (as in the case of wheat and rice) and should be made effective through public purchase and public distribution. The Government of India succussfully implemented the policy of support procurement of rice and wheat and managed buffer stocks to stabilise prices on the one hand and supplied foodgrains at subsidised prices to the poor.

However, there has also been a contrary view namely, that the Government should dismantle the present system of support prices and procurement and give freedom to farmers.

Many reasons are given in support of this view. One is that Indian farmers can manage the markets forces, without the support of the Government. Another is that the Government benefits middlemen and traders, rather that the farmers on the one side and consumers on the other. Secondly, Government's accumulated stocks were diverted to private traders and flour mills during the NDA Government. Thirdly, Government policy helped richer farmers and ignored small and marginal farmers who had either zero or very little marketable surplus.

Farmers, specially with small marketable surplus, have suffered badly at the hands of FCI officials in charge of procurement. Further, in the years to come, government procurement is bound to fail. For instance in 2006-07, Government agencies have been importing wheat at the rate of ₹ 1,200 per quintal, while the Support Procurement price has been between ₹ 750 to ₹ 850. As a result, wheat procurement had gone down in U.P. and Punjab. Farmers are willing to wait for better prices, instead of off-loading soon often the harvest season.

V. Buffer Stocks and Public Distribution System

The severe famine conditions of 1964-65, the huge import of foodgrains from America under P.L.480 Agreement and the American threat to stop supplying P.L.480 food support during Indo-Pakistan war, compelled the Indian Government to formulate a new food policy – push through the green revolution, create a surplus and become self-sufficient in foodgrains. Over a period, this policy was successful and Government accumulated huge stocks of major foodgrains – rice and wheat – through the Food Corporation of India (FCI). The buffer stocks enabled state trading to achieve two purposes: (a) Stabilize prices of major foodgrains and (b)

supply foodgrains at subsidized prices to lower income groups – later called below-poverty line families (BPL).

This food policy involved heavy expenditure in the form of food subsidy. During the NDA rule, the heavy accumulation of food stocks – as much as 62 million tonnes at one time – was gradually liquidated and the PDS was almost dismantled. During the first year of the 11th Plan (2007-08), the government of India is importing over 5 million tonnes of wheat. There is an inherent inflationary pressure here and the Government will have to formulate a policy to increase agricultural production and reduce our dependence on imports of major foodgrains. A big country like India cannot depend on imports of essential goods – India's imports alone can push international prices of essential goods.

(vi) Prices of industrial products

Till now, the policy framework for determining the prices of industrial products was not fully prepared. In the case of fertilisers, prices were fixed separately for each producer but in the case of sugar and cement, prices were product specific and varied between regions. The general approach was to fix prices on a cost-plus basis but the details of the procedure varied. In the case of coal, price was fixed on the basis of actual costs. In many cases, certain standards of efficiency and capacity utilisation were taken into account while fixing standard costs. The basis on which a return to capital was allowed also varied.

In the case of energy sector, there could be substitution between different products and hence prices of such products as kerosene, soft coke, electricity and LPG were fixed after paying due regard to the impact on the demand for related goods and their conformity with development strategy. Likewise, the pricing of different metals and other materials took into account the substitution possibilities which need to be encouraged or discouraged.

Finally, the prices of most industrial products did not contain an element of subsidy. But in the case of fertilisers, the final prices paid by the farmers were very much below the average cost of production and a huge budgetary provision had to be made year after year. Though fertiliser subsidy was justified from the point of view of agricultural growth, the burden of subsidy had grown with the increase in the domestic production of fertilisers. In recent years, every political party which assumed power at the Centre announced its intention to phase out fertiliser subsidy but none had the guts to implement it because of the opposition of the rich farmers' lobby.

(vii) Fiscal Policy

Price policy designed to promote economic growth includes measures for controlling the volume of public expenditures in general and fiscal deficit in particular. The aim is to reduce any undue pressure on the limited supply of consumption goods. Besides, the consumer goods should be available at prices regarded reasonable from the point of view of the low-income groups. Non-essential and non-productive expenditure in the public sector must be reduced and, if possible, eliminated.

In this connection, particular emphasis should be laid on reduction of non-plan expenditure of the Government. Ultimately without government cutting down its expenditure it is impossible to control inflation. Maximum economy in Central Government non-plan expenditure can be effected through

(a) cutting down subsidies of all types;

(b) making government enterprises earn profits and

(c) reducing the size of bureaucracy.

State Governments are also guilty of wasting precious resources by way of heavy losses of their enterprises and undertakings.

Fiscal deficit is another factor for increase in money supply in the country, which in turn pulls up demand for goods and services leading to inflationary rise in prices. During the last decade, Indian Governments has been able to reduce fiscal deficit to around 3 percent. Besides, since 2007-08, the Government has been reducing customs duties on edible oils and permitting free import of wheat. Excise duties have also been cut in general to check the price level from rising.

Till 2000-01, fiscal policy was used to control demand for goods and services – i.e. demand management, but the present fiscal policy is to check the inflationary increase in prices directly.

(viii) Monetary Policy and Control of Inflation

RBI has always used its monetary policy to control inflation. In the sixties and seventies of the last century, RBI used both quantitative and qualitative (or selective) controls to check the volume of money supply with the people and control the public demand for goods and services. RBI's monetary policy along with the Finance Ministry's fiscal policy and direct price controls have been successfully used to prevent the general price level becoming inflationary. During 2007-08 too, RBI has raised the interest rates and cash reserve ratio to check the volume of liquidity and credit in the country and threreby control the inflationary rise in prices taking place.

(ix) Exchange Reserves and price stability

The foreign exchange reserves were generally used in the past to prevent shortages of essential goods within the country, and to check inflationary pressures. At present India has comfortable foreign exchange reserves of the order of $311 billion in June 2008 which can be used to import wheat and other essential commodities to overcome internal shortages.

At the same time, goods such as fresh vegetables, specially onions and potatoes, fish and meat, sugar etc. which are in short supply within the country should not be exported. True, India has to make an effort to bridge huge gap between imports and exports but this should not involve the export of such essential commodities such as sugar, vegetables, etc. which push up domestic prices. The argument that only a very small proportion of total output of these essential goods is exported is not relevant in the context of internal shortages and inflationary potential within the country.

Conclusion

The problem of a suitable price policy in the context of the Eleventh Plan arises largely due to the existence of persistent pressure of inflation. Price stability need not mean freezing the price at a given level. Slow and steady rise in the price level has all the virtues of a constant price level and has in addition the power to infuse a good degree momentum to the economy. This type of non-inflationary growth is necessary when the Indian economy is poised at 8 to 9 per cent annual rate of growth of GDP. However, there is a need to exercise care in not permitting to cross the tolerable level of 5% as accepted by Government.

5. RECENT RISE IN PRICES AND THE COMMON MAN

The wholesale price index (WPI) touched the high level of 240.7 by August 9, 2008 as against 213.7 on August 11, 2007 (1993-94=100) signaling 12.63% rise in WPI during the year, highest witnessed during the last ten years. It crossed the limit of 5 percent comfort zone specified by RBI. Consequently, UPA government was upset due to the inflationary rise in prices. However since then there has been a fall in rate of inflation due to recessionary trend, such that rate of inflation has reached near zero or even negative between September 2008 and February 2009. WPI declined from 241.5 in September 2008 to 227.6 in February 2009. Subsequent months of the year 2009, once again witnessed rapid rise in the level of prices and wholesale price index climbed to 246.5 in December 2009, up from 229.7 in December 2008.

Calculation of wholesale price index has always been a subject of criticism. Critics have been raising issues about the flawed measurement of WPI. Parliamentary Standing Committee on Finance headed by BJP leader Ananth Kumar recommended revised price indices, but the Government has shown inordinate delay in adopting its recommendations. Similarly, in 2005, Taskforce headed by Dr. Abhijit Sen, member, Planning Commission recommended updating the base year, instead of continuing 1993-94 as the base year; increasing the number of commodities and making changes in weightage given to different commodities. Such changes would give a higher rate of inflation and thus, the government is holding back its revision of WPI. The Committee had recommended 2004-05 as the base year.

If we have a look at the Table 8 we find a higher rate of inflation in terms of Consumer Price Index for Industrial Workers and Consumer Price Index for Agricultural Labour, as compared to wholesale Price Index. Same is also depicted in Figure 2.

Table : 8 Different Price Indices

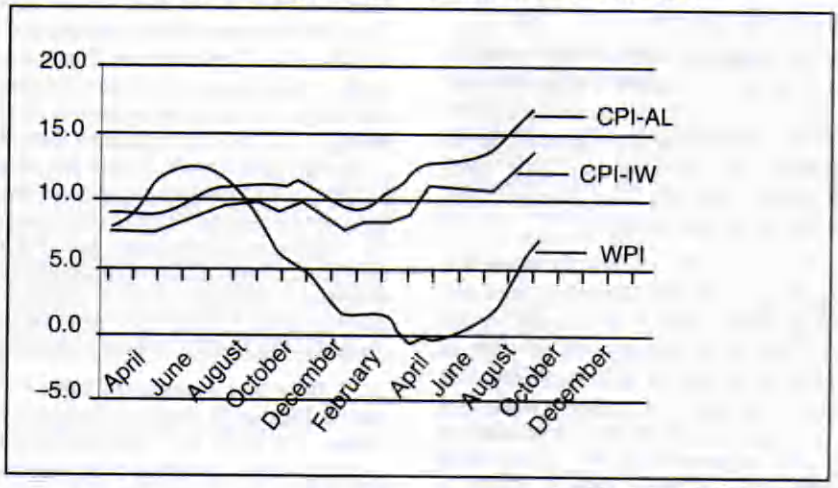
2008	*WPI*	*CPI-IW*	*CPI-AL*
April	8.0	7.8	8.9
May	8.9	7.8	9.1
June	11.8	7.7	8.8
July	12.4	8.3	9.4
August	12.8	9.0	10.3
September	12.3	9.8	11.0
October	11.1	10.4	11.1
November	8.5	10.4	11.1
December	6.1	9.7	11.1
2009			
January	5.0	10.4	11.6
February	3.5	9.6	10.8
March	1.2	8.0	9.5
April	1.3	8.7	9.1
May	1.4	8.6	10.2
June	-1.0	9.3	11.5
July	-0.5	11.9	12.9
August	-0.2	11.7	12.9
September	0.5	11.6	13.2
October	1.5	11.5	13.7
November	**4.8**	13.5	15.7
December	**7.3**	15.0	17.2

Source :*Departgment of industrial Policy and Promotion*,, Labour Bureau and Central Statistical Organization

IW : Industrial Workers, AL : Agricultural Labourer

Obviously there has been a gap between the perception of the Government and that of the common man, who is experiencing much higher retail inflation. While the government has been stating a lower rate of inflation in terms of Wholesale Price Index, the common man was experiencing a sharp rise in the wholesale prices of food grains, especially rice, wheat and pulses, and

Figure 2 : Different Price Indices 2008-09 & 2009-10



besides that of vegetables and fruits. As the common man was experiencing double-digit inflation according to one estimate, about another 10 crore people have been pushed below the poverty line due to the impact of recent price inflation.

The Government tried to take shelter behind the plea that inflation in India was part of global inflation. During the short span of 8 months between August 2007 and March 2008, global price of coconut oil has risen by 61%, groundnut oil by 71%, maize by 54% and rice by 72%, US wheat by 74%, bananas by 76% and sugar by 35%. According to World Bank data, between August 2007 and March 2008, low and middle income countries have witnessed 73% rise in the prices of agricultural products, 88% in foods; 71% in fats and oils and 105% in grains. But all this was cold comfort for the poor people and the plea of the Government did not cut much ice.

However if we look at the inflation in world commodity price indices during the year 2009 (January 2009 to December 2009), we find a much greater volatility in the International market in almost all commodity groups compared to the domestic market in India. Though in the international market prices of almost all commodity groups declined, but the same was not reflected by the price indices of those commodity groups in the domestic market.[1] Therefore if we tend to accept the argument of the government regarding international inflation as the driving force for inflation in the country, then opposite should also have been the case. But opposite did not happen and we witness rise in prices in most of the commodity groups but a much higher rise in prices of food products.

To douse the anger of the common man, Government adopted 'Fire Fighting Approach' to tackle inflation. The following measures were announced during the

Table 9: Inflation in world commodity price indices (per cent) in comparison with WPI (India)

Period	*Energy*		*Non – energy commodities*		*Food*		*Metal and Minerals*	
	World Commodity	*WPI (India) Commodity*	*World Commodity*	*WPI (India) Commodity*	*World Commodity*	*WPI (India) Commodity*	*World Commodity*	*WPI (India) Commodity*
Jan. 2009	–45.48	–1.70	–23.64	6.81	–19.07	9.37	–37.75	9.54
Feb.2009	–51.58	–3.40	–30.29	5.41	–26.35	9.32	–42.46	1.88
Mar.2009	–52.00	–6.00	–34.12	3.17	–31.61	8.07	–42.95	–7.47
Apr.2009	–52.87	–5.69	–32.04	3.21	–29.51	10.14	–38.33	12.11
May. 2009	-52.31	-6.14	-29.14	3.43	-24.33	10.62	-34.49	12.19
Jun. 2009	-48.37	-12.53	-31.14	2.32	-26.27	11.13	-36.04	13.95
Jul. 2009	-52.48	-10.37	-32.31	2.29	-28.90	12.36	-34.86	15.03
Aug. 2009	-39.69	-9.26	-22.70	2.44	-17.84	12.98	-21.27	13.46
Sep. 2009	-35.07	-8.18	-19.00	2.91	-14.17	13.75	-16.97	12.74
Oct. 2009	-6.15	-6.66	0.74	3.75	5.40	14.67	4.10	11.68
Nov. 2009	26.21	-0.89	14.78	6.30	17.13	19.75	23.12	-8.28
Dec. 2009	55.23	4.29	27.65	8.09	23.49	21.94	42.79	-6.93

Source: *Economic Survey (2007-08), Agricultural Statistics at a Glance (2008).*

Note : *Energy (Fuel group); Non Energy Commodities (all* commodities excluding energy); Agriculture (Food Articles and Non-Food Articles); Metals and Minerals (Basic Metals, Alloys & Metals Products and Minerals)

Table 10: Trends of Production of food items

Million tonnes

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-2008	2008-09	2009-10	2010-11
Food grains	174.8	213.2	198.4	208.6	217.3	230.7	234.5	218.2	242
Rice	71.8	88.5	83.1	91.8	93.35	96.7	99.2	89.1	96
Wheat	65.8	72.2	68.6	69.4	75.8	78.6	80.6	80.7	86
Pulses	11.1	14.9	13.1	13.4	14.2	14.8	14.7	14.6	18
Potato	23.3	23.1	23.6	23.9	22.2	28.5	29.0	36.6	36.6

Source: *Economic Survey (2011-12), Agricultural Statistics at a Glance (2008).*

year 2008.

1. Scrapped import duties on edible oils
2. Banned export of basmati rise
3. Reduced duty on maize imports from 15% to zero
4. Extended ban on export of pulses for one year
5. Banned export of edible oils
6. Withdrew export incentives in steel and cement.

The principal objective of the Government was to make available supply of food grains, pulses, and edible oils for domestic use and to facilitate the import of these commodities to reduce the impact of supply constraint. But these measures did not produce the desired effect.

Recent Food Inflation

But the scenario was different in the years 2009, 2010 and 2011. The country faced a worst situation in the food inflation and rise in the price of food products became driver of the inflation. The items which contributed significantly towards overall inflation are rice, wheat, pulses, vegetables and fruits, milk, fish and meat and tea in primary articles; non-administered mineral oils in the fuel group; and sugar/gur and oil cakes in manufactured products. For instance price index of sugar increased significantly and annualised rise in the sugar price index was 50 per cent in the last quarter of the year 2009. The main reason for increase in the price of sugar was the gap between demand and supply of sugar in the year 2008-09. Sugar production declined from 263 lakh tonnes in the 2007-08 sugar season to 146 lakh tonnes in the 2008-09 sugar season (provisional). This was primarily due to fall in the area under cultivation of sugar cane and consequently a fall in sugar production. Further, due to large sugar import by India international sugar prices also started increasing. There does not seem to be any reprieve from sugar inflation as sugar price index continued to be high.

In case of pulses, India has been a net importer. Domestic annual production of pulses has been around 14-15 million tonnes during the last three years while the demand is estimated at around 17-18 million tonnes. The gap between demand and supply is met by import of a variety of pulses from different countries depending upon their availability. Domestic production of pulses declined during the year 2008-09 marginally, specially due to decline in kharif pulses production in the year 2008-09 (fourth advance estimates). In the year 2009-10 it is expected to fall further. According to Economic Survey 2009-10, a significant increase of about 7.806 lakh hectares in the area under pulses is expected to help in dampening the prices.

The current phase of rising price of rice is due to an unexpected fall in rice production from 99.2 million tonnes in 2008-09 to only 89.1 million tonnes during 2009-10. This means the fall in production by 10 million tonnes in one year. However in the 2010-11 season we find production of rice rising. Rice production was higher during 2010-11. Wheat production has been increasing for the last 5 years (Table 9). This year again expectation of a better wheat harvest is likely to moderate wheat prices. But on the whole primary commodities have shown a very high rate of inflation between 2007-08 and 2011-12, as per wholesale price index. But real worry is still higher rate of inflation in terms of consumer price index (CPI).

Failure to improve growth rate in agriculture

Basically, the present inflation, which is driven by the prices of foodgrains, pulses, vegetables and fruits is not a demand-driven inflation, but is the result of failure of government policy on the agricultural front to raise output. It is supply constraint that has fuelled inflation.

During the 5 years of UPA-I government, production of food grains, especially rice, wheat, pulses and potato has shown stagnation, whereas the population has been growing at the rate of 1.61% per annum and reached a level of 1,210 million in 2011. Overwhelmed by GDP growth rates during 2004-05 to 2006-07and driven by high growth in industry and services, the Government neglected agriculture. This is evident from the fact that public investment in agriculture, especially irrigation, has been stagnating around 0.5% of GDP in the recent year. (Table 11)

Table 11: Investment in Agriculture to Total GDP (1999-00 prices)

% of GDP

	Public Sector	Private Sector	Total
2002-03	0.4	2.1	2.5
2003-04	0.4	1.8	2.2
2004-05	0.6	1.8	2.2
2005-06	0.6	1.8	2.3
2006-07	0.6	2.0	2.6
2007-08	0.6	2.5	3.1
2008-09	0.6	2.7	3.3
2009-10	0.5	2.5	3.0
2011-12	0.5	2.4	2.9

Source: Ministry of Agriculture, Agricultural Statistics at a Glance (2008), Central Statistical Organisation (2012)

There is a dire need to raise productivity in states where yield levels are low in agriculture. For the extension of seed-fertilizer technology to secure better yields, irrigation is a basic necessity. But facts stare us in the face that during 2000-01 to 2006-07, there has been very little increase in irrigated area, specially in two major crops, viz., rice and wheat.

Table 12: Irrigated Area Under Crops

Million hectares

	Rice	*Wheat*	*Pulses*	*Total foodgrains*
2000-01	24.6	22.7	2.7	53.6
2003-04	22.5	24.2	3.4	53.4
2004-05	23.6	24.2	3.4	53.8
2005-06	25.2	24.1	3.5	56.0
2006-07	25.2	25.6	3.7	57.9
2007-08	25.1	25.8	4.0	59.0
2008-09	26.5	25.5	3.8	60.0

Source: *Economic Survey (2011-12)*

As data reveals that irrigated area under wheat ranged between 23 to 24 million hectares and that under rice oscillated within the narrow range of 24-26.5 million hectares and that of pulse ranged between 3 to 34 million hectares during 2000-01 and 2008-09. This was the result of a fall in public sector investment during the post-reform period. There is a concomitant need for better utilization of water, whether made available due to rains or melting of snow. This requires a major compaign for watershed development so that the utilization of water is significantly stepped up. This is specially important for regions which have sufficient rainfall. The two measures extension of irrigation and watershed development can trigger a second green revolution in poor and backward states, and also save soil from the dangerous effects of water logging and soil depletion. Both will require substantial step up of public sector investment. Government seems to have realized its mistake and is making efforts to raise the level of investment in agriculture.

Minimum Support Price for Farmers

Another problem which has affected agriculture is the Minimum Support Price (MSP) for farmers. Since the cost of production in agriculture is increasing, there is a need to increase MSP for farmers. Till 2007-08 it was ₹ 850 per quintal in case of wheat and ₹ 745 per quintal for rice. It was alleged that the Government is paying more for imports in the international market, but is not paying a higher MSP to its own farmers so that we can have more food grains for our buffer stocks.

Fuels

Besides food grains, other commodities which are exercising an upward pressure on WPI, are fuels, cement and steel. The price of petrol in the international market once reached an unprecedented level of $ 147 per barrel. Through rise in transport cost, it pushes up the price level. But this is an exogenous factor on which the government has no control. Recently, there is a diversion of certain food grains towards the manufacture of bio-fuels. This has resulted in pushing up international prices of food grains by over 80 percent, thus raising the cost of imported food grains. In the domestic economy as well, the diversion of land producing food grains to bio-fuels is aggravating the supply constraint. To mitigate the situation, the Government should impose severe restrictions on use of food grains for bio-fuels and diversion of land for bio-fuel, as a temporary measure till such period that food grains output growth is accelerated by the measures initiated to reach the target of agricultural growth by 4% per annum.

In case of controlling the prices of steel and cement, the Government has been dilly-dallying action against cartelization in these two industries. Experience the world over reveals that cartels are not tamed by issuing advisories. The tendency to exploit the market is so strong that industrial magnates refuse to listen. Grilled by the opposition, Finance Minister P. Chidambaram stated in the Lok Sabha on April 16, 2008; "I have no hesitation in repeating that cement manufacturers are behaving like a cartel.. There are signs that even steel manufactures are behaving like a cartel... If they do not understand the gravity of the situation and behave responsibly, Government will not hesitate to take tough administrative measures." It is really strange that when the country has created Competitive Commission of India (CCI) in place of MRTPC, the Government should have asked the CCI to initiate action much earlier. It is bad policy first to allow much damage to be done, and take very belated action.

There appears to be divergence of views within the Government. As against the Finance Minister's strong view warning tough measures against cartel-like behavior by Minister of Steel Jatin Prasad in a written reply to a query in the Lok Sabha stated; "The steel prices are determined by market forces, such as demand and supply and international prices... However, no evidence of cartelization by steel companies in determining steel prices has been brought to the notice of the Ministry of Steel." With such divergent views within the Government, chances of breaking cartels appear to be very dim. The Government following USA and European Union should have used 'the leniency principle' – an application of the 'approver principle' in the economic domain to break cartels. There does not appear a strong resolve by the government to do so. Even if the CCI initiates action suo motto, it will not be effective in view of confusion within the Government.

Ban on future trading in essential items

The alliance partners in Congress-led coalition Government have been voicing strong views on future trading in essential commodities. CPM leader Sitaram Yechury pleaded for imposing a ban on future trading of 25 commodities, since the left maintains that large scale speculation in futures trading in grain has been the main

Table 13. Movement of wholesale Price Index (WPI)
(Base 2004 – 05=100)

Commodity Group	*Weight*	*2007-08*	*2008-09*	*2009-10*	*2010-11 (Dec 2010)*	*2011-12 (Jan)*
All Commodities	100.0	121.5	123.5	136.3	149.5	157.7
a. Primary Articles	22.0	124.0	138.0	155.0	182.0	200.0
b. Manufactured Products	63.8	118.0	120.0	126.9	136.0	141.0
c. Fuel, Power, Light & Lubricants	14.2	121.0	135.0	132.0	148.0	173.0

Source : Compiled and computed from Economic Survey, 2011-12

factor responsible for rise in their prices. To quote Me. Yechury: "The only way to insulate ourselves from international speculation is to reverse the process of liberalization in commodity trade and prohibit future trading in essential commodities." But Mr. Sharad Pawar, Minister for Agriculture, Food and Civil Supplies was not convinced about the correlation between future trading and increase in essential commodity prices. However, he conceded that ban on future trading in rice did help to stabilize prices, in urad and tur, it did not happen. It may be noted that in 2007, under pressure from its allies, the government had banned future trading in wheat, rice, urad and tur.

Abhijit Sen Committee has decided to take an escapist route and not provide an answer to the question of banning future trading. Dr. Abhijit Sen mentioned: "The evidence we have found is not unambiguous. Based on data that we have analysed, it is neither possible to say that future trading in agricultural commodities leads to price rise in the pot market, nor is it possible to say that there is no impact." (*Business Line*, April 24, 2008) The Committee could have, on balance, drawn some conclusion, but preferred to run with the hare and hunt with the hound.

To be effective, the government should bring about a clear policy to control inflation after due deliberation within the cabinet. It should state the short-term measures to alleviate the suffering of the common man and also state the long term measures to increase supplies of essential commodities, more especially food grains. Among the short term measures to augment supply, the government announced the import of one million tonne of edible oils and subsidize it at the rate of ₹ 15 a litre for sale through the public distribution system. Also 15 lakh tones of pulses were imported to mitigate the situation in 2008.

To sum up: it is vitally necessary to build a market information system which should reflect the changes in the prices of essential commodities accounting for 60 to 70 percent of the expenditure of low income groups. For this purpose, revision of price indices is essential after considering the recommendations of various committees. Secondly, there is a need to take timely action so that the hardship of the common man by way of erosion of his income with sharp increase in the prices of essential commodities, can be reduced. Thirdly, the government should give top priority to the development of agriculture. Fourthly, the government must take measures to reduce the use of multi-crop land for non-agricultural purposes, like Special Economic Zones. Last, but not the least, efforts should be made to undertake a second green revolution, with a special focus on agriculturally backward states. The country should follow a policy of self-sufficiency in food and essential commodities. That way lies hope for the common man and progress towards inclusive growth. In this connection Mr. Prashant Goel concludes: "The sustainable way out of the current mess is to increase food production and productivity and this cannot come without right prices. If the farmer does not get remunerative price for his produce, even the loan waiver package may not deliver. Given our large arable land and favourable climate, and rising global food prices, a proper policy frame work could ensure that India becomes world's food bowl." (Food Inflation offers an opportunity, *Economic Times*, 18th April 2008).

Limitation of Monetary Measures in Control of Inflation

Perturbed by accelerating rate of inflation, government has been advocating various measures to combat the same. Recently the government has advised the RBI to take appropriate measures to curb inflation. Following government's advice RBI has been adopting various measures like increase in Repo rate, Cash Reserve Ratio (CRR) etc.

According to economic principles excess demand, costs escalation and structural factors cause inflation. For the past few months combination of all these factors have played their role in accelerating inflation. Major reason for present inflation is unprecedented increase in the supply of money in recent years. We have noted above that money supply which was 12,45,557 crores on March 31, 2009, has increase to 17,29,870 crores as on March 31, 2012. Currency held with the public which was 666095 crores on March 31, 2009 has increase to 10,67,890 crores as on March 31, 2012. We find increase in money supply to be 38.9 per cent in three year whereas increase in currency held with the public as increase by 60.3 per cent given the same period.

Raising Interest Rates is No solution for Inflation

The RBI has increased Repo rate at least 8 times in the last financial year (2010-11). In the current financial year 2011-12 this has been raised twice (till June 2011). Reserve Bank once again raised Repo Rate and Reverse Repo Rate by. 25 percent points in June 2011. As a result Repo Rate and Reverse Repo Rate have gone up to 7.5 percent 6.5 percent respectively. As

inflation continues unabated, it is feared that RBI will further raise Repo Rate and may take the same to nearly 9 percent. Repo rate is the interest rate at which banks can borrow from the Reserve Bank. Reverse Repo Rate is the rate of interest applied on the funds parked by the banks with RBI. By increasing these interest rates RBI attempts to increase the cost of borrowing on the one hand and reducing availability of loanable funds. This way RBI claims that inflation can be controlled by reducing aggregate demand in the economy.

Attempts made by RBI have failed to produce desired results and inflation is continuing unabated. In the future also, this tight money policy is not expected to make any major dent on inflation, as the inflation is caused by some other factors which are not going to get affected by rising interest rates.

First major cause of inflation in the country is raising food prices. Prices of food grains, pulses, edible oil, fruits and vegetables are skyrocketing. This is because production of these items has not been growing in proportion to the growing population and increasing incomes. Except a few months, food prices have been increasing continuously in the last 5 years. To control food prices, interest rates hardly have any role

Second leading cause of inflation in the country is increasing prices of petroleum products. The government decontrolled the prices of petroleum products and the right to determine the prices of petroleum products, namely, petrol, diesel, etc. was given to the petroleum companies in June 2010. Prices of petroleum products have been increased by at least 9 times since then, last being hike in diesel, LPG and kerosene prices on 24th June, 2011. In May 2011, petrol price was increased by rupees five per litre. RBI monetary policy has no role in nullifying the effect of increase in petro prices or the cost of transportation due to this hike.

Thirdly rising fiscal deficit is yet another reason for inflation. Inability of the government to fill this deficit by raising loans, forces it to borrow from RBI. Since April 2010, till May 2011 rupees 1, 66,000 crores worth of additional currency was printed, simply to fill this gap. As stock of money increases, inflation is unavoidable, if the supply of goods and services does not increase proportionately. Increase in interest rates can at best restrain multiplier effect of this increase in currency with the public on credit creation. Raising interest rates cannot in any case make much dent on inflation caused by this factor.

Thus we note inflation is beyond control of the government, and sometimes is being inflamed by the policies of the government. On the contrary, attempts made by the RBI in terms of tight monetary policy, can cause havocs. If we look at the experience in the last about 10 years, we find an unprecedented rate of economic growth. Though agricultural sector could not perform well in all these years, but much faster rate of growth in the services more than made up the loss and economy made unprecedented stride in terms of growth rates. Main reason behind this growth was stability in price level witnessed in the first 5-6 years of the last decade. As a result of stability in prices, rates of interest started falling and stabilised at a lower level. Though falling rates of interest did affect a section in our population adversely, who was dependent upon interest incomes, but economy at large benefitted from fall in interest rates. Investment got encouraged due to falling interest rates, as borrowing by business ventures was cheaper than before. Further falling interest rates in country encouraged borrowing for houses, cars and other consumer durables etc. As a result of this there was a phenomenal growth in demand in the country, both investment and household demand. Lowering of interest rates led to favourable impact on government budget as well, as interest payment on loans previously taken also could be kept low. Housing, infrastructure and other important sectors of the economy could show better results and India could emerge as second fastest growing country of the world after China. Thus we can conclude that fall in rates of interest played an important role in the growth story of India.

In the last couple of years RBI has been trying to increase the rates of interest to somehow control price. This has once again created a sense of hopelessness in the country. Increasing rates of interest would not only reduce the demand in the country, it would also adversely affect the investment in infrastructure and industry in the country. People would be encouraged to deposit more funds with the banks and banks which are already flooded with funds would not get sufficient borrowers. This rush towards deposits may affect profitability of the banks, as demand for loans is expected to be less. Low rates of interest are thus imperative for high rate of growth in the economy. But it is not possible in times of rising inflation. To keep real rate of interest positive, interest rates have to be increased. Thus to keep the growth rate high in India, we must control inflation using fiscal and direct measures.

RBI has only limited powers

This unprecedented increase in money supply is basically caused by large scale purchase of foreign exchange by RBI, populist government policies, heavy deficit financing by the government and rampant corruption at government level. In order to gain cheap publicity government is successively making populist schemes, ultimately leading to large scale deficit financing and thereby increasing money supply.

Now the major question is, whether RBI would be able to stop inflation. To find answer to this question, we need to understand the limitations of RBI. According to Constitution of India, RBI cannot compel government to limit or reduce deficit financing. RBI is obliged to purchase foreign exchange brought to it by international investors and other investors. RBI even has no right to restrain government to adopt populist schemes. All this is leading to unprecedented increase in quantity of currency held by the public. It is true that currency is issued by RBI but it has no right to stop or reduce the issue of currency for all such purposes.

RBI has jurisdiction only with regard to variation

in Cash Reserve Ratio (CCR), Repo Rate, Bank Rate, sale and purchase of government securities in open market operations or Statutory Liquidity Ratio (SLR). All these measures can affect changes, only in the limited way, in the capacity to create credit by commercial banks. But these measures have drawbacks as well as they affect economic growth adversely. In this context the decision of the RBI, not to increase bank rate is a step in right direction. Though it is obligatory for RBI to purchase foreign exchange brought before it, but it was possible to pay rising oil bills from large and overflowing foreign exchange reserves accumulated so far. This act could have stopped devaluation of rupee and petrol price hike to some extent.

Need to attack basic causes of inflation

Government needs to directly attack basic causes of inflation. No doubt government has no control on fast rising international crude prices, but its impact on consumers can be reduced by providing relief in taxes. To curb price hike in food products, we need to end policy of neglecting agriculture. Investment in agriculture needs to be encouraged. Farmers should be provided remunerative price for their produce and agricultural costs be reduced. Buffer shocks should be maintained by procuring agricultural products from the farmers and the practice of periodical sale from buffer shock should be re-established to curb unwanted upheavals in price of food products.

Need to bring about course-correction in government policies

The recent rise in Wholesale Price Index (WPI) by 13% and Consumer Price Index (CPI) by 9% as witnessed in August 2008 is a cause for concern.

In this connection, the Government policies need course-correction in the following areas :

1. **To halt fuelling demand pressures** – In view of the steep rise in international petrol prices to over $110 per barrel, the country had to increase subsidies on petrol since it was not possible to transfer the entire burden of rising import billion the consumers. Secondly, the acceptance of recommendation of the Sixth Pay Commission also leave more disposable income in the hands of people and thus add to demand pressure. Thirdly, the bonanza announced by the Finance Minister in 2008 in the form of loan waiver to the farmers of the order of ₹ 70,000 crores also added to demand pressure. Such larged extravanzas, in the form of pre-election populist measures should be avoided.
2. **RBI should concentrate on controlling CPI, rather than WPI** – Reserve Bank of India has been emphasizing the control of WPI and thus, announced monetary policies like raising the rate of interest, statutory liquidity ratio and repo rate with a view to monetary tightening. But the world over, more especially in European countries, the Central Banks emphazise control of CPI and they simultaneously promote growth, employment and price stability as their objectives, since these determine the overall welfare of the people. RBI measures have produced little effect on industrial growth and investment and in slowing down construction of dwellings since buyers were required to pay higher Equal Monthly Instalments (EMIs). Moreover, there was adverse effect on employment.
3. Need to emphasize foodgrains production, as part of the strategy of boosting agricultural growth – All talk of diversification of agricultural production without providing food security in the country, more especially to the weaker sections, does not carry conviction with the common man. The present sharp increase in CPI is due to a sharp increase in the prices of foodgrains – wheat and rice, and a much sharp increase in prices of pulses. To provide relief to the weaker sections of the society who are not able to afford higher prices of cereals and pulses, the Government should use the public distribution system. But a strict vigil has to be kept on PDS system so that pilferage pf foodgrains for distribution is minimized and the intended beneficiaries should benefit from PDS outlets.

To sum up, monetary measures will be ineffective to check the rise of prices unless the supply contraints are not taken care of. However, care must be taken that the growth and employment objectives are not compromised.

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CHAPTER

28

BALANCED REGIONAL DEVELOPMENT

"The fact that there are vast areas of the country which have remained backward over the years is both a challenge and an opportunity."

—Sixth Five Year Plan (1980-85)

Balanced regional growth is necessary for the harmonious development of a federal state such as India. India, however, presents a picture of wide regional variations, in terms of such indicators of economic growth as per capita income, the proportion of population living below the poverty line, working population in agriculture, the percentage of urban population to total population, the percentage of workers in manufacturing industries, etc. Relatively speaking, some states are economically advanced while others are relatively backward. Even within each state, some regions are more developed while others are almost primitive. ***The co-existence of relatively developed and economically depressed states and even regions within each State is known as regional imbalance.*** Regional imbalances may be natural due to unequal natural endowments or man-made in the sense of neglect of some regions and preference of others for investment and development effort. Regional imbalances may be inter-state or intrastate; they may be total or sectoral. Economic backwardness of a region is indicated by symptoms like high pressure of population on land, excessive dependence on agriculture leading to high incidence of rural employment, absence of large-scale urbanisation, low productivity in agriculture and cottage industries etc.

1. INDICATORS OF REGIONAL IMBALANCE

To study regional imbalance, the 15 major states of India have been classified into two major groups: Forward States and Backward States. Among the forward states are included: Punjab, Gujarat, West Bengal, Karnataka, Kerala, Tamil Nadu and Andhra Pradesh. Among the backward states are Madhya Pradesh, Assam, Uttar Pradesh, Rajasthan, Orissa and Bihar. These 15 states taken together accounted for 90 per cent of the total population in 2001 — about 48 per cent in the forward states and 42 per cent in the backward states.

1. Net State Domestic Product (NSDP) as the indicator of Regional Disparity

An important indicator of regional disparity is the growth rate of net state domestic product, (NSDP) observed during. For our purpose, we have classified the

states on the basis
forward and backw
it had the highest pe
was at the bottom,
was at the top and
of per capita incom

Table 1: States
Const

Forward States
Punjab
Maharashtra
Haryana
Gujrat
West Bengal
Karnataka
Kerala
Tamil Nadu
Andhra Pradesh
Sub Total
Sub-total
Backward States
Madhya Pradesh
Assam
Uttar Pradesh
Rajasthan
Orissa
Bihar
Sub Total
All India

Source: Ministry of
2004-2005

Table 1A

Forward States
Haryana
Punjab
Maharashtra
Kerala
Gujarat
Tamil Nadu
Andhra Pradesh
Karnataka
Backward States
Assam
Rajasthan
Orissa
Madhya Pradesh
Uttar Pradesh
Bihar

Source : RBI, Ha

states on the basis of per capita NSDP (Income) into forward and backward states. Punjab topped the list as it had the highest per capita income in 1990-91 and Orissa was at the bottom. However, in 2002-03, Maharashtra was at the top and Bihar was at the bottom on the basis of per capita income.

Table 1: Statewise Net Domestic Product at Constant Prices (1993-94)

	₹ crores		Annual Average Growth Rate
	1990-91	2004-05	1990-91 to 2004-05
Forward States			
Punjab	23,693	43,122	4.37
Maharashtra	79,869	182,388	6.06
Haryana	18,215	37,983	5.37
Gujrat	36,207	90,783	6.79
West Bengal	40,633	103,361	6.88
Karnataka	29,845	76,298	6.91
Kerala	19,774	44,055	5.86
Tamil Nadu	43,937	90,137	5.26
Andhra Pradesh	45,131	97,699	5.65
Sub Total	337,304	765,826	6.03
Sub-total	337,304	6,52,272	5.6
Backward States			
Madhya Pradesh	41,833	53,539	1.78
Assam	12,299	19,041	3.18
Uttar Pradesh	74,791	109,768	2.79
Rajasthan	29,713	59,911	5.11
Orissa	13,450	28,871	5.52
Bihar	37,607	33,460	-0.99
Sub Total	2,09,693	304,590	2.69
All India	6,23,407	136,4027	5.76

Source: Ministry of Finance, Indian Public Finance Statistics 2004-2005, Statistical Abstract of India 2007.

Table 1 indicates that the average growth rate of net state domestic product of forward states was 6.03 percent, while that of the backward states was only 2.69 percent per annum. These differentials aggravated regional disparities during the post-reform period. While forward states like West Bengal, Karnataka and Gujarat indicated very high growth rates of NSDP (over 6 percent), the backward states like Uttar Pradesh, Madhya Pradesh and Bihar (with very large population) indicated very low growth rates during the 14-years period (1990-91 and 2004-2005). The most distressing fact was that Bihar indicated a negative growth rate of NSDP at (-) 0.99 percent, while Uttar Pradesh with a population of 166 million (16.2 percent of total population) indicated a very low growth rate of 2.79 percent. Madhya Pradesh showed a very dismal performance with a growth rate of merely 1.78 percent of NSDP. This implies that the backward states with very large population share - U.P., Bihar and Madhya Pradesh - acted as a drag on the growth process of the Indian economy. Orissa and Rajasthan have picked up growth rates of the order of 5.58 percent and 5.11 percent respectively, which though still quite low, are showing signs of improvement vis-a-vis other backward states during the 14 years period. It may also be noted that growth rates of some of forward states, such as Punjab and Haryana have decelerated during the period, although they were the star performers during 1980-81 and 1990-91 decade. The above fact is made clear by the difference in the growth rates of NSDP of the forward and backward states.

NSDP in forward states indicated an annual average growth rate of 5.2 per cent during 1980-81 to 1990-91 – the pre-reform period. However, the situation showed a marked improvement in these states and they showed a higher annual average growth rate 6.03 per cent during 1990-91 to 2004-2005. Situation has changed since 2004-05. Data indicates towards a much better position

Table 1A : Statewise Net State Domestic Product and Per Capita NSDP (2004-05 to 2009-10) at 2004-05 Prices

	Net State Domestic Product (₹ Crores)		Average Growth Rate (2004-05 to 2010-11	PerCapita NSDP (₹)		Average Growth Rate (2004-05 to 2010-11)
	2010-11	2010-11		2004-05	2010-11	
Forward States						
Haryana	86,222	1,49,651	9.6	37,972	59,221	7.7
Punjab	86,108	1,29,933	7.1	33,103	44,752	5.2
Maharashtra	3,68,369	7,02,832	11.4	35,915	62,729	9.7
Kerala	1,04,776	1,71,897	8.6	31,871	49,873	7.7
Gujarat	1,72,265	3,09,409	10.2	32,021	52,708	8.7
Tamil Nadu	1,93,645	3,49,335	10.3	30,062	51,928	9.5
Andhra Pradesh	2,01,303	3,40,792	9.2	25,321	40,366	8.1
Karnataka	1,48,729	2,32,541	7.7	26,882	39,301	6.5
Backward States						
Assam	47,181	65,102	5.5	16,782	21,406	4.1
Rajasthan	1,12,636	1,78,184	8.0	18,565	26,436	6.0
Orissa	67,987	1,07,129	7.9	17,650	25,708	6.4
Madhya Pradesh	99,940	1,60,549	8.2	15,442	22,382	6.4
Uttar Pradesh	2,31,029	3,45,848	6.9	12,950	17,349	5.0
Bihar	70,167	1,32,488	11.2	7,914	13,632	9.5

Source : RBI, Hand Book of Statistics for Indian Economy (2010-11), CSO, National Accounts Statistics, 2011.

for both forward and backward states. Table 1A shows that rate of growth of Rajasthan's SDP has been 7.71 percent per annum between 2004-05 and 2010-11. This rate has been 6.4 per cent for Orissa, 6.4 percent for Madhya Pradesh and 5.0 percent for Uttar Pradesh during the same period. Bihar has also started showing signs of improvement since 2005. Bihar has demonstrated a high rate of growth of 9.5 percent per annum during 2004-05 and 2010-11. But this is also a fact that per capita income of Bihar is still the lowest in the country. On the other hand per capita income of Uttar Pradesh, Orissa, Rajasthan, Assam, Madhya Pradesh and newly constituted state of Jharkhand is lower by 25 to 40 percent as compared to national average per capita income. This is cause of major concern. Reduction in regional inequalities is imperative not only from the point of view of improving living standards in backward states but also for faster economic development of the country at large. The importance of contribution of our vast man power, specially youth in the development of the country is well established. If anyone or more states remain backward, it affects the development in education, health and other public utilities. In such states infrastructure development is also adversely affected. We find that in such states educational development index also remain low. According to the government's statistics Bihar is educationally most backward state and in the list of all state and union territories it is at lowest rank of 35.Ranks of Jharkhand, Uttar Pradesh, Madhya Pradesh and Orissa are 34th, 31st, 29th and 28th respectively. Development of Rajasthan is getting revealed in its educational development and it has reached at 19th position. Though West Bengal is considered to be developed but it comes at 32nd position, even lower than Madhya Pradesh.

The planning process, by helping the backward regions, made an effort to reduce regional disparities, but the forces of liberalisation and globalisation strengthened investment in forward states much more than in backward states. Consequently, regional disparities in growth rates widened further. This is clear from the next point.

Growth Rates of State Domestic Product in various states

Table 2 provides information about the growth rates of State Domestic Product during the 8th, 9th and 10th Plan for major states of India. The data has been classified into two categories – Forward States and Backward States. The data reveal that among the forward states, Gujarat indicated highest growth rate of 9.6% during the 11th Plan, followed by Tamil Nadu, Maharashtra, Goa and Haryana which were above the All-India average of 7.9%. Punjab, had been trailing behind during the three plans in the range of 4.4 – 4.7% has improved its growth rate to 6.8 percent in 11th plan, It may, be interesting to note that because Punjab during the Green Revolution of the late sixties and seventies was at the top. West Bengal, Uttar Pradesh and Rajasthan are also indicating lower growth rates than the national average.

Table 2: Growth Rate of State Domestic Product in Different States

Percent per annum

	Eighth Plan	*Ninth Plan*	*Tenth Plan*	*Eleventh Plan*
Forward States				
Gujarat	12.4	4.0	10.6	9.6
Tamil Nadu	7.0	6.3	8.0	8.3
Maharashtra	8.9	4.7	7.9	9.4
Goa	8.9	5.5	7.8	8.9
Haryana	5.2	4.1	7.6	9.1
Kerala	6.5	5.7	7.2	8.0
Karnataka	6.2	7.2	7.0	8.0
Andhra Pradesh	5.4	4.6	6.7	8.3
West-Bengal	6.3	6.9	6.1	7.3
Punjab	4.7	4.4	4.5	6.8
Backward States				
Jharkhand	n.a.	n.a.	11.1	7.0
Chattisgarh	n.a.	n.a.	9.2	8.4
Orissa	2.1	5.1	9.1	8.2
Rajasthan	7.5	3.5	5.0	7.7
Bihar	2.2	4.0	4.7	12.0
Uttar Pradesh	4.9	4.0	4.6	6.9
Madhya Pradesh	6.3	4.0	4.3	8.9
All India	6.5	5.3	7.6	7.9

Note: Data has been re-arranged on the basis of growth rate of SDP in the descending order during the Tenth Plan

Source: CSO (based on 1999-00 constant prices as given in the *Eleventh Five Year Plan* (2007-012). *Vol.I.*

Among the backward states, Orissa, Chhattissgarh and Jharkhand have indicated sharp increase in growth rates. Rajasthan which indicated a robust growth rate of 7.5% during the Eighth Plan, slowed down to 5.0% during the Tenth Plan, has improved growth rate to 7.7 percent There is an improvement in case of Bihar (12.0 percent) and Madhya Pradesh (8.9 percent). There is a strong need to accelerate growth rate among the laggard backward states so that regional disparity is reduced.

2. Per Capita Net State Domestic Products as the Indicator of Regional Disparity

Table 3 provides per capita NSDP at 1993-94 prices for both forward and backward states. Punjab had highest per capita income in 1990-91 but in 2004-05, Maharastra was at the top. Orissa had the lowest per capita income in 1990-91, but in 2004-05, Bihar has recorded the lowest per capita income. During the period 1990-91 and 2004-05, Karnataka has recorded the highest annual average growth rate of per capita NSDP while, Bihar has recorded negative rate of growth. Further, while advanced states have recorded smart annual rates of growth backward states have registered extremely poor rates of growth between 1 and 3.7 per cent, with Bihar registering negative rate of growth. This is a clear indication of the forward rates providing a higher per capita income to their profile while the backward states failing

to catch up with the forward states upto 2005. A positive development is that after 2004-05, performance of backward states has started improving (Table 1A)

3. Trends in Investment and Financial Assistance

Dr. M. J. Kurian of the Planning Commission has made an extensive study of the 'Widening Regional Disparities in India'. He has indicated that more than two-thirds of investment proposals (69.2 %) in the post-reform period were concentrated in the forward states and a similar situation prevailed in terms of financial assistance distributed by All-India Financial Institutions as well as State Financial Corporations. (Refer Table 4). The All India Financial Institutions viz., IDBI, IFCI, ICICI, UTI, LIC, GIC, IRBI and SIDBI disbursed 67.3 per cent of total financial assistance to forward states upto 31st March 1997. Even among the 9 forward states, four states, namely Maharashtra, Gujarat, Tamil Nadu and Andhra Pradesh were able to appropriate about 51 per cent of total assistance. Even in the case of State Financial Corporations, 70 per cent of total assistance was received by forward states. This analysis underlines the fact that the reform process has favoured the forward states in terms of approval of investment proposals as well as financial assistance. Consequently, the already better-off states can further accelerate the growth process while the backward states being unfavourably treated face a retardation in growth. This explains the growing disparities in terms of growth of NSDP — both total and per capita.

Table 3 : Statewise Per/Capita Net Domestic Product at Constant Prices (1993-94)

	₹ At 1993-94 prices 1990-91	2004-05	Average Annual Rate of Growth
Forward States			
Punjab	11,776	16,756	2.5
Maharashtra	10,159	17,864	4.1
Haryana	11,125	16,872	3.0
Gujarat	8,788	16,878	4.8
West Bengal	5,991	12,271	5.3
Karnataka	6,631	13,320	5.4
Kerala	6,851	13,821	4.9
Tamil Nadu	7,864	13,999	4.2
Andhra Pradesh	6,873	12,352	4.3
Backward States			
Madhya Pradesh	6,350	8,238	1.8
Assam	5,574	6,721	1.4
Uttar Pradesh	5,342	6,138	1.0
Rajasthan	6,760	9,853	2.7
Orissa	4,300	7,176	3.7
Bihar	4,474	3,773	−1.20
All-India	**7,430**	**12,595**	**3.9**
Ratio between Maximum and Minimum per Capita NSDP	2.7	4.73	

Source: Ministry of Finance, *Indian Public Finance Statistics (2004-05)*

4. Infrastructure Disparities

Glaring infrastructure disparities are visible India. Table 5 provides data on consumption of power per capita, registered vehicles per 1000 persons, road length per 1000 sq. Kms. of area, telecom lines per 100 persons and percentage of irrigated area to gross cropped area.

Consumption of power per capita is an indicator of level of energy consumption. Form data given in table 4, it is evident that but for Kerala and West Bengal, all the other forward states are above the national average of 509 kwh. in 2007-08. Bihar and Assam are way behind at 49 kwh. and 124 kwh. respectively. It is imperative that unless the them, the backward states, especially Uttar Pradesh industrialisation process picks up in these states, the disparities would continue. The reform process has only sidelined this issue.

Table 4: Investment Proposals and Disbursal of Assistance for Investment

(Percentage Distribution)

	Percentage share of Investment Proposals (Aug '91-Dec '98)	Cumulative Share of Financial Assistance Disbursed by All-India Financial Institutions (up 31st March '97)	Cumulative Financial Assistance Disbursed by State Financial Corporations (up 31st March 97)
Forward States			
Punjab	3.4	2.4	3.6
Maharashtra	18.0	21.0	11.5
Haryana	3.6	2.5	4.8
Gujarat	18.7	13.5	9.3
West Bengal	3.3	3.9	2.5
Karnataka	5.6	6.1	15.5
Kerala	1.1	1.7	4.4
Tamil Nadu	7.2	9.0	10.6
Andhra Pradesh	8.3	7.2	7.8
Sub-total	**69.2**	**67.3**	**70.0**
Backward States			
Madhya Pradesh	7.4	5.1	3.2
Assam	0.7	0.5	0.5
Uttar Pradesh	9.4	7.9	11.1
Rajasthan	3.9	4.5	6.1
Orissa	2.2	1.8	3.7
Bihar	1.2	1.4	2.0
Sub-total	24.8	21.2	26.6
All-India	**100.0 (7,37,516)**	**100.0 (3,12,502)**	**100.0 (20,896)**

Note: 1. Figures in brackets indicate totals of ₹ crores.
2. Data has been arranged according to our classification of forward and backward states.

SOURCE: N. J. Kurian, Widening Regional Disparties in India, *Economic and Political Weekly*, February 12-18, 2000.

TABLE 5: Levels of Infrastructure Development

	Per Capita Power Consumption (2007-08)	*Registered Vehicles per 1000 persons as on (2006)*	*Road Length per 1000 km² kms. of Area of the States (2008)*	*Telecom Lines per 1000 persons as on March 31, (2009)*	*% of Irigated Area in gross cropped Area 2007-08*	*Social and Economic Infrastructure Index 1999*
	(1)	(2)	(3)	(4)	(5)	(6)
Forward States						
Punjab	1,155	1,548	897	5.83	97.7	187.6
Maharashtra	680	1,046	726	3.79	19.6	112.8
Haryana	309	1,324	672	4.38	86.0	137.5
Gujarat	1,116	1,568	743	4.52	41.7	124.3
West Bengal	321	337	2,336	2.25	56.9	111.3
Karnataka	661	1,106	1,331	4.52	29.4	104.9
Kerala	352	1,070	5,269	5.85	16.5	178.7
Tamil Nadu	896	1,544	1,393	5.05	55.9	149.1
Andhra Pradesh	651	894	1,254	3.96	46.3	103.3
Backward States						
Madhya Pradesh	395	694	538	3.01	32.2	76.8
Assam	124	319	2937	2.07	2.4	77.7
Uttar Pradesh	241	867	1182	2.49	75.5	101.2
Rajasthan	443	763	501	3.72	36.4	75.9
Orissa	520	497	1383	2.33	36.7	81.0
Bihar	49	158	1276	2.22	60.6	81.3
All-India	**509**	**768**	**1288.7**	**3.3**	**44.6**	**100.0**

SOURCE: Planning Commission, *Ninth Fire Year Plan* (1997-2002), CMIE, *Profiles of States*, March 1997 and Tata Services Ltd., *Statistical Outline of India* (1999-2000) and *Eleventh Finance Commission (2000)*, *CSO Infrastructure Statistics, 2010*, *Directorate of Economic and Statistics, Department of Agriculture and Cooperation.*

Statewise number of registered vehicles per 1000 persons is an important indicator, though it cannot be treated as a comprehensive indicator of the level of transport development, since it does not take into account (a) railways and (b) road length per 1000 sq. Kms. which has become a major source of transport. While creation of infrastructure is important, but the intensity of its use would depend upon the state of development of the state in terms of Net State Domestic Product as well as per capita NSDP. It is due to this reason that certain anomalies need to be explained. For instance, Orissa has 1,383 Kms of road length per 1000 sq. Kms. of area, but it ranks very low in terms of NSDP (both total and per capita). This explains the under-utilisation of roads.

Whether we use registered vehicles per 1000 persons or telecom lines per 100 persons, none of these indicators, by itself indicates the intensity of utilisation. To that extent, the use of these criteria to indicate a direct connection between them and rate of development has its own limitations. Infrastructure development can be demand-driven when it is followed by investment in directly productivity activities and it is supply-driven when it is preceded by investment in directly productive activities. Demand-driven extension of infrastructure leads to its better utilisation with very little time lag but supply-driven enlargement of capacities does lead to its utilisation with a time lag. There can be justification of both approaches.

Nevertheless, the development of infrastructure is an essential, though not a sufficient condition for development. This can be realised from a close perusal of the infrastructure development index developed by CMIE. This index included the following items with the weights indicated in brackets.

(a) Transport facilities (26 per cent)
(b) Energy consumption (24 per cent)
(c) Irrigation facilties (20 per cent)
(d) Banking facilities (12 per cent)
(e) Communication (6 per cent)
(f) Educational facilities (6 per cent)
(g) Health facilities (6 per cent)

Treating the value of index for all-India as 100, the relative values of infrastructure development index (IDI) in the states have been presented in column (6) of Table 5. It may be noted that Punjab had the highest value of IDI as 191.4, followed by Tamil Nadu and Haryana as 144.0 and 141.3 respectively. Lowest value of IDI was for Madhya Pradesh (75.3), followed by Assam (78.9) and Bihar (81.1). Although Uttar Pradesh had a value of IDI 103.3 higher than that of the all-India level, yet in terms of foodgrains production and poverty removal, it was far behind Karnataka, West Bengal and Tamil Nadu, which had relatively lower IDI values.

While considering irrigation infrastructure, it may be noted that whereas Punjab had 95 per cent of irrigated area as a proportion of gross cropped area, it had the highest

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be setting up nursing hom

States

Forward States
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Maharashtra
Haryana
Gujarat
West Bengal
Karnataka
Kerala
Tamil Nadu
Andhra Pradesh
Backward States
Madhya Pradesh
Assam
Uttar Pradesh
Rajasthan
Orissa
Bihar
All-India63.5

SOURCE: Government
Note : IMR – Infant

productivity per hectare, but in Uttar Pradesh though this proportion was quite high at 63 per cent, yet its productivity per hectare was relatively low. This only highlights the fact that whereas Punjab and Haryana were able to harness this high infrastructure facility for agricultural development, Uttar Pradesh did not succeed adequately in this regard.

Social Infrastructure and Human Development

Table 6 presents data on selected indicators of Human Development viz., life expectancy, literacy rate, infant mortality rate (IMR), death rate and birth rate. If the purpose of all development is to improve the quality of life, then human development indicators are the end-products of the development process.

Wide disparities are observed among different states. Kerala and to some extent Tamil Nadu have shown that it is possible to achieve higher levels of human development even with low levels of economic development. But, by and large, better levels of per capita NSDP are associated with higher levels of human development. To achieve higher levels of human development, it is necessary that investment in educational and health infrastructure be stepped up. Among the backward states, Bihar, Rajasthan and Uttar Pradesh have very poor record in terms of literacy, especially female literacy. They have also failed to make adequate investment in health infrastructure and consequently have lower life expectancy, higher infant mortality and higher birth rate. The private sector which is the torch-bearer of economic reforms may be setting up nursing homes or elite educational institutions with higher levels of charges or fees to meet the demand of the upper middle class and affluent sections, but it does not offer anything for the welfare of the poor. Either the private sector should assume a higher social purpose or the state should invest more in education and health infrastructure.

N. J. Kurian after making a detailed analysis of regional disparities after the initiation of economic reforms reaches the following conclusion:

"The accelerated economic growth since the early 1980s with increased participation by the private sector appears to have aggravated regional disparities. The ongoing economic reforms since 1991 with stabilisation and deregulation policies as their prime instruments and a very significant role for the private sector seem to have aggravated the inter-state disparities." He further states: " The better-off states are able to attract considerable amount of private investment, both domestic and foreign, to improve their development potential because of the existing favourable investment climate including better socio-economic infrastructure. The backward states are unable to attract private investment because of unfavourable investment climate including poor infrastructure. They are unable to improve the investment climate by improving the existing poor infrastructural facilities due to lack of resources. Their lack of resources is linked to their poor development. Thus, they are truly in a vicious circle."[1]

1. Kurian N J, Widening Regional Disparities, *Economic and Political Weekly*, Feb. 12-18-2000.

Table 6 : Selected Indicators of Human Development

States	Life Expectancy at birth (years) 2002-2006	Literacy Rate (2011) Total	Male	Female	Estimates of SRS-(Per Thousand) (2005) IMR (2010)	Death Rate (2010)	Birth Rate (2010)
Forward States							
Punjab	69.4	76.7	81.5	71.3	34	7.0	16.6
Maharashtra	67.2	82.9	89.8	75.5	28	6.5	17.1
Haryana	66.2	76.6	85.4	66.8	48	6.6	22.3
Gujarat	64.1	79.3	87.2	70.7	44	6.7	21.8
West Bengal	64.9	77.1	82.7	71.2	31	6.0	16.8
Karnataka	65.3	75.6	82.9	68.1	38	7.1	19.2
Kerala	74.0	93.9	96.0	92.0	13	7.0	14.8
Tamil Nadu	66.2	80.3	86.8	73.9	24	7.6	15.9
Andhra Pradesh	64.4	67.6	75.6	59.7	46	7.6	17.9
Backward States							
Madhya Pradesh	58.0	70.6	80.5	60.0	62	8.3	27.3
Assam	58.9	73.2	78.8	67.3	58	8.2	23.2
Uttar Pradesh	69.0	69.7	79.2	59.3	61	8.1	28.3
Rajasthan	62.0	67.1	80.5	52.7	48	6.8	26.7
Orissa	59.6	73.4	82.4	64.4	61	8.6	20.5
Bihar	61.6	63.8	73.4	53.3	47	6.8	28.1
All-India63.5	63.5	74.0	82.1	65.5	47	7.2	22.1

Source: Government of India, *Economic Survey (2009-10) and Census of India 2011, Series 1 – India, Paper 1 of 2011*

Note : IMR – Infant Mortality Rate

The upshot of the analysis of indicators of regional imbalance is that though even during the planning process, there is some evidence of the growth of regional disparities but still, the state made a conscious effort to reduce them. But the reform process, which strengthened market forces within the country, coupled with globalisation favour the forward states and neglected the backward states. As a result regional disparities were aggravated.

2. CAUSES OF ECONOMIC BACKWARDNESS AND REGIONAL IMBALANCES

There are certain deterrent factors which come in the way of rapid development of a region; most important of these are the geographical isolation, inadequacy of economic overheads like transport, labour, technology, etc.

Historically, the existence of backward regions started from the British rule in India. The British helped the development of only those regions which possessed facilities for prosperous manufacturing and trading activities. Maharashtra and West Bengal were the states preferred by the British industrialists. The three metropolitan cities—Calcutta, Bombay and Madras—attracted all the industries and the rest of the country was neglected and remained backward.

Further, under the land system of the British, the rural areas were continuously pauperised and the farmers remained the most oppressed class; the zamindars and the moneylenders were of course, the only prosperous persons on the rural scene. The absence of effective land reforms allowed the structure in most of rural India to remain inimical to economic growth. The uneven investment in irrigation during the British period helped some areas become prosperous under the British rule.

In developing countries, the developed regions are generally confined to urban centres and urban areas. This is mainly because physical geography controls economic growth in a greater degree in developing countries than in developed countries. For example, Japan and Switzerland have overcome the handicaps of mountain terrain but our Himalayan States, viz., Northern Kashmir, Himachal Pradesh, the Hill districts of U. P. and Bihar and NEFA, have remained backwards and underdeveloped mainly because of inaccessibility. Climate too plays an important role in the low economic development of many regions in India as reflected in low agricultural output and absence of large-scale industry.

Some regions are preferred because of certain locational advantages. The location of iron and steel factories or oil refineries will have to be only in those technically defined areas, which are optimal from all the standpoints considered together. Naturally, as the process of development gains momentum, they attract labour, capital, trade and the external economies offered by the developing regions.

New investment, more so, in the private sector has a tendency to concentrate in an already well developed area, thus reaping the benefit of external economies. This is but natural from the private sector

TABLE 6. Per Capita Plan outlays : First to Eighth Plan and Eleventh Plan

(₹)

	I Plan 1951-56	*II Plan* 1956-61	*III Plan* 1961-66	*IV Plan* 1969-74	*V Plan* 1974-78	*VI Plan* 1980-85	*VII Plan* 1985-90	*VIII Plan* 1992-97	*XI Plan* 2007-12
Punjab	175	146	212	316	531	1,179	1,695	2,951	11,873
Maharashtra	37	57	103	199	372	983	1,434	3,101	13,164
Haryana	..	..	..	358	481	1,385	1,871	2,838	15,783
Gujarat	58	76	108	204	376	1,037	1,485	2,700	21,100
West Bengal	54	48	80	82	200	600	653	1,144	7,955
Karnataka	46	62	100	128	276	614	749	3,138	19,235
Kerala	31	49	101	156	224	578	727	2,378	13,172
Tamil Nadu	28	57	98	134	201	651	1,063	2,427	13,676
Andhra Pradesh	33	52	91	98	236	584	841	1,858	19,340
Madhya Pradesh	34	48	84	114	254	687	1,146	1,742	11,653
Assam	29	57	103	136	190	526	850	2,066	8,986
Uttar Pradesh	25	32	72	132	237	535	803	1,372	10,896
Rajasthan	39	53	97	120	237	577	718	2,548	12,694
Orissa	56	54	120	113	207	536	897	2,123	3,755
Bihar	25	40	67	85	155	456	626	592	7,305
All States	38	51	92	142	262	687	1.026	1,965	14,466

SOURCE :Centre for Monitoring Indian Economy : *Basic Statistics Relating to the Indian Economy*, Vol. 2, States (1989) and Planning Commission, *Ninth Five Year Plan* (1992-97), Eleventh Five year Plan (2007-12).

point of view, since well developed area offers private investors certain basic advantages, viz, labour, infrastructure facilities, transport and the market.

Nature of development during the planning era

Serious regional imbalances resulted during the period of planned economic development since 1950-51. Even though balanced development was strongly endorsed by the Industrial Policy Resolution of 1956 and accepted as one of the principal objectives of economic planning from the Second Plan onwards, it was almost completely ignored by our planners and the licensing authorities.

Really speaking, the planning mechanism has itself accentuated the disparity between the states by having a strong bias in favour of developed states and neglecting less-developed States. Table 7 shows that by and large, the more developed States were clearly favoured and the less developed States were neglected in planned outlay. Punjab and Haryana have always received the highest per capita plan outlays from the first plan to the Eight plan. In fact, the first four or five states have always received larger allocation of Plan outlays in all the five year plans. At the same time, the poorest states like Bihar, Orissa, Uttar Pradesh and Rajasthan have continued to receive the smallest allocation per capita in all the Plans. Accordingly, the disparity between the States in India has been widening. This is despite a clear objective of planning to achieve regional balance in development.

Since 1951, considerable investments have been concentrated at a few places like Mumbai, Ahmedabad, Delhi, Kanpur, Calcutta, Bangalore, etc. on "efficiency criteria." These areas have outgrown their capacities and are faced with serious problems of congestion, slums, transport, public health, etc. At the same time, they are causing serious brain and resource drain from the adjoining areas. They "act as suction pumps, pulling in more dynamic elements from the more static regions." While the growth centres experience rapid, sustained and cumulative economic growth, the neighbouring regions have experienced outflow of people, capital and resources.

The adoption of the new technology in agriculture during the 1960's has also aggravated regional economic disparities. Working on the assumption of using the scarce resources in the most productive way and maximising foodgrains production to solve the problem of food shortage, the Government concentrated its resources on farmers of heavily irrigated tracts in different parts of the country. These farmers were already well-off and they were made still better-off. On the other hand, dry-land farmers and non-farming population of the countryside have been left out. This has led to widening of the gap of income disparities between irrigated and dry areas and between large farmers and small farmers in every state.

The Government did make an attempt toward decentralisation and development of backward regions through public sector investment programmes in such areas as Rourkela, Bhilai, Barauni, etc. But as the ancillary industries did not come up fast enough these areas have continued to remain backward despite heavy investment by the Centre.

Finally, there was an additional factor for growing regional imbalance after Independence. While some State Governments devoted much attention to the industrial development of their regions—Punjab, Haryana, Gujarat, Maharashtra and Tamil Nadu (at one time) are examples—others were more interested in political intrigues and manipulations than in rapid and balanced economic growth of their areas.

3. CHANGING SCENARIO IN BACKWARD STATES – BUT A LONG WAY TO GO

Punjab, Maharashtra, Haryana, Gujarat, Tamil Nadu, Kerala, Himachal Pradesh are undoubtedly relatively developed states and Bihar, Madhya Pradesh, Assam, Rajasthan, Uttar Pradesh etc. are backward states. Economic analysts try to name these backward states as BIMARU by joining first letter of names of these backward states. They are called backward, as not only their per capita income in low, rate of economic growth has also been very low there. We find that between 1990-91 and 2002-2003 Bihar state domestic product instead of rising, declined at the rate of about one percent per annum. We find that during this period rate of growth of gross domestic product (All India) was 5.4 percent per annum, rate of growth of State Domestic Product (SDP) was only 0.4 percent for Madhya Pradesh, 2.1 percent for Uttar Pradesh, 2.6 percent for Assam and 3.5 percent for Rajasthan.

At aggregate level, the rate of growth of backward states was only 1.7 percent per annum. Thus it was legitimate to call these states – BIMARU states. But situations have changed since 2002-03. Data indicate towards a much better position for these states. Rate of growth of Rajasthan's SDP has been about 7.71 percent per annum between 2004-05 and 2009-10. This rate has been 9.02 per cent for Orissa, 5.07 percent for Madhya Pradesh and 6.57 percent for Uttar Pradesh during the same period. Bihar has also started showing signs of improvement since 2005. Bihar has demonstrated a high rate of growth of 11.07 percent per annum. It may not be a pure coincidence that after new government took the reign of Bihar, that the rate of growth of Bihar economy not only turned positive it became one of the fastest growing state of the country and achieved a rate of growth of 11 percent per annum during 2006-07 and 2009-10.

But this is also a fact that per capita income of Bihar is still the lowest in the country. On the other hand per capita income of Uttar Pradesh, Orissa, Rajasthan, Assam, Madhya Pradesh and newly constituted state of Jharkhand is lower by 25 to 40 percent as compared to national average per capita income. This is a cause of major concern. Reduction in regional inequalities is imperative not only from the point of view of improving living standards in backward states but also for faster economic development of the country at large. The importance of contribution of our vast man power specially youth in the development of the country is well established. If anyone or more states remain backward, it affects the development in education, health and other public utilities. In such states infrastructure development is also adversely affected. We find that in such states educational development index is also low. According to the government's statistics Bihar is educationally most backward state and in the list of all state and union territories it is at lowest rank of 35.Ranks of Jharkhand, Uttar Pradesh, Madhya Pradesh and Orissa are 34th, 31st, 29th and 28th respectively. Development of Rajasthan is getting revealed in its educational development and it has reached at 19th position. Though West Bengal is considered to be developed but it comes at 32nd position, even lower than Madhya Pradesh.

Once a state misses the train of development, it is caught into the web of backwardness. Whereas forward states get all kinds of investment proposals, backward states lag behind in investment. They get less support even from financial institution as compared to forward states. Living standards in these states are very low with no signs of improvement. Forward states enjoy maximum utilisation of national resources. According to Planning Commission per capita consumption of electricity in backward states is less than half as compared to forward states. These backwards states lag behind forward states even in terms expansion of roads, telecom, agriculture extension services, irrigation etc. They lag behind in terms of all types of indicators of human development. Life expectancy is low, literacy level is low and birth rate and death rate both are very high.

We get a sigh of relief when we note signs of development in these backward states and it seems that they are coming out of web of under development. Now it becomes the bounded duty of both central and state governments to completely eradicate the menace of illiteracy, lack of health facilities, poverty and unemployment and infrastructural bottlenecks, all arising due to under-development and place these states on right track.

4. POLICY MEASURES TO REMOVE REGIONAL DISPARITIES

The Planning Commission of India has sought to tackle the problem of regional disparities and backwardness particularly in three ways :

(a) The recognition of backwardness as a factor to be taken into account in the transfer of financial resources from the Centre to the States;

(b) special area development programmes directed at development of backward areas; and

(c) measures to promote private investment in backward areas. We shall deal with these three policy measures in greater detail.

Backwardness and resource transfer

The Finance Commissions in India have used backwardness of a State as one of the criteria for the transfer of funds from the Central pool to the States. The resource transfers relate to Central assistance for State Plans, transfers effected under the recommendations of Finance Commission, *ad hoc* transfers from the Centre to the States, the distribution of assistance for Centrally sponsored schemes, the distribution of long-term and short-term credit from financial institutions etc. The share of the backward States in plan outlay and in Central assistance steadily rose from 48 per cent in the First Plan to 57 per cent in the Third Plan. Since then, the share of the backward states in Central Plan assistance has been gradually declining to 50 per cent in the Fifth Plan, 36 per cent in the Sixth Plan and 37 per cent in the Eighth Plan (Refer Table 8). The Tenth Plan has projected a further decline to 36 per cent.

Table 8: Central Assistance to State Plans

Plans	*Total Assistance to all States (₹ crore)*	*Total Assistance to Backward States (₹ crores)*	*Percentage of Assistance of Backward States*
Sixth Plan (1980-85)	16,560	7,590	46
Seventh Plan (1985-90)	31,420	13,200	42
Eighth Plan (1992-97)	93,830	35,160	37
Ninth Plan (1997-2002) (Actual)	1,85,260	69,990	38
Tenth Plan (2002-07) (Projected)	2,54,100	91,080	36

* The backward States are Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh.

Source: Compiled from *Tenth Five Year Plan (2002-07)*, Table 6.1, p. 118 of Vol. III.

Many states demanded that the proportion of Central assistance allotted to special projects should be raised from 10 per cent under the Gadgil formula to 25

Table 9: Inter-state shares of Central Assistance

	Per capita GSDP (2004-05) ₹	*Population (2001) Crores*	*Share in NCA* (2007-08)*	*Share percent as per 12th Finance*
Non-Special category				
Forward States				
Goa	80,392	0.14	0.50	0.28
Maharashtra	37,235	10.21	6.91	5.44
Punjab	36,376	2.57	2.11	1.42
Haryana	35,893	2.23	1.77	1.17
Gujarat	34,223	5.35	3.93	3.89
Kerala	32,818	3.36	3.26	2.90
Tamil Nadu	31,603	6.58	5.94	5.78
Karnataka	28,774	5.57	4.42	4.86
Andhra Pradesh	26,655	8.03	6.34	8.01
West Bengal	23,145	8.45	8.81	7.68
Sub-Total		**52.49**	**43.99**	**41.43**
Backward States				
Chhattisgarh	20,336	2.20	2.87	2.89
Jharkhand	19,908	2.84	3.54	3.66
Rajasthan	18,909	5.95	5.86	6.11
Orissa	18,440	3.88	6.26	5.62
Madhya Pradesh	16,597	6.36	6.92	7.31
Uttar Pradesh	13,842	17.52	19.48	20.98
Bihar	7,486	8.75	11.06	12.01
Sub Total		**47.51**	**56.01**	**58.57**
Total		**100.00**	**100.00**	**100.00**

* NCA implies Normal Central Assistance

Notes: States in a particular category have been arranged in the descending order on the basis of per capita gross state domestic product (GSDP).

Source: Planning Commission, *Eleventh Five Year Plan* (2007-2012), Vol.I

per cent, so as to benefit the backward states. Even the revised formula for Central assistance could not tilt the balance in favour of backward states as was intended.

There are certain basic difficulties in solving the problem of regional disparities and backwardness through transfer of resources from the Centre to the States. There is no guarantee that the resources transferred from the Centre to the States would be automatically used for the development of the backward areas or districts. In fact there is a "tendency to divert funds intended for backward and difficult areas to more forward areas and easier programmes."[2]

Special area development programmes

Specific Plan schemes have been formulated with Central assistance to develop hilly areas, tribal areas and drought-prone areas. Moreover, schemes of rural development directed towards the improvement of specific groups like small farmers and agricultural labourers were also located in backward areas. In course of time, these special schemes for particular target groups, become a part of the programme of block level planning for integrated rural development and full employment.

2. **Sixth Five Year Plan**, 1980--85. p. 87.

The Eleventh Finance Commission did not make backwardness as such a criterion for resource transfer, but in the formula for resource transfer, among the different criteria, the relative distance of the per capita income of state with the income of the state with highest per capita income and the index of infrastructure development were indirectly used to include backwardness. On the basis of the new formula, backward states and special category states, taken together would receive 61.2 per cent of total resource transfer.

As per data provided in table 9, the Central Government and the Twelfth Finance Commission have made efforts to reallocate resources in favour of the backward states. Out of the Normal Central Assistance, as against a population of 52.5% belonging to forward states, only 44% of the funds were provided. Similarly, the Twelfth Finance Commission, allocated only 41.4% of the total funds to forward states. Consequently, backward states with a population of 47.5% received 56% funds under Normal Central assistance and 58.6% share as per Twelfth Finance recommendations. This indicates the intention of the Central Government to tilt the balance of allocations in favour of backward states.

Incentives to promote investment in backward areas

Various incentives, both fiscal and otherwise, have been provided in order to tackle the problem of industrial backwardness and to promote private investment in backward areas. These incentives have been provided by the Centre, by the States and by public sector financial institutions.

Central Government Incentives

The Government of India has been providing important incentives to promote private investment in backward areas. These incentives are :

(a) ***Income Tax Concession*** : New industrial units located in backward areas set up after January 1971 are allowed a deduction of 20 per cent of profits for computation of assessable income. This concession introduced in April 1974 was to be available for a period of 10 years.

(b) ***Central Investment Subsidy Scheme*** : The scheme of Central investment subsidy, as originally announced in 1970, provided for an outright subsidy at the rate of 10 per cent subject to a maximum of ₹ 5 lakh on fixed capital investment, viz., land, buildings, plant and machinery. The rate of subsidy was subsequently raised to 15 per cent and still later to 20 per cent.

However, the block/talukas/extensions of townships in category B and C areas which have exceeded an investment limit of ₹ 30 crores as at the end of March 1983 were to be excluded from the scope of the investment subsidy scheme.

With effect from April 1984, the maximum limit of Central investment subsidy has been raised to ₹ 50 lakhs at the rate of 25 per cent in the case of electronics industries set up in hilly districts.

(c) ***Transport Subsidy Scheme*** : Under this scheme, introduced in July 1971, industrial units set up in hilly, remote and inaccessible areas were entitled to 50 per cent transport subsidy on the expenditure incurred for movement of raw materials and finished goods to and from certain selected rail heads to the location of the industrial units. The scheme is applicable to remote and inaccessible areas in Jammu and Kashmir, and north-eastern hill states.

(d) ***Other measures*** : The Central Government has also initiated a scheme at assisting state governments in infrastructural development in identified "no-industry districts" upto one-third of the total cost of such development subject to a maximum of ₹ 2 crores. Under this scheme, the Central Government has helped to develop many growth centres through infrastructure development.

State Government Incentives

State Governments have also offered incentives to attract private sector units to the backward region. These incentives include provision of developed plots with power and water on a no-profit no-loss basis, exemption from payments of water charges for some years, interest-free loans on sales tax dues, exemption from Octroi duties, exemption from payment of property taxes for some years, preferential treatment for the purchase of stores for units located in backward areas, subsidy on industrial housing scheme etc. In recent years more than half the assistance sanctioned by SFCs, SIDCO and SIICs went to districts designated backward for the concessional finance schemes.

Concessional Finance by major financial institutions.

The three major public sector financial institutions, viz., Industrial Development Bank of India (IDBI), the Industrial Finance Corporation of India (IFCI) and the Industrial Credit and Investment Corporation of India (ICICI) provide concessional finance for industrial projects located in backward areas. These concessions relate to: a lower rate of interest on rupee loans (9.5 per cent as against 11.5 per cent), a longer period of repayment (generally 15 to 20 years, as against 10 to 12 years), participation in the risk capital or debenture issues, charging only half the normal rate of underwriting commission, waiving of commitment charges, etc.

The above three public sector financial institutions have also taken many other steps for the development of backward areas. They have prepared, at their own cost, feasibility study of projects which seem promising and they encourage prospective entrepreneurs to assess them and take interest in implementing them. These institutions run entrepreneurial training programmes for the benefit of small and medium entrepreneurs. Finally, IDBI has been instrumental in setting up several technical consultancy organisations (TCOs) throughout the country. These organisations provided technical consultancy service, so very necessary for the development of backward areas.

5. TENTH AND ELEVENTH FIVE YEAR PLAN AND REGIONAL DISPARITIES

Barring the First Five Year Plan (1951-56), every successive five year plan has highlighted the widening disparities between States and between different regions within states and the necessity to narrow down these disparities. The Tenth Plan took up this problem as a challenge, since these backward states and regions, despite many efforts in the past, have continued to be characterized by "high poverty, low growth and poor governance." They represent the most glaring failure of

3. Planning Commission. ***Eleventh Five Year Plan*** (2007-2012) Vol. I. P. 155
4. Ibid., p. 155

Table 10: Allocation of Funds under Various Central Funded Schemes (2007-08) for Backward States

₹ crores

	Population Share (2001) % age	*PMSGY*	*NHRM*	*SSA*	*IAY*	*Supp. nutrition*
Uttar Pradesh	16.2	675	1,459	1,759	478	509
Bihar	8.1	457	681	1,154	1,063	185
Jharkhand	2.6	225	263	669	95	60
Madhya Pradesh	5.9	890	544	894	111	131
Chhattisgarh	2.0	690	225	390	56	590
Rajasthan	5.5	434	548	800	89	98
Orissa	3.6	543	345	449	209	96
Sub-total	**43.9**	**3,914**	**4,065**	**6,115**	**2,101**	**1,669**
		(60.2)	**(45.3)**	**(59.0)**	**(52.1)**	**(82.3)**
All-India total	**100.0**	**6,500**	**8,970**	**10,371**	**4,033**	**2,027**
		(100)	**(100)**	**(100)**	**(100)**	**(100)**

Note: Figures in brackets are percentage of All-India total outlay for these schemes
Source: Compiled and computed from the data provided in the ***Eleventh Five Year Plan*** (2007-2012), Vol.I.

the existing policies and administrative procedures and hence it is these areas that need to be addressed, in a special way, during the Tenth Plan.

Tenth Plan Strategy For Less Developed States

As states with better infrastructure generally attract private investment in much larger measure than other states, the Tenth Plan would like to adopt a multipronged strategy to accelerate the development of less developed states and backward regions within developed states. Accordingly, the Tenth Plan strategy is:

(a) High level of capital investment is an important component of this strategy. A high proportion of Central assistance and States' own resources would be devoted in improving infrastructure gaps in less developed states.

(b) Funds alone cannot address backwardness; but development effort should be accompanied by Governance and institutional reforms to make the targeted investment effective.

On the basis of this strategy, the Tenth Plan formulated a new scheme called Rashtriya Sam Vikas Yojana - RSVY (National Equal Development Plan) to support the development initiatives in backward states and regions. RSVY was a new initiative introduced from the financial year 2002-03, with the specific focus on development programmes for backward areas, help reduce imbalances, speed up development and help the backward areas to overcome poverty and unemployment. RSVY would facilitate the states to take up productivity-enhancing reforms. These would consist of reforms in the administrative and financial structure, the way financial and administrative powers are delegated and include policies relating to the day-to-day life of the ordinary people. Besides, the reforms undertaken should have a multiplier effect on the concerned regions.

The implementation of various development programmes in backward states and regions during the past five year plans, especially during the Ninth plan, brought out clearly that funds were not the only bottleneck in the development process. More often, the existing rules and the way they are interpreted prevent the services meant for the poor and the marginalized reaching the target groups.

Under the present RSVY arrangement, each state has to identify and choose the reforms process and enter an agreement with the Centre to implement the reforms process. Only those states which enter into such agreement will be entitled to receive funds based on Gadgil-Mukherjee formula.

Eleventh Five Year Plan and Balanced Regional Development

In the Eleventh Five Year Plan commenting on regional disparities states: "Redressing regional imbalances has indeed been a vital objective of the planning process. However, despite the efforts made, regional disparities have continued to grow and the gaps have been accentuated as the benefits of economic growth have been largely confined to better developed areas. Paradoxically, it is the natural resource rich areas which continue to lag behind. This has in turn tightened the stranglehold of the naxalite movement and demands for division of States in these areas. With the removal of controls and the opening up of the economy to external forces, the pressure of market forces may tend to exacerbate inter and intra-State disparities."[3]

Warning the Government, the Eleventh Plan further mentions: "Redressing regional disparities is not only a goal in itself but is essential for maintaining the integrated social and economic fabric of the country without which

Table 11: Disparities in State HDIs in India

State	*No. of Districts in the State*	*State HDI*	*Highest HDI for a District in the State*	*Lowest HDI for a District in the State*	*Coefficient of Variation %*
Kerala	14	0.773	0.801	0.749	2.37
Tamil Nadu	29	0.657	0.757	0.584	5.97
Karnataka	27	0.633	0.753	0.547	7.62
Nagalnd	8	0.620	0.733	0.450	15.89
West Bengal	18	0.610	0.780	0.440	16.68
Maharashtra	34	0.580	1.000	0.210	36.55
Punjab	17	0.537	0.761	0.633	4.93
Uttar Pradesh	70	0.532	0.710	0.366	11.59
Arunachal Pradesh	17	0.515	0.660	0.362	18.36
Gujarat	25	0.479	0.582	0.309	16.14
Chhattisgarh	16	0.471	0.625	0.264	21.16
Sikkim	4	0.454	0.501	0.391	8.92
Himachal Pradesh	12	0.433	0.534	0.390	11.14
Rajasthan	32	0.424	0.656	0.456	8.88
Assam	23	0.407	0.650	0.214	27.9
Orissa	30	0.404	0.736	0.389	16.94
Madhya Pradesh	45	0.394	0.694	0.372	11.37

Note: Data for states has been re-arranged in the descending order on the basis of State HDI.
Source: State Human Development Reports (SDHRs) as given in *Eleventh Five Year Plan (2007-2012)*, Vol.I.

the country may be faced with a situation of discontent, anarchy and breakdown of law and order."[4]

The Eleventh Plan has listed the programmes which are particularly targeted towards poor areas and poor people, especially those below the poverty line. Since backward states have higher percentages of the poor people, their share in these programmes is bound to be better. The programmes of resource transfer under centrally sponsored schemes are as under:

1. Pradhan Mantri Gram Swaranjayanti Swarozgar Yojana (PMGSY) is targeted at BPL (Below Poverty Line) families and has in-built safeguards for the weaker sections with 50% benefits reserved for SC/STs.
2. Indira Awaas Yojana gives 75% weightage to housing shortage and 25% to poverty ratios.
3. National Rural Health Mission (NHRM) focuses on 18 states which have weak public health indicators or weak infrastructure. 23 percent of funds from the scheme are provided to two states, viz., Uttar Pradesh (16%), Bihar (77%).
4. Sarv Shiksha Abhiyan – Under this programme, seven states, viz, Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh, Chattisgarh, Rajasthan, and Orissa received 59% of total outlay.
5. Under supplementary nutrition programme, the seven backward states, received 82.3% of the total allocation though their population was only 44%.

Taking all the five schemes together, out of a total allocation of ₹ 31,901 crores the allocation for the backward states was ₹ 17,864 crores – that is 56 percent of the total.

Rashtriya Sam Vikas Yojna (National Equal Development Fund) was introduced in 2003-04 to address the problems of low agricultural productivity, unemployment and critical gaps in infrastructure. The scheme covered 147 backward districts and each district was to receive ₹ 45 crore. During the Tenth Plan, an amount of ₹ 4,763 cores was released under RSVY.

Backward Regions Grant Fund aims to help programmes like Bharat Nirman and National Rural Employment Guarantee Programme (NREGP) which are explicitly designed to meet rural infrastructure needs but which need supplementation to address critical gaps.

The scheme has two components, namely, (a) District Component covering 250 districts and (b) Special Plans for Bihar State and Kalahandi-Bolangir-Koraput (KBK) districts of Orissa State. The Special Plan aims to bring about improvement in sectors such as power, road connectivity, irrigation, forestry and watershed development. An allocation of ₹ 1,000 crores per annum was made during the Tenth Plan for the Special Plan.

Development of North Eastern Region

North Eastern Region (NER) comprises of states, namely, Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagalnd, Sikkim and Tripura. These states have been classified as Special Category States. Since these states did not participate in the process of planned development in the first two decades of planning, they were deprived of the benefits of infrastructure development. It was only after the formation of North Eastern Council that these states received special attention. During 1973 and 2006-07, a total investment of ₹ 7,182 crores have been made in NER. Out of this, ₹ 3,315 crores (46.7%) were used for the development of transport and communications and ₹ 2,586 crores (36.0%) were used

for power and water. These two items, taken together accounted for nearly 83% of total investment, leaving very little for agriculture, industry, human development in the form of health and education.

NER has hydropower potential of 62,357 MW (42.5%) against the All India- potential of 1,48,701 MW. Arunachal Pradesh alone has hydropower potential of 50,238 MW which is 80% of the total hydro-potential of NER. This accounts for 34% of the total potential of the country. Eleventh Plan laments: "Despite recognizing this potential, the desired thrust is not there as hydel power development requires huge investments."[5] Since the coal resources of the country are expected to be exhausted during the next 30 year, it would be desirable to take up massive hydro-power projects increase the importance of NER in the energy sector and thus will be beneficial not only for NER, but also for the entire country. It will also reduce the disruption in communications and loss of life and property due to frequence occurrence of floods and landslides, causing natural disasters in North-Eastern Region.

During the Tenth Plan, a total investment of ₹ 80,940 crores was made in the NER during 2002-03 and 2006-07.

According to the Eleventh Plan, though the NER is rich in development in terms of human capital and natural resources, yet lack of infrastructure has impeded the growth process in this region. The situation as it prevails in the North Eastern Region is that "the primary sector has remained largely stagnant; the secondary sector has been handicapped due to variety of reasons. The planning exercise has resulted mainly in the expansion of the tertiary sector."[6] There is a need to stimulate the growth of agriculture as well as industry in NER.

6. STATE HUMAN DEVELOPMENT REPORTS

India has the largest programme of any country in the world for the preparation of Human Development Reports at the State level. So far, 18 states have published these reports. Others are in the process of preparation. On account of differences in methodology, the Human Development Indices (HDIs) developed by them are not comparable. Notwithstanding that, they broadly indicate the level of human development in a state.

However, the HDIs at the district level in a state are comparable. Efforts are being made to standardize Human Development Reports at the State Level as well.

Table 11 provides the range of HDIs among the districts within each state in comparison with the state average.

The co-efficient of variation indicates the inter-district disparity with in a state. This provides the basis for intervention by the states to remove disparity within the state. For instance, in Maharashtra, the HDI for Mumbai city is 1.0. Even if we treat this as an outlier, the next highest HDI in Maharashtra is 0.82 for Thane district. The lowest HDI for any district is 0.210. Consequently, co-efficient for variation for Maharashtra in 36.55% which is the highest in the country. As against it, in Kerala, HDI for various districts ranges between 0.749 and 0.801, with a co-efficient of variation of 2.3% which is the lowest in the country. This highlights that whereas inter-district disparity in Maharashtra is very high, it is very low in Kerala. Besides that a perusal of data given in the table reveals that whereas Karnataka, Punjab, Rajasthan, Tamil Nadu, Sikkim show low inter-district disparity in HDI, Asssam, Chhattisgarh, Nagaland, Arunachal Pradesh and Gujarat show high inter-district disparity.

Obviously, whereas there is an over-all effort in all states in India to improve HDI, specific interventions are being made to improve inter-district disparity by various state governments. Governments of West Bengal, Andhra Pradesh and Gujarat have initiated measures for uplifting backward districts so that inter-district disparity is reduced.

According to the Human Development Report, countries which attain HDI level of 0.8 and above are classifred among the high HDI countries. Those with HDI in the range of 0.5 to 0.8 are among medium HDI countries and others showing HDI below 0.5 are among the poor HDI countries. Treating India as a sub-continent and considering each state as a country, we observe that none of the Indian states can be classified as one with a high HDI. Kerala with an HDI of 0.773 is making an effort to reach the high HDI category. Arunachal, Karnataka, Maharashtra, Nagaland, Tamil Nadu and Uttar Pradesh fall in the medium HDI range. All other states are in the range of low HDI.

Efforts have, therefore, to be made to concentrate development on those sections of our population which have remained poor, lack health and education facilities. The backward states should be helped to catch up with the relatively more advanced HDI states and within each state, the backward districts have to be given greater attention and resources so that inter-district disparities are reduced. We have miles to go before we sleep.

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5. Ibid, p. 172 6. Ibid, p. 3

PART III

AGRICULTURE IN THE NATIONAL ECONOMY

- Agriculture : Under Five Year Plans : The Green Revolution
- Food security in India
- Irrigation and agricultural inputs
- Land Reforms
- Size of farms and productive efficiency
- Organisation of rural credit
- Agricultural marketing and warehousing
- Agricultural labour

CHAPTER

29

INDIAN AGRICULTURE : UNDER THE FIVE YEAR PLANS : THE GREEN REVOLUTION

"Agricultural development is central to economic development of the country."

— Tenth Five Year Plan

1. THE PLACE OF AGRICULTURE IN THE NATIONAL ECONOMY

Agriculture has always been the backbone of the Indian economy and despite concerted industrialisation in the last six decades, agriculture still occupies a place of pride. It provides employment to around 60 per cent of the total work force in the country. The significance of agriculture in the national economy can be best explained by considering the role of agriculture under different heads.

(i) Share of Agriculture in the National Income.

TABLE 1: Share of Agricultural Sector in Total Gross Domestic Product (At 1999-00 Prices)

(in percentage terms)

Year	*Agriculture*
	(2)
1950-51	56.5
1970-71	45.9
1990-91	34.0
2000-01	24.7
2005-06	19.55
2006-07	18.51
2007-08 (2004-05 Prices)	17.8
2008-09	15.7
2009-10(PE)	14.7
2010-11(QE)	14.5
2011-12*	13.9

Note: Agriculture includes agriculture, forestry and fishing.
Source: Economic Survey 2007-08, Statistical Abstract of India 2008. CSO, National Accounts Statistics, 2010, (2004-05 Prices) *Advanced

PE Provisional Estimates; RE Revised Estimates

Figures provided by the Central Statistical Organisation (CSO) reveal that in 1950-51, the share of agriculture in GDP was around 55 per cent (Table 1). As the process of industrialisation and economic growth gathered momentum under the Five Year Plans with manufacturing and service sectors growing rapidly and agricultureal sector limping along, the percentage share of agriculture in GDP declined and reached a level of 13.9 per cent in 2011-12.

Two important facts must be emphasised here:

(a) Agriculture contributed a major share of the national income in India at one time.

(b) The share of agriculture in national income, however, has been decreasing continuously while the

shares of the manufacturing and service sectors are increasing.

Comparison can be made between the position of agriculture in India with that in the other countries as regards the share of agriculture in national income. In the United Kingdom and United States, only 2 to 3 per cent of the working population is engaged in agriculture; in France, the proportion is about 7 per cent; and in Australia, this is about 6 per cent.

It is only in backward and less developed countries that the working population engaged in agriculture is quite high. For instance, it is 35 per cent in Egypt, 59 per cent in Bangladesh, 50 per cent in Indonesia and 68 per cent in China.

(ii) **Indian Agriculture and Pattern of Employment in the Country**. Agriculture dominates the economy to such an extent that a very high proportion of working population in India is engaged in agriculture.

TABLE 2: Population and Agricultural Workers

(in million)

	1951	*2001*
Total Population of India	361	1029
Total Working Population	140 (100)	401 (100)
Population employed on land *of which*	98 (70%)	235 (59%)
Cultivators	70 (50%)	128 (32%)
Agricultural Labourers	28 (20%)	107 (27%)

SOURCE: *Agricultural Statistics at a Glance* (2007).

Data provided by the Census of India reveals that in absolute terms, agriculture provided employment to 98 million persons in 1951; the number of people working on land (cultivators and agricultural labourers) increased to 235 million in 2001. In terms of percentage, however, people working on land came down from 70 to 59 during the five decades between 1951 and 2001.

The Tenth Plan (2002-07) estimates that the agricultural sector still provides employment to 57 per cent of India's work force and is the single largest private sector occupation. It is, however, really disturbing that the proportion of agricultural labourers has increased from 20 to 27 per cent between 1951 and 2001 but that of cultivators registered a decline from 50 per cent to 32 per cent. This shows clearly the growing pauperisation of the rural peasantry.

(iii) **Importance of Agriculture for Industrial Development**. Indian agriculture has been the source of supply of raw materials to our leading industries. Cotton and jute textile industries, sugar, flour mills vanaspati and plantations--all these depend on agriculture directly. There are many other industries which depend on agriculture in an indirect manner. Many of our small-scale and cottage industries like handloom weaving, oil crushing, rice husking, etc., depend upon agriculture for their raw materials--together they account for 50 per cent of income generated in the manufacturing sector in India.

But then, in recent years, the significance of agriculture to industries is going down as many new industries have come up which are not dependent on agriculture. Under the Five-Year Plans, iron and steel industry, chemicals, machine tools and other engineering industries, automobiles, information technology etc., have come up in a big way.

However, in recent years, the importance of food processing industries is being increasingly recognised both for generation of income and for generation of employment.

(iv) **Role of Agriculture in the Field of International Trade**. Importance of Indian agriculture also arises from the role it plays in India's trade. Agricultural products--tea, sugar, oilseeds, tobacco, spices, etc. --constituted the main items of exports of India. Broadly speaking, the proportion of agricultural goods which were exported came to 50 per cent of our exports, and manufactures with agricultural content (such goods as manufactured jute, cloth and sugar) contribute another 20 per cent or so; and the total comes to 70 per cent of India's exports in 1950-51. But with diversification of exports, more especially after the introduction of agricultural exports which were 18.5% in 1990-91 rose to 20.3% in 1996-97 and thereafter indicated a continuous decline and were of the order of only 9.9% in 2010-11.

Table 3 ; Agricultural Exports as a percentage of Total Exports

₹crores

	Agril. Exports (1)	*Total Exports (2)*	*(1) as % of (2)*
1990-91	6,013	32,527	18.5
1996-97	24,161	118,817	20.3
2000-01	28,657	201,356	14.2
2005-06	61,194	456,418	10.8
2006-07	62,411	571,779	10.92
2007-08	79,040	6,55,864	12.05
2008-09	85,952	8,40,755	10.22
2009-10	87,523	8,45,125	10.59
2010-11	1,13,116	11,42,649	9.9

Source : *Agricultural Statistics at a Glance (2010), Economic Survey 2011-12.*

(v) **Role of Agricultural Sector in Economic Planning.** Importance of agriculture in the national economy is indicated by many facts. For example, agriculture is the main support for India's transport systems, secure bulk of their business from the movement of agricultural goods. Internal trade is mostly in agricultural products.

Further, good crops implying large purchasing power with the farmers lead to greater demand for manufactures and, therefore, better prices. In other words, prosperity of the farmers is also the prosperity of industries. Likewise, bad crops lead to a depression in business. Generally, it is the failure in the agricultural front that has led to failure of economic planning in particular periods.

Agricultural growth has direct impact on poverty eradication. It is also an important factor in containing inflation, raising agricultural wages and for employment generation.

It is clear, therefore, that agriculture has been the backbone of the Indian economy. The rural areas are the biggest markets for low-priced and middle-priced consumer goods, including consumer durables. Besides, rural domestic savings are an important source of resource mobilisation.

Accordingly, any change in the agricultural sector, positive or negative, will have a multiplier effect on the entire economy. Since 2002-03, Indian agricultural sector is almost going through a crisis — huge foodgrains surplus wiped out, large imports of wheat being planned and farmers' suicides more frequent all over the country. A nation of more than a billion people cannot be dependent on imports for basic items like foodgrains and edible oils. The Tenth Plan asserts emphatically that the agricultural sector acts as a bulwork in maintaining food security and, in the process, national security as well.

Besides, the allied sectors like horticulture, animal husbandry, dairy and fisheries have an important role in improving the overall economic conditions and health and nutrition of the rural masses. To maintain the ecological balance, there is need for sustainable and balanced development of both agriculture and the allied sectors. The Tenth Plan—in fact, every one of the Five Year Plans—brought out the crucial role of the agricultural sector in enabling the widest dispersal of economic benefits and emphasised that "*agricultural development is central to economic development of the country.*"

Agricultural Development Essential for Economic Growth

The significance of agriculture in India arises also from the fact that the development in agriculture is an essential condition for the development of the national economy. Ragnar Nurkse argues that the surplus population in agriculture should be shifted to the newly started industries. Nurkse's thesis is that agricultural productivity will be increased on the one hand and on the other new industrial units would be set up with the use of surplus labour.

The Nurksian thesis, though widely welcomed at one time, has been questioned recently:

(a) Industrialisation does not consist only of shifting of workers from agriculture to industries. It requires a particular set of motives and values which an agricultural economy cannot supply. A change in agriculture itself is essential before such motivations and values are evolved.

(*b*) The marketable agricultural surplus will have to be increased considerably to feed the growing urban population and to provide raw materials to industries.

(*c*) New uses have been discovered for foodgrains and other agricultural crops. With fossil oils becoming increasingly expensive, ethanol is being used as an alternative fuel. Corn, sugarcanes, beetroot and other crops are increasingly converted into ethanol and alcohol.

(*d*) The new industries and the fast growing services sector, however fast they may develop, will not be able to provide adequate employment for the ever-growing millions in India. There is a limit to the capacity of employment in industries in the short period. Necessarily, therefore, increased employment will have to be found in agriculture and in rural industries.

In other words, rapid economic development will require rapid agricultural development either to precede or to go hand in hand with it. Indian planners learnt a bitter lesson during the Second and Third Five-Year Plan periods and in recent years, during 2002-03, for example, when failure of the agricultural sector spelt disaster to the entire planning process.

Thus, any change in the agricultural sector—positive or negative—has a multiplier effect on the entire economy. The agricultural sector acts as a bulwark in maintaining food security and in the process, national security as well. Recognising the crucial role played by the agricultural sector in enabling the widest dispersal of economic benefits, the Tenth Plan emphasised that ***agricultural development is central to rapid economic development of the country***.

The unfortunate thing is that most of the economic plans failed continuously to achieve agricultural targets. In fact, agricultural development has always been given lower priority at the expense of industries and service sectors.

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2. PROGRESS OF AGRICULTURE UNDER THE FIVE-YEAR PLANS

On the eve of the First Plan (1951-56), agriculture was in a hopeless and deplorable condition. Our farmers were in heavy debt to the village money-lenders. They were having small and scattered holdings. They had neither the money nor the knowledge to use proper equipment, good seeds and chemical manures. Except in certain selected irrigated areas, they were dependent upon rainfall and upon the vagaries of the monsoons. Productivity of land as well as of labour had been declining and was generally the lowest in the world. In spite of the fact that over 70 per cent of our working population was engaged in cultivation, the country was not self-sufficient in foodgrains but had to depend on imports of foodgrains. Besides, the partition of the country in 1947 worsened the agricultural situation, as India was allotted more people but less land to support them.

Objectives of economic planning for the agricultural sector

While planning to develop the agricultural sector, the Planning Commission has generally kept four broad objectives in view :

(a) ***Increase agricultural production***.—The aim has always been

(i) to bring more land under cultivation,

(ii) raise the per hectare yield through intensive application of such agricultural inputs as irrigation, improved seeds, fertilisers, etc. and thus

(iii) bring about increased agricultural production.

(b) ***Increase employment opportunities***—Apart from increase in production, the agricultural sector has to generate additional employment opportunities and provide scope for increasing the incomes of the poorer sections in our villages.

(c) ***Reduce the pressure of population on land***—Another basic objective of planning in the agricultural sector has been to reduce the number of people working on land, on the assumption that there are too many people working on land. The surplus labour on land should be shifted to secondary and tertiary sectors, preferably in rural and semi-urban areas.

(d) ***Reduce inequality of incomes in the rural sector***—The Government should remove the exploitation of tenants, and should distribute surplus land among small and marginal farmers in such a way that there would be some degree of equality and justice in the rural areas.

All these four objectives are generally followed in all our five year plans but in practice, agricultural planning in India has come to mean increase in agricultural production, viz., the achievement of the first objective; all other objectives have either been ignored or given lower priority.

Strategy used in the agricultural sector

To bring about increase in agricultural production and also increase in rural employment, the Five Year Plans use various programmes such as: setting up of community development programmes and agricultural extension services throughout the country, expansion of irrigation facilities, fertilisers, pesticides, agricultural machinery, high-yielding varieties of seeds and expansion of transportation, power, marketing and of institutional credit.

To reduce the pressure of population on land, the strategy used by the Planning Commission was rural development *i.e.*, set up agro-based industries and handicrafts in rural areas, to promote rural transport and communications and to encourage the movement of people from agriculture to industries and service sectors.

Finally, to bring about equality and justice in rural India, the strategy used by the Planning Commission was land reforms which included the removal of intermediaries, like the Zamindars, the protection of tenants through tenancy legislation, ceiling of land holdings and distribution of surplus land among landless labourers and small and marginal farmers.

Pattern of investment in the agricultural sector

At the outset, a word of explanation is necessary about the meaning and content of "agricultural sector". In the first three Plans, "agricultural sector" was composed of agriculture and allied sectors (horticulture, animal husbandry and fisheries) and irrigation and flood control. In the succesive Plans, "rural development" and "special area programmes, were added and "irrigation and flood control" was omitted. In Table 4, outlay on agriculture is composed of agriculture and allied sectors, special area programmes and rural development, irrigation and flood control.

It would be clear that the total outlay in each Plan had increased and, correspondingly, the outlay on agriculture allied sectors had also increased. However, the percentage of plan outlay on agriculture and allied sectors to total plan outlay varied between 31 per cent and 14.9 per cent from the First Plan to the Tenth Plan.

TABLE 4. Pattern of Government Outlay on Agriculture and Allied Sectors

(₹ crores)

Plans	*Periods*	*Total Plan Expenditure (Actual)*	*Agriculture and allied sectors*	*%age of of agriculture and allied sectors to total outlay*
I Plan (Actual)	1951-56	1,960	600	31
II Plan "	1956-61	4,670	950	20
III Plan "	1961-66	8,580	1,750	21
IV Plan "	1969-74	15,800	3,670	24
V Plan "	1974-79	39,430	8,740	22
VI Plan "	1980-85	1,09,300	26,100	24
VII Plan "	1985-90	2,18,730	47,100	23
VIII Plan "	1992-97	4,75,480	1,01,590	21
IX Plan "	1997-02	8,59,200	1,76,217	20.5
X Plan "	2002-07	15,25,639	3,05,055	20.0
XI Plan (Plan)	2007-12	36,44,718	6,74,105	18.5

SOURCE : Planning Commission, Various *Five-Year Plan Documents.*
Economic Survey, 2006-07 (Tables) and Eleventh Five Year Plan (2007-12)

The Indian Planning Commission specified various programmes for increasing agricultural production such as irrigation, soil conservation, dry farming and land reclamation, supply of fertilisers and manures, improved agricultural implements, adoption of scientific practices, etc. The Government gave considerable attention to institutional changes such as the setting up of community development programme and agricultural extension services throughout the country, the use of land reforms, expansion of rural transportation, power, marketing and other basic facilities, improvement of the system of co-operative credit, etc. From the Third Plan onwards, the greatest emphasis was laid on irrigation- fertilizer-seed technology which led to the green revolution.

Actual outlay on the agricultural sector ranged between 18 and 24 per cent of the total Plan outlay (except during the first Plan, it was as high as 31 per cent). During Eleventh Plan it has declined to only 18.5 percent.

We shall describe the progress made by India in the field of agriculture under the first nine plans. In the next section, we shall take up the progress of agriculture under the Tenth Plan separately.

Agricultural Progress under the Five Year Plans : Brief Summary

First three Plans (1951-61)

The First Five Plan (1951-56) aimed at solving the food crisis India was facing at that time and also ease the critical agricultural raw material situation, particularly the acute shortage of raw cotton and raw jute. Accordingly, the First Plan gave the highest priority to agriculture, specially food production, by allotting 31 per cent of the total Plan outlay on agriculture.

The production target in foodgrains during the First Plan was exceeded—for instance, as against the target of about 62 million tonnes, actual production of foodgrains came to nearly 67 million tonnes (Table 4). However, the targets fixed for sugarcane, cotton and jute were not achieved.

The Planning Commission wanted the Second Plan to lay the foundations of industrialisation . Out of total outlay of ₹ 4,600 crores during the Second Plan, a sum of ₹ 950 crores or about 20 per cent was spent on agriculture. Despite the percentage reduction in Plan outlay on agriculture, the progress on the agricultural front was significant. For example, foodgrain production recorded nearly 80 million tonnes in 1960-61, as against the target of 81 million tonnes. Likewise, the production of oilseeds, sugarcane and cotton was much more in 1960-61 than in 1955-56. There was, however, a shortfall in the production of all groups of commodities, as against the target fixed, except in the case of sugarcane in which there was remarkable progress.

Experience in the Second Plan had showed clearly that the rate of growth in agricultural production was a major limiting factor in the progress of the Indian economy.

As the Government felt that the success of the agricultural sector was an essential condition for the success of the entire Plan, the Third Plan fixed ambitious targets of production for all agricultural crops.

TABLE 5 : Achievements in the Agricultural Sector in the Various Plans

	Foodgrains		*Oilseeds*		*Sugarcane*		*Cotton*		*Jute*	
	Target	*Actual*	*Target*	*Actual*	*Target*	*Actual*	*Target*	*Actual*	*Target*	*Actual*
First Plan	62	67	5.5	5.6	63	60	4.2	4.0	5.4	4.2
Second Plan	81	80	7.6	6.5	78	104	6.5	5.4	6.5	4.0
Third Plan	100	72	9.8	6.4	100	127	7.0	4.6	6.2	4.5
Fourth Plan	129	104	10.5	8.7	150	140	8.0	5.8	7.4	6.2
Fifth Plan	125	132	12.0	8.9	165	165	8.0	7.1	7.7	7.1
Sixth Plan	154	146	11.1	13.0	215	170	9.2	8.5	9.1	7.8
Seventh Plan	180	171	18.0	17.0	217	210	9.5	10.5	9.5	7.9
Eighth Plan	210	199	23.0	25.0	275	277	14.0	14.3	9.5	11.0
Ninth Plan	234	211	30.0	20.7	336	300	15.7	10.1	—	11.6
Tenth Plan	234	216	30.0	24.0	336	345	16.0	23.0	—	11.0

Note : 1. Production of foodgrains, oilseeds and sugarcane in million tonnes.
2. Production of cotton in millions of bales of 180 Kgs each.
3. Production of jute in millions of bales of 170 kgs each.

SOURCE : Plan documents and *Economic Surveys*.

The Government introduced the new agricultural technology known as Intensive Agricultural District Programme (IADP), which was soon followed by a programme of using improved seeds, viz., High Yielding Varieties Programme (HYVP). The new agricultural technology was expected to usher in the green revolution. However, as a result of the extensive and serious drought conditions in 1965-66, agricultural production was adversely affected. (Table 4).

(a) None of the agricultural targets— except sugarcane—was achieved during the Third Plan period; and

(b) The actual output at the end of the Third Plan in the case of foodgrains, oilseeds and raw cotton was lower than the output at the end of the Second Plan, indicating that the Third Plan was a wash-out as far as agriculture was concerned.

As a consequence of the shortfall in food production and serious famine conditions in many parts of the country, the Government was forced to import foodgrains extensively during the last year of the Third Plan. Besides, *for the first time, the public lost interest in the planning process and the Government adopted "plan holiday" for three years.*

The experience of the Third Plan made the Planning Commission realise the bitter fact that ***economic planning would be a failure unless agricultural production was increased rapidly.*** Accordingly, the Planning Commission assigned high priority to agriculture in the successive plans.

Progress from the Fourth Plan Onwards

The approach paper to the Fourth Plan emphasised the necessity to create favourable economic conditions for the promotion of agriculture and a systematic effort to extend the application of science and technology to improve agricultural practices. Ambitious targets were fixed for the Fourth Plan.

Table 5, however, reveals clearly that none of the targets fixed in agriculture in the Fourth Plan was realised. For example, the target for foodgrains was 129 million tonnes for 1973-74 but the actual production in that year was only 104 million tonnes—the highest level of production during the Fourth Plan was 108 million in 1970-71.

Consider further the targets fixed and actual production of oilseeds, sugarcane, cotton and jute during the Fourth Plan. It would be clear that the Fourth Plan failed to achieve the agricultural targets.

The Fifth Plan (1974-1979) was prepared with great care, with total Plan outlay at ₹ 39,430 crores out of which outlay on agriculture and allied sectors would be ₹ 8,740 crores (which was 24 per cent of the total Plan outlay). The targets for production of various crops and the necessary inputs to achieve these targets were also clearly set out. Unfortunately, all the financial calculations went wrong because of the serious inflationary situation during 1973-74. However, after the declaration of emergency (1975) agricultural progress was steady and plan targets were almost realized.

The Janata Party which came to power in 1997, however, suspended the Fifth Plan midway – rather foolishly – and started preparing the Sixth Plan. It will be clear from Table 4 that the actual production of foodgrains in the last year (1978-79) of the Fifth Plan was 132 million tonnes, as against the target of 125 million tonnes. In fact, apart from the First Plan the Fifth Plan was the only period when the actual production of foodgrains exceeded the targeted production.

Progress since the Sixth Plan

Of all the Plans, the Sixth Plan (1980-85) was hailed as a great success, particularly because of the success on the agricultural front. As against the annual growth rate of 3.8 per cent for agriculture, the actual growth rate was 4.3 per cent. The production of foodgrains in 1983-84 was 152 million tonnes (against the target of 154 million tonnes) and was hailed by the Indian Government as the ***Second Green Revolution.*** While the First Green Revolution from 1967-68 arose from the introduction of new high yielding varieties of Mexican wheat and dwarf rice varieties, the Second Green Revolution from 1983-84 was said to be from expansion in supplies of inputs and services to farmers, agricultural extension and better management.

While the First Green Revolution was confined mainly to Punjab, Haryana and Western U.P., the Second Green Revolution had spread to eastern and central states including West Bengal, Bihar, Orissa, Madhya Pradesh and eastern U.P. These states had made tremendous progress in recent years.

However, it is important to emphasise the fact that, despite all the great claims of the Government, none of the targets (except in oilseeds) of agricultural production was achieved during the Sixth Plan (Refer Table 4).

The Seventh Plan (1985-90), the Eighth Plan (1992-97) and the Ninth Plan (1997-2002) targeted 4 per cent annual rate of growth and laid emphasis on specific projects in the field of agriculture. They included a special rice production programme in the eastern region, national watershed programme for rainfed agriculture, national oilseeds development project, social forestry, etc.

The Seventh Plan was not successful in the sense that the targets fixed for various sectors (except cotton) were not achieved (see Table 4). However, the level of production at the end of the Seventh Plan was much higher than at the beginning of the Seventh Plan.

The Eighth Plan (1992-97) was basically sound in its approach in the strategy of development and in the targets of agricultural crops. Fortunately, weather and climate conditions were favourable and broadly many of the targets could be fulfilled. For instance, the actual outputs in 1996-97 (the last year of the Eighth Plan) of oilseeds, of sugar cane, of cotton and of jute were higher than the targets for these crops in the Eighth Plan. The only exception was foodgrains – the Eighth Plan target was 210 million tonnes but the actual production was 199 million tonnes. In fact, the production of foodgrains at 199 million tonnes was the highest output registered by India till then.

The Ninth Plan (1997-2002) was not much of a success, as far as the agricultural targets were concerned. For instance, the Ninth Plan fixed the target of foodgrain production at 234 million tonnes in 2001-02, but the actual production was only 211 million tonnes. The same story of under-achievement was to be noted in other sectors of agriculture also. One is again inclined to ask the question: why should the planners fix unrealistic and unrealisable targets?

Agriculture Sector Under the Tenth Plan

Growth Projection in the Tenth Plan

The Tenth Plan adopted the prescriptions of the National Agricultural Policy, 2000 (NAP, 2000). The Tenth Plan, particularly, emphasised the following types of growth envisaged by NAP, 2000.

(*i*) growth that was based on efficient use of resources and conservation the soil, water and biodiversity of the country ;

(*ii*) growth with equity i.e. growth which was widespread across regions and covered all farmers ;

(*iii*) growth that was demand driven and catered to domestic markets as well as maximised benefits from exports of agricultural products in the face of the challenges arising from economic liberalisation and globalisation ; and

(*iv*) growth that was sustainable technologically, environmentally and economically.

The NAP, 2000 envisaged a growth rate exceeding 4 per cent per annum in the agricultural sector. The Tenth Plan also targeted a 4 per cent rate of growth. Towards this purpose, the Tenth Plan visualised :

(*a*) the estimated foodgrains requirement at the end of the Tenth Plan : 230 million tonnes.

(*b*) the estimated supply position is expected to be between 225 and 243 million tonnes.

The Tenth Plan planned to achieve this volume of production of foodgrains through

(*i*) adequate thrust on maize cultivation which has good scope for increasing production of minor cereals to 43 to 48 million tonnes ; and

(*ii*) thrust on commercialisation of hybrid rice on a large scale and improved technologies in wheat.

Strategy and Thrust in the Tenth Plan

The Tenth Plan accepted the increasing biotic pressure on the natural resources in the country, especially land, water and biodiversity; with the increasing population, the fragmentation of holdings had increased,

resulting in smaller and unviable units of land holdings. The Tenth Plan addressed this problem through:

(*a*) easy transfers of agricultural land to enable farmers to augment their holdings to viable units ;

(*b*) facilitate leasing and contract farming through more freedom to lease in and lease out.

(*c*) developed technologies suitable to increase productivity of small and marginal holdings which constitute 78 per cent of all holdings and operate about 32 per cent of total agricultural area.

The second aspect of this strategy involved waste lands — estimated at 64 million hectares — and degraded areas which are either unutilised or underutilised estimated to cover 107 million hectares. All these lands are under the control of the Government or of Panchayats. The Tenth Plan proposed that :

(*a*) all such lands under the control of the Government or the Panchayats would be parcelled out in viable units and allotted to landless, scheduled caste and scheduled tribe farmers, small and marginal farmers, retired defence personnel, and educated rural youth, for cultivation.

(*b*) highly degraded wastelands, should be exclusively used for forestry, tree cropping and agro-forestry.

(*c*) the areas under reserved forests but which are at present unutilised or under-utilised should be distributed to the resource poor, especially landless and marginal farmers, to produce grasses and fodder and medicinal and aromatics plants.

(*d*) The Tenth Plan continued rain-water harvesting and conservation so as to increase productivity of rain-fed farmlands. *Rain water conservation and harvesting hold the key for sustainable development of rain -fed areas.* Such a programme should ensure that the minimum basic water needs of the rural communities are met.

In this connection, the Tenth Plan proposed to continue vigorously, minor irrigation development and the adoption of improved on-farm water management practices and also the use of water saving devices, such as sprinkler irrigation and trip irrigation system in low-rainfall areas.

In general, the Tenth Plan believed that current land and water-use practices in the country were unsustainable, less productive and impact adversely on regeneration of natural resources. Accordingly, for sustainable development of natural resources, the Tenth Plan would continue to pursue, as already mentioned, a regionally differentiated strategy based on agro-climatic conditions and land and water availability. The promotion of suitable cropping patterns formed an essential part of the Tenth Plan strategy.

(*e*) The Tenth Plan envisaged a radical thrust in crop diversification. Small and marginal farmers, by and large, give a prime place to cereals in the cropping system, even though Indian agriculture is moving rapidly towards commercialisation. The emphasis on cereals is due to consideration of food security, low risk and easy market access. Besides, the Government's minimum support price (MSP) policy, involving only three crops (paddy, wheat and sugarcane) has encouraged mono-cropping and even exploitation of natural resources in some areas. All this has happened in the face of severe shortage of pulses and oilseeds.

The Tenth Plan's new thrust was diversification towards high value and more remunerative crops, considering the agro-climatic conditions, endowment of land and water resources and the market demand both within the country and outside. The Tenth Plan emphasised the production of fruits, vegetables, flowers, agro-forestry, tree farming, animal husbandry, dairying, aquaculture, etc.

To encourage such activities, the Tenth Plan developed the necessary infrastructure for post-harvest handling, processing, storage, marketing, etc. and also promoted pro-active production policies to motivate farmers and entrepreneuers.

(*f*) The Tenth Plan set out radical schemes affecting production and distribution of quality seeds, fertilisers and plant nutrients, soil testing, farm implements and pest management.

(*g*) Finally, the Tenth Plan encouraged organic farming in a big way. The Plan appreciated the growing demand for organically produced food all over the world and the high prices they command. India is a low-chemical fertiliser using country, specially in the rain-fed areas, north eastern and hill areas. India has, thus, good opportunity to take up production of organic foods for exports and domestic use. In this connection, the Tenth Plan encouraged organic fertilisers use in agriculture by converting farm waste and municipal solid waste into good quality compost/manure.

Pattern of outlay on agriculture in the Tenth Plan

The Tenth Plan targeted 8 per cent rate of growth in GDP and accordingly, estimated the required level of investment (at 2001-02 prices) of ₹ 15, 92, 300 crores in the public sector – this was 67 per cent increase over the Ninth Plan outlay. As regards agriculture, the Tenth Plan set a target growth rate of 4 per cent per annum during the Plan period, and raised Plan allocations on agriculture and allied sectors, rural development, special area programmes and irrigation and flood control.

The public sector outlay on agriculture and allied activities irrigation and flood control, rural development and special area programme which was of the order of ₹1,76,217 crores in the Ninth Plan, incerased to ₹3,05,055 crores in the Tenth Plan which was 20 per cent of the total

TABLE 6 : Plan Allocation on agriculture

	Ninth Plan		*Tenth Plan*		*Eleventh Plan*	
	Amount (₹ crores)	*%*	*Amount (₹ crores)*	*%*	*Amount (₹ crores)*	*%*
1. Agriculture and allied activities, rural development, special area Irrigation and flood control	1,76,217m	20.5	3,05,055	20.0	6,74,105	18.5
2. Total Plan outlay	8,59,200	100.0	15,25,639	100.0	36,44,718	100.0

SOURCE : *Tenth Five Year Plan*, 2002-07 ; Vol. II. and *Eleventh Five Year Plan* (2007-12) Vol. I.
Note : Tenth and Eleventh Plan figures are at 2006-07 prices.

Plan outlay ; this was almost the same as that in the Ninth Plan. In fact, as emphasised earlier, public sector outlay on agriculture irrigation and others has ranged between around 20 and 24 per cent of the total outlay in all the Plans. It may be noted that if we take agriculture and allied activities alone, public sector outlay has been handly 4.9 percent of total outlay in ninth plan, 3.9 percent in tenth plan proposed expenditure an agriculture and allied activities in merely 3.7 percent of total plan outlay in 11th plan.

Targets of Crop Production in the Tenth Plan

The Tenth Plan was the first Plan which did not fix targets of crop production.

For every Plan, the Planning Commission used to fix

(*a*) the rate of growth in the agricultural sector as a whole,

(*b*) the planned target growth of production in each major crop viz., cereals, pulses, oilseeds, sugarcane, cotton, jute and so on.

(*c*) the targets of production of major inputs such as seeds, fertilisers, irrigation etc., and

(*d*) the strategy to be adopted to achieve the targets of crop production in general and the rate of growth in agriculture in particular.

The Tenth Plan was a clear departure from this traditional presentation. It described the achievement/non-achievement of the Ninth Plan (Table 7).

The Planning Commission must have been clearly ashamed of its target projections in the Ninth Plan. It is clear from Table 6 that the actual production of foodgrains for the year 2001-02 (final year of the Ninth Plan) was 212 million tonnes, as against the planned target of 234 million tonnes — a huge shortfall of 22 million tonnes. In the case of oilseeds the actual output in 2001-02 was 21 million tonnes as against the targeted figure of 30 million tonnes. This was also the case of sugarcane and cotton.

What was really pathetic was that the actual production of oilseeds and cotton during the Ninth Plan was not only less than the target production but *less than the base level (1996-97) output*. This was defintely negative rate of growth. It is unfortunate that we could not achieve Ninth plan targets even at the end of Tenth Plan.

Table 7 gives agricultural achievement during 9th and 10th Plans. During the Tenth Plan period (2002-07), foodgrain production had increased to 216 million tonnes – it may be mentioned that the target of foodgrain production was fixed at 234 million tonnes for the Ninth Plan period (2001-02). There was, however, clear growth in oilseeds, sugarcane and cotton. In general, it is estimated that the annual rate of growth in agriuclture was 2.3 per cent, as against the targeted 4 per cent.

Agriculture in the Eleventh Plan (2007-12)

During the 11th Plan also, the Planning Commission has fixed the target of 4 per cent, rate of growth in agriculture, as if this is the first time such a "high" rate of growth has been fixed. The Planning Commission has appointed a special Agricultural Commission to monitor this rate of growth.

TABLE 7 : Crop Production During Ninth and Tenth Plans

Crop	*Base Level (1996-97) Output*	*Plan Target (2001-02)*	*Actual Output in 2001-02*	*2006-07*
All foodgrains (m. tonnes)	199	234	213	216
Oilseeds (m. tonnes)	24	30	21	24
Sugarcane (m. tonnes)	278	336	297	345
Cotton (m. bales of 170 kg.)	14	16	10	23

SOURCE: *Five Year Plan documents and Economic Survey, 2008-09* and Ministry of Agriculture.
*3rd Advance Estimates

Eleventh Plan Amount (₹ crores)	%
6,74,105	18.5
36,44,718	100.0

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Actual Output in 2001-02	2006-07
213	216
21	24
297	345
10	23

griculture.

TABLE 8. Some key Indicators of Agricultural Progress

			1950-51	1964-65	1990-91	2007-08	2008-09	2009-10	2010-11	Ratio between 1950-51 & 2010-11
1.	Foodgrains	(m. tonnes)	51	89	176	231	234	218	242	4.75
	Rice	"	21	39	74	96	99	89	96	4.57
	Wheat	"	6	12	55	78	81	81	86	14.3
2.	Oilseeds	"	5	9	19	29	28	25	31	6.2
3.	Sugarcane	"	57	122	241	341	274	278	339	5.95
4.	Cotton*	(m. bales)	3	6	7	25	23	24	33	11.0
5.	Jute & mesta**	(m. bales)	3	4	8	11	10	11	11	3.67
6.	Potato	(m. tonnes)	3	4	15	n.a	29	n.a	37	12.3

SOURCE : *Economic Survey*, 2009-10. Note : * Cotton : million bales of : 170 kg
Agricultural Statistics At a Glance, 2010 ** Jute : " " of : 180 kg

The corporate sector is actively encouraged to go for contract farming in fruits, vegetables and other crops. It is encouraged to provide seeds, fertilisers and assured marketing. At the same time, the Government is encouraging the setting up of Special Economic Zones (SEZ) by buying large tracts of a agricultural land for setting up industries and service sectors. There is considerable confusion in the agricultural sector in India.

The volatile variation in crop production from year to year shows that there is very little planning in Indian agriculture. The old saying that " Indian agriculture is a gamble in the rains" holds good even today, after nearly six decades of planning. In simple terms, agricultural planning has been a failure.

The data pertaining to 2010-11 reveals that renewed efforts to boost agricultural production has shown concrete results. Total foodgrains production will be of the order of 242 million tonnes – a record upto this time. Rice production touches 96 m. tonnes, wheat 86 m. tonnes, coarse cereals 42 m tonnes and pulse 18 m. tonnes. Oil seeds and cotton have also yielded higher production. It appears that agriculture is turning the corner. There is a need to strengthen this process further.

After showing improvement in production of different crops, crops failure in different crops affected all crops except rice in 2008-09.

Progress of Agriculture since 1951

So, far we have explained agricultural progress under each Five Year Plan. We shall give the progress of agriculture as a whole during the last 58 years. The progress of the agricultural sector, summarised in Table 8, brings out the tremendous progress the country has achieved since the First Plan, ***even though, the targets fixed in each Plan might not have been fully met***.

Between 1950-51 and 2009-10, production of foodgrains had increased by 4.3 times, production of oilseeds by 5 times, sugarcane by 4.9 times and cotton by over 8 times. The increase in production of wheat has been really spectacular—by 13.5 times.

Table 9 gives the annual compound rate of growth since planning was introduced in 1951. During the first decade of planning (1951-61) when the First and Second Five Year Plans were implemented, the annual rate of growth in agriculture was 3.3 per cent. During the next two decades of planning in 1961-81, despite spectacular progress achieved under the new agricultural strategy and IADP and HYVP, the overall progress in agriculture was dismal; the annual average rate of growth declined to 2.2 per cent and 1.7 per cent respectively.

But conditions improved during the fourth decade of planning (1981-91). The growth rate in the 1980s was highly respectable (3.9 per cent). The compound growth rate for the period 1991-2001 was 2.8 per cent. Since then, specially during 2002-03, agricultural production declined deeply – negative rate of growth of 7 per cent. There was some improvement in agricultural growth but much lower than the targeted 4 per cent per annum. The Tenth Plan fixed a target rate of growth of 4 per cent in agriculture to achieve 8 per cent rate of growth in GDP. Indian agriculture growth was merely 2.1 per cent during the Tenth Plan.

TABLE 9 : Growth of the Agricultural Sector since 1950-51

Period	In Agriculture and allied sector	GDP
1951-61	3.3	3.8
1961-71	2.2	3.7
1971-81	1.7	3.3
1981-91	3.9	5.7
1991-01	2.8	6.7
2002-07	2.1	7.5
2005-11	3.1	7.0

SOURCE: 1. CMIE, *Basic Statistics Relating to Indian Economy*, Vol. I, August 1992, August 1994
2. *Eleventh Five Year Plan*, (2007-2012).
3. CSO, National Accounts Statistics, 2011

2. Rate of growth in yield since 1950-51. With the introduction of planning in 1950-51, there was rapid extension of irrigation and application of intensive

methods of cultivation. After the introduction of modern agricultural practices including the adoption of hybrid seeds since 1964-65, there has been a steady and continuous increase in yield per hectare of all crops. Table 9 illustrates the yield of growth rates in India since 1950-51.

As it is not feasible and convenient to lump together yield per hectare of different crops under the group of "non-foodgrains", we have shown the yield per hectare, in selected years, for some selected crops. As mentioned earlier, monsoon and weather conditions affect average yield per hectare, and therefore, the variations in the yield per hectare reflect not only the effects of improved agricultural techniques but also that of natural factors, such as monsoon and weather conditions.

TABLE 10 : Per Hectare Yield of Principal Crops since 1950-51

	1950-51	*1964-65*	*2010-11*
1. Foodgrains			
Rice (Quintals)	7.1	10.8	22.4
Wheat (Quintals)	6.6	9.1	29.4
Coarse cereals (Quintals)	4.3	5.1	14.18*
Pulses (Quintals)	4.0	5.2	6.9
2. Non-foodgrains			
Oilseeds (Quintals)	5.2	5.6	11.6
Sugarcane (Tonnes)	34	47	69
Cotton (Kgs)	95	122	510
Potato (Quintals)	66	84	203

* Figure for the year 2011-12.

Source: Economic survey, 2010-11, Agricultural Statistics at a Glance, 2008.

During the pre-green revolution period (1951-65), rice recorded the most impressive growth rate in yield--from 7 quintals per hectare in 1950-51 to nearly 11 quintals by 1964-65 (Table 10). The annual rate of growth was 2.1 per cent.

Yield per hectare in the case of wheat improved from 6.6 quintals in 1950-51 to 9.1 quintals in 1964-65, highest annual rate of growth of all crops among non-foodgrains, cotton and sugarcane recorded modest growth rates during this period.

During the second period of green revolution (1965-2010), however, the most spectacular growth rate was recorded by wheat (2.55 per cent per annum) potato too recorded an impressive growth rate of 1.87 per cent per year. Pulses recorded a growth rate of 0.42 per cent per year and oilseeds, a mere 1.2 per cent per year. This shows that the new bio-chemical technology was particularly suited to wheat production but was not effective in the case of other crops.

International Comparison of Agricultural Productivity

It will be useful to make a comparison of yield per hectare of some selected crops in India with that in other countries of the world so as to show how much India lags behind the other countries of the world.

Table 10 shows:

(a) the actual yield per hectare of major food and non-food crops in India in the year 1999;

(b) the actual yield in the country which is the largest producer of each specific crop; and

(c) the highest yield per hectare in the world.

In the case of rice, the highest yield in the world is nearly 100 quintals per hectare recorded by Egypt. In the case of wheat, the highest yield is recorded by England - over 79.3 quintals per hectare.

China which is the single largest producer of both rice and wheat in the world records with average yields of 65.8 quintals and 47.4 quintals respectively.

TABLE 11 : Actual Yield per hectare in quintals during 2006 in Comparison with world's highest yield and yeilds of world's largest producer

Quintals/hectare

	Potential of high-yielding Indian varieties	*Actual yield in India*	*Actual yield of the world's largest producer*	*Country*	*World's highest yield*	*Country*
Food Crops						
Rice (Paddy)	40 to 58	31.9	65.8	China	100.0	Egypt
Wheat	60 to 68	29.1	47.4	China	79.3	UK
Maize	60 to 80	20.0	103.4	USA	103.4	USA
Non-food crops						
Sugarcane		644	789	Brazil	1214	Egypt
Groundnut (pods)	20 to 30	10.1	33.6	China	33.6	China

SOURCE : Agricultural Statistics at a Glance, 2011.

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Quintals/hectare

ld's highest yield	*Country*
100.0	Egypt
79.3	UK
103.4	USA
1214	Egypt
33.6	China

Now, compare with average annual yield in India — only 31.9 quintals of rice and 29.1 quintals of wheat. Rice is India's major crop but the annual yield is less than one-third of that of Egypt and a little less than one-half of the annual yield of China.

Even in the case of wheat — the crop which has recorded the highest increase in India in the last 50 years — India's average annual yield is much lower as compared to the U.K. (world's highest yield in wheat) and China (world's largest producer of wheat).

In fact, when we compare carefully the average annual yield of every crop mentioned in Table 9, we find that the average yield in India generally ranges between 30 and 50 per cent only of the highest average yield in the world — this shows the enormous scope for, as well as challenge to, India to increase its annual yield. This fact demonstrates clearly that the increase in yield recorded by India under the green revolution and the introduction of modern technologies are not particularly unique to India; in fact, it is much less in India than the increase recorded by other developing countries like China.

In this connection Table 10 gives also ***the potential annual yield*** of high-yielding Indian varieties. For instance, against the actual yield of 30.0 quintals per hectare in rice, India has the potential to produce between 40 and 58 quintals of rice per hectare. In the case of wheat, India can produce up to 60 to 68 quintals, but the average yield is around 26 quintals per hectare. Even if we assume that India could register the minimum of the potential yield, the total output of rice in India should be 168 million tonnes per year (42 million hectares x 40 quintals or 4 tonnes per hectare); but the actual production of rice ranged between 82 and 93 million tonnes in between 1997 and 2007. Likewise, the total output of wheat in India should be 156 million tonnes (26 million hectares x 60 quintals or 6 tonnes per hectare); however, the actual production of wheat ranged between 69 and 75 million tonnes between 1997 and 2007.

It would thus be clear that if India could achieve the ***minimum of potential yield*** of only these two cereals, the total production would be around 324 million tonnes. It may be mentioned here that the total production of all cereals and pulses came to 199 million tonnes in 1996-97 and 213 million tonnes in 2006-07. The gap between the actual yield and potential yield in all our crops and the gap between the average yield in India and the average yield in many other countries of the world — these pose a challenge and an opportunity for India — vast scope for second and third green revolution.

Some agricultural economists have expressed their doubts about the possibility of India ever reaching the levels of yield attained in cold countries. There is no doubt that some scope of increasing yield exists, but to hope that it can be raised to 3 to 5 times is not feasible due to the fact that the semi-dwarf HYV varieties of wheat in India have a duration of 140 days, while in the cold countries long duration wheat crop of 10 months duration helps to obtain higher yields.

There is another point to remember here. In the span of a year, the Indian farmers can grow another rice crop or a crop of potato or legume or short-duration vegetables. Thus the farmer in India, by shifting from a mono-cropping to a multi-cropping system, is more concerned with the *over-all yield from* ***all crops*** *during a year*, rather than in terms of productivity per hectare of individual crops. Dr. M. S. Swaminathan, the eminent agricultural scientist, responsible for green revolution in India asserts: "It is unscientific to make comparisons purely on the basis of individual crops, but it would be more scientific to compare the cropping system as a whole." Obviously, the sharp differences shown in Table 10 do not take into account these factors.

3. PRESENT STATUS OF INDIAN AGRICULTURE: LOOMING AGRICULTURAL CRISIS

During the last 56 years of planning, India's agricultural development — more commonly called the Green Revolution — has been applauded the world over and many developing countries have started considering India their role model. Initially, India remained a food deficit country for almost two decades since Independence. But with the Green Revolution, India became not only self-sufficient in foodgrains but accumulated a huge food surplus – about 58 million tonnes in January 2002.

The agricultural situation started improving after the middle of 1960s with the introduction of high-yielding varieties (HYVs) of crops and the development of agriculture infrastructure for irrigation, credit, other input supply, storage and marketing. The high production potential, input-responsive HYVs motivated Indian farmers to adopt improved and modern technologies. The Government came out with minimum support prices (MSP) and procurement of agricultural commodities and expanded the storage, marketing and distribution of foodgrains at the national level.

The major factors for the all-round success of agriculture were : increase in the net area sown, expansion of irrigation facilities, land reforms, specially consolidation of land holdings — this was the first phase (1947-65) of agricultural development since Independence; development

and introduction of high-yielding seeds, extensive use of chemical fertilisers, pesticides and improved crop production technologies — this was the second phase (1965-85) of development in the agriculture sector; price policy based on MSP and procurement operations, infrastructure for storage/cold storage, increase in investments — this could be broadly called the third phase of agricultural development in India.

In spite of the spectacular achievements, various constraints and disturbing trends have always continued to hamper the requisite growth of the agricultural sector:

(i) Agriculture, Still a Gamble in the Monsoons. Despite almost 6 decades of planning, agriculture in India has continued to be a gamble in the monsoons: failure of rainfall in some parts of the country and excessive rains and consequent floods in certain other areas of the country. It appears that the Planning Commission should have devoted more attention and more resources to the control of the vagaries of the monsoons. During the first decade of planning (1951-61) the main emphasis on extension of irrigation and in fact, even in the successive decades, considerable importance was given to the cumulative increase in the area brought under irrigation. In none of the Plans, however, the irrigation targets had been fulfilled. Besides, even the irrigation potential created during a plan was not fully utilised for various reasons.

(ii) Limited Use of New Agricultural Technology. Since 1961, the emphasis shifted to the use of seed-fertiliser-water technology, known as the new agricultural strategy. But the new strategy succeeded only in wheat and to a small extent in rice; other food and non-food crops did not show perceptible improvement in production. Dry land cultivation was not touched at all by the new agricultural strategy.

(iii) Decline in Investment in Agriculture. We have generally been given to understand that government investment was significant in boosting growth in agriculture. Besides, the role of the Government was not only to raise investment but also induce private investment in agriculture. The figures published by the Government in the *Economic Survey* are quite revealing (Table 12) :

In the early stages of technology breakthrough and green revolution, there was some improvement in private investment in farm assets like irrigation pumps, wells, tractors etc. Thereafter, private investment declined. Since 1980-81 however, there has been some buoyancy in private investment in agriculture — from 70% to 82%. The rising trend in private investment probably reflects the improved incentives for agriculture and favourable change in the trade policy.

Table 12 : Gross Investment in Agriculture

(₹ Crores)(at 1980-81 prices)

Year	Public	Private	Total	% Share Public	% Share Private
1960-61	590	1,080	1,670	35	65
1970-71	790	1,970	2,760	29	71
1980-81	1,800	2,840	4,640	39	61
1990-91	4,400	10,440	14,840	30	70
1999-00	6,670	41,480	50,150	17	83
2004-05	23,039	86,967	1,10,006	20	80
2008-09	24,452	1,14,145	1,38,597	18	82
2009-10	23,635	1,09,742	1,33,377	18	82
2010-11	NA	NA	1,42,254	18	82

Note: 1. The figures for 2004-05 onwards are based on 2004-05 prices.

2. The figures given by the Government of India are guesstimates. Figures from 1960-61 to 1980-81 are based on 1980-81prices. Figures for 1990-91 and subsequent years are based on 1993-94 prices. Hence, these figures are not really comparable.

SOURCE : *Economic Survey 2011-12. Agricultural Statistics at a Glance (2011)*, Central Statistical Organisation.

The worrying aspect is that private investment in agriculture is almost completely concentrated in the northern regions particularly Punjab, Haryana and Western Uttar Pradesh and almost completely absent in other parts of the country.

Public investment, on the other hand, is a great disappointment. After showing an uptrend in the seventies, public investment in real terms (i.e. in 1980-81 prices) has generally declined — probably due to diversion of resources from investment to current expenditure in the form of increased inputs and input subsidies.

The share of agricultural sector's capital formation in GDP has been revolving around 2.7 percent to 3.3 percent in post reform period which is a disturbing phenomenon.

(iv) *Failure of Land Reforms*. Till the middle of the 1970s the Government hoped to implement land reforms, specially tenancy legislation and ceiling on land holdings. The Government failed to implement the land reform measures and there was very little of land redistribution in favour of marginal farmers and landless labourers or protection of tenants from exploitation or from eviction. The Government reconciled itself to its failure to push forth progressive land reforms and shifted the emphasis to technological changes. Since the Seventh Plan, for instance, there is no mention of land reforms. The bitter conflict between landlords and the landless in Bihar, Andhra Pradesh and other states – the rapid expansion of the Naxalite movement — is in the result of the failure to implement land reforms.

(v) ***Growing Exploitation of the Tenants***. From the very beginning, the growth prospects of Indian agriculture were vitally dependent on the role of public investment in irrigation, drainage and flood control, in land shaping and land consolidation, in prevention of soil erosion and salinity, in the development of a widespread research and extension network and in rural electrification and provision of institutional credit. But technological change is not a substitute for institutional change in agriculture. It is only a fusion of technological and institutional changes that can optimise the process of agricultural growth from the point of view of maximising production as well as distributive justice. However, this fusion has not taken place yet. As a result, the technological progress in the agricultural sector has been accompanied by growing inequality. Although as a consequence of rapid agricultural growth, the wages of agricultural labourers have risen in the green revolution areas of Punjab and Haryana. It has also been observed that land is being treated by the rich farmers as a very valuable asset. Exploitation of tenants has not declined and consequently, the fruits of agricultural progress are being pocketed by the rich peasantry. This is the paradox of growing agricultural production and growing inequalities and injustices.

(vi) ***Failure to control growth of rural population***. The Government failed to arrest the rapid growth of population in rural areas and also to create non-agricultural employment in the rural sector so that those who could not be provided land in the programme of land redistribution could be provided non-agricultural employment to eke out a living. A programme of enlarging non-agricultural employment, if it could grow faster than the increase in total labour force, could, after a period of time, help to reduce the excessive pressure of population on land.

Basically, the Planning Commission failed to appreciate the fact that the process of agricultural transformation should emphasise not only higher growth rate in agriculture but should also stress the need for a decentralised industrial pattern of growth with greater emphasis on labour-intensive technology.

(vii) Unbalanced agricultural development. Bulk of the increase in output, particularly foodgrains had been concentrated in a few progressive regions which were already enjoying high levels of consumption of foodgrains. As a result, the marketable surplus of foodgrains had been rising at a high rate in these states resulting in the accumulation of large stocks with the Government with the attendant problems of storage and distribution and the cost of storage and distribution.

Many regions had continued to be poor and backward, indicating the necessity for a ***balanced growth of agriculture*** as between different regions. Crop yields were low in these areas and, therefore, the use of modern inputs in these areas would raise agricultural productivity considerably.

Many classes of farmers, specially marginal and small farmers in the less developed areas, were having low levels of income. They used very little of modern inputs. More financial assistance to these farmers and greater encouragement to them to use modern inputs would have good output-response and rise of purchasing power of the rural poor.

Indian agriculture displayed another type of imbalance in the form of disparities in growth between foodgrains and non-foodgrains and between different foodgrains. Part of these inter-crop disparities in growth also reflected regional imbalance. For instance, a breakthrough in rice cultivation in the eastern region where the per hectare yield was low could bring about significant increase in rice production and remove the imbalance in growth between different foodgrains.

Likewise, a breakthrough in dry-land farming would help to raise the output of millets, pulses and oilseeds and thus help to correct inter-crop imbalance. Small and marginal farmers predominate in the dry-land farming regions and naturally, they will benefit most through watershed programmes and national pulse and oilseed development programmes.

The various weaknesses of the agricultural sector mentioned above indicate the main concerns and thrusts of the successive Five Year Plans. Outlining the strategies of agricultural development during the Seventh Plan, the Planning Commission wrote: "Broadening the base of agricultural growth and modernisation through infrastructure development e.g. irrigation, drainage, roads, markets and credit institutions in the less developed regions, extension of new technology, particularly break-through in dry-land farming, afforestation and appropriate price and procurement policies for crops are essential for accelerating the growth of agricultural output, reducing annual fluctuations in output and for correcting inter-regional, inter-crop and inter-class disparities. Such a pattern of growth can also provide the necessary impetus to rural development through the dispersal of agro-industries. This is how agriculture can contribute more effectively to the fulfilment of the national objectives of self-reliance, removal of poverty, increase in productivity and eco-preservation."[1]

Looming Agricultural Crisis

The Planning Commission and the Government of India were aware — but not concerned — of the deceleration of the growth of agriculture in the 1990s — the over-

1. Planning Commission, ***Seventh Five-Year Plan*** (1985-90), Vol. I, p.2.

all growth rate of crop production declined from 3.7 per cent per annum to 2.3 per cent and productivity declined from nearly 3 per cent to 1.2 per cent. The deceleration of the growth rate in foodgrains was much steeper.

The NDA Government, however, was worried about the huge stocks of foodgrains in Government godowns and the heavy burden it involved. Much of the stock was sold to flour mills illegally. Over 10 million tonnes of foodgrains were exported. The buffer stocks of foodgrains built up so carefully over the years were frittered away. Even in June 2005, the Government claimed that India was "self sufficient in wheat". But the reality was the liquidation of as much as 60 million tonnes of buffer stocks in a period of three years, even in the midst of famine deaths in Orissa and Rajasthan.

The last two years of lean agricultural production with growing farmers' suicides all over the country has created a sense of panic in the country. Unprecedented hoarding of cereals and pulses by traders and huge rise in the prices of articles of daily consumption has forced the Government of India to resort to import of wheat for the first time in nearly three decades. As much as 5 million tonnes of wheat is being imported this year. This trend of large imports of wheat will continue in the years to come. The Agriculture Ministry officials are, however, unable to explain the sudden disappearance of foodgrain stocks. Four dangerous things are taking place in India now :

(a) Agricultural production is declining (Refer to Table 17 and note the annual production of foodgrains since 2001-02) ;

(b) The small and marginal farmers who have borrowed from money lenders, normally at the rate of 36 per cent per annum, are committing suicide in large numbers all over the country ; this is a clear failure of public sector banks and the Finance Ministry, which directs them;

(c) Prime agricultural land is being diverted all over India in the name of "development" by the government and passed on to powerful builders to construct highways, theme parks, IT parks, high-rise apartments, and so on.

(*d*) Rural poverty is growing in general, creating a sense of despair and anger among the rural poor.

India is now in a dangerous position. On the one hand, "India is shining" — that is, manufacturing and service sectors are growing and financial markets are booming. On the other hand, there is a suffering India and deepening gloom in the agricultural sector. The Second Green Revolution should come and come fast. The growing disparity in incomes and wealth between the urban and rural areas should be rapidly reduced. Otherwise, the growing rural poverty, misery and the consequent anger will surely destroy the "shining urban India".

In the 1990's, Soviet Russia disintegrated, not because of the American CIA but because of the continuous failure of Russian agriculture. The Indian planners should remember that one-third of India is already with the Naxalites. This area is expanding day by day and not shrinking. This may spell the greatest danger to India's development.

4. GREEN REVOLUTION

New Agricultural Strategy

Since the mid-1960's, the traditional agricultural practices are gradually being replaced by modern technology and farm practices in India and a veritable revolution is taking place in our country. Initially, the new technology was tried in 1960-61 as a pilot project in seven districts and was called Intensive Agricultural District Programme (IADP). Later, the High-Yielding Varieties Programme (HYVP) was also added and the strategy was extended to cover the entire country. This strategy has been called by various names : modern agricultural technology, seed-fertiliser-water technology, or simply green revolution.

As a result of the new agricultural strategy, area under improved seeds has gone up since 1966. The new varieties are of a short-term duration and consequently, instead of growing one crop, two crops and sometimes, even three crops are grown. In the case of wheat, unprecedented enthusiasm has prevailed among farmers in Punjab, Haryana, Delhi, Rajasthan and Western U.P. for the new Mexican varieties like Lerma Rojo, Sonara-64, Kalyan and P.V. 18 and a situation developed in which the demand for seeds by the farmers exceeded the supply.

Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds, simple ploughs and other primitive agricultural tools, bullocks, etc. Modern technology, on the other hand, consists of chemical fertilisers, pesticides, improved varieties of seeds including hybrid seeds, agricultural machinery, extensive irrigation, use of diesel and electric power, etc. Since 1966, the use of modern agricultural inputs has increased at a compound rate of 10 per cent per annum in contrast to the traditional inputs rising at the rate of only one per cent per annum during the same period.

The new agricultural technology uses such resources like fertilisers, pesticides, agricultural machinery, etc., which are produced outside the agricultural sector. As a result, industries supplying the modern farm inputs are growing at a rapid rate. Massive programmes of farm mechanisation and irrigation have also led to an increase in the consumption of electricity and diesel in rural areas.

The Case for New Strategy

The advocates of the new strategy considered the intensive approach as the only means of making

a breakthrough in Indian agriculture in the shortest possible time.

Agricultural inputs were scarce and it was not possible to meet the needs of the entire country in this respect. The choice was to have either a thin layer of the inputs spread over the entire country or to apply concentrated doses in selected and promising areas. The latter choice, according to the apologists, was more rational as it ensured maximum production in the short period. Besides, the urgent problem in the 1960s was to make the country self-sufficient in the shortest possible time.

It was further held that the application of high doses would be accompanied by increasing returns and consequently, such an application could be justified on economic grounds.

Large-scale demonstration of better cultivation in actual field conditions would induce farmers in other areas to adopt improved techniques. Thus, the intensive development programme would set in motion a beneficent cycle. In this way, the spread effect of the programme would raise overall level of productivity in Indian agriculture.

Lastly, increased agricultural production in a certain region would produce secondary and tertiary effects. For instance, the availability of more food in the country would decrease our dependence on food imports and thereby release scarce foreign exchange resources for other sections of the economy. Similarly, increased production of commercial crops would lead to the expansion of agro-based industries.

Achievements of the New Agricultural Strategy

(i) ***Boost to the production of cereals.*** The major achievement of the new strategy is to boost the production of major cereals, viz., wheat and rice. Table 13 gives the production of the principal food crops during the last 50 years. A close look at the table reveals the increase in rice production from 35 million tonnes in 1960-61 to 99 million tonnes in 2008-09, signifying a breakthrough in this major crop of India. (Due to bad monsoon rice production declined in 2009-10). The yield per hectare has also recorded an improvement from a little more than 11 quintals in 1960-61 to nearly 22 quintals now.

TABLE 13 : Progress in Foodgrain Production

(million tonnes)

	1960-61	*1990-91*	*2009-10*	*2010-11*
Rice	35	75	89	96
Wheat	11	55	80.8	86
Coarse cereals	23	32	33.6	42
(a) Total Cereals	69	162	203.4	224
(b) Total Pulses	13	14	14.7	18
(c) Total foodgrains (a+b)	82	176	218.1	242

SOURCE : Ministry of Agriculture, Government of India, 2009, Economic survey 2010-11.

The production of wheat, which stood at 11 million tonnes in 1960-61, rose to 86 million tonnes in 2010-2011. Part of the increase in wheat production can be attributed to an extension of the area, but the yield per hectare rose from 8.5 quintals to 29.4 quintals per hectare, signifying 3.5 times rise in the last 50 years

It is interesting to observe that the ratio of wheat to rice (Table 14) has steadily increased from one-third in 1960-61 to 84 per cent in 1999-2000. This means that, even though rice continues to be the most important cereal in the country, wheat is catching up fast.

TABLE 14 : Production of Rice and Wheat

Year	*Rice (million tonnes)*	*Wheat (million tonnes)*	*Percentage of wheat to rice*
1960-61	35	11	31
1980-81	54	36	67
1999-00	90	76	84
2006-07	93	75	81
2007-08	96	78	81
2008-09	99	81	82
2009-10	89	81	91
2010-11	96	86	90

SOURCE : Agricultural Statistics at a Glance, 2011. Economic Survey 2011-12

Green revolution did not cover coarse cereals like maize, jowar, barley, ragi, and minor-millets. The green revolution did not cover pulses. The output of pulses fluctuated violently from year to year till it declined to an all time low of 8 million tonnes in 1979-80. From 13 million tonnes in 1960-61. Even now the production of pulses fluctuates between 13 and 15 million tonnes per year.

The green revolution was thus confined only to High Yielding Varieties (HYV) cereals, mainly rice, wheat, maize and jowar.

While rice output increased at a relatively slower rate, the singular crop which showed a continuously rising trend was wheat. This was true of potatoes. The very fact that the cash crops in general and pulses in particular have not so far been brought within the ambit of new technology forces the conclusion that quite a substantial part of the agricultural output has not even been touched by the green revolution.

(ii) ***Increase in the production of commercial crops.*** The green revolution was mainly directed to increase the production of foodgrains. It did not affect initially the production of commercial crops or cash crops such as sugarcane, cotton, jute, oilseeds and potatoes; these crops did not record any significant improvement initially. However, significant improvement in the output of sugarcane took place after 1973-74. Likewise, there was considerable improvement in the production of other cash crops such as oilseeds, potatoes etc. (Table 15).

TABLE 15 : Production of Cash Crops in India

	1960-61	*1990-91*	*1999-2000*	*2008-2009*	*2009-2010*
Oilseeds (m. tonnes)	7	19	21	28	31.1
Sugarcane	110	254	299	285	339.2
(m. tonnes) Cotton	6	10	12	22.3	33.4
(m. bales) Jute	4	8	11	10.4	10.6
(m. bales) Potatoes	3	15	25	29	36.6
(m. tonnes)					

SOURCE : *Economic Survey*, 2011-12.

(*iii*) ***Significant changes in crop pattern.*** As a result of the green revolution, the crop pattern in India has undergone two significant changes. Firstly, the output of cereals has risen at the rate of 3 to 4 per cent per annum but the output of pulses has remained stagnant or even declined. This has resulted in a decline in the importance of pulses in foodgrain output from 16 per cent in 1960-61 to 7.4 per cent in 2010-11. Cereals, on the other hand, have risen in importance from 84 per cent to 92.6 per cent during the same period. The *stagnant production of pulses* and the consequent rise in prices of pulses has a disastrous effect on the health of the poor who have generally given up the use of pulses – a major source of protein.

Secondly, among cereals, the proportion of rice in total cereal output has come down from 48 per cent to 43 percent between 1950-51 and 2010-2011. During the same period, however, the importance of wheat has more than doubled, i.e., from 15 per cent to 38 per cent (Table 16). The share of coarse grains has gone down from 37 per cent to 19 per cent of total cereals. The rising output of wheat indicates a substitution of coarse grains with wheat, on the side of production as well as consumption. This trend had begun even before the green revolution ushered in, but it has now strengthened.

TABLE 16. Percentage distribution of cereals output

Year	*Rice*	*Wheat*	*Coarse grains*	*Total cereals*
1950-51	48	15	37	100
1960-61	50	16	34	100
1990-91	46	34	20	100
2006-07	46	37	17	100
2007-08	45	36	19	100
2008-09	45	37	18	100
2009-10	44	40	16	100
2010-11	43	38	19	100

SOURCE : Economic Survey 2010-11. Agricultural Statistics at a Glance (2011).

(iv) ***Boost to agricultural production and employment.*** The successful adoption of the new agricultural technology has led to continuous expansion in area under crops, increase in total production and rise in agricultural productivity. Impressive results have been achieved in wheat, rice, maize, potatoes, etc. The adoption of new technology has also given a boost to agricultural employment because of diverse job opportunities created by multiple cropping and shift towards hired workers. At the same time, there has been displacement of agricultural labour by the extensive use of agricultural machinery.

(v) ***Forward and backward linkages strengthened.*** The new technology and modernisation of agriculture have strengthened the linkages between agriculture and industry. Even under traditional agriculture, the forward linkage of agriculture with industry was always strong, since agriculture supplied many of the inputs of industry; but backward linkage of agriculture to industry — the former using the finished products of the latter was weak. Now, however, agricultural modernisation has created a larger demand for inputs produced and supplied by industries to agriculture and thus the backward linkage has also become quite strong. In this way, the linkage between agriculture and industry has got strengthened.

Weaknesses of the New Strategy

The new agricultural technology has made the farmer market-oriented. The farmers are largely dependent on the market for the supply of inputs and for the demand for their output. At the same time, the demand for agricultural credit has also increased as the new technology has increased the cash requirements of the farmer. Besides, modern technology has definitely proved its superiority over the traditional technology only in those areas where appropriate conditions prevail. But as mentioned above, these conditions prevail only in certain selected areas and the rest of the country is not yet suitable for advanced technology. What is, therefore, wanted is the evolution of a low-cost technology which can be adopted by all small farmers and which can use and exploit the local resources.

(1) **Indian Agriculture is still a gamble in the monsoons.** When the new agricultural strategy was introduced in the early 1960's, it was hoped that the trend of rising output of foodgrains would continue (Table 16). The then record achievement of 108 million tonnes of foodgrains in 1970-71 was hailed that green revolution had materialised and imports were immediately stopped. The euphoria was cut short in 1972-73 when production of foodgrains slumped to 95 million tonnes. Sharp fluctuations in foodgrain output were observed in the later years too. From a low level of about 100 million tonnes in 1974-75, foodgrains output rose gradually to 132 million tonnes in 1978-79. There was a steep decline in production just next year due to adverse weather conditions; foodgrains output in that year was 109 million tonnes in 1979-80 which was almost the same as 1970-71 output.

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After many fluctuations, the output of foodgrains rose to 176 million tonnes in 1990-91 and touched 213 million tonnes in 2001-02. On account of extensive drought conditions, the output of foodgrains declined steeply to 174 million tonnes during 2002-03 (decline of 38 million tonnes in one year). It is only in 2010-11, that the trend has been reversed and foodgrain output touch a record level of 242 million tonnes. But in the next year it again plunged to 218 million tonnes.

TABLE 17: Trend in the production of foodgrains in India

(million tonnes)

Year	*Production*	*Year*	*Production*
1970-71	108	2002-03	174
1978-79	132	2003-04	212
1990-91	176	2006-07	216
2001-02	213	2007-08	231
		2008-09	235
		2009-10	218
		2010-11	242

SOURCE: *Economic Survey* (various issues). Agricultural Statistics at a Glance, 2011

Two conclusions can be drawn from the sharp fluctuations of output of cereals in India since the introduction of new agricultural strategy.

(a) Output of cereals (as well as other agricultural products) is still subject to weather conditions as in the past; and

(b) the maximum and minimum total outputs, however, are now much higherthan in the past.

(2) Growth of Capitalistic Farming in Indian Agriculture. The new agricultural strategy consisting of IADP and HYVP necessitated heavy investment in seeds, fertilisers, pesticides and water. These heavy investments are beyond the capacity of small and medium farmers. In India, there are about 81 million farm households but just 6 per cent of the big farmers account for 40 per cent of all cultivated land; they alone are making heavy investment in the installation of tubewells, pumping sets, use of fertilisers and agricultural machinery required for the purpose. Consequently, the new agricultural strategy has helped the growth of capitalist farming in India and has led to concentration of wealth in the hands of the top 6 per cent of the rural population. The poor and marginal peasants have not directly benefited from green revolution.

A recent study of Punjab by Ashok Rudra and others revealed evidence of the growth of gentlemen farmers, comprising ex-servicemen, retired civil servants, and urban-based businessmen deriving their income from industry and commerce and who have recently taken up agriculture as an industry. In Punjab, they constitute about 3 per cent of the total number of farmers, command 8.5 per cent of the total number of farms and cover 27 per cent of the total cultivated area. It is this group of farmers called as "progressive farmers" and "gentlemen farmers" who are able to make huge investments in the form of tractors, tubewells and pumping sets and other equipment.

The vast majority of rural households with little or no land, with poor finances and poor creditworthiness have not gone in for the new technology in a big way and have benefited the least from the green revolution. Regions which have been well endowed with resources (like Punjab, Haryana and Western U.P.) have benefited the most from the use of modern technology and have prospered. Other regions have remained backward and underdeveloped. Regional disparities have thus increased.

(3) Sidetracking the need for institutional reforms in Indian agriculture. The new agricultural strategy does not recognise the need for institutional reforms in agriculture. The bulk of the peasant population does not enjoy ownership rights. Large-scale evictions have already taken place. As a result, the tenants are being forced to accept the position of sharecroppers. Minhas and Srinivasan studied the effects of crop sharing arrangements in fertiliser use. Their basic assumption was that the cost of fertilizers was met by the cultivator by borrowing, and interest charges amounted to 10 per cent of the cost. Basing their judgement on the capitalist principle of profit maximisation, the owner-farmers reaped a profit of 180 per cent on irrigated lands in the case of wheat and 183 per cent in the case of rice. Against this, the tenant cultivators on a 50 per cent basis reaped a profit of only 65 per cent in wheat and 67 per cent in rice. The return was further reduced to a level of 42 per cent in the case of share-cropping on a 40 per cent basis. Profit maximisation criterion clearly indicates that larger dosages of fertilisers will be absorbed by owner farmers than by tenants. Thus, the conclusion is inescapable that tenancy cultivation poses itself as a big obstruction in the way of fertilizer use.

(4) Widening disparities in income. Technological changes in agriculture have had adverse effects on the distribution of income in rural areas. From his study of technological changes and distribution of gains in Indian agriculture, C.H. Hanumantha Rao concluded : "Technological changes have contributed to widening the disparities in income between different regions, between small and large farms and between landowners on the one hand and landless labourers and tenants on the other. In absolute terms, however, the gains from technological change have been shared by all sections. This is indicated by the rise in real wages and employment and in incomes of small farmers in regions experiencing technological change".[2]

(5) New Strategy and Socio-economic relations in rural areas. Francine Franknel, USAID ex-

2. C.H. Hanumantha Rao : *Technological Change and Distribution of Gains in Indian Agriculture* (1975), p. 178.

pert, undertook a study of the impact of the new strategy on the socio-economic relations of the peasantry. The main conclusions of this study are :

(a) Overwhelming majority of the cultivators having uneconomic holdings of 2-3 acres have managed to increase per acre yield from the application of small doses of fertilisers, but aggregate gains in output have been insufficient to create surplus capital for investment in land development.

(b) Often small and marginal farmers are forced to take some land on lease; in some cases, they are pure tenants. Rising rentals in recent years (in response to the sharp spurt in land values), and /or the tendency of landowner to resume land for personal cultivation (with the introduction of more profitable techniques), has actually led to an absolute deterioration in the economic condition of the small owner-cum-tenant cultivator class.

(c) Only the small minority of cultivators with holdings of ten acres or more have been in a position to mobilize surplus capital for investment in land development, especially minor irrigation, as an essential precondition for the efficient utilisation of modern inputs. Moreover, this class has prided its gains by using increased profits to buy more land, improve land already under cultivation, and purchase modern equipment.

(d) Farmers with twenty acres or more have made the greatest gains, partly by mechanising farm operations to take up double or multiple cropping, and partly by diversifying their cropping pattern to include more profitable commercial crops.

U Thant, a former U.N. Secretary-General warned developing countries : "There are many observers who contend that if left to market forces, the green revolution is likely to benefit primarily those farmers who are already engaged in commercial production rather than subsistence farmers, and among commercial farmers, big ones more than small producers." U Thant impressed upon the developing countries the urgent necessity to push through land reforms and bring about relative equality in land ownership.

The need for modifying policies focussing special attention on small farmers and backward regions is evident. In the words of Dr. V.K.R.V. Rao : "It is now well-known that the so-called green revolution which helped the country to raise its output of foodgrains has also been accompanied by a widening of the range of inequality in rural incomes, the loss of their status as tenants by a number of small farmers and the emergence of social and economic tensions in the countryside. . . the challenge which Indian agriculture faces is not only of production but also that of distribution, and in our anxiety to concentrate on production problems, we should not forget the human and social implications of agricultural development."[3] Land reforms are, therefore, unavoidable. Rapid growth of Naxaliti movement in many parts of the country calls for justice for land distributions

(6) **Problems of labour displacement**. Very few studies are available to assess the impact of the mechanisation introduced under the garb of green revolution in terms of displacement of labour. Uma K. Srivastava, Robert W. Crown and Earl O. Heady have examined the effects of two types of technological innovations introduced under the Green Revolution — (i) biological and (ii) mechanical.

The term 'biological innovations' refers to the changes in inputs that increase productivity of land. The introduction of high yielding seed varieties and use of fertilisers, fall in this category. In this sense, green revolution is described as transformation of seed-fertiliser technology. The mechanical innovations refer to the introduction of new appliances which displace human or bullock labour. Thus, whereas biological innovations are labour-absorbing, mechanical innovations are labour-saving. It is therefore appropriate to describe the green revolution as a biological-mechanical revolution. It is the net effect of the labour-absorbing and labour-saving innovations which will determine the extent to which mechanisation need be introduced to check further displacement of labour. The study concludes : "Since mechanisation may dampen the increase in labour demand, resulting from the expanding factor of seed-fertilisers, the policies that encourage premature mechanisation in surplus labour economies, such as India's, do not seem conducive to solving the problem of growing unemployment."[4]

C.H. Hanumantha Rao brings out the favourable as well as unfavourable effects of new technology on employment : "If the Green Revolution is regarded as a package consisting of HYV and fertilisers, its contribution to employment has been substantial. Also, tubewells seem to have contributed significantly to the employment of labour ....." However, "the net employment of tractor-use may turn out to be negative when tractorisation of farm operations is complete. A harvest combine would displace farm labour on a large scale while its land augmenting effect would be negligible."[5]

Martin H. Billings and Arjan Singh have made

3. V.K.R.V. Rao : ***"New Challenges before Indian Agriculture"***, Panse Memorial Lecture (April 1974)

4. Uma Srivastava, Robert W. Crown and Earl O. Heady : "Green Revolution and Farm Income Distribution", ***Economic and Political Weekly***, December 25, 1971.

5. C.H. Hanumantha Rao : ***Technological Change and Distribution of Gains in Indian Agriculture*** (1975), p. 121.

an attempt to quantify the labour-displacement effects in the wheat growing areas of Punjab with different degrees of mechanisation. The authors showed that 55 per cent of the total labour displaced was expected to be caused by tractors and pumpsets and 37 per cent by threshers and reapers. This analysis of Martin H. Billings and Arjan Singh emphasizes the fact that the technical changes that will successively gather momentum are bound to cause labour displacement . In other words, green revolution unaccompanied by a nassive programme of "rural industrialisation" will cause nothing but frustration among the large mass of Indian peasantry. Unemployment or underemployment of agricultural labour might land us in a situation which might become explosive both politically and economically—rise of Naxalite movement in many parts of the country is a cause for serious worry.

Lessons from the Green revolution

Les us analyse the lessons of the experience of the Green Revolution embodied in the 'seed-fertiliser-irrigation' package.

1. The green revolution caused by the new strategy was initially limited to wheat, maize and bajra only. The major crop of India, i.e., rice, responded to the impact of the high-yielding varieties much later. Progress in major commercial crops, viz., oilseeds, cotton and jute is very slow. Further, pulses which account for about 10 per cent of the total food production have not registered any increase in production. It is really wrong to speak in terms of an agricultural revolution unless the projected upward trend in production in a few crops ***becomes pervasive in all major crops.***

2. True, spectacular rise in foodgrain production has taken place since the 1960s in Punjab, Haryana, Western U.P. and in some selected districts of Andhra Pradesh, Maharashtra and Tamil Nadu. But these areas cannot claim to cover the bulk of India. All that can be said is that they have shown the way to a big take-off in agricultural production. In other words, the already better-off areas have made their economic position still better. This has initiated a process of unbalanced growth in India. The regions which have lagged behind have to catch up with those that have marched ahead. Unless all the major States enter the take-off stage, it would not be fair to speak of an agricultural revolution.

3. It has been observed that in the present rural set-up of co-operative societies and rural banks, it is the big farmer who is able to secure a loan at low rate of interest. The small farmer who wields very little influence in the village has to borrow from the village money-lender at exorbitant rates of interest varying between 24 and 36 per cent. Whereas official agencies provide about 40 per cent of the total credit at cheaper rates and that, too, mostly to the big farmers, the tenant farmer and the small farmer who need credit at lower rates of interests, get the costliest credit. This introduces a difference in the real price of inputs to the large and the small farmers, obviously to the disadvantage of the latter.

4. The adoption of new technology depends upon control over water supply and ability of the farmer to regulate its timing. It requires lumpy investment in tubewells or diesel pumpsets. It has been observed that the ownership of tubewells was limited among farmers with ten acres or more. Obviously, there is need to develop a rental market for water supply. In order to accelerate the pace of new technology, availability of water should be ensured.

5. The new strategy has created three kinds of conflicts, namely, between large and small farmers, between owners and tenant farmers and between employers and employees on agricultural farms:

(a) The holders of large farms are capable of making heavy investment in the form of fertilizers, pumpsets, tubewells and agricultural machinery. They are also able to procure credit from banks and cooperatives societies and also obtain fertilizers and better seeds. For all practical purposes the large farmers enjoy the right of pre-emption of agricultural inputs and, thus, the small farmers are deprived of the much-needed inputs.

(b) In India quite a significant group of peasants have small size holdings and consequently, they hire land on tenancy from the large owners. Since the landlords pay for the new agricultural inputs, such farms are experiencing a dualism in agricultural production technique. The part of land hired by the tenants is provided with modern techniques and the small fragments of land owned by the tenants continue to be worked by traditional techniques. The conflict is the cause of social tension, more so when the landlords demand exploitative rents on the land leased out by them.

(c) The application of new technology in large farms has led to the substitution of human labour with mechanical processes. In other words, the back-wash effects of new strategy in terms of displacement of human labour have also to be taken note of. The greatest sufferers in the process of agricultural revolution are landless labourers. Unless alternative opportunities of employment are provided to this most vulnerable section of the rural community, agricultural revolution will be meaningless to the millions of landless peasants in this country.

In this context C.H. Hanumantha Rao argues that "participation in the modernisation process is

6. *Ibid*, p. 121.

usually greater in regions which have shed the feudal and semi-feudal structures and attitudes and where the inequalities in wealth and status are not conspicuous."[6] Hanumantha Rao cites the examples of Punjab, Haryana and western Uttar Pradesh where the technological change did not result in perceptible social tensions because real wages had risen in these regions. But such was not the case in Thanjavur in Tamil Nadu. The landlords in Thanjavur district tried to counter the demand for higher wages by bringing in farm labour from outside. For the success of the Green Revolution and its spread without social tensions, it would be advisable—rather it is absolutely necessary—to make a frontal attack on feudal and semi-feudal land relations.

Dr. M.S. Swaminathan, the eminent agricultural scientist, analysing the success of green revolution in Punjab stated : "The Green Revolution in Punjab is not a miracle. It happened only because the following pre-requisites for its success existed in the mid-Sixities: (a) Land consolidation and levelling, (b) Owner cultivation resulting in a long-term stake in land, (c) Rural communication, (d) Rural electrification and (e) A dynamic Agricultural University".

5. NEW THRUST AREAS IN AGRICULTURE

As a consequence of the new agricultural technology, India has achieved relative self-sufficiency in foodgrains and its imports became negligible. India is also able to accumulate large buffer stocks of rice and wheat so that she could face any eventuality resulting from drought in a particular year or successively in two or three years.

But the achievements in agriculture cannot and should not make the Government complacent, because there are still many thrust areas in which we must orient our agricultural policies in the interests of agricultural growth with emphasis on sustainability and equity. Major thrust areas are the following :

(i) **Output and area under coarse cereals has shown negligible improvement.** Neither area nor production of coarse cereals showed any significant improvement. Sufficient attention was not paid so far to develop better HYV strains of these crops. Since major inputs were directed towards wheat and rice, coarse cereals remained neglected and to improve their production should be a major thrust area now.

(ii) **Stagnation in the output of pulses**—The production of pulses in 1970-71 was around 12 million tonnes. In 1990-91, the peak year of foodgrains production, production of pulses was 14 million tonnes. After 16 years in 2006-07 too the production of pulses is still 14 million tonnes. In most years, however, production has been stagnant around 13 to 14 million tonnes. The per capita consumption of pulses, which was 69 gm per day in 1971, has come down to 36 to 37 gm now. This sharp decrease in the consumption of pulses is a cause of serious concern, more so for the poor for whom pulses are the major source of protein.

Pulses are mostly grown under unirrigated conditions on poor soils and with low inputs. Out of about 23 million hectares of area under pulses, only 2 to 3 million hectares are irrigated. Pulses do not require large doses of fertilizers and pesticides. The development of short duration varieties and improved dry farming technology has raised new hopes of raising the production of pulses. Researches over the last decade have produced new varieties of pigeon-pea (Arhar) which is ideally suited for poor farmers and it is possible to produce 2 to 3 tonnes per hectare of pulse besides 6 to 8 tonnes per hectare of dry stalks for fuel. Similarly, the productivity of Chickpea (Bengal gram), the dominant pulse crop, can also be increased by improved deep black soil management technology. Both Arhar and gram taken together account for 60 per cent of total production of pulses and if efforts are concentrated in improving their productivity, in the coming years, there is considerable scope for making a break-through in the productivity of pulses.

(*iii*) **Another thrust area is to boost the production of edible oils**—India is not self-reliant in the production of edible oils. The major oil seeds grown in India are groundnut, rape-seed, mustard, sesamum, safflower, sunflower, and soyabean. The principal problem in oilseeds production is low productivity. Not only India is way behind the developed countries, its productivity per hectare does not compare favourably even with respect to that of China and other developing countries. Imports of edible oils were barely of the order of ₹ 23 crores in 1970-71 but with increasing domestic demand and our failure to meet it with domestic production, imports of edible oils had gone up from ₹ 700 crores to ₹ 1,000 crores a year during the 1980's and exceeded ₹ 11,680 crores in 2003-04 but declined thereafter.

The Government of India set up the Technology Mission on Oilseeds which has proposed the target of raising production of oilseeds to 16 to 18 million tonnes by 1989-90 and raising it further to 26 million tonnes. by the year 2000-01.

These targets were to be achieved by (a) bringing additional oilseed areas under irrigation. (b) modern crop technology, (c) crop substitutions, (d) better dry farming and (e) promoting oil palm cultivation in 6,00,000 hectares.

The short term target for oilseed production (i.e. 16 to 18 million tonnes by 1989-90) was fulfilled. The long range target (of 26 million tonnes by 2000 A.D.) was, however, achieved in 2004-05. Between these two years, production oilseeds ranged between 21 mil-

lion tonnes and 16 million tonnes, forcing the Indian Government to resort to large import of oilseeds. Production of Safflower and Soyabean, however, has been the most promising.

(iv) **New Strategies of Irrigation and Water Management**—The total foodgrains production from a gross area of 163 to 165 million hectares was around 212 million tonnes in 2001-02 (as against the Ninth Plan target of 234 million tonnes for that year. Our average foodgrains production is about 1.3 tonne (or 13 quintals) per hectare. As against this, China produces 4 tonnes or 40 quintals of foodgrains per hectare. If India is to meet the needs of its growing population of over 1,000 million people it must produce 240 to 250 million tonnes of foodgrains per year. This will necessitate the adoption of new strategies of irrigation.

The total available water reserves is of the order of 100 million hectare metres (mhm) during the next 12 to 15 years. Since water is a scarce resource, it is vitally necessary that emphasis be shifted on its more efficient use. As things stand today, 90 per cent of water available is allocated to irrigation. This is, according to experts, wasteful use of water. It would, therefore, be useful to develop irrigation strategies which economise water use. The target should be to reduce water use for irrigation to 77 per cent of total available water in the next 10 to 12 years, so as to meet the rising demand for water for industrial and municipal needs. The new strategy of irrigation should be directed towards the following:

(i) control and proper method of irrigation in canal and tank command areas, specifically for paddy;

(ii) repair and maintain the traditional system of water harvesting and recharge of surface water.

(iii) conjuctive use of surface and ground water;

(iv) using sprinkler irrigation in canal/tank command areas;

(v) introducing drip irrigation in well irrigated areas;

(vi) Biwall irrigation for closely spaced crops like sugarcane, vegetables and cotton; and

(vii) training farmers and extension officers in water management.

In major irrigation projects, there is frequently over-irrigation, with its adverse effects on production. For instance, farmers use 1,500—3,000 mm of water for paddy, as against the requirement of only 800 mm. Moreover, absence of proper channels to take water to various fields leads to water logging and makes the land saline or alkaline.

Use of sprinkler irrigation can bring about 30-35 per cent of saving in water use. This should be used in all closely spaced crops like millets, groundnuts, pulses and wheat.

Drip irrigation is suitable for all row crops and can result in a water saving of 50-70 per cent, simultaneously raising yield by 60-70 per cent in various crops. It helps in economic use of water and is specially suitable for irrigation by wells.

Biwall irrigation is being recently experimented in Maharashtra. In this system, water is delivered from the main chamber with a distribution chamber through evenly spaced supply orifices provided by lazer beams. It is then slowly released through the emission orifice.

The education of the farmers and the extension workers is vital in this thrust area of water management. For this, demonstrations, group discussions, seminars of farmers and other mass media be pressed into service. This is a thrust area which promises much better results with marginal addition of costs.

During the first eight Five Year Plans, much greater emphasis was laid on major and medium irrigation works. It is now being increasingly realised that this obsession with major irrigation works or big projects has raised the irrigation costs per hectare to prohibitive levels (₹ 60,000 per hectare on an average). Because of its cheapness and quick benefits the new thrust should be in favour of minor irrigation works.

(v) **The use of bio-fertilizers has to be expanded**—Recent researches in bio-technology and genetic engineering have demonstrated that certain micro-organisms such as bacteria and blue green algae can act as nitrogen fixers and provide nutrient to crop-plants. The most commonly used bio-fertilizer is ***Rhizobium*** which colonizes the roots of specific legumes to form root nodules. These nodules act as factors of ammonia production. The ***Rhizobiums*** legume association can fix 100-300 kg of nitrogen per hectare in one crop season and even leave substantial quantities of nitrogen for the next crop. The great break-through in nitrogen generation by micro-organisms, for which the bill is paid by nature, is a great advance in agricultural research that promises a second green revolution.

With new bio-technology, for algae, the cost of inoculant at the rate of 10 kg./ha. is around ₹ 20 and its nitrogen contribution in terms of fertilizer is ₹ 200-400 per hectare. If agricultural production is encouraged on these lines, it has the potential to generate income to the farmers of the order of ₹ 5,000—7,500 from one hectare of land through sale of the produce. The new bio-technology is, therefore, the answer to the problems of the small farmers in cutting down their costs of fertilizer use.

Whereas bio-technology in fertilizers has been successfully exploited in developed countries, several factors have hampered its use and propagation in India. They are : lack of trained personnel, lack of appreciation of the benefits of innoculation and absence of industrial support. The Ministry of Agriculture of the Government of India is sponsoring national projects on these subjects. This should give a major thrust in agricultural development in future.

(vi) **Emphasis should shift to dry farming**— Out of total cultivated area of 163 million hectares in India, dry farming is carried on in 100 million hectares i.e. in 60 per cent of the total arable land. But the contribution of dry land farming to agricultural production is less than 30 per cent.

There is no doubt that irrigation has brought about national self-sufficiency in foodgrains, but the gap between the rich and the poor farmers has widened because of the use of irrigation. About two-thirds of dryland farmers own less than two hectares and even this is available in scattered and fragmented holdings. Since the country has to carry on with dryland farming for many years to come, it is vitally necessary that dry-farming technology be developed, so that the possibilities of raising the potential output of vast dry-land areas be exploited. For this purpose, problems of different dryland areas have to be studied and region-specific technology have to be developed. Moderate use of fertilizers, improved seeds and better conservation of rain water and its judicious use can contribute to 40 to 50 per cent increase in yields in rain-fed areas.

To conclude : The annual rate of growth in foodgrains output during nineties was just about 1.7 per cent, which is much lower than 3.5 per cent annual growth recorded in the eighties. The yield rates have more or less plateaued in major wheat and rice growing areas. Hence the government should give special attention to those areas where productivity is much below the national average. Eastern Uttar Pradesh, Bihar, Madhya Pradesh and Orissa should be the target areas where higher investment in rural infrastructure by way of improved water conservation and delivery system, fertiliser use and credit availability could be concentrated.

6. GREEN REVOLUTION – THE FUTURE PROSPECTS

Green Revolution initiated in the 1960's centered around the use of semi-dwarf high yielding varieties responsive to irrigation and chemical fertilizers yielded good results in giving a big boost to the production of wheat in the first stage and the production of rice in the next stage. But more recently, it has been felt that high-yielding varieties have reached a plateau and the scope for future increase in production appears to be very limited. In other words, the seed-water-fertilizer technology has probably exhausted its potential and is now at a point of diminishing returns.

The Planning Commission set a target of foodgrains production of the order of 300 million tonnes by 2007-08 but the actual production was 216 million tonnes. The question raised is: What are the prospects of realising this target?

Some like Harish Damodaran do not subscribe to the view that agricultural production has reached a plateau.

Table 18 : Average Foodgrain Yield

Kgs per hectare

	1960s	*1970s*	*1980s*	*1990s*	*2010-11*
Foodgrains	719	894	1,156	1,490	1,921
Wheat	950	1,382	1,921	2,449	2,938
Rice	1,000	1,158	1,470	1,827	2,240

*Advanced estimates for 2008-09.

Source: Harish Damodaran, Green Revolution Fatigue, Business Line, May 27 & 28, 1999.

Economic Survey : 2011-12, Agricultural Statistics At a Glance 2011.

Data given in Table 18 indicates that foodgrain yield has continued to increase from 719 Kgs. in 1960s to 1,490 Kgs. during 1990's and to 1,921 in 2010-11. The increase in yield has been more pronounced in the case of wheat from 950 Kgs. in 1960s to about 2,450 Kgs. in 1990s and 2,938 in 2010-11, although in rice too yield has gone up from 1,000 Kgs. in 1960s to 2,240 Kgs. in 2010-11. While bringing more areas under High Yielding Varieties, highest yield rates may have shown some signs of stagnation.

It would, therefore, be necessary to understand the theoretically obtainable maximum yield and the actual realisable maximum. It may be noted that the first Green Revolution variety Sharbati Sonora had demonstrated a yield potential of about 3.4 tonnes per hectare. The next jump in yield variety came from Kalyansona in 1970 to 4.2 tonnes. For a major breakthrough, the country had to wait till 1994 when new rust-resistant varieties like UP2338 jacked up yields to 5.1 tonnes and PBW 343 in 1995 to boost it further to 5.4 tonnes per hectare.

However, in rice, the picture has not been very encouraging. Consequently, the skeptics believe that traditional Green Revolution breeding techniques have come to a dead end. Whatever success has been achieved in rice is the consequence of extending the pioneering varieties to more and more areas so that the country can realise the potential.

But this does not signify that we have exhausted all the latent potential of the existing HYV varieties. Field trials in Punjab confirm the demonstrated potential of 5.5 tonnes per hectare, but actual mean yields are around 4.25 tonnes per hectare. Obviously, one tonnne of unharvested yield potential exists in Punjab. Similarly, the situation in other wheat growing states indicates the gap between attainable and actual yields to rise to over two tonnes per hectare. Mr. Harish Damodaran, therefore, concludes: "Even with the current high yielding varieties, it is possible for farmers in the Indo-Gangetic plain, which accounts for 18 million hectares out of 26 million hectares under wheat to produce an additional 25 million tonnes of wheat by adopting improved crop management practices and ensuring timely supply of inputs, attractive

prices and so on. A half-a-tonne increase in average per hectare rice yield can similarly generate an additional 20 million tonnes from the country's 42 million-odd hectares area planted under paddy."[7]

A point often made by critics that as against average yield of 4 to 4.5 tonnes of wheat in Punjab, the farmers in cold countries like Netherlands raise about 8 tonnes per hectare, but this comparison ignores one important difference in the cropping systems of the two countries.

The eminent agricultural scientist Dr. M. S. Swaminathan emphasises that it is unscientific to make comparisons purely on the basis of individual crops, but it would be more scientific to compare the cropping system as a whole. For instance, a farmer in Punjab may obtain only 4 to 4.5 tonnes per hectare yield on spring wheat of 140 days duration, but his counterpart in Netherlands obtains 8 tonnes per hectare on a 10-month winter wheat crop. The difference is made up by the Punjab farmer by raising a rice crop during the same year providing a yield of 3 to 3.5 tonnes per hectare. He may also be raising a crop of potato or legume or some short-duration vegetable. Obviously, for the Indian farmer, the more important consideration *is the total yield during the year, rather than simply yield per crop.* Thus, the transformation from a mono cropping to multi-cropping system has enabled the development of rice or wheat varieties of different maturities, which have been integrated in the phenomenon described as the Green Revolution. Obviously, the success of the Green Revolution should be judged in terms of the over-all yield (income) generated by the farmers per hectare in a year rather than in terms of productivity per hectare of a single crop.

Future Prospects

Scientists in India have been making efforts to develop hybrid varieties of rice and wheat so that the yield barrier operating at present can be broken. In the case of rice, on-farm-trials of hybrid rice in Andhra Pradesh Tamil Nadu and Karnataka have been found to yield an average of 6.8 tonnes per hectare as against 5.2 tonnes obtained from conventional pure-line rice varieties. This amounts to an additional yield of 31 per cent viz., 1.6 tonnes per hectare. In some cases, hybrid rice yield is even higher by 35 to 44 per cent than the conventional varieties. In other words, gains from hybrid rice have been estimated to be 1.5 to 1.75 tonnes per hectare. Despite success at on-farm trials, India has been able to bring only 0.15 million hectares under hybrid rice as against the target of 2 million hectares by the year 2000. The following factors are responsible for the slow progress:

(a) Since the additional seed costs for hybrid seeds are of the order of ₹ 1,500 per hectare, the yield gain has not been enough to translate into substantially higher returns to the farmer. As a consequence, the farmers have not felt enthused about the use of hybrid rice.

(b) The presence of an aroma and stickiness in the hybrid-rice grain has not been able to make it acceptable to the consumers, particularly in South India. Consequently, hybrid rice fetches lower prices, which again produces an unfavourable impact on the rate of return to farmers.

(c) Hybrid rice is also said to be more susceptible to pests and diseases.

According to Mr. Harish Damodaran, China is "the only country that has so far really managed to adopt hybrid technology in any significant way. More than 50 per cent of China's 32 million hectares rice area is currently covered under hybrid rice, which also accounts for 70 per cent of total rice output. To make hybrid rice more acceptable to the farmers, China provided seeds to farmers at subsidised prices. Besides, the Chinese government provided incentives to hybrid seed growers to bring down costs. China has also standardised its hybrid seed production techniques, with seed yields averaging 2.5 tonnes per hectare, against 1 to 1.5 tonnes being obtained by experienced breeders in India.

India should make an effort to bring down the seed costs by standardizing hybrid rice seed production techniques. The Government should also provide hybrid rice seed at subsidised rates to farmers.

However, the hybrid technology in wheat is still at an infant stage of development and research efforts shall have to be strengthened for quite some time so as to achieve a break-through in the yield barrier.

7. THE NATIONAL COMMISSION ON FARMERS AND SECOND GREEN REVOLUTION

The UPA Government, after coming to power in 2004, appointed the National Commission on Farmers under the chairmanship of Dr. M S Swaminathan, eminent agricultural scientist. The Commission has made recommendations which promise to rejuvenate agriculture and thereby improve the lot of millions of farmers.

For the purpose of suggesting policy measures, *the term "Farmer" includes landless agricultural labourers, sharecroppers, tenants, small, marginal and sub-marginal cultivators, farmers with larger holdings, fishermen and women, dairy, sheep, poultry and other farmers involved in animal husbandry, pastoralists, as well as those rural and tribal families engaged in a wide variety of farming related occupations such as sericulture, vermiculture, production of bio-fertilizers and bio-pesticides, and agro-processing."*

"The term also includes tribal families sometimes engaged in shifting cultivation, and in the collection and

7. Harish Damodaran, Green Revolution Fatigue – Have yields begun to plateau, ***Business line***, May 27, 1999.

use of non-timber forest products. In all cases, both men and women should receive equal attention."

Statement of the Problem of Farmers

Farmers have to face the fury of nature in the form of drought, unseasonal and heavy rain which causes extensive damage to crops.

Institutional support to small farmers is weak. Even now in many parts of India, paddy is spread on the roads for drying. The loss due to lack of proper storage and maintenance due to spoilage is as heavy as 30 per cent in the case of fruits and vegetables.

The cost of production is invariably higher than the minimum support price, due to ever-increasing price of diesel and other inputs.

Capital formation in agriculture and allied sectors as percentage of Gross Domestic Product (GDP) started declining in the 80's and is only now being reversed. This has adversely affected irrigation and rural infrastructure. As a consequence, small farm families commit suicides and the number of suicides has been growing in India during the last five years. The situation is particularly alarming in Vidarbha region of Maharashtra. The government has identified 31 districts where farmer suicides have been reported. These are spread over Maharashtra, Andhra Pradesh, Karnataka and Kerala. The Prime Minister felt so much disturbed that he undertook a visit of Vidarbha and declared a package of Rs 4,000 crores to improve the lot of farmers and to alleviate their pathetic condition decided to waive off heavy loans undertaken by them. The Government agreed to provide a subsidy to banks and co-operative credit institutions to enable them to accommodate the impact of loan waiver by making a provision in the budget. The loan waiver cannot be restricted to one state only, but will have to be provided to all states affected by farmers' distress.

Since the cost-risk structure of farming is becoming adverse, indebtedness is growing among farmers. According to NSS Survey – 59th round, 55 percent of the farm households are in debt in 2003. The average per capita monthly consumption expenditure of farm households across India was ₹ 503 in 2003.

Endemic hunger (i.e. chronic malnutrition) is high both in families without assets like land or livestock, as well as those with small land holdings without access to irrigation.

Only 10 per cent of farmers are covered by crop insurance. Farm families are also not covered by health insurance.

Women, by and large, have been denied the benefit of Kisan Credit Card System.

Strategy to improve the economic condition of farmers

Outlining the basic philosophy of the National Commission on Farmers, the recommendations emphasize the need to increase farm productivity and profitability in perpetuity without ecological harm. If the country adopts this strategy, the present agricultural crisis can then be converted in an opportunity for not only reversing the decline, but for taking our agricultural evolution forward. For this purpose, it would be essential to bridge the gap between potential and actual yields in agriculture. This will require the intensive introduction of mutually reinforcing packages of technology, services and public policies.

This **Agricultural Renewal Action Plan** has five components which include the following:

(1) *Soil health enhancement*: Agricultural Universities, research institutes, Krishi Vigyan Kendras, fertilizer companies, states department of agriculture and farmers' associations should aim at increasing the productivity potential of the soils by paying adequate attention to the chemistry and physics of soils (macro and micro-nutrients) and microbiology. Dry farming areas should receive special attention.

(2) *Irrigation Water Supply Augmentation and Demand Management*: National Commission on Farmers made a very forthright declaration: Water is a public good and a social resource and not private property. The privatization of its distribution is fraught with dangers and could lead to water wars in local communities. Improving supply through rainwater harvesting and recharge of aquifers should become mandatory.

10 million hectares of new area under irrigation should be developed under Bharat Nirman.

All existing wells and ponds should be renovated.

Seawater farming should be promoted in coastal areas through the cultivation of mangroves, salicornia, casuarinar and appropriate halophytic plants.

Demand management through improved irrigation practices, including sprinkler and drip irrigation should receive priority attention.

(3) *Credit and Insurance*: The National Commission on Farmers considers: "Credit reform is the primary pathway to enhancing small farm productivity and ending farmer suicides."

Firstly, the difference between lending and deposit interest rate is high in India by international standards. This needs to be reduced. Keeping in view, the decline in profitability and the farmers' distress, it would be desirable for the government to reduce the rate of interest on crop loans to 4 per cent.

On account of droughts and floods and the high interest on farm loans, the farmers become defaulters and thus the credit system pushes them out of its network. To meet natural calamities, the Central and State governments must step in to create an Agriculture Risk Fund to provide relief. This may be in the form of full/part waiver of the loan and interest.

(4) ***Technology:*** Agriculture scientists should state the performance of new varieties and technologies in terms of *net income per hectare*, and not just in terms of yield per hectare.

Moreover, there is a need for proper integration of production and post-harvest technologies. For this purpose, the Commission suggests that a post-harvest technology wing should be added to Krishi Vigyan Kendras. Also, lab-to-land demonstrations should be organized in dry farming areas where millets, pulses, oilseeds and cotton are grown. Value addition to biomass will help to generate skilled jobs in the non-farm sector.

Rice covers the largest area in the country and there are opportunities for creating more jobs and income by establishing rice bio-parks. Similarly, eco-boards can be produced from cotton stalks as a replacement for plywood from timber.

A cadre of Rural Farm Science Managers should be developed by training some members in every panchayat to manage these new technologies. It would be necessary to establish a professional National Biotechnology Regulatory Authority without further delay.

(5) ***Market:*** Ultimately, it is only opportunities for assured and remunerative marketing that will determine the economic viability of farming both as a way of life and as a means to livelihood. Market reform should begin with production planning, so that every link in the cultivation-consumption-commerce chain receives adequate and timely attention.

A Land Use Advisory Service is needed so that informed decisions are taken with ecological, meteorological and marketing factors being kept in view.

The National Commission on Farmers Concludes: "We should not remain silent spectators to agricultural decay. Both food and human security and national sovereignty are at stake. Overall economic growth rates have little meaning if we do not look after the economic health and survival of over 60 percent of our population." The NCF in its 4th Report has warned that ignoring agriculture despite Jawaharlal Nehru's "Agriculture cannot wait" declaration will have three consequences:

(*a*) Spread of agrarian distress and rural discontent and the spread of the Naxalite Movement.

(*b*) Returning to "Ship to mouth " era, and the consequent erosion of national sovereignty in foreign policy.

(*c*) Jobless or even job-loss growth resulting in the expansion of urban slums.

The NCF exhorts the nation to end this sad chapter in our agricultural history and fulfil the "Jai Kisan" commitment made by Lal Bahadur Shastri. The steps to be undertaken are simple, doable, and affordable. They, however, need a change in the mindset from regarding farmers as "beneficiaries" of small government programmes to treating them as partners in development and custodians of food security.

Five Point Action Plan

The NCF has suggested a five point action plan for the revival of agriculture:

First, undertake soil health enhancement through integrated measures in improving organic matter and macro-and-micro-nutrient content, as well as the physics and microbiology of the soil.

Secondly, promote water harvesting, conservation, and efficient and equitable use by empowering gram sabhas to function as "Pani Panchayats".

A sustainable water harvesting system should be established, particularly in rainfed areas lacking assured irrigation. This can be facilitated by mandatory water harvesting and greater attention to dry land farming.

Thirdly, immediately initiate credit reforms coupled with credit and insurance literacy. The Finance Minister has announced a reduction in the interest on short-term loans to 7 percent. This should be regarded as the first step towards further reduction in interest rate as recommended by the NCF and the revitalization of the co-operative credit system. In chronically drought-prone areas, the repayment cycle should be extended to four to five years. Besides this, the credit delivery system should be made gender sensitive.

Fourthly, bridge the growing gap between scientific know-how and the field level do-how both in production and post-harvest phase of farming. This could be accomplished by organizing the training of agricultural workers as farm science managers, strengthening Krishi Vigyan Kendras (Agricultural Science Centres) in both production and post-harvest technologies and organizing nation-wide lab to land demonstrations in the areas of agricultural diversification, food processing, and value addition.

In nutshell, low economic risk, high factor productivity and avoidance of ecological harm should form the fundamentals of all agricultural research and development strategies. Success in agricultural progress should be measured by growth rate in farmers' income and not just by production figures.

Finally, the gap between what the rural producer gets and the urban consumer pays should be made as narrow as possible, as has been done in the case of milk by Dr. V. Kurien.

At the same time, there should be a Risk Stabilization Fund and a farmer centric Minimum Support Price (MSP) and Market Intervention Scheme (MIS).

The Commission emphasizing the importance of agriculture and farmers in our economy states: "Agriculture in our country is based on the technology of production by the masses. As a consequence, it is the backbone of the national livelihood security system. "

"The Indian tragedy of extensive poverty and deprivation persisting under conditions of impressive progress in the industrial and services sectors will continue so long as we refuse to place faces before figures."

National Commission on Farmers and Second Green Revolution

Dr. M.S. Swaminathan, the architect of India's first green revolution listed five components of Agricultural Renewal in his report as Chairman of the National Commission on Farmers. These five components suggested by the Commission are: Soil health enhancement; water harvesting and sustainable and equitable use of water; access to affordable credit and crop and life insurance reform; development and dissemination of appropriate technologies and improved opportunities; infrastructure and regulation for marketing of agricultural produce.

Inaugurating the 93rd Indian Science Congress on June 3, 2006, Prime Minister Manmohan Singh added two more components: (a) application of science and biotechnology to the improvement of seeds and utilization of herbal and other plants; and (b) application of science to animal husbandry to improve productivity of livestock and poultry. It may, however, be mentioned that these two components were already covered by the National Commission on Farmers. For instance, Dr. Swaminathan mentions: " Had we adopted a pro-small farmer biotechnology strategy, we would by now have had Bt-cotton varieties whose seeds farmers could keep and replant, unlike in the case of the hybrids marketed by private companies." NCF has, therefore, made a categorical case for vesting in the Indian farmers the right to use their own seeds developed by them, rather than remain dependent on private companies and multinationals to get them patented and then deny this right of use to Indian farmers.

Although, Prime Minister Manmohan Singh has given a call for a "Second Green Revolution," it would be of interest to understand why the first green revolution has run out of steam. Two reasons were ascribed by the Prime Minister: First, it did not benefit dryland farming. Second, it was not scale-neutral and had thus benefited only large farms and big farmers. This implies that 62 percent of marginal holdings accounting for 17 percent of operated area and 31 percent of small holdings of size 1 to 4 hectares accounting for 55 percent of area operated were bypassed by the first green revolution. Although, production of foodgrains and other crops substantially improved in India but the spread of green revolution in reducing poverty remained rather limited. It is due to this reason that it is now being argued and rightly so by the Prime Minister that he Second Green Revolution should concentrate on the small and marginal farmers.

A confirmation of the failure of first green revolution to ameliorate the condition of the small and marginal farmer is provided by National Sample Survey data on rural indebtedness. Post-liberalization Rural India sarcastically referred to as Bharat, became more indebted, according to the latest NSSO data for the period January to December 2003. In just one year, rural household indebtedness increased from 4 percent to 27 percent. This more than six-fold increase in rural indebtedness is a pointer to the deteriorating condition of rural households. At the national level, rural household indebtedness accounts for ₹ 1,12,000 crores which is more than 63 per cent of India's total outstanding debt of ₹ 1,77,000 crores.

Average per capita monthly expenditure of farm household in India as a whole was Rs 503 which is just Rs 135 above the rural poverty line for rural India for 2003 at Rs 368. This average includes large and very large size farm households. But the states which have an average MPCE even below the poverty line or just above the rural poverty line are – Orissa (Rs 342), Jharkhand (₹ 353), Chattisgarh (₹ 379) and Bihar (₹ 404). In the 31 districts identified by the Government in the states of Maharashtra, Andhra Pradesh, Karnataka and Kerala where farmers suicides are taking place, the monthly per capita expenditure of rural households is below the rural poverty line expenditure. The lack of irrigation facilities and availability of other inputs are responsible for denial of income security needed for a reasonably good life. The failure of our agricultural scientists to develop superior crop varieties, which would have provided higher yields would have pushed our foodgrains production much higher than the current level of 210 million tonnes. It may be noted that China has been able to raise its foodgrains production to 550 million tonnes, more than two and a half times as compared with India, though the Chinese population is only 300 million more than the Indian population.

The Eleventh Five Year Plan Approach Paper emphasizes the need for promoting 'inclusive growth'. If the dream of the approach paper has to be translated into reality, then as indicated by the National Commission on Farmers, the Second Green Revolution should specifically address the problems of marginal and small farmers so as to provide them income security. This can happen only if small and marginal farmers are treated as partners in development in the Second Green Revolution, rather than as mere beneficiaries of some government programmes. For this purpose, the process of implementation of the policies enunciated by NCF should lay special focus on improving the lot of small and marginal farmers.

The Report of the National Commission on Farmers is a technological document. The Report has laid special emphasis on improving technology and irrigation facilities, but it is silent on land reforms. This is also true that there is no movement about land reforms in India, but still it is possible to introduce co-operative joint farming. Recently, the Adat Farmers Co-operative Bank made a very successful effort in co-operative joint farming. In this experiment, 2,400 farmers in Thrissur district in Kerala pooled their land for joint cultivation. This was a realization by the small farmers of the hard reality that the small size of their holdings was responsible for low productivity, high cost of cultivation and the low level of income of the farmers. In co-operative joint farming, the farmers contribute their land and for this, they are paid an ownership dividend in the proportion of land contributed

by them. Besides, those who contribute their labour also receive wages on the basis of the hours of work contributed by them. The Co-operative Bank received Rs 5.10 crore on the sale of paddy produce. The cost of cultivation was ₹ 2.10 crores. Thus, there emerged a profit of ₹ 3 crores which was distributed among the farmers as ownership dividend on the basis of the land contributed by each farmer. Many such efforts have also succeeded in other states as well, the most important factor which helped the success of these experiments was an honest leadership which operated the scheme. Thus, by encouraging co-operative joint farming, the lot of the small and marginal farmers can be improved. Since 93 percent of agricultural holdings belong to small and marginal farmers, the strategy of co-operative joint farming, if followed sincerely, can make an effective contribution to improve the economic condition of the small and marginal farmers.

8. CROP PATTERN IN INDIA SINCE 1951

Crop Pattern Before Independence

By cropping pattern is meant the proportion of area under different crops at a point of time. A change in cropping pattern implies a change in the proportion of area under different crops. At the beginning of the century, more than 83 per cent of land was put under food crops and about 17 per cent under non-food crops. By 1950-51, area under food crops had come down to 74 per cent and area under non-food crops had increased to 26 per cent.[4] This shift in crops from foodgrains to non-foodgrains was mainly due to the higher price of non-foodgrains, commonly known as cash crops. It reflected a change from subsistence cropping to commercial cropping.

TABLE 19. Nature of Crop Distribution of Area Since 1951

Crops	*1950-51*	*1970-71*	*2006-07*	*2010-11*
(a) All Crops	100	100	100	100
(b) Foodgrains	75	74	64	66
(c) Non-foodgrains	26	26	36	34

Source: Agricultural Statistics at a Glance 2010-11.

Table 19 shows the share of different categories of crops in the total area sown. The acreage figures from 1960-61 show a reversal of the above trend, and a definite shift from non-foodgrains to foodgrains. By 1970-71, the ratio of foodgrains to non-foodgrains was 74 : 26 and by 2010-11, the share of foodgrains has further declined and stand at 66:34. Two important reasons may be given to explain this shift in favour of foodgrains.

(a) Prices of foodgrains have been rising quite fast and the farmers have started growing foodgrains for the market, in the same way they grow oilseeds, cotton and other commercial crops. In other words, the traditional classification between food crops and commercial crops is losing its significance.

(b) The cultivation of foodgrains has become highly remunerative and productive under the impact of the new technology.

Among foodgrains, the largest increase in area has been recorded by wheat, with an increase of 150 per cent. While the increase in the case of rice has been quite modest (36%), coarse cereals have recorded only marginal increase, indicating a positive shift from minor to major crops. Increase in acreage under pulses has been modest.

The traditional commercial crops, viz., oilseeds, cotton, jute, sugarcane, etc., have made impressive increases in acreage, much more than food crops (with the exception of wheat). Of these, the most spectacular was the increase in acreage under potato, viz., by over 300 per cent between 1951 and 2005. By 2004-05, the ratio of foodgrains to non-foodgrains was 64 : 36.

Factors Affecting Cropping Pattern in India

At one time many believed that cropping pattern in India could not be changed. S.N. Sinha, for instance, gave expression to such an opinion when he wrote : "In a tradition-ridden country with a very low level of knowledge, the peasants are unwilling to make experiments. They accept everything with a spirit of resignation and a sense of fatalism. For them, agriculture is a way of life rather than a commercial proposition . ...In an agricultural community where the members are illiterate and tradition-ridden, there is hardly any possibility of crop shifts."[8] This opinion is not correct any more as is clear from the change in cropping pattern in Punjab. It is widely agreed that the crop pattern of a country like India can be changed and should be changed.

1. Physical and Technical Factors and Cropping Pattern

Cropping pattern of any region depends upon physical characteristics as soil, climate, weather, rainfall, etc. For instance, in a dry area where the rainfall is scanty and where there is high uncertainty of monsoons, there will be a greater dependence on jowar and bajra, as these crops can be managed with a small quantity of rainfall. Water-logging in parts of Ludhiana and Sangrur districts in Punjab has led to an increase in area under rice; for rice can stand the extra water better than other crops. In the newly reclaimed lands of Madhya Pradesh, millets are grown for a few years after which rice is cultivated.

8. S.N. Sinha : "*Economics of Cropping Pattern*" in *AICC Economic Review*, Vol. XV, January, 1964.

Apart from soil and climatic conditions, the cropping pattern of a region will depend upon the nature and availability of irrigation facilities. Wherever water is available, not only can a different crop be grown, but even double or triple cropping will be possible. When new irrigation facilities are provided, the whole method of cultivation may change. A superior crop can be grown; a new rotation of crops where there was none, or a better rotation over what prevailed may be possible. One of the important factors responsible for increase in the cultivation of sugarcane, tobacco, etc., is the extension of irrigation facilities. It is possible that because of lack of capital, agricultural pre-requisites, better implements, improved seeds and finance for getting fertilisers, it might not have been the right crop that was being grown; but given these facilities, the cropping pattern may change.

2. Economic Factors and Cropping Pattern

Economic motivations are the most important in determining the cropping pattern in a country. Whatever may have been the position in India in the past there are very clear indications that Indian farmers are being clearly influenced by economic factors now. Among economic factors affecting crop pattern, the following are important :

(i) **Price and income maximisation**. According to a study of inter-crop price parities undertaken by the Ministry of Food and Agriculture, "It seems that prices influence the acreage under the crops in two ways. One is that the variations in the inter-crop price parities led to shifts in acreage as between the crops. Another is that the maintenance of a stable level of prices for a crop . . . provides a better incentive to the producer to increase the output"[9] Fixed procurement price of wheat and rice and other Government controls have induced farmers to shift to cash crops like sugarcane.

According to some authorities, income maximisation pull has greater influence in changing the crop pattern, that is, the farmer would choose that combination of crops which would give him maximum of income. Dr. Raj Krishna, however, argues that relative profitability per acre is the main consideration which influences the crop pattern.

(ii) **Farm Size.** There is a relationship between farm size and the cropping pattern. The small farmers are first interested in producing foodgrains for their requirements. They would go in for cash crops only after they have met their requirements of foodgrains. Small holders, therefore, devote relatively small acreage to cash crops than large holders. This point has been brought out in many empirical studies. But a study of Deoria district of Uttar Pradesh brings out clearly the fact that almost all farmers, big and small, try to grow some cash crops. In fact, in recent years it is the small farmers who have been increasing their sugarcane area more than large farmers.

It is true that the need for subsistence has traditionally dominated the cropping pattern of the small farmer. But his need for money income cannot be less than that of the large farmer. And, as the economy grows, we should expect the small farmer to make very significant adjustments in his crop pattern in order to maximise his income.

(iii) **Insurance against risk**. The need to minimise the risk of crop failures not only explains diversification but also some specific features of crop patterns. For instance, the persistence of millets in many regions which puzzles many economists can be understood mainly as insurance against bad seasons in dry areas.

(iv) **Availability of Inputs**. As already indicated, crop pattern is also dependent upon the availability of such inputs as seeds, fertilisers, water storage and marketing, transport, etc. Of the additional facilities, the most rewarding would be irrigation. The availability of groundnut seed was one of the important factors which induced many farmers to increase the area under this crop in Madhya Pradesh. Another reason why farmers prefer groundnut to cotton is that the former is quick yielding, while cotton is on the field for a long time, and does not easily satisfy the need for quick cash.

(v) **Tenure**. Under the crop sharing system, the landlord has a dominant voice in the choice of the cropping pattern and this helps in the adoption of income-maximising crop adjustments.

3. Government Action and Crop Pattern

Government can influence crop pattern through legislative and administrative measures. Steps may be taken by the Government to ease or subsidise the supplies of the farm inputs and knowledge. The provision of irrigation facilities or the supply of seeds and fertilisers, etc., may be related to the adoption of a given crop pattern by the farmers.

Apart from the personal prejudices, and inadequate financial and other resources of the farmers, there may be factors like recurrent drought or pest infestation that prevent them from opting for a more remunerative set of crops. In those situations if more of irrigation, institutional credit fertilizers pesticides etc. are made available, it would be possible for them to change the crop-structure and so earn larger returns from their land. To the extent it is not possible for a farmer to acquire all these by himself, the Government could come to his help and procure these for him.

9. Indian Journal of Agricultural Economics, Vol, XVIII, No. 1. Conference Number, "Agricultural Price Policy in India" (Memo), Directorate of Economics and statistics, Ministry of Food and Agriculture.S.N. Sinha : "*Economics of Cropping Pattern*" in *AICC Economic Revidew*, Vol. XV, January, 1964.

Yet other possibilities of helping the farmer to improve the cropping pattern are building of new roads which will improve the flow of commodities to the market where they will fetch better prices and help to establish industries or townships nearer to their land.

Horticulture : New Initiative.

Indian farmers are now appreciating the importance of horticulture — the sector includes fruits, vegetables, spices, floriculture and coconut — in improving the productivity of land, generating employment, providing nutritional security and improving their economic conditions. Horticulture covered over 18.7 million hectares of land in 2005-06, accounting for 9.5 per cent of the gross cropped area of the country (12.3 million hectares in 1991-92). Between 1992 and 2006 production of major horticultural crops rose from 97 million tonnes to 182 million tonnes, India has tremendous scope to increase horticultural products — India is the second largest producer of fruits in the world (55 million tonnes and 10 per cent of the global production) and highest producer of vegetables in the world (110 million tonnes). Indian farmers are going in a big way to adopt new crops and new pattern by production.

Conclusion

The most important consideration affecting cropping pattern is the economic consideration. Even in a country like India which is dominated by farmers steeped in poverty and conservatism and where farmers hold tiny bits of land, cropping pattern can be changed through appropriate change in economic motive. Experience in recent years has been that the farmer does accept the logic for a change wherever he is shown a better cropping pattern. The real difficulty in adopting a better cropping pattern is that the farmer may not have the requisite capital to invest now or possess the know-how that may be necessary for changing the crops. It is here that the Government may come to his help.

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CHAPTER

30

FOOD SECURITY IN INDIA

"Even though self-sufficiency of food production has been achieved, the population still lacks access to balanced food. It is a matter of concern that even though cereal production has kept pace with the increasing requirements and average per capita intakes of cereals have remained satisfactory, there have been a fall in the per capita consumption of pulses....."

— Ninth Five Year Plan (1997-2002)

1. CONCEPT OF FOOD SECURITY

World Development Report (1986) defined food security as "access by all people at all times to enough food for an active, healthy life."

Food and Agriculture Organisation (FAO, 1983) defined food security as "ensuring that all people at all times have both physical and economic access to basic food they need."

Staatz (1990) defined food security as "the ability to assure, on a long term basis, that the food system provides the total population access to a timely, reliable and nutritionally adequate supply of food."

From these definitions, the following points emerge:

1. Food security involves adequate physical availability of food to the entire population in a country.
2. People have enough purchasing power so that they can acquire the food they need.
3. For healthy life, the food available should be adequate in quality as well as quantity to meet nutritional requirements.
4. A nation may acquire self-sufficiency in food at a point of time, but the concept of food security necessities that, timely, reliable and nutritionally adequate supply of food should be available *on a long-term basis*. This implies that a nation has to ensure the growth rate in food supply so that it takes care of the increase in population as also the increase in demand resulting from increase in the income of the people.

From this point of view, the following stages of food security may be visualised for a developing country like India :

Stage 1. The most basic need from the point of view of human survival is to make an adequate quantity of cereals available to all.

Stage 2. In the second stage, we may think of food security as the adequate availability of cereals and pulses.

Stage 3. In the third stage, food security should include cereals, pulses, milk and milk products.

Stage 4. In the fourth stage, food security should include cereals, pulses, milk and milk products, vegetables and fruits, fish, eggs and meat.

2. F C S

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Year	Population (millions) P
1950-51	363
1960-61	442
1970-71	551
1980-81	689
1990-91	852
2000-01	1,033
2005-06	1,103
2006-07	1,120
2007-08	1136.5
2008-09	1153.01
2009-10	1169.4
2010-11	1,210

Note : Net availabili

SOURCE : *Economic S*

2. FOOD SELF-SUFFICIENCY AND FOOD SECURITY IN INDIA

The Indian planners, right from the beginning, realised the need to attain self-sufficiency in foodgrains as one of the important goals of planning. The Government realised that food surplus countries used their food-surplus as a weapon to force food deficit countries to submit to their dictates.

India's first Prime Minister Jawaharlal Nehru realised that it was with great difficulty that India was able to avoid the political strings attached with food aid, but it did hurt national pride. In one of his broadcasts to the nation, Nehru stated very candidly:

"We have sought help from abroad ... and we shall continue to do so under pressure of necessity, but the conviction is growing upon me more forcefully than ever how dangerous it is for us to depend for this prime necessity of life on foreign countries. It is only when we obtain self-sufficiency in food that we can progress and develop ourselves. Otherwise, there is the continuous pressure of circumstances, there is trouble and misery and there is sometimes shame and humiliation."

Later, when India suffered very severe droughts during 1965 and 1966, the then American President, Lyndon Johnson , restricted food aid to monthly basis under the P. L. 480 programme. This was done to force India not to condemn American aggression in Vietnam.

The Government of India under Prime Minister Indira Gandhi went in for seed-water-fertiliser policy popularly known as the green revolution. This policy ushered in a revolution in food production in India and dispensed with foodgrains imports altogether. India achieved self-sufficiency in foodgrains by the year 1976 and since then, Indian imports of cereals have remained negligible (except in 2006-07). Appreciating India's achievements on the food front Gilbert Etienne states:

"Despite the gloomy and perfectly ill-founded forecasts or 'prophecies' about India's future disasters, which were fashionable in the 1960's, the country is no longer exposed to real famines."[1]

The Ninth Five Year Plan (1997-2002) states: "One of the first efforts of the country was to build up a food security system to ensure that the threat of famine no longer stalks the country ... The fact that the country has not witnessed famine and acute starvation on a massive scale in the last five decades is the most eloquent testimony for the success of these efforts"[2]

Progress on foodgrains front reveals the following:

(a) Between 1950-51 and 2010-2011 foodgrains production had increased from 51 million tonnes to 242 million tonnes — more than four-fold increase in the production of food grains.

(b) The various components of cereal production indicate that whereas cereals accounted for 84 per cent in foodgrains in 1950-51, their share has increased to 92.6 per cent in 2010-11, the share of pulses , however, has declined from 16 per cent to just 7.3 per cent during the same period.

(c) Within cereals, the share of the two "superior" cereals — rice and wheat — which was only 53 per cent in 1950-51 had improved to 81 per cent in 2010-2011. During the same period, the share of coarse cereals had declined from 30 per cent to 19 per cent. This indicates that even the weaker sections favour rice and wheat as against coarse cereals they normally consumed earlier.

Net Availability of Cereals and Pulses

Table 1 is revealing. While India's population was steadily rising, production of foodgrains-cereals and pulses, specially cereals—rose equally. Net availability of cereals had gone up except in some years. But the Government had to import large quantity of cereals from

TABLE 1: Net Availability of Cereals and Pulses

Year	Population (millions)	Cereals (million tonnes) Net Production (1)	Net Imports (2)	Net Availability	Pulses Net Availability (million tonnes)	Per Capita Net Availability per day (gram) Cereals	Pulses	Total
1950-51	363	40.1	4.1	44.3	8.0	334.2	60.7	394.9
1960-61	442	60.9	3.5	64.6	11..1	399.7	69.0	468.7
1970-71	551	84.5	2.0	84.0	10.3	417.6	51.2	468.8
1980-81	689	104.1	0.5	104.8	9.4	417.3	37.5	454.8
1990-91	852	141.9	–0.6	145.7	12.9	468.5	41.6	510.1
2000-01	1,033	162.5	–4.5	145.6	11.3	366.2	30.0	416.2
2005-06	1,103	162.1	–7.2	157.4	12.7	390.9	31.5	422.4
2006-07	1,120	170.8	–3.8	168.8	13.3	412.1	32.5	444.5
2007-08	1136.5	177.7	–7.0	168.9	14.7	407.4	32.5	442.8
2008-09	1153.01	197.2	–14.4	165.9	17.6	374.6	41.8	436.0
2009-10	1169.4	192.4	–7.2	173.7	15.8	407.0	37.0	444.0
2010-11	1,210	178.0	–2.4	176.5	13.7	407	31.6	438.6

Note : Net availability of cereals = Net production + net imports – changes in government stock of cereals.

SOURCE: *Economic Survey* (2011-2012).

1. Etienne, Gilbert (1988), *Food and Poverty*, p. 196.
2. *Ninth Five Year Plan* (1997-2002), Vol. II, p. 529.

other countries to increase the net availability of cereals in the country.

The data reveal that annual net imports were of the order of 4.1 million tonnes during 1950-51, they increased to 10.3 million tonnes during 1965-66. They were around 6.4 million tonnes per year during 1966-71. They declined thereafter and since 1976, food imports were negligible. After 1995-96, India became a net exporter of cereals. In fact, India's exports of cereals during 2009-10 was 2.4 million tonnes.

Data about per capita availability of cereals and pulses indicates an over-all improvement in per capita availability of foodgrains from about 395 grams per day to 438.6 grams between 1951 and 2011. This has two components — cereals and pulses. The per capita availability of cereals increased from 334 gms to 407 gms ; but the availability of pulses has declined deeply from 61 grams per day to about 31.6 grams per day — indicating the growing poor quality of food..

Similarly, the per capita consumption of coarse cereals declined from 116 gms. per day in 1950-51 to 90 gms per day in 1997-98 – a fall of nearly 25 %. The Ninth Five Year Plan emphasizing this point rightly mentions: "Coarse grains that are inexpensive can provide substantially higher calories for the same cost. If made available through PDS at subsidised rates, these will be self-targeting and improve calorie intake and reduce "hunger" among the poorest segments of population."[3]

Obviously, while moving towards foodgrains security, India has succeeded in terms of cereals, but has miserably failed to increase the production of pulses consistent with the needs of a growing population.

Self-Sufficiency at the National level

Ninth Plan (1997-2002) discussed the problem of food security at the national level and at the household level. The Planning Commission states: "An approach to national food security, which relies largely on domestic production of food needed for consumption as well as for building buffer stocks, can be described as a strategy of self-sufficiency." This strategy was adopted in the early phase of Indian planning. It emphasised the extension of irrigation facilities and later in the sixties adopted seed-water-fertiliser technology popularly known as the Green Revolution. As a consequence of these concerted efforts, India was able to attain its goal of self-sufficiency in foodgrains.

3. Planning Commission, ***Ninth Five Year Plan*** (1997-2002), Vol. II, p. 555.

There is no doubt that as a result of these efforts, India was able to avert famines and acute food scarcities, yet it has not been able to provide food "needed for an active and healthy life" to its population. In other words, the goal of a balanced diet consisting of needed cereals, necessary quantity of pulses, vegetables and fruits. is still a distant dream.

Food Security at the Local Level

At the household level, food security implies having physical and economic access to food articles that are adequate in terms of quantity, quality and affordability. This raises the question of prices of food articles and the purchasing power in the hands of the population. To help the poor sections, the Government introduced the Public Distribution System (PDS) and adopted dual price mechanism. At the PDS outlet, the issue price of food articles was kept lower than the market price to enable the poor to purchase subsidized food. But due to political pressures, the Government adopted a universal PDS, rather than a targeted PDS focused on the poor. The result was the non-poor also began to benefit from the PDS and the poor especially the migrant poor — were not able to take full advantage of the PDS supplies. The Public Distribution System which was conceived as a key mechanism in the Government's food security system did not achieve the desired results.

The Ninth Plan reviewing the situation underlines the stark reality: "In spite of mounting food subsidies, evaluation studies indicate that supply of subsidised foodgrains through PDS has not resulted in improvement in household level food security. Self-sufficiency of foodgrains at national level and availability of foodgrains at affordable cost at local level have not got translated into household level food security for the poor."[4]

To achieve household level food security, efforts should be directed on the following fronts.

(i) accelerating growth in food and agricultural sectors which provide direct sources for food and income with which to buy food;

(ii) promoting rural development that focuses on the poor;

(iii) improving access to land and other natural resources;

(iv) providing cheap credit for poor households;

(v) increasing employment opportunities;

(vi) introducing income transfer scheme, including provision of public distribution system of subsidised cheap food;

4. *Ibid.*, p. 529.

(vii) stabilising food supplies and food prices; and

(viii) improving emergency preparedness planning for providing food aid during natural disasters like drought, flood, earthquake etc.

Food Security and Nutrition

During the last 50 years, there has been substantial reduction in moderate and severe under-nutrition in children and some improvement in nutritional status of all segments of population.

Milder forms of chronic energy deficiency still persists in many parts of the country ; serious malnutrition and even widespread starvation among children and the aged has become common in tribal belts in Maharashtra and Orissa, essentially because there is no purchasing power.

Under-nutrition is a problem among:

(i) Pregnant and lactating women.

(ii) One-third of the new-borns still weigh less than 2.5 kg. at birth.

(iii) Less severe forms of Vitamin-A deficiency exist which may result in blindness in certain cases.

(iv) Universal access to iodised salt has not been achieved and there has not been marked reduction in iodine disorders.

(v) No decline in prevalence or severity of anaemia and its health consequences due to iron-deficiency.

Prevention of Chronic Energy Deficiency

Applied Nutrition Project (ANP) introduced in 1963 was intended to promote production of protected food such as vegetables and fruits and ensure their consumption by pregnant and nursing mothers and children.

Special Nutrition Programme (SNP) was started in 1970 with the objective of providing 500 K Cal and 25 grams of protein to expectant and nursing mothers and 300 K Cal and 10 grams of protein to children six days in a week.

Integrated Child Development Services Scheme (ICDS)

ICDS started in 1975 was intended to provide food supplementation to children and pregnant/nursing women. The Ninth Plan reviewing ICDS mentions: "Experience gained during the last two decades indicates that the most needy may not access to the facility and even when they do, the food provided acts more as a substitute than as a supplement."[5] The ICDS programme as of 1996, covers 4,200 blocks with 5.92 lakh anganwadis in the country. The number of beneficiaries shot up to 18.5 million children and 3.7 million mothers in 1996. Review of the ICDS programme revealed: "While 25 per cent of nursing mothers in ICDS areas introduced semi-solid supplements to their breast-fed infants at 6 months, only 19 per cent did so in non-ICDS areas. These evaluations have shown the gains in terms of improvement in nutritional status from the ICDS programme have not been impressive."

Mid-day Meal Programme

Mid-day Meal Programme was introduced for children between ages of 2-14 attending balwadis/schools at the expense of ₹ 0.44 to 0.90 per beneficiary. The programme does not cover poor children not attending school. This programme has been renamed as Nutritional Support to Primary Education and implemented in 1975 to universalize primary education. By 2003-04, the programme covered nearly 10.6 crore children. While the mid-day meal programme has been largely successful in Tamil Nadu, Karnataka and other South Indian states, it was a failure in most North Indian states.

Production of foodgrains increased from 51 million tonnes in 1950-51 to 217 million tonnes in 2006-07 – 4-fold increase. Cereal production has been growing faster than the rate of growth of population, but in case of pulses, growth rate of production has lagged behind the population growth rate. Consequently, there is reduction in the per capita availability of pulses from 61 gms. to 33 gms. per day. Similarly, per capita availability of coarse cereals declined form 116 gms. to 90 gms. per day.

Yet another area of concern is the lack of sufficient focus and thrust in horticulture. Because of this, availability of vegetables especially green leafy vegetables and yellow/red vegetables throughout the year at affordable cost both in urban and rural areas has remained an unfulfilled dream.

Cereals and millets constitute more than 50% of the total food among the low income group (LIG), industrial labour and slum dwellers, while for the high income group (HIG) and middle income groups (MIG), these food groups form about one-fourth and one-third of the total food respectively.

Income status bears a positive relationship with consumption of pulses, milk, fruits, meat, oil and sugar.

Recommended intake of pulses is 40 gms. per day.

5. *Ibid.*, p. 546.

Even the national average is 33 gms. in 2006-07 and thus, the condition of the poor in intake of pulses has become worse. Regionwise, only in Karnataka, Madhya Pradesh, Rajasthan and Uttar Pradesh, is the mean intake above the recommended level of 40 gms. per day. Unless the production of pulses is substantially increased, the nutritional levels will further deteriorate.

The mean energy intake varies from 2,206 K Cal in the lowest income group to about 2,600 K Cal in the highest. Only families belonging to the highest income group have an average calorie intake above the RDA (Recommended Daily Allowance) level of 2,400.

Nutrition education, more especially among families can help to improve intra-familial distribution. It can help to direct the available resources to use green and leafy vegetables and also such commodities as iodised salt, which help to reduce iodine deficiency.

Nutrition education to all members of the family is required to ensure that pregnant and lactating women do eat 1/5th or 1/6th more than their habitual diet. This is a critical input to reduce low birth weight and give the child a good start in life.

Tenth Plan and Food Security

Tenth Plan has drawn attention to the changes in consumption pattern that have taken place in the post-Green Revolution period. It states: "Between 1972-73 and 1993-94, the food basket has become much more diversified, with the share of cereals seeing a dramatic decline of ten percentage points in most regions. At the all India level, cereal consumption in the rural areas declined from 15.3 kg per capita per month in 1972-73 to 13.4 kg per capita per month in 1993-94. The corresponding decline in the urban areas was more modest—from 11.3 kg to 10.6 kg over the same period. At the same time, consumption of milk and meat products as well as vegetables and fruits has increased. Such changes are a natural outcome of economic development."[6]

Restructuring of PDS

Tenth Plan provides the following outline for restructuring of PDS.

1. Since wheat and rice are the basic necessities of the poor, items other than these two should be excluded from the scope of food subsidies.

2. Sugar should be kept outside the purview of PDS.

3. The subsidy on kerosene should be phased out by raising its supply price for PDS shops since studies show that the subsidy on kerosene is cornered by the non-poor. Alternatively, if kerosene is to be retained under PDS, the extent of subsidy provided should be reduced so that there is less incentive for diversion.

4. The coverage of PDS and food subsidy should be restricted to BPL population. Any attempt to revert to the old concept (BPL as well as APL population) of a universal PDS will be a retrograde step and needs to be resisted.

5. To reduce malpractices, food stamps should be issued to female members of the family who can be designated as heads of households for the purpose. Under the system of food stamps, the State Governments should issue a subsidy entitlement card (SEC) instead of ration cards.

6. A food card system could be a superior alternative to the prevalent Fair Price Shop (FPS) system and perhaps even a food stamp system. The customers could use food credit/debit cards to buy subsidised foodgrains from the market and the retailers can claim the subsidy from the Government.

7. A food coupon scheme was introduced in Andhra Pradesh in 1998-99 for distribution of rice and kerosene through PDS. This system has resulted in saving about 20,000 tonnes of rice, 71 lakh litres of kerosene every month. The Andhra Pradesh experiment may be replicated with suitable adaptation in other states as well.

To conclude: Despite the huge stock of foodgrains available in FCI godowns, stray cases of hunger and death are still being reported. PDS should, therefore, be reformed and made more efficient. The present system can be replaced by a system of food stamps and eventually by a food credit card system. The excess stock of foodgrains that have accumulated with the Government is partly the result of the high Minimum Support Price (MSP) which often exceeded the levels recommended by CACP (Commission for Agricultural Costs and Prices). There is, therefore, a need to adhere to the recommendations of CACP.

The scheme for decentralised procurement of foodgrains should be encouraged and more states could be brought under its fold. Similarly, the operation of PDS could be decentralised with the states taking their own decisions regarding issue prices, and quantum of foodgrains to be supplied. The national food subsidy could be distributed among the states according to a prescribed formula.

The Essential Commodities Act should be amended to make it an emergency provision that will have to be formally invoked by notification for a limited period for specific commodities.

All restrictions on inter-state movement of

6. Planning Commission, *Tenth Five Year Plan (2002-07)*, Vol. II, p. 365.

foodgrains should be removed. Octroi and all sorts of taxes/levies on food articles should be eliminated. The ban on future trading in all agricultural commodities should be lifted.

To help the private sector to play an enhanced role in the distribution system, 26% Foreign Direct Investment (FDI) should be allowed in food retailing and 100 per cent FDI in insurance for agriculture and rural areas.

The recommendations listed in the Tenth Plan for PDS should result in making the system more vibrant and efficient and capable of meeting the requirements of a liberalised economy.

Goals Set in Nutrition Policy

The Tenth Plan lays down specific nutrition goals to be achieved by 2007. The major goals are:

(a) Intensify nutrition and health education to reduce infant mortality and child feeding and caring practices so as to

(i) bring down the prevalence of under-weight children under three years from the current level of 47per cent to 40 per cent;

(ii) reduce prevalence of severe under-nutrition in children in the 0-6 years age group by 50 per cent;

(b) reduce prevalence of anaemia by 25% and that of moderate/severe anaemia by 50%.

(c) eliminate Vitamin A deficiency as a public health problem; and

(d) reduce prevalence of Iodine Deficiency Disorders (IDD) to less than 10 per cent by 2010.

Main components of the Food Security System

The main components of the food security system are the following:

(i) Promoting domestic production to meet the demands of the growing population as also to reduce under-nutrition among quite a large section of the population;

(ii) Providing minimum support prices for procurement and storage of food items;

(iii) Operating a public distribution system; and

(iv) Maintaining buffer stocks so as to take care of natural calamities resulting in temporary shortages of food, and to act as a countervailing mechanism against traders and businessmen who try to push up prices, especially during periods of shortages of food.

3. PUBLIC DISTRIBUTION SYSTEM AND ITS IMPACT ON POVERTY

The main purpose of the Public Distribution System (PDS) in India was to act as a price support programme for the consumer during the periods of food shortage of the 1960s. Thus, it acted as an instrument of price stabilisation and became a countervailing force against private traders who were interested to exploit the situation of scarcity to acquire more and more profits. The basic aim was to provide essential commodities such as rice, wheat, sugar, edible oil, soft coke and kerosene at subsidised prices.

Since the mid-1980s, the coverage of the PDS was extended to rural areas in some states. Thus, it acquired the status of a welfare programme. An effort was made to extend subsidised foodgrains in 1985 in all the tribal blocks covering about 57 million persons. With a network of more than 4.62 lakh fair price shops (FPS) distributing commodities worth ₹ 30,000 crores annually to about 160 million families, the PDS in India was the largest distribution network of its kind in the world. In several employment generation programmes, subsidised foodgrains were distributed as a part of wages.

The food subsidy component of the Central Government is given in table 2. It may be noted that there has been a continuous increase in PDS expenditure, which rose from ₹ 650 crores in 1980-81 (at current prices) to ₹ 2,450 crores in 1990-91. There was a big jump in expenditure during the period. As a proportion of Central Government expenditure, it was in the range of 2.9 to 3.2 per cent during 1980s and 1990s. Since 1997-98 PDS expenditure has been shooting up from ₹ 7,500 crores to ₹ 12,120 crores in 2000-01 and further to a record level of ₹ 27,798 crores in 2004-05. Food subsidies as percentage of total government expenditure went up sharply from 2.9 per cent in 1980-81 to 2.5 per cent in 2004-05. Thereafter, food subsidy declined to ₹ 23,828 crores in 2006-07, which was only 1 per cent of total government expenditure. In 2011-12 though it increased to ₹ 72,823 (RE) crore, it continued to remain low is terms of total government expenditure.

Table 2: Central Government Expenditure on Food Subsidy

	Expenditure (₹ crores) At Current Prices
1980-81	650
1990-91	2,450
2000-01	12,010
2004-05	25,746
2005-06	23,071
2006-07	23,828
2007-08	31,259
2008-09	43,668
2009-10	58,242
2010-11	63,844
2011-12(RE)	72,823
2012-13(BE)	75,000

Source: Planning Commission, Tenth Five Year Plan, Vol. II. Economic Survey, 2011-12.
Agricultural Statistics at a Glance, 2010, *Ministry of Agriculture*.

Relative Share of Different Items in PDS Sales

Rice, wheat, sugar, edible oil, soft coke and kerosene are sold through PDS outlets. Of these 4 items, viz., rice, wheat, sugar and kerosene account for 86 per cent of total PDS sales (Table 3). Sugar alone accounts for 35 per cent, followed by rice (27 per cent), wheat (10 per cent) and kerosene (15 per cent). Coarse cereals (bajra, jowar and other coarse grains), which are largely consumed by the poor account for less than one per cent of total PDS sales. The share of pulses, the main source of protein for the poor, is less than 0.2 per cent.

TABLE 3: A Profile of Purchases from PDS: All India

Commodity	*Percentage Share in Total (Rural + Urban) PDS Purchase*
1. Rice	26.7
2. Wheat	10.1
3. Minor cereals	0.8
4. Pulses	0.2
Total Foodgrains (1 to 4)	**37.8**
Edible Oils	8.6
Sugar	35.0
Kerosene	14.6
Others	4.0
Total	**100.0**

SOURCE: Suryanarayana M. H., PDS Reform and Scope for Commodity Based Targeting.

Data about commoditywise composition of market dependent population reveal that the bulk of the PDS purchases of these commodities go to benefit the non-poor in urban and rural areas.

Cereal Consumption and Food Security

From the point of view of food security, it is necessary to bring the cereal consumption to the minimum cereal consumption norm of 11.6 kgs. fixed for subsistence level by the Indian Council of Medical Research (ICMR). Accordingly, food security is intended in the first stage to achieve the minimum level of 11.6 kgs. per month. The lowest 30 per cent of our population are not able to reach the minimum level of cereal consumption prescribed by ICMR. This is a sad commentary on our achievement towards food security.

PDS and Food Security for the Poor

The basic question is whether PDS purchases are able to effectively help the poor. Radhakrishna et. al. have studied this problem on the basis of 42nd NSS round, 1986-87. Their study brought out many disquieting points :

(*a*) the virtual exclusion of backward states such as Bihar and Uttar Pradesh from the PDS network .

(*b*) In states, like Kerala and Andhra Pradesh, PDS purchases were relatively high in all expenditure groups but generally the poor purchased less while the non-poor purchased more. In this sense, the PDS scheme was regressive.

(*c*) In contrast to the impressive coverage of PDS in the states of Kerala and Andhra Pradesh, the coverage was low in all-India; the monthly per capita purchase was 0.9 kg. in rural areas and 1.3 kg. in urban areas.

(*d*) The monthly purchase from PDS was lowest for the very poor uniformly across all the states, both in rural and urban areas. In other words, impressive coverage of PDS and/or additional state-level spending on subsidy is no guarantee that the very poor are better served. They further state:

PDS has thus remained an expensive and largely untargeted programme. The basic question is : how to improve the efficacy of PDS in transferring food to the poor cost-effectively.

The Government should distinguish between the very poor and moderately poor, and attempt at improving the efficiency of PDS in transferring food to the former.

Regional Offtake of PDS Foodgrains

Upward revision of issue price of cereals by PDS adversely affected off-take levels since and the gap between subsidised issue price and open market price was narrowed down. As a result, in all states, offtake was lower than the Central allocation.

But persistence by certain State Governments to implement subsidised PDS was responsible for higher offtake in certain States, such as Kerala and Andhra Pradesh. The rigid adherence to ₹ 2 per kg. rice scheme in Andhra Pradesh by late Mr. N. T. Rama Rao is a case in point. Similarly, Kerala has been pushing the implementation of subsidised foodgrains very enthusiastically.

In poorer states such as Bihar, Orissa and Madhya Pradesh, the off-take was substantially lower than Central allocations partly due to the narrow difference between the Central issue price and open market price and partly because of weak fiscal capacity of these states to finance any additional subsidy *via* lowering of issue prices. Besides these states had not built up effective institutional mechanisms to lift the quotas from FCI depots to fair price shops. Ironically, the incidence of poverty was high precisely in the states with the lowest off-take of FCI grains.

PDS Impact on Poverty

Radhakrishna Report has also studied the decline in poverty as a result of PDS subsidies. Taking India as

a whole, the impact of all consumer subsidies on poverty was moderate; subsidies were estimated to have reduced poverty by 1.6 percentage points in rural areas and 1.7 percentage points in urban areas. About 12 million persons (9 million in rural and 3 million in urban areas) may have moved out of poverty in 1986-87 due to income transfers from PDS. ... As the absolute number of poor in India was put at 274 million in 1986-87, these numbers are small, rather insignificant.

The poor impact of the scheme in poor states also underlines the need for strengthening PDS in these states. As long as the development process is not able to reduce poverty effectively in Bihar, Uttar Pradesh, Madhya Pradesh, Orissa and Rajasthan, the continuance of the PDS in poor states stands justified. Rather, the need of the hour is to encourage proper targeting to achieve better results and to build commitment on the part of the poorer states to pursue PDS.

Cost of Income Transfer

On cost effectiveness, Radhakrishna's study reveals that under the PDS the cost of transferring one rupee of income to the poor was ₹ 5.37 (Table 4). This includes cost to both the Central and State Governments. Andhra Pradesh Rice Scheme was least cost effective since the cost of transferring one rupee to the poor was ₹ 6.35.

TABLE 4: Cost per Re. 1 of Income Transferred by various Programmes (1986-87)

Scheme	*Total Cost Per Re. 1 Income Transferred (₹)*
Public Distribution System	5.37
Andhra Pradesh Rice Scheme	6.35
Jawahar Rozgar Yojana	4.35
Maharashtra EGS	3.10
ICDS	1.80

SOURCE : Compiled from R. Radhakrishna, et. al., *op. cit.*

As against these, the employment generation schemes fared much better. Under Jawahar Rozgar Yojana, the cost of one rupee income transfer was ₹ 4.35 and that under Maharashtra Employment Guarantee Scheme, it was still lower at ₹ 3.10. However, the cost of transferring one rupee under Integrated Child Development Services was ₹ 1.80. This scheme was most cost-effective since it provided a package of health, nutrition and education to pre-school children (0-6), pregnant and nursing mothers.

4. POLICY OPTIONS FOR REFORM OF PDS

The major problem in the reform of PDS is identifying the real poor. This requires the development of strategies, which are able to minimise the accrual of benefits of PDS to the non-poor. For this purpose, the following should be the goals of PDS reforms:

(i) Devise instruments for the identification of the poor by transferring the task of identification from the bureaucracy to Panchayati Raj Institutions (PRIs) which, in turn, will be supervised and monitored by NGOs with proved record. There is consensus among economists and social workers on this issue.

(ii) Through extensive consumer surveys, identify the PDS commodities, which confer higher income benefits on the poor, and other commodities which are used by the non-poor, should be gradually shifted to the open market.

(iii) To help the effective transfer of income to the poor, the gap between the issue prices of essential commodities and their market prices should be sufficient to attract the poor to buy the PDS commodities.

(iv) PDS should also be implemented through employment generation programmes like Jawahar Rozgar Yojana (JRY) or Employment Assurance Scheme (EAS) because in such programmes, the poor derive double benefit. Firstly, the error of inclusion of the non-poor is minimised, since it has been found that the non-poor generally do not undertake employment under JRY/EAS. Secondly, besides transferring purchasing power in the hands of the poor through poverty alleviation employment generation programmes, additional income transfer will take place through PDS supplies to the participants.

(v) The State Governments should issue food stamps/vouchers to the PRIs so that they can distribute them to the poor. Similarly, food stamps/vouchers can be provided to the operators of JRY/EAS.

(vi) Food Corporation of India (FCI) is not the most appropriate institution for providing food security to the poor. It would be desirable to limit the role of FCI to stabilisation of food prices but task of allocation of foodgrains to PRIs should be entrusted to the State Governments.

(vii) The following considerations should be taken into account while identifying the poor:

Table 5: Foodgrains Allocation and Offtake under Public Distribution System

Million tonnes

	Allocation			*Offtake*		
	Wheat (1)	*Rice* (2)	*Total* (3)	*Wheat* (4)	*Rice* (5)	*Total* (6)
1991-92	10.3	11.4	21.7	8.8	10.2	19.0
1995-96	11.3	14.6	25.9	5.3	9.4	14.7
2000-01	11.5	16.3	27.8	4.0	7.9	12.0
2001-02	13.1	17.2	30.3	5.6	8.1	13.8
2005-06	16.7	27.7	44.4	12.2	19.2	31.4
2006-07	9.2	26.3	35.3	10.4	21.2	31.6
2007-08	8.7	20.6	29.3	10.9	22.6	33.5
2008-09	11.0	17.4	28.4	12.5	22.1	34.6
2009-10	—	—	—	19.0	23.4	42.4
2010-11	—	—	—	23.1	29.9	52.0

Source: *Economic Survey 2011-2012, Agricultural Statistics a Glance, 2011.*

For the rural areas, the following criteria for inclusion will help:

(a) All households participating in employment programmes.

(b) Single mothers with children or widows without support; and

(c) All landless agricultural labourers, petty artisans.

For urban areas, the following criteria may be adopted:

(1) Careful selection of areas: slums, areas occupied by traditionally poor communities such as potters, cobblers, construction workers, poor home-based workers, etc.

(2) All non-income-tax paying households.

(3) Households, which do not possess expensive consumer durable and services (cooking gas, refrigerators, washing machines, telephones, etc.)

To sum up, it would be appropriate to emphasise that whereas the coverage of the PDS is wide and is able to help large sections of the poor, if properly targeted, the purpose of providing enduring food security to the poor, it would be more appropriate to emphasise strategies, which reduce poverty. The role of rapid economic growth with larger employment generation assumes crucial importance.

To ensure that the gains of income to the poor are not eroded through rise of prices, the Government should adopt price stabilisation strategies.

PDS Allocation and Offtake

Data provided in table 5 reveals that offtake by the states of the allocation of foodgrains made for PDS has varied from 43 percent to 87 per cent up to 2008-09 Sharp fluctuations in PDS off take was either due to the narrow margin between open market and issue prices, or low releases of PDS supplies by the Government to dealers, or lack of commitment to PDS programme. Weak commitment to PDS was noticed in poor states, namely, Bihar, Orissa, Uttar Pradesh and Madhya Pradesh as well as in rich states like Punjab and Haryana. In Recent year ratio of offtake to allocation has improved.

The Government has used the below poverty line (BPL) and above poverty line (APL) as the cut-off points for providing subsidised PDS foodgrains. Considering an average family of 5 persons, families earning approximately ₹ 1,500 per month in the rural areas and ₹ 2,000 in the urban areas fall below the poverty line. If this criterion is taken as the basis, even class IV employees in the public as well as the private sectors are excluded from PDS foodgrains. This appears to be very iniquitous. It only indicates that the role of PDS as a poverty alleviation measure was sought to be undermined by the new PDS policy.

Moreover, it was totally unjust to hike the PDS foodgrains prices in one go by 68 per cent. Both from the point of view of its impact on the poor and the coverage of the population, the targeting basis of the revised PDS needs reconsideration because it has become too restrictive.

The Government has not spelt out as to how it proposes to identify the population below the poverty line.The process would be difficult because only 8 per cent of the total labour force works in the organised sector and 92 per cent is in the unorganised sector.

The Government intends to use the income–tax assessee's criterion to eliminate non-eligible families for sugar from PDS. But quite a large proportion of our population does not avail of sugar from PDS outlets - this includes the very poor on the one hand and the very rich on the other. For wheat and rice, which sustain the poor, not only the people below the poverty line, but even many who may be slightly above the poverty line belong to the weaker sections of the society, it would be desirable to spell out other criteria of exclusion so that the Government can restrict PDS to weaker sections of the society. The administrative aspect has not been clearly spelt out.

In this connection it would be relevant to mention that the Food Corporation of India buys superior foodgrains and supplies them for PDS, but quite a good

proportion of these supplies find their way into the open market and PDS outlets supply very inferior grains to ration card holders. The poor consumers have to accept whatever is supplied to them. It is this mismanagement and corruption, which needs rectification so that the intended benefits reach the poor and the PDS can serve its purpose as a poverty alleviation programme.

As the BPL families did not or could not accept PDS foodgrains at higher prices, the Government had a huge stock of 64 million tonnes of foodgrains in its godowns up to July 2002, out of which 41 million tonnes was in the form of wheat. There were two options before the Government. Either it could reduce the issue prices substantially so that the poor start higher offtake of PDS grains. This implies bearing higher subsidy cost. Alternatively, the Government may export rice and wheat.

Targeted Public Distribution System (TPDS)

The functioning of the PDS was thus severely criticised

(*a*) for its failure to serve below poverty line (BPL) population,

(*b*) for its bias in favour of urban areas,

(*c*) negligible coverage in poor states with large population of the rural poor, and

(*d*) wide leakages of PDS foodgrains procured from Food Corporation of India to the open market and supply of inferior grains in ration shops.

Realising this, the Government tried to streamline the system by issuing special cards to BPL families and selling foodgrains to them at specially subsidized prices with effect from June 1997. Under Targeted Public Distribution System (TPDS), each poor family was entitled to 10 kg of foodgrains at highly subsidised prices.

To increase the extent of benefit to the poor, the allocation of BPL families was increased from 10 kg to 20 kg per month at 50 per cent of the Economic Cost from April 2000. The allocation of Above Poverty Line (APL) families was retained at the 10 kg level fixed in 1997 at the price which was equal to 100 per cent of the economic cost.

The main aim was to direct the subsidy to BPL and discourage APL families to benefit from PDS. As a consequence, it was expected that 65 million BPL families would receive a kind of income transfer.

With effect from July 2001, the BPL allocation of foodgrains was increaed from 20 kg to 25 kg per family per month. In addition, 25 kg of foodgrains was to be provided to the poorest of the poor families of the Antodaya Anna Yojana at a highly subsidised price of ₹ 2 per kg for wheat and ₹ 3 per kg for rice under PDS.

From Food Surplus to Food Crisis : A Tragedy

During the NDA rule, India was in a pitiable situation, with bulging godowns — 64.7 million tonnes in June 2002 — and rotting foodgrains on the one side and nearly 300 million people at various degrees of starvation in the country, on the other. The old and the infirm in rural areas did not have the means to buy foodgrains even from the PDS. The Food and Civil Supplies Minister at the Centre was willing to distribute foodgrains from the Central Godowns but many states could not lift the free foodgrains. The Fifth Pay Commission had literally pauperised many states which did not have even finances to pay for the transport of free foodgrains from the Central godowns.

The attitude and the policy of the Government to reduce foodstocks was simple but cruel : subsidise export of rice and divert foodgrains meant for PDS to private mills and traders.

Some interesting points emerge from table 6

1. Production of cereals (we have omitted pulses) has reached a plateau and has averaged at about 200 million tonnes.

2. The offtake of cereals from the Central Government pool for both PDS and other welfare schemes had peaked at 47.6 million tonnes in 2009-10. Earlier it generally remained less than 40 million tonnes. The bureaucrats in the agriculture and food civil supply ministries never bothered about this trend.

3. Open-market sales from Government godowns reached a maximum of 5.7 million tonnes in 2002-03, the year when agriculture suffered due to bad monsoon conditions. However it declined thereafter and was elimated in 2006-07. In 2009-10 it again increased to 2.1 million tonnes.

4. Exports picked up smartly from 1.5 million tonnes in 2000-01 and was the highest (12.4 million tonnes in 2002-03) in the year when production of cereals was the lowest in recent years. But what was surprising was that subsidised exports were allowed in the next two years — over 10 million tonnes a year.

The huge stock of foodgrains accumulated over the years as a buffer stock to meet emergencies and possible famines was thus squandered away by the NDA government in a matter of three to four years. The government had all types of excuses — heavy losses due to food subsidies — and was committed to keep enough stocks to meet the PDS obligation.

The general public and even Parliamentarians were not aware of what was happening in the agricultural and food ministries. When the question of free market sales — legal and illegal — and subsidised exports of wheat and rice was raised occasionally, the government asserted that there were sufficient stocks in the Central godowns, much above the buffer stock norms fixed from time to time.

TABLE 6: Offtake of Cereals from Central Pool in recent years

Million tonnes

Year	*Production of cereals*	*To PDS and other Government welfare scheme*	*To Open market Sale*	*Exports*	*Total off take*
1999-00	196.4	18.4	4.6	–	23.0
2000-01	185.7	15.2	1.5	1.5	18.2
2001-02	199.5	21.0	5.6	4.7	31.3
2002-03	163.6	31.7	5.7	12.4	49.8
2003-04	198.5	37.7	1.3	10.3	49.3
2004-05	191.2	40.3	0.3	10.0	50.8
2005-06	195.2	41.1	0.3	0.0	41.1
2006-07	203.1	36.7	1.2	—	36.7
2007-08	216.0	37.4	.02*	—	37.02
2008-09	219.2	36.2	1.2*	—	38.2
2009-10	203.4	47.6	2.1	—	49.7

SOURCE: *Economic Survey, 2010-2011. *Includes Exports Also.*

Table 7 shows the average buffer stocks and actual stocks in the Central godowns for the years since 2001. The buffer norms for both cereals are 18.7 million tonnes but the actual stocks were as high as 53 million tonnes in 2001. (It touched over 64 million tonnes in July 2002.) However, the stocks of cereals were declining rapidly, as explained earlier because of welfare schemes, open market sales and subsidised exports and a time came when the actual stocks were just equal to buffer stock norms. In fact, the position with wheat stocks was shocking – the average actual stock of wheat was lower than the minimum buffer stock requirement (see the figures for wheat for the year 2007). *The huge surplus of wheat just disappeared in a matter of two to three years, magically*. The Government had assured the M.S. Swaminathan, National Commission on Farmers — even in June 2005 — that there was sufficient quantity of wheat in Government godowns to meet PDS requirements. This was a blatant misinformation.

The traders and flour mills have clearly understood the situation and made a killing by hoarding wheat. The Government has been forced to import wheat for the first time in 30 years. In 2006, as much as 5 million tonnes of wheat was imported at much higher prices than were paid to the Indian farmers. Since 2008, we find an increase in the buffer stock of both wheat and rice. This is a welcome development.

What about the future ? Foodgrains production in 2004-05 was 204 million tonnes — as against 213 million tonnes in the previous year. In 2009-10 again food grain production declined after reaching a peak at 234 million tonnes in 2008-09. In 2011-12, it is expectd to be nearly 250 million tonnes. International production of foodgrains is also declining. If this state of affairs continues, the price of wheat will rise and the country will be forced to import larger quantity of wheat and at much higher prices.

The prices of cereals, pulses and vegetables are rising to unheard-of limits. The situation has worsened through high incidence of farmer suicides and the rate of agricultural growth being around 2 per cent .

Proposed Food Security Legislation

A new legislation has been proposed to provide food security to our population. This implies that the new law would provide a legal entitlement to subsidised

TABLE 7: Central Foodgrains stocks in recent years

Million tonnes

Year (Average)	*Wheat*		*Rice*		*Total cereals*	
	Buffer norms	*Actial*	*Buffer norm*	*Actual*	*Buffer norm*	*Actual*
2001	9.5	30.5	9.2	22.0	18.7	52.7
2002	9.5	33.8	9.2	22.5	18.7	56.3
2003	9.5	21.8	9.2	13.2	18.7	35.0
2004	9.5	13.2	9.2	10.4	18.7	23.6
2005	10.1	9.4	9.0	10.3	19.1	19.7
2006	10.1	5.7	9.7	10.8	19.8	16.5
2007	10.1	8.3	9.7	10.4	19.8	18.7
2008*	8.20	7.71	11.8	11.4	16.8	19.1
2009*	8.20	18.21	11.8	17.6	20.0	35.8
2010*	8.20	23.09	11.8	24.4	20.0	47.5
2011*	11.2	21.54	13.8	25.58	25.0	47.12
2012*	11.2	25.68	13.8	29.72	25.0	55.39

*as on 1st January (norms of buffer stock are also for 1st January).

Source: Calculated from Economic Survey, 2011-12, Agricultural Statistics at a Glance 2009.

food grains to the people. In this regard National Advisory Council has recommended that for at least 75 per cent of the population, which translates into 90 per cent of the country's rural population and 50 per cent of the urban population be coverd by this legislation.

National Advisory Council has suggested that this 75 per cent of the population should, in turn be divided into "priority households" — who should have a monthly entitlement of 35 kg at a subsidised price of Re. 1 a kg for millets, ₹ 2 a kg for wheat and ₹ 3 a kg for rice — and "general households" who should have a monthly entitlement of 20 kg "at a price not exceeding 50 per cent of the current Minimum Support Price" for the three grains.

The NAC proposes that 46 per cent of the rural population and 28 per cent of the urban population would be classified as priority households. And that 44 per cent of the rural and 22 per cent of the urban population would be classified as general households. The NAC has suggested that the criteria for categorising households as 'priority' or 'general' should be specified by the government of India.

This means that those entitled to 35 kg of grain in the price range of ₹ 1-3 will form approximately 40 per cent of the total population, while those entitled to 20 kg will form approximately 35 per cent of the population. The NAC proposal also allows for the provision of subsidised food grains to be extended beyond the poorest 75 per cent of the population.

In this manner talk about right to food which was started with much enthusiasm is ultimately meeting the fate, similar to other welfare schemes. It was said that more than 90 per cent of the population would be covered by the schemes initiated under Right to Food Act. It was also said that to start with the schemes would be started in 200 districts. But the National Advisory Council has actually restricted the same to only 46 per cent in the population of rural areas and 28 per cent of urban areas. This means that only about 40 per cent of the total population and would get the highly subsidised wheat at ₹ 3 per Kilogram and rice at ₹ 2 per kilogram. Another 22 per cent of rural population and 44 per cent of urban population would get this food at half the price at which it is procured from the farmer. Jean Draze, a member of this National Advisory Council objected to this decision by saying that it would amount to doing nothing more than what is being provided by the government at present.

Food Security Bill is yet to be formally introduced in the Parliament. Through the government has shown its intention to introduce the bill in the parliament at the earliest, but there are still many uresolved issues about the definition of poverty and identification of poor. Through the purposed food security bill is supposedly finalized by National Advisory Council, it is yet unclear which definition of poverty the government would follow.

In this context Parliamentary Committee has suggested that the government adopt a comprehensive and multidimensional approach to poverty to enable a more dynamic enumeration of the poor. The Committee in its report has explained that the present system of estimating poverty and identification of the poor has resulted in a situation where there is considerable divergence between official estimates and the actual incidence of poverty. Depending upon the criteria, the number of persons who would classify as poor varied. The Parliamentary Committee reviewed the work done by various expert groups and found wide variations in the estimates of poverty on account of the criteria used by each expert group. While the Planning Commission's Tendulkar Committee found that at all India level 37.2 percent of the population is poor on the basis of calorie intake norms, the Rural Development Ministry's Saxena Committee found that 50 percent of the population would be classified as poor and 80 percent if calorie intake was to be considered. And the national Commission for Enterprises and Unorganized Sector's Arjun Sengupta Committee found 77 percent of the population to be poor, if condition of work and livelihood was considered.

The committee therefore suggested that the criteria for identifying and enumerating the poor be harmonized through a joint mechanism comprising the central, state and local agencies concerned.

5. FOOD INSECURITY AT GLOBAL LEVEL

Prices of traditional food grains like wheat, corn and rice have been rising globally. According to FAO data on food prices, cereal price index increased from 121 in 2006 to 274 in June 2008. The major factor behind increasing prices of food grains is historic decline in the production of food grains all over the globe. Food and Agriculture Organisation (FAO) has also cautioned that world production of wheat would be only 142 million tonnes by the year 2008, which is 10 percent less than the production in the year 2007. Situation of rising prices has been made even worse by constantly rising international price of crude oil. The price of crude oil reached up to 147 $US per barrel, which later tumbled down to about 39$US per barrel. Constantly rising prices of crude oil prompted various countries to shift their crop pattern such that the land previously been used for food grains production is now being used for bio fuel. Apart from this food products are also being used for extracting ethanol. In the year 2006-07, US utilized 20% of its corn production for extracting ethanol. It is believed that by the year 2016, US would be utilizing 32 percent of its

corn production for producing ethanol. In the light of rising prices of crude oil US has set target for itself for producing 25 billion gallons of bio fuel in the next 10 years. Europe has set a target of 5.75% of its diesel needs to be fulfilled from plants by the year 2010.The China is extracting ethanol not only from corn but even from wheat and rice. Experts believe that this tendency will increase further. Even UN believes that United States of America and European Union are both responsible for this sudden international food crisis, as these nations have reduced their production of food grains in order to produce more bio fuel. These countries have started shifting their land in favour of bio fuel plants.

As noted earlier, production of food grain per capita has being going down in the country in the last few years, necessitating large scale import of food grain. For instance in five years from 2002-2003 to 2007-08 India's population increased by 8 percent, whereas food grains production could increase by merely 5 percent. But more disturbing is the fact that the country had to imports food grain, especially wheat at extra ordinarily exorbitant price. Whereas farmers were being paid only 850 per quintal by the government procurement agencies, later in the same year wheat was imported at effective price of rupees 1300 to 1600 per quintal. Of late the government realised the importance of paying reasonable price to the farmers, that it could procure 230 lakh tones of wheat. As the result of good wheat procurement, a reasonable buffer stock would be maintained, resulting in stabilisation of food prices in the country.

Thus we can conclude that in view of danger of declining food grain availability at global level looming large, solution lies in encouraging food grain production in the country by offering reasonable price to the farmer. To make available food to the masses at the reasonable prices, we need to maintain reasonable level of buffer stock, which in turn could be ensured by making sufficient procurement.

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CHAPTER

31

IRRIGATION AND OTHER AGRICULTURAL INPUTS

"The secret of rapid agricultural progress in the underdeveloped countries is to be found much more in agricultural extension, in fertilisers, in new seeds, in pesticides and in water supplies than in altering the size of the farm, in introducing machinery, or in getting rid of middlemen in the marketing process."

—W.A. Lewis

Progressive agriculture will demand, among other things (i.e., favourable institutional and organisational structure), improvement in inputs and methods. Irrigation, better seeds, better manures and fertilisers, land reclamation and soil conservation, plant protection, use of mechanisation etc.--these are various aspects of agricultural inputs which have to be considered here.

1. IRRIGATION

Water is indispensable to agricultural production. In areas where rainfall is plentiful and well-distributed over the year, there is no problem of water. But rainfall in certain areas is very scanty as well as uncertain. This is so in Deccan and Central India, Punjab and Rajasthan. In these areas, artificial irrigation is absolutely essential, for without it cultivation is almost impossible. In certain regions, rainfall may be abundant but it may be concentrated in a short period of the year, the rest of the year being dry. As a result cultivation may not be possible for the whole year. In these regions, provision of irrigation will facilitate growing of more than one crop in the year. Finally, there are certain food and cash crops such as rice and sugarcane which require abundant, regular and continuous supply of water. In short, water is a vital input to increase agricultural output to keep pace with the food requirements of the ever-increasing population.

During the 50 years since independence, the Government had spent about ₹ 231,400 crores (at 1996-97 prices) on major, medium and minor irrigation works.[1] As a result, the country's irrigation potential has increased from 23 million hectares in the pre-plan period (i.e. 1950-51) to 89 million hectares at the end of 1996-97. With this, India has the largest irrigated area among all the countries in the world. This has greatly contributed to the increase in foodgrains production from 51 million tonnes in 1950-51 to 203 million tonnes in 2001-02.

1. *Ninth Five Year Plan*, 1997-2002, Vol. II, p. 478.

Sources of Irrigation in India

Since 1950-51, considerable importance was attached to the provision of canal irrigation. Canal-irrigated area had increased from 8.3 million hectares to 18 million hectares during 1950-51 and 2000-01. Even then, its relative importance has come down from 40 per cent to 29.5 per cent.

Well irrigated area has increased from 6 million hectares to 33.3 million hectares during the last 50 years—well irrigation in 2000-01 accounted for nearly 61 per cent of the total irrigated area as compared to only 29 per cent in 1950-51.

TABLE 1. Area Irrigated by Sources in India

Sources of Irrigation	1950-51		2007-08	
	Area (million hectares)	*Per-centage*	*Area (million hectares)*	*Per-centage*
Canals	8.3	40	16.5	26.5
Wells and tube wells	6.0	29	37.8	60.7
Tanks	3.6	17	2.0	3.2
Other sources	3.0	14	6.0	9.6
Total	20.9	100	62.3	100.0

SOURCE: Central Statistical Organisation (CSO), *Agricultural Statistics at a Glance, 2011.*

The growth of well irrigation has been at the expense of irrigation from tanks and other sources. During this period, it is well irrigation, particularly tube well irrigation, which has made the most spectacular progress. In 1950-51, only 6.0 million hectares were irrigated by well and tubewells, but by 2007-08, over 60.7million hectares were served by wells and tubewell irrigation.

In India, irrigation works are classified into major and minor irrigation works. Since 1978-79, the Planning Commission has adopted the following classification of irrigation schemes :—

(a) Major Irrigation Scheme--Those with culturable command areas (CCA) more than 10,000 hectares.

(b) Medium Schemes--Those with culturable command areas (CCA) between 2,000 and 10,000 hectares.

(c) Minor Schemes--Those with culturable command areas (CCA) up to 2,000 hectares.

TABLE 2: Gross and Net Irrigated Area in India

(million hectares)

Year	*Net Irrigated area*	*Gross Irrigated area*	*Total cropped area*	*Gross Irrigated area as per cent of sown area*
1950-51	21	23	133	17
1970-71	31	38	166	23
1990-91	48	62	186	34
1999-00	57	76	193	39
2000-01	55	76	186	40
2006-07	61	85	193	44
2007-08	62	87	195	44.6
2008-09	63	88	195	45.3

SOURCE: *Agricultural Statistics at a Glance (2010).*

Table 2 gives us an idea of the progress of irrigation since 1950-51 when economic planning was undertaken:

(a) Net irrigated area has increased from 21 million hectares in 1950-51 to 63 million hectares in 2008-09— an increase by over 300 per cent in 58 years.

(b) Gross irrigated area (which includes land cultivated more than once in a year with the help of irrigation) has gone up from 23 million hectares to 88 million hectares during this period—an increase by more than 382 per cent in 58 years.

(c) This means that the area cultivated more than once in a year has risen sharply from about 2 million hectares in 1950-51 (which was 8 per cent of net irrigated area) to nearly 25 million hectares in 2008-09 (which was 40 per cent of net irrigated area). This has great significance in the Indian context. Area irrigated more than once is a kind of increase of land and, therefore, is very crucial in raising agricultural productivity and agricultural production.

(d)Finally, the benefit of irrigation is available for more land now than in 1950-51. For instance, the third column in Table 2 shows that in 1950-51, total cropped area was 133 million hectares; but by the end of the century, the total cropped area had increased to 195 million hectares. Moreover, only 17 per cent of cropped land got the benefit of irrigation in 1950-51. But in 2008-09, as much as 45.3 per cent of all cropped area gets the benefit of irrigation.

Irrigation Potential

When India started planned economic development in 1951, the irrigation potential from major and medium irrigation was about 10 million hectares and from minor irigation works was 13 million hectares, totalling 23 million hectares (Table 3). By 2006-07, the total irrigation potential created had increased to 103 million hectares out of which the contribution of major and medium works was 42 million hectares and that minor irrigation works was 61 million hectares. By trans-basin diversions it is

estimated that another 25 million hectares potential can become available through surface and 10 million hectares through growing water sources.

The present long-term objective is to utilise the available water resources fully by the year 2010. For this purpose, the Government has prepared a national perspective for water resources development which includes also storage and inter-basin transfer from surplus to deficit and drought-prone areas.

Table 3 : Development of Irrigation potential
(Million hectares)

Year	*Major and medium works*	*Minor works*	*Total*
1950-51	10	13	23
1980-81	27	31	58
1990-91	30	48	78
1999-2000	35	60	95
2006-07	42	61	103
Ultimate irrigation potential (UIP)	59	81	140

Source : *Economic Survey*, 2008-09.

Irrigation Potential and Utilisation in the Five Year Plans

All the Five Year Plans have given considerable importance to the creation of additional irrigation potential. The First Plan devoted as much as 25 per cent of the total Plan outlay on irrigation and created 3 million hectares of irrigation potential. Generally, however, between 10 to 12 per cent of the total plan outlay has been on the creation of irrigation potential ranging from 5 to 10 million hectares.

As a consequence of this investment, the potential created in terms of irrigation area was of the order of 95 million hectares – about 35 m. ha. as a result of major and medium irrigation and 60 m. ha. as a result of minor irrigation (Table 4). The potential actually utilised was 85 million hectares.

Table 4: Irrigation Potential Created and Utilised upto the end of 2006-07
Million hectares

Source	*Potential created* (1)	*Potential utilised* (2)	*Per cent utilisation* (3)
Major & Medium Irrigation	42.4	34.4	81
Minor Irrigation	60.4	52.8	87
Total Irrigation	**102.8**	**87.2**	**85**

Source: 1. Planning Commission, *Eleventh Five Year Plan (2007-12)*, Vol. III.

Unfortunately, the irrigation potential created over the years in major and medium works has not been fully utilised and the gap between the potential created and the actual utilisation was widening. For instance, at the end of the Seventh Plan (1989-90), the irrigation potential created and the actual irrigation utilised were 77 million hectares and 69 million hectares respectively — the gap was 8 million hectares. By 2006-07 this gap between potential and actual irrigation has widened still further--against irrigation potential of 103 million hectares created, the actual utilisation was only 87 million hectares; the gap was 16 million hectares. The non-utilisation of the created irrigation potential occurs mainly due to delay in the construction of field channels and drains and in land levelling/shaping. Lack of involvement of farmers is also an important constraint in achieving full utilisation of created potential.

Accelerated Irrigation Benefit Programme (AIBP)

The central government initiated the Accelerated Irrigation Benefit Programme (AIBP) from 1996-97 for extending assistance for the completion of incomplete irrigation schemes. Under this programme, projects approved by the Planning Commission are eligible for assistance. Under this programme, projects approved by the Planning Commission are eligible for assistance. Further, the assistance, which was entirely a loan from the Centre in the beginning, was modified by inclusion of a grant component with effect from 2004-05. AIBP guidelines were further modified in December 2006 to provide enhanced assistance at 90 percent of the project cost as grant to special category States. Drought Prone Are Programme (DPAP) States/tribal/areas/flood-prone area, and Koraput-Balangir-Kalahandi (KBK) districts of Orrisa. According to Economy Survey 2011-12, under the AIBP, Rs. 50,380.64 crore of central loan assistance (CLA)/grant has been released upto 30 November 2011. As on 31 March 2011, 290 projects were covered under the AIBP and 134 completed. During 2010-11, an irrigation potential of 566.24 thousand hectare is reported to have been created by states, from AIBP. To maximise the flow of benefits from investments in irrigation projects, structural changes in Accelerated Irrigation Benefit Programme (AIBP) are being made. The allocation for AIBP in 2012-13 is being stepped up by 13 per cent to ₹ 14,242 crore.

It is expected that higher irrigation potential would help aurgment production and productivity in agriculture.

Table 5 : Potential created under Accelerated Irrigation Benefit Programme (AIBP)

	Major & Medium Irrigation Projects
Target Potential under AIBP	11929.15
Potential Created upto March, 2006	3465.81
Potential Created during 2006-07	892.59
Cumulative potential up to Mar, 07	4404.09
Potential created during 2007-08	543.66
Potential created during 2008-09	538.05
Cumulative potential up to March 2009	5485.91
Potential created during 2009-10	982.0
Cumulative potential created up to March 2010	6467.94
Potential created during 2010-11	566.24
Cumulative potential created up to March 2011	7034.18

Source : Economic Survey 2011-12

Command Area Development

With a view to narrowing the gap between the potential created through the major and medium works and its ground level full utilisation, the Government started the Command Area Development (CAD) and water management programme since 1974-75. The basic objective of CAD Programme is to maximise productivity in the irrigation command areas through an integrated approach, viz. construction of field channels and field drains, land shaping wherever necessary and the introduction of rotational supply of water to ensure equitable and assured distribution to individual farm holdings. However, CAD programme has not been particularly successful because of three major constraints:

(a) Unreliability of water supply at outlet;

(b) Gap between available technology and its adoption; and

(c) lack of participation of farmers.

In recent years, the CAD programme has been restructured by retaining only those components which are beneficial to farmers and which correct deficiencies in water supply and improve drainage systems.

The cost of creating irrigation potential for major and medium irrigation was ₹ 40,170 per hectare (at 1996-97 prices) and that for minor irrigation was ₹ 12,970 per hectare. This implies that the cost of irrigation for major and medium projects was more than three times per hectare as compared with minor irrigation projects. This underlines the need for giving more emphasis on minor irrigation. However, major and medium irrigation projects also perform additional functions of providing electric energy and promote flood control. Obviously, both types will have to be strengthened to increase irrigation facilities. It may be noted that 60 per cent of foodgrains production comes from irrigated area, which constitutes about 39 of cultivated area and the remaining 40 per cent of foodgrains production comes from 61% of rainfed area.

The emphasis in recent years is on minor irrigation works using ground water resources. Minor irrigation works are relatively less capital-intensive and do not take long to construct. Expansion of minor irrigation works, however, depends on private initiative and naturally it depends upon the farmers' perception of profitability, easy and cheap availability of such facilities as electric power, supply of diesel, construction material, credit etc. Expansion of rural electrification works helps to optimise returns from minor irrigation works. Minor irrigation works are of special importance in raising pulses and oilseeds as these crops require only limited irrigation facilities. Finally, there is almost no time lag between the creation of irrigation potential and its utilisation in the case of minor works.

The major problem of minor irrigation—specially tube well irrigation is rapid exhaustion of ground water which has already posed a serious problem in many parts of the country.

Irrigation and New Challenge to Agriculture

An important constituent of the current strategy for raising agricultural production is the increasing reliance on irrigation. The strategy of Intensive Agricultural District Programme (IADP) and the High Yielding Varieties Programme (HYVP) were initially introduced only in those areas which had assured rainfall and irrigation facilities. As the scope for extending the cropped area is limited in fact, the cropped area has ranged between 140 to 141 million hectares in recent years – greater reliance has to be placed on irrigation so as to have double or multiple cropping. The basic objective is to produce a much higher yield of grain output per hectare by promoting the sowing of two or more crops on irrigated land.

It has been estimated that India has around 166 million hectares of agricultural land out of which 140 million hectares of land could ultimately be irrigated. (Table 3) By 2006-07 only 87 million hectares are provided irrigation facilities. That leaves still 37 million hectares of potential irrigation for the successive five year plans. According to the Irrigation Commission, the cost of exploiting this potential would work out at ₹ 30,000 crores (at 1980-81 prices); or more than ₹ 75,000 crores now (at current prices). As the financial resources available to the Government are limited, the last three Plans took up only a few major and medium projects but laid emphasis on the completion of ongoing projects.

In order to expand irrigation facilities, the Government of India has adopted the following programmes:

(a) NABARD has set up Rural Infrastructure Development Fund (RIDF) under which loans are granted to States for speedy completion of minor irrigation projects.

(b) The Government of India has launched, since 1996-97, a programme called "Accelerated Irrigation Benefit Programme" (AIBP) under which the Centre is providing additional Central assistance by way of loans to the States for early completion of selected large irrigation and multi-purpose projects. AIBP was specifically started because a large number of river valley projects - both major and medium - have spilled from plan to plan, mainly because of financial constraints of state governments. Some of these projects were in an advanced stage of construction and could provide irrigation benefits in four or five agricultural seasons. The completion of these projects, however, was beyond the resources capability of the State Governments.

Under AIBP, funds were provided to the States in the form of Centre loan assistance. The Central Government also introduced in February 2002 a Fast Track Programme for completion of some irrigation works in two or three working seasons with full Central assistance. From April 2002, AIBP has been further modified, with the adoption of a grant component - i.e. 30 per cent grant for General Category States and 90 per cent grant for Special Category States.

Between 1996-97 and 2005-06, the Government of India has released ₹ 19,440 crores as loan assistance under AIBP for 181 irrigation works and 3,810 minor irrigation works. So far 28 projects have been completed and irrigation potential of 3.7 million hectares has been created upto March 2006.

Better Utilisation of Irrigation Capacity

Equally important is the better utilisation of the irrigation facilities already created. So far, we have failed hopelessly in getting the maximum benefits out of our investment in irrigation in the sense that irrigated land has not contributed its maximum to agricultural output. Theoretically, irrigation should make double cropping possible, if not multiple cropping, but the bulk of the irrigated area in India still continues to be single crop area.

As already explained in 1950-51, only 8.4 per cent of the net irrigated area was sown more than once; the percentage rose to 27 per cent in 2004-05. This means that either, the bulk of irrigation gives security to only one crop or agronomic practices in the irrigated areas have not developed sufficiently to permit more than one crop. If we assume that the entire irrigated area can be made to support two crops, then, 73 per cent of irrigated land is under-utilised. This extent of under-utilisation is not met with in any other type of public enterprise even in India. Scientists have explained the possibility of raising 10 to 11 tonnes of grain per hectare on irrigated land, subject to multiple cropping and proper alternative rotations of crops. Full utilisation of existing irrigation resources alone can, therefore, boost foodgrains production from the present 200 to 210 million tonnes to anything between 300 and 400 million tonnes. The following are some of the important factors for under-utilisation and the necessary steps to remove them :

(i) Indian farmers, by and large lack the necessary knowledge to optimise irrigation use. They do not know appropriate agronomic practices including suitable varieties of short-maturing crops, appropriate crop rotations, etc. In this connection, it is necessary to provide better extension services, suitably linked with research organisation of scientists, and adapted to multi-cropping farming practices.

(ii) Supporting facilities necessary for optimum use of irrigation etc., land levelling, land shaping, land consolidation, efficient land channels, etc., are absent in many parts of the country.

(iii) Even major and medium irrigation works have not been properly maintained. Minor irrigation works, particularly tanks and open wells, have been largely neglected. To remove this important defect, it is necessary to undertake extensive rehabilitation, renovation and modernisation of existing irrigation system.

(iv) Faulty irrigation practices and absence of proper and adequate drainage facilities have not only been responsible for waste of water but for water-logging, salinity and alkalinity which have permanently damaged considerable portion of cultivable land. Education in water management and provision of drainage facilities will help to remove this defect.

The Task Force for Special Foodgrains Production Programme has included the provision of assured irrigation through both major and medium irrigation projects and minor irrigation works as a basic component in the multi-pronged strategy to raise foodgrains production. It has been planned to install 6 lakh shallow tubewells in certain districts of U.P., Bihar, Orissa, West Bengal, Assam and Andhra Pradesh, where ground water potential has been identified. These tubewells will provide assured irrigation facilities at low cost in these potentially high output and yield areas.

In general, there has to be an all-India coordinated programme to promote double and multiple cropping and optimal use of water. The objective is to raise the yield per hectare of the irrigated land through double and multiple cropping.

2. MULTIPURPOSE RIVER VALLEY PROJECTS : A CONTROVERSY

Soon after independence, multipurpose river valley projects and other dams and canals were considered essential for meeting India's critical requirements of irrigation for agriculture, electricity for industries and flood control. Accordingly, dam construction was given a high priority in our economic plans and over 15 per cent of the total plan outlay was invested on dams and canals. India now ranks among the more important dam building nations in the world. Dams were regarded as "the temples of modern India" by Jawaharlal Nehru. Till now "irrigation and hydro-power have been the major objectives of water resources development in India."

Impressive Achievements. The heavy investments on major and medium irrigation projects have impressive results to show. The irrigation potential created by large and medium works has gone up from about 10 million hectares in 1950-51 to 42 million hectares in 2006-07. Irrigation is the single most important factor in achieving a successful break through in agriculture and a measure of self-sufficiency in food production.

Production of hydro-electric energy capacity

has risen smartly from 3 billion KWH in 1950-51 to 113 billion KWH in 2006-07—increase by 38 times.[2]

(a) **Irrigation benefits exaggerated.** A careful study of the above "impressive" achievements will reveal that they were not really that impressive. Even though the additional irrigation potential created between 1951 and 1997 through major and medium irrigation works was of the order of 23 million hectares, the actual area irrigated was much less due to delays in the construction of field channels and water routes. The Planning Commission has admitted that major and medium works have yielded disappointingly low returns in terms of yield as well as finance. For instance, the national average annual yield of cereals from irrigated land is about 17 quintals per hectare; it should at least be between 40 to 50 quintals per hectare. Further, most of the States are unable to recover even working expenses from their irrigation projects, mainly because of their lack of interest in imposing and collecting betterment levy, flood cess, water rates, etc. The Sixth Plan document estimated the annual losses at ₹ 430 crores. During 2006-07 the annual losses may amount to ₹ 15,070 crores.

A serious problem here is the delay in the completion of major and medium irrigation works which generally take 15 to 20 years--resulting in huge cost escalation.

(b) **Hydro-power is not cheap.** Hydro-power has the inherent advantage of a renewable and non-polluting source of energy and is regarded cheaper than thermal and nuclear power. In practice, however, there are persistent delays in commissioning hydro-projects. The gestation period is generally between 5 to 12 years for hydro-projects, while it is only 5 years for thermal units. As a result, the cost of generating thermal power is ₹ 4,000 per kw while it is as high as ₹ 7,000 per kw in the case of hydropower.

In spite of the spectacular growth in installed capacity of hydro-power between 1951 and 1998 its share has declined from 33 per cent of the total installed capacity in 1950-51 to 21 percent in 2005-06. A serious weakness is that the benefits of hydro-power are mostly available to industry and to urban areas. Besides, during a period of shortage of electric power, agricultural needs are ignored in favour of the urban users. Well-to-do farmers of Punjab and Haryana often keep diesel pumps as a back-up for such emergencies.

2. Production had actually touched 82 billion KWH in 1994-95 and again in 1998-99; there has, however, been constant fluctuation in production of hydro-electric power due to frequent changes in rainfall conditions.

(c) **No benefit of flood control.** By impounding a river's water so as to release it at a controlled rate, a dam acts as a buffer against floods. The so-called multi-purpose river valley projects have been constructed to prevent floods in their respective regions. The National Flood Control Programme launched in 1954 has constructed many embankments, drainage channels and town and village protection schemes. In practice, flood control measures have failed miserably and over the years, the area affected by floods and the damage to crops, cattle and to human beings has increased sharply – despite the multipurpose projects.

A serious problem is the heavy siltation of the reservoirs of major dams; the rate of siltation is often much higher than originally estimated. Heavy siltation reduces the storage capacity and life span of many reservoirs which, as a result, are incapable of absorbing heavy floods. Often, panic discharges from these reservoirs have led to destructive flash floods in the valley's down-stream.

(d) **Adverse environmental effects.** Big dams and huge multi-purpose river valley projects have serious adverse environmental effects. A major environmental effect is the degradation of the soil in the command areas of irrigation projects due to waterlogging and soil salinity.

There are also certain inherent problems associated with major irrigation works:

(i) Millions of tribal families have been displaced; they have lost their lands, their traditional occupations and the benefits they derived from minor forest produce. They were never properly compensated or rehabilitated. It is the contention of many NGOs that the human suffering inflicted on the weakest tribal population in order to benefit other better-off communities can never be justified.

(ii) It has been observed that "in the world as a whole, as much land goes out of production owing to waterlogging and salination every year as is brought under production through new projects". This indeed is a serious criticism and is particularly applicable to India.

(iii) There is a very long gestation period associated with major projects. Sometimes, the gestation period extends over one or two decades or even more.

(iv) The Indian bureaucracy associated with these projects is corrupt and inefficient and colludes

with contractors; and as a result, the cost over-runs are much greater.

(v) Quite a large area of precious agricultural land is also wasted to construct distribution systems.

(vi) Last but not the least, there is heavy loss of water due to seepage--sometimes, this loss is as high as 50 per cent of water released. These losses occur because most of the distributaries are unlined and thus waterlogging becomes a serious problem.

Dr. B.B. Vohra, therefore, concludes: "The future of major and medium irrigation is dim and the country has neither the resources nor the time for creating additional gross potential of some 26 million hectares irrigation through this route. Hence, minor irrigation, particularly through the use of ground water, must be the mainstay for all future plans."

This obsession with big irrigation dams must end and minor irrigation must be provided a much greater allocation than has hitherto been done. Minor irrigation has a much shorter gestation period, it is mostly done in the private sector through the installation of wells, tubewells, pumpsets etc. There is, therefore, no wastage of land in distributaries. Problems of waterlogging are not associated with minor irrigation. Farmers tend to economize the use of water since the system is directly under their control. The key to better management, therefore, lies not in big dams at exorbitant financial and ecological costs, but in minor irrigation which ensures maximum use of ground water and better control over irrigation sources.

In recent years many basic questions have been raised about the conventional emphasis on multi-purpose river valley projects. Time indeed is now ripe to re-evaluate our irrigation policy and formulate new policies.

3. IRRIGATION IN THE ELEVENTH PLAN

The Eleventh Plan has underlined the sad reality that some of the projects started in pre-Fifth Plan and Fifth Plan periods had not yet been completed. Two decades is too long a period for the completion of a project. This was a sad reflection on our planning process. Therefore, there was the need to undertake only a few new major and medium projects and emphasis should be laid on the completion of on-going projects as a first charge on the available resources.

The Eleventh Plan intended to enlarge irrigation capacity and at the same time improve the efficiency of irrigation. The overall strategy of irrigation development and management in the Ninth Plan which were also included had the following ingredients:—

(i) To improve water use efficiency by progressive reduction in conveyance and application losses.

(ii)To bridge the gap between potential created and its utilisation by strengthening the Command Area Development (CAD) programme, institutional reform and promoting farmers' involvement in irrigation management.

(iii) To complete all ongoing projects particularly those which were started during pre-Fifth and Fifth Plan periods.

(iv) To introduce rational pricing of irrigation water based initially on Operation and Management (O & M) cost.

(v)To promote Participatory Irrigation Management (PIM) with full involvement of water user community, which will be at the centre stage of the implementation of the strategy.

(vi) To encourage and implement the conjunctive use of ground and surface water towards optimal utilisation of water resources and to have its development environmentally sustainable as well.

Proposed Outlays and Targets

As against an investment of ₹ 1,09,025 crores on irrigation and flood control in the Tenth Plan, Eleventh Plan proposed an outlay of ₹ 2,32,310 crores on irrigation and flood control in the public sector.

The Working Group for the Eleventh Plan has assessed that a total of 161 major and 222 medium irrigation projects would spill over into the Tenth Plan (from the previous plans). Another 89 projects—known as Extension, Renovation and Modernisation (ERM) projects would also spill over to the Eleventh Plan. A further 178 major, 143 medium and 86 ERM projects would also be taken up during the Eleventh Plan. For completing the old projects and executing new projects, the Eleventh Plan proposed a total outlay of ₹ 2,32,310 crores and hopes to create over 11 million hectares of additional irrigation potential. (It is interesting to note that

the Eleventh Plan anticipated additional irrigation potential of 17 million hectares).

Improvement in Water Use Efficiency

In total water use in 1990, the share of agriculture was 83%, followed by domestic use (4.5%), industrial use (2.7%) and energy (1.8%). The remaining 8 per cent was for other uses including environmental requirements. In a long period projection of water use, the Ninth Plan intended to bring down the total demand for water for irrigation by 2025 AD to about 74 to75 per cent. For this, more efficient use of water by encouraging economical and effective methods of irrigation were to be undertaken. It was estimated that by 10% increase in the present level of water use efficiency in irrigation projects, an additional 14 million hectares could be brought under irrigation with existing capacities. Obviously, this required large scale education of farmers to undertake more efficient water use methods. For this purpose, the recent Plans are putting emphasis on Participatory Irrigation Management Programme as the key element of strategy.

4. PRIVATE SECTOR PARTICIPATION IN IRRIGATION

The increasing demand for investment in irrigation cannot be met by the public sector from its own sources. It was, therefore, found desirable to open the irrigation sector for private sector participation so as to supplement the efforts of the State to extend irrigation facilities necessary for boosting agricultural production. For this purpose, the Government appointed a Committee under the Chairmanship of Mr. P. V. Rangayya Naidu, the then minister of state for water resources, which submitted its report in December 1997. Since the Committee was pre-occupied with the idea of finding sources of private investment in irrigation, it conceived of private sector participation in a very narrow sense and included only the participation of corporate sector, but did not include private groups such as Water Users Associations (WUAs), Non-Governmental Organisations (NGOs) and the general public. Critics highlighted the narrow focus of this Committee and insisted that privatisation of irrigation should not only include private corporate sector, but also water users' associations (WUAs), NGOs and the general public. Table 5 has outlined the various forms of privatisation in irrigation.

Policy and Practice

Some states like Maharashtra, Madhya Pradesh and Andhra Pradesh have initiated action for privatisation of irrigation projects. These projects are conceived on Build-Own-Operate System (BOOS) or Build-Own-Transfer System (BOT) or Build-Own-Lease (BOL). In case of projects on Build-Own-Operate System (BOOS), the irrigation department may buy water in bulk from the private corporation at mutually agreed price for distribution to the farmers. Besides this, Maharashtra Krishna Valley Development Corporation (MKVDC) for Krishna Valley Projects, Sardar Sarovar Narmada Nirman Ltd. (SSNNL) for Sardar Sarovar Project in Gujarat and Krishna Bhagya Jal Nigam for Upper Krishna Project, Karnataka have issued bonds for mopping up funds from the private market. In fact, in Karnataka irrigation privatisation is linked with power privatisation in the form of multipurpose projects. Karnataka was

Table 5: Major Players and their Roles in Privatisation

Main Group	*Sub-group*	*Participation configuration*
Private Corporate Sector	Irrigation Companies	(a) Build-own-operate system (b) Build-own-transfer system (c) Lease-own-operate system
	Consultancy outfits	(a) Engineering consultancy (b) Managerial consultancy
	Contracting firms	(a) Main contracting (b) Sub-contracting
Water Users Associations		(a) Turn over system (b) Water bond system
NGOs	Formal Organisations	Legal/Technical Services
	Informal/Local Organisations	Organisation Services
General Public		Contribution via Water Bond

able to raise ₹ 2,300 crores in the Krishna Bhagya Jal Nigam Ltd. on the basis of the government guarantee of high return of 17.5 per cent. In MKVDC, the Government was able to raise ₹ 428 crores — an amount which was beyond the expectation of the Maharashtra Government.

The real issue, therefore, is: Once the funds have been raised, how does the government make use of them for meeting the obligations for which they are raised. There is sometimes an attempt to divert these funds to meet other demands on the general exchequer. In this sense, it is necessary to enforce financial discipline to utilise the funds for the specific purpose for which they are raised.

The second issue is to revise water rates so that they cover the cost of operation and maintenance fully as also a part of the fixed cost. To make it a success, there is a need to take the help of Water Users Associations (WUAs) and NGOs.

PIM Programmes and WUAs

The National Water Policy (1987) emphasised the involvement of farmers in various aspects of the management of irrigation system, particularly in water distribution and collection of water charges. For this purpose, Water Users Associations (WUAs) were formed in various states, but a review undertaken by the Planning Commission reveals that 55,500 WUA were formed and they manage 10.23 million hectares in 2006-07. The situation is highly unsatisfactory. The main factors responsible for the very slow progress of WUAs in Participatory Irrigation Management Programme are:

(i) The prolonged prevalence of government managed systems have sapped initiative of the farmers to organise WUAs.

(ii) Non-availability of funds for PIM is another obstacle. A one-time subsidy under CAD programme is inadequate to continue WUAs.

(iii) The farmers are reluctant to adopt participatory approach unless deliveries of water can be made flexible, practical and responsive to the need.

(iv) The farmers apprehend that under the new system they might have to incur expenditure for operation and maintenance in addition of increased water rates.

(v) Non-homogeneous composition of farmers' population due to caste and class differentiation is another major impediment in the formation of WUAs.

(vi) The bureaucratic administration lacks dedication to the cause of WUAs.

Role of Government

Privatisation of irrigation will help to reduce the direct role of the government in irrigation financing, but its role as a facilitator and regulator will be greatly enhanced. The major areas in which the Government has to play its role are:

1. While private sector participation may be more suitable for medium and minor projects, it may pose problems in the case of major projects. The Government has, therefore, to continue its role of financing big irrigation projects.

2. To help the private sector, clearances such as forests, environment, resettlement and rehabilitation of oustees, acquisition of land etc. should be carried out by the government department.

3. The Government should offer concessions to private sector investors to augment their return. These concessions can take the form of tax concessions, moratorium on loans, tourism facilities, navigation etc.

4. There should be a guarantee on the return of investment by the private sector.

5. The Government should spell out clearly the obligations of the Government and the private sector in the agreement for such participation.

Sequencing of Privatisation of Irrigation

Privatisation of irrigation has political overtones and it would, therefore, be desirable in the first instance to undertake those forms of privatisation, which are politically less sensitive in the present set-up. At the first stage, it would be in the fitness of things to promote WUAs, NGOs and Consultancy firms, and involve them in water-distribution and collection of water rates. A period of 5 years may be used to allay the fears of WUAs and NGOs. At the second stage, it would be prudent to undertake legal and institutional reforms to facilitate the process of privatisation of irrigation. As the first and the second stage get consolidated, the more difficult options involving private corporate sector in construction and management of irrigation may be attempted. Such a sequencing of privatisation has greater chance of success since it

would have prepared the ground for a change over by policy makers from state-sponsored irrigation practised for the last five decades to a privatized pattern of irrigation and development.

5. FERTILISERS AND MANURES

In any scheme for boosting agricultural output, the use of chemical fertilisers has an important role. India's soil though varied and rich is deficient in nitrogen and phosphorus--two plant nutrients which together with organic manure influence crop return. With population rising at a fast rate, the use of larger doses of chemical fertilisers is the only way to augment our foodgrains production. The New Agricultural Strategy was based on increased use of fertilisers.

TABLE 6. Production, imports and consumption of chemical fertilisers in India

Year	*Production*	*Imports*	*Consumption*	*Consumption per hectare of cropped area (in kgs)*
	(000 tonnes)			
1951-52	39	52	70	0.5
1970-71	1,060	630	2,260	13.1
1990-91	11,860	2,760	12,550	76.8
2000-01	14,750	2,090	16,700	90.1
2005-06	15,575	5,253	20,340	104.5
2006-07	16,096	6,058	21,651	112.2
2007-08	14,760	7,750	22,570	116.9
2008-09	14,334	10,221	24,909	128.6
2009-10	16,221	9,148	2,64,860	135.8
2010-11	16,378	12,363	2,31,220	144.1

SOURCE : Economic Survey, 2010-11, Agricultural Statistics at a Glance (2008). *Estimated (Production figures are considered actual for April-December, 2009) and estimated for January to March 2010.

Consumption of Fertilisers. Since the adoption of the New Agricultural Strategy in the Sixties, the consumption of chemical fertilisers has been growing rapidly (Table 6). From a mere 70,000 tonnes in 1950-51, consumption of fertilisers rose to 12.5 million tonnes in 1990-91 and to be 28.1 million tonnes in 2010-11. The consumption of fertiliser has been erratic in recent years because of high variability of monsoon conditions.

The Government has been promoting the consumption of fertilisers through heavy subsidies. In the recent years, special measures were taken to streamline distribution of available supplies through better transport, regulated supplies to priority crops and areas specified by the State Governments, ensuring adequate supplies of wagons through high level co-ordination with the railways, provision of short-term credit to states for the purchase and distribution of fertilisers, promotion of balanced use of fertilisers (through a fertiliser promotion scheme), setting up of soil testing laboratories in various parts of the country for proper soil testing, and so on. In spite of rapid increase in the consumption of fertilisers in the country in recent years, India's position is much behind other progressive countries. The following conclusions emerge from the fertilizer consumption pattern, over the last three decades:

(i) Consumption of fertilizers in India per hectare in 1950-51 was negligible but increased to 144.1 kgs in 2010-11. The corresponding figures for some developed countries were : South Korea (400 kgs), Netherlands (275 kgs), Belgium (225 kgs), Japan (340 kgs).

(ii) Absence of assured supply of water which is a primary condition for the application of chemical fertilizers is lacking over large parts of the country and this acts as a hindrance to their more rapid consumption in India.

(iii) Since the rainfed areas which constitute 70 per cent of the cultivated areas consume only 20 per cent of the total fertilisers, the Government has been taking steps in recent years to increase the consumption of fertilisers in these areas. For instance, the Government has sanctioned a National Project and Development of Fertiliser Use in Low Consumption Rainfed areas in 60 identified districts in 16 states. The programme includes field block demonstrations, farmers' training programmes, opening additional soil testing laboratories and additional retail outlets.

(iv) Rabi crops (food and non-food) which contribute to 1/3rd of agricultural production, account for 2/3rd of fertilizer consumption. This is largely due to more assured availability of irrigation of subsoil moisture for rabi crops.

(v) There has been a steep rise in fertiliser subsidies from ₹ 600 crores in 1979-80 to ₹ 4,400 crores in 1990-91 and to ₹ 67,199 crores during 2011-12 (RE). Fertilizer subsidy is a huge drain on Government financial resources and most of the time, the bulk of these subsidies goes to the more affluent farmers.

(vi) The use of plant nutrients received scant attention in the past. The sharp increase in international fertilizer prices has compelled the government to divert attention to greater use of organic manures.

The fertiliser strategy since the Ninth Plan is oriented towards increasing use of organic manure, both farmyard manure and urban and rural compost. On a rough estimate, over one-third of cow dung is not collected and one-third is used as fuel by the villagers; and the amount actually collected and used is about 340 million tonnes. At present, cattle urine which has valuable manurial properties is completely wasted. If cattle urine can be mixed with cow dung, the available manure will be about 400 million tonnes. The provision of alternative fuels to the rural population will help to increase the availability of farmyard manure. Besides, the increasing use of gobar gas plants will help in making organic manures available to the cultivator.

There is great scope for the manufacture of compost from urban waste, from forest litter and other waste materials and also for the use of green manures. All these will help in reducing our dependence on chemical fertilisers. In fact, there is growing awareness among farmers of the importance of organic farming.

Production of Fertilisers. Fertiliser industry made rapid progress during the past decade. The production of fertilisers rose from a mere 39,000 tonnes in 1951-52 to over 8 million tonnes in 1990-91 and is expected to touch 16.4 million tonnes in 2010-11. There has been considerable increase in the domestic production of fertilisers over the years but not enough to keep pace with the growth in consumption. (Table 6). There were many reasons for this:

For one thing, there has always been much delay in the setting up of fertiliser plants in India. It takes about 8 to 9 years to complete a project from the time of issue of the letter of intent, causing unnecessary increase in the cost of the project. Secondly, there is the problem of capital for the fertiliser programme. It is estimated that between ₹ 5,000 crores and ₹ 10,000 crores would be required of which about 25 to 30 per cent of the total outlay would be foreign exchange component. Thirdly, the Government of India was never clear about the role of the private sector in the fertilizer industry. There was, therefore, considerable hesitation and delay in the issue of licences to private parties to set up fertiliser plants.

Recognising the need for increased foreign investment, the Government of India granted certain concessions to attract foreign capital for the fertiliser industry, such as majority equity participation, distribution rights, etc. But the foreign response to these offers was very poor, mainly because (a) profitability of exports of fertilisers to India was very high and (b) there was uncertainty with respect to the nature and availability of raw materials.

Imports of Fertilisers. As internal production has been short of continuously increasing demand, the government had to depend upon imports. From 52,000 tonnes in 1951-52, total imports had risen to 2.8 million tonnes in 1990-91 and would be 12.4 million tonnes in 2010-11 (See Table 6). Large imports of fertilizers through the use of scarce foreign exchange and heavy subsidies was the result of the absence of a clear-cut and vigorous policy of setting up fertiliser units within the country. In the international market, fertilizer was becoming scarce and its price was shooting up particularly after the middle of 1973 in the wake of the oil crisis. Heavy pressure of demand, the high cost of feed-stock of fertiliser factories, high rates of ocean freight--all these have reduced the international supplies of fertilisers to India and at the same time have raised their price.

Rationalization of Fertilizer Prices and Fertilizer Subsidies

Scientists recommend that nitrogenous, phosphatic and potassium (NPK) should be used in the ratio of 4 : 2 : 1. To begin with even in 1990-91 NPK were used in the ratio of 6 : 2.4 : 1. After liberalisation with a change in the prices of fertilizers NPK ratio rose to 9.7 : 2.9 : 1. Unbalanced use was even greater in some agricultural states. This led to serious degradation of soil. The need of the hour is correct unbalanced use of fertilizers by appropriate policies, more especially focussed on the need to reduce excessive use of nitrogenous fertilizers.

To encourage balanced fertilizer use and to make fertilizers available to farmers at affordable prices, the Central Government determines and notifies the selling prices of urea and other fertilizers. As these prices are always less than the cost of production, the Central Government makes good the loss to the producers of fertilizers in the form of subsidy. The purpose of the fertilizer subsidy is thus two-fold: the producers cover their cost of production and the consumers (i.e. the farmers) get fertilizers at affordable prices.

There has always been considerable controversy on the question of fertilizer subsidy and its growing burden on the Central Government. As already mentioned the fertilizer subsidy rose from ₹ 4,400 crores in 1990-91 and is expected to be ₹ 67,199 crores in 2011-12 (RE). A basic criticism is that the benefit of subsidy goes to more affluent and rich farmers and not to small and marginal farmers who use almost no fertilizers. The fertilizer factories have always questioned the method of the Government calculation of selling prices of fertilizers and delayed disbursal of subsidies. The fertilizer industry - a basic industry - has suffered heavily and has remained stagnant for a long period.

Since April 2003, the Government of India has adopted a new rational pricing policy to benefit both producers and consumers of fertilizers. The Government has also formulated a new policy for the setting up of new fertilizer units and for the expansion of capacity of the existing units. This new policy is meant to encourage private investment in urea plants and for the conversion of existing non-gas urea plants into NG (natural gas) or LNG (liquefied natural gas) urea plants which are clean, efficient and cost effective. The long term objective is to reduce and ultimately abolish fertilizer subsidy.

6. IMPROVED SEEDS

In the past, Indian farmers generally used seeds of very indifferent quality either because the special good quality seeds kept for sowing were consumed away during the off-season or because good seeds deteriorated through bad storage. Agriculture Department, and the Indian Council of Agricultural Research have done much to evolve and popularise improved and disease-resisting varieties of seeds suitable for different local conditions.

Seed is "basic and crucial input for attaining sustained growth in agricultural production." Seed is the carrier of new technology to crop production, propagation and multiplication. Accordingly, production of quality seeds and distribution of new improved plant varieties constitute an important component of Government's agricultural policy. In fact, it is the success of this policy initiative which is the main reason for India's current self-sufficiency in foodgrains.

A number of high yielding varieties of rice and wheat, hybrids of maize, jowar and bajra, have been introduced. The High Yielding Varieties Programme (HYVP) was started in 1966. By 1997-98 a total of 76 million hectares of land were covered by high yielding varieties. While coverage of area under HYV is as high as 90 per cent in the case of wheat, the coverage under rice is much lower—i.e. around 75 per cent of the total area. In the case of coarse grains, the coverage is only around 55 per cent.

The organised seed sector particularly for food crops and cereals is dominated by the public sector. The Government is giving considerable attention to (*a*) research in evolving better seeds suitable to Indian conditions, (*b*) larger production and better distribution of quality seeds, (*c*) provision of adequate credit facilities to enable even the poorest farmers to purchase and use quality seeds, and (d) expansion of irrigation, fertilisers and pesticides which are necessary for the efficient use of quality seeds.

With the introduction of high-yielding varieties programme, the need for stepping up the production of better seeds has increased considerably. The Government set up the National Seeds Corporation (NSC) in 1963 and the State Farms Corporation of India (SFCI) in 1969, to produce and supply quality seeds. There are also private producers who multiply foundation seeds and certify quality seeds under the prescribed quality control arrangements.

There are three stages in the seed production cycle, viz., production of breeder seeds, the production of foundation seeds and the production and availability of quality seeds to the actual farmer-users.

Table 7: Production of breader and foundation seeds and distribution of certified seed

Year	*Production of breader seeds (quintals)*	*Production of foundation seeds (lakh quintals)*	*Distribution of certified/ quality seeds (lakh quintals)*
2004-05	66,460	6.9	113.10
2005-06	68,654	7.4	126.74
2006-07	73,829	7.96	155.01
2007-08	91,960	8.22	179.05
2008-09	74,361	9.69	215.81
2009-10	1,05,000	10,500	2,57,110
2010-11	1,19,210	17,530	2,77,300

Source : Economic Survey, 2011-12

Original Source : Department of Agriculture & Cooperation.

Breeder seed is the primary stage of the seed production cycle. It is further multiplied into foundation and certified seeds. The production of breeder seed is organised by the Indian Council of Agricultural Research (ICAR). The National Seeds Corporation, the State Farms Corporation of India as well as the agricultural universities and research institutes are also producing breeder seeds.Breeder seed production is anticipated to be 1,19,210 quintals during 2010-11.

While there has been adequate supply of breeder seeds of cereals, fodder and fibre crops, there has been shortage of breeder seeds of oil-seeds, particularly groundnut, and of pulses. Efforts are, therefore, being made to ensure adequate availability of breeder seeds of oilseeds and pulses.

Foundation seed is the secondary stage of seed production cycle. The National Seeds Corporation, the State Farms Corporation of India and State Seeds Corporations have been given the responsibility for the production of foundation seed. To ensure adequate

availability of foundation seed, the Government of India is now allocating breeder seeds to private seed producers, for rapid multiplication of the breeder seeds to foundation seed. The NSC and SFCI produce foundation seed to meet the requirements of national varieties, while State Seeds Corporations produce foundation seeds to meet local requirements. The foundation seed production of cereals, pulses, oilseeds, fodder and fibre crops was of the order of 92,000 quintals in 1979-80 and is targeted to 17.5 lakhs quintals in 2010-11.

Finally, *certified/quality seeds* are produced and distributed for all farmers and in all regions. In fact, stupendous growth in the production and availability of seeds is the main indicator of the achievement in the seeds sector. The distribution of certified/quality seeds has witnessed a phenomenal increase from 1.4 million quintals in 1979-80 to nearly 277.3 lakh quintals in 2010-11.

Protection of Plant Varieties

The Parliament has passed the Protection of Plant Varieties and Farmers Rights Legislation. The objective of this legislation is to protect effectively plant varieties and farmers' rights and also promote research in the development of new plant varieties. The Act recognises the role of farmers as cultivators and conservers and the contribution of traditional rural and tribal communities to India's agro-bio diversity. The Act rewards the farmers for their contribution through benefit sharing and protecting the traditional rights of the farmers. There is also a provision in the Act to set up a Protection of Plant Varieties and Farmers Rights Authority to perform all functions related to the protection of plant varieties.

The Seeds Bill, 2004

The government formulated the Seeds Bill, 2004. The salient features of the Bill are:

(*i*) Compulsory registration of varieties based on agronomic performance data;

(*ii*) accreditation of organizations for certification; such as Indian Council of Agricultural Research (ICAR), State Agricultural Universities, Private Organisations to be authorized for certification;

(*iii*) regulation of import and export of seeds;

(*iv*) exemptions for farmers to save, use, exchange, share or sell their seed without registration; and

(*v*) enhance of penalty for major and minor infringement.

The bill was severely criticized and the most important point brought against the bill was that it makes registration of all kinds and varieties of seeds and thus take away many of the rights of the farmers. Dr. G S Bhalla, making a scathing criticism of Bill mentions: "The bill is a direct violation of the farmer's fundamentals right to produce, use, save, sell or exchange their own seeds and thereby, it takes away the proposed rights given under the Plant Varieties and Farmers' Rights Protection Act (2003). It also infringes upon farmers' precious inheritance as breeders and conservers of several kinds of seed verities... It can give a free hand to industry and multinationals to ravage India's bio-diversity and indulge in bio-piracy."[3]

In view of the strong resistance against the Bill, though the Bill was introduced in Parliament in December 2004, it was referred to a Parliamentary Committee and thus has remained pending.

Setting up of a Seeds Bank

The Government of India has set up a Seeds Bank in 1999-2000 to make available seeds for meeting any contingent requirement and also develop infrastructure for production and distribution of seeds. The Seeds Bank is being implemented through National Seeds Cooperation, State Farms Corporation of India and State Seeds Corporations of various States. During 2001-02, the Seeds Bank had fixed a physical target of maintaining over 1,33,200 quintals of certified seeds, 9,000 quintals of foundation seeds of various major crops, besides 11,000 quintals of certified seeds for the North-Eastern States.

7. SOIL CONSERVATION AND RECLAMATION

Although positive data are lacking, available tests show clearly that Indian soils have reached the lowest stage of deterioration. While heavy crops are grown year after year, very little is returned to the soil by way of manures. Apart from soil exhaustion and deterioration, there is also the problem of soil erosion. Soil erosion takes place when the surface soil is washed away through excessive rains and floods. Soil erosion occurs because of cutting of trees, removal of vegetation which exposes land to wind and rain, uncontrolled grazing and cultivation on hill slopes.

Out of the total geographical area of 329 million hectares, about 174 million hectares (53%) face degradation problems arising from water and wind erosion like water logging, salinity, alkalinity, ravines, etc. The incidence of drought and flood is increasing. In U.P. alone as many as 8 million acres have been lost through soil erosion. Other States to suffer heavily through soil erosion are West Bengal, Punjab, Maharashtra and Madhya Pradesh. Deserts of Rajasthan covering over 20 million hectares are posing a serious problem as they are

3. Bhalla G.S, (2007), *Indian Agriculture since Independence*, p. 107.

creating conditions of soil erosion in nearby areas. It has been estimated that nearly one-fourth of the land area in the country--i.e., 80 million hectares--is suffering from soil erosion. Indian soils also suffer from the problem of salt effervescence and water-logging.

The remedies to soil erosion are : prevention of forests and afforestation, contour bunding, regulation of land use, etc. The Union Government set up the Central Soil Conservation Board in 1952 and similar boards were set up for each State. Nearly 40 million hectares of land have been brought under soil conservation measures till 1997-98. The programme consists of contour bunding, bench terracing, land levelling and shaping as well as improved agronomical practices on agricultural lands. Soil and water conservation programmes constitute an important activity to protect the soil resources of the country, check soil erosion and land degradation and reclaim degraded and problem lands.

8. LIVESTOCK AND DAIRY DEVELOPMENT

Importance of Livestock in India

Livestock is an important source of income for a nation. In fact, pastoral production is far more resilient than crop production, and more remunerative too. The share of livestock production in the aggregate agricultural output in some of the West European countries is about 60 to 80 per cent. In India, however, the gross value of output from livestock sector i.e. animal husbandry and dairy development is placed at around 6..5 to 7 per cent of India's GDP at current prices.

The value of output of livestock was estimated at ₹ 1,73,350 crores during 2004-05 at current prices which is about 36 per cent of the total value of output of agriculture and allied sectors. The contribution of milk alone (valued at ₹ 1,15,970 crores in 2004-05) was higher than paddy (Rs, 70,462 crores), wheat (₹ 48,050 crores) and sugarcane (₹ 23,167 crores).

Apart from milk production estimated at 97 million tonnes in 2005-06, the livestock sector contributed 46 billion eggs, 52 million kgs of wool, 5 million tonnes of meat, 6.5 million tonnes of fish. Besides these goods, proper economic valuation of dung (as fertiliser and domestic fuel) and cattle as source of energy for cultivation and transport of men and materials in rural areas has not been done in our country. If all this was done, the contribution of livestock to GDP was 7.2 per cent estimated in 2005-06.

The significance of livestock sector in the Indian economy arises also because of its assistance to tackle the serious problems of unemployment and under-employment for weaker sections in the country and for providing subsidiary occupation for income generation. It also plays a dominant role in dry-land agriculture particularly in the semi-arid and arid areas of the country. Animal husbandry and dairy development are being used as a poverty-eradication measure, i.e., to provide additional employment and increase family income of the rural poor.

Livestock provides regular employment to about 11 million in principal status and 9 million in subsidiary status. It is equally interesting to note that women constitute 69 per cent of the labour force in livestock sector as against 35 per cent in crop farming.

Finally, export earnings from livestock related products were ₹ 8,200 crores in 2002-03.

Thus, the livestock sector plays an important role in India's economy and in the socio-economic development of the country.

It is a well-known fact that India has the largest number of livestock in the world. Table 8 shows the livestock position in India according to the different livestock censuses (taken once in five years).

TABLE 8. Livestock Resources in India

(in millions)

	1958	*2003*	*2011*
1. Cattle	155	185	199
2. Buffaloes	43	98	105
3. Sheep	39	61	72
4. Goats	47	124	141
5. Others*	9	17	13
Total	293	485	530

SOURCE : *Annual Report 2011-12*.

Department of Animal husbandry, Dairing and Fisheries, Ministry of Agriculture

* Under "others" we include horses and ponies, pigs, mules and donkeys, camels, dogs, etc.

** Provisional

India is at the top of the world having 17 per cent of the total livestock population — less than one-fifth of cattle, half of buffaloes, and over one-fifth of goats and sheep. China comes second with only 10 per cent. Countries which have well developed livestock based industries like Australia, Belgium, Denmark, Finland, Ireland, Italy, Norway, the Netherlands, Sweden, Switzerland, etc., have only small herds, that is, less than 1 per cent of the total.

Livestock requires sufficient land area for their sustenance, particularly grazing land, consisting of per-

manent meadows and pastures. India has the lowest per unit amount of grazing land; even densely populated countries of Europe have much higher amount of grazing land per unit of livestock. India has too many units of livestock depending upon too small a patch of land.

The poor yield of Indian cows is proverbial. It is estimated that the average yield of cows in India is 220 litres per year, as compared to 3,000 to 5,000 litres per year in Western countries. As regards meat, about three-fourths of the meat produced in India is from goats and sheep. Beef accounted for only 6 per cent. Thus though cattle accounted for the largest proportion of livestock in India, their contribution to the national income of India was insignificant.

The contribution of livestock to income from agriculture has been more than 50 per cent in all the advanced countries of the world. This is exceptionally high in some countries (75 to 85 per cent)—such as Denmark, Sweden, Norway, etc.—for they enjoy exceptional environmental advantages for rearing quality livestock.

It has been observed that in advanced countries like the United States of America, West Germany, England, etc., the share of livestock in the gross agricultural income has remained steady since the 1930s and at very high levels. On the other hand, in India, the share of livestock in the gross agricultural income has also remained steady but in very low levels. The important conclusion from this fact is that with economic development, the share of agricultural income in the total income of the country declines but the share of livestock income in the gross agricultural income increases. A very interesting illustration may be given from Italy.

The reasons for the poor contribution of livestock enterprise to national income in India are not far to seek. The hopeless condition in Indian livestock position illustrates in a striking fashion what long years of utter indifference and positive cruelty in the name of religion can do to livestock. The reasons for the poor condition of livestock in the country are not economic but religious and social. In India, the large cattle population contains a sizeable proportion of aged animals, both male and female, which are capable neither of work nor of yielding milk. These animals are clearly a drain on available resources and a drag on the farm economy.

It may be pointed out here that our fodder resources are sufficient only for about 60 per cent of our livestock strength. There is, therefore, considerable malnutrition to which our animals are subjected. At the same time, death rate among cattle population has been declining due to better veterinary aid. The result is that cattle population has been increasing almost as fast as human population and today *there is surplus livestock in India*. About 100 million animals are said to be surplus and are costing the country at least ₹ 30,000 crores a year to maintain them (at the rate of ₹ 8 per animal per day). If the meat, hides, horns, etc. of these animals are used, they would bring in about ₹ 40,000 crores (at the rate of ₹ 4,000 per animal), much of it in the form of foreign exchange. These operations would also create additional jobs such as packers, tanners, etc. But unfortunately religion and superstition are standing in the way of the country adopting a rational and humane policy of reducing surplus and useless cattle.

Five Year Plans and Animal Husbandry

The development programmes of animal husbandry under the five year plans have a threefold objective—to increase the supply of milk and milk products, to provide draught animals for farm operations and to raise the output of such products as wool and hides which have commercial importance. The Plans have proposed to increase production of livestock products by improved methods of animal husbandry supported by a co-operative marketing structure. Planned cross-breeding for improving the productivity of cows and draught power of bullocks, improving the buffalo stock and promotion of poultry in rural areas, selective breeding and cross-breeding of sheep, goats and pigs, the production of high yielding varieties of fodder—these are some of the policies which are vigorously implemented.

Under the impact of development plans, milk production has risen to 97 million tonnes in 2005-06 and is rising continuously due to the implementation of "Operation Flood Project", the world's largest integrated dairy development programme started in 1970 (milk production was put at 17 million tonnes in 1950-51 and 54 million tonnes in 1990-91). This programme has organised about 69,000 dairy co-operative societies involving 9 million farmers. It links rural milk producers with urban consumers and eliminates the middlemen and their commission. Per capita availability of milk has increased from 124 grams per day in 1950-51 to 302 grams per day in 2005-06.

In recent years, the poultry sector is becoming a vital component of India's farm economy as it provides additional income (₹15,000 crores) and job opportunities to the weaker sections of rural society (3 million people). The main thrust has been on increasing production of eggs and poultry meat through increased availability of quality chicks and support facilities such as storage, marketing, balanced feed, health care, etc. Egg production in India has increased 26-fold from an esti-

mated 1.8 billion in 1950-51 to over 46 billion in 2006-07. Chicken meat is now estimated at 2 million tonnes per year.

Future Prospects

What then is the future of cattle wealth in the country? The future is indeed bleak, because of religious prejudices of the vast majority of people in the country. But the past experience of developed countries can serve as a guide for India. In other developed countries, industrialisation has meant increase in national and per capita income. With increase in income, people change their consumption habits. They shift from cereal-based food to a diversified and protein reinforced diet. This will necessitate a readjustment of agricultural and pastoral production in such a way that the latter is given greater importance. The developments in animal husbandry will help the livestock enterprise to catch up with the increasing demand and consumption and consumer preferences. These developments can be expected in India in the future but the only snag is still prevailing religious prejudice against the killing of cattle, even the most useless.

9. MECHANISATION OF AGRICULTURE

The tools and implements used by the Indian farmers are primitive, crude and antiquated, as compared to the most up-to-date farm machinery used by the farmers of the West. As a result of progressive mechanisation of agriculture, these countries have been able to experience an agricultural revolution comparable to industrial revolution of 18th and 19th centuries. Mechanisation of agriculture has resulted in increased agricultural production and reduction of costs. Besides, agricultural machinery has been useful in reclaiming barren lands. Thus, the prosperity and richness of peasantry in the Western countries has been due, largely, to the extensive use of farm machinery. Naturally there is now a common belief that progressive agriculture is impossible without mechanisation of agriculture.

Mr. Anwar Alam has provided a very comprehensive definition of agricultural mechanisation. He states: "Agricultural mechanisation is required to provide engineering inputs to agriculture, agro-processing and rural living for increased production and productivity with reduced cost of production; provide technology for efficient handling, transport and storage of agricultural produce, processed products and by-products; apply technology and management practices for value-added agro-processing industries that generate additional income and employment, assuring better quality of life to rural people, a life that is nutritionally healthy and hygiene-wise secured and free from arduous labour and drudgery."[4]

From the definition, the scope and purpose of agricultural mechanisation can be analysed:

1. By use of better tools, equipment and machinery, it is possible to increase agricultural production.

2. Agricultural mechanisation helps efficient handling, transport and storage of agricultural produce (post harvest technology) so as to reduce wastage and bring greater revenue to the producer.

3. Agricultural mechanisation helps in processing agricultural produce near the places of production, thus adding value to agricultural output.

4. Agricultural mechanisation reduces the physical labour and drudgery attached with various agricultural operations.

5. The basic purpose of mechanisation is to raise agricultural productivity, increase profitability in agri-

4. Anwar Alam, Farm Mechanisation – Keeping Pace with Change, *The Hindu, Survey of Indian Agriculture 1999*, p. 189.

TABLE 9 : Progress of farm mechanisation in India

Items	1950-51	1960-61	1990-91	2001-02
1. Gross cropped area (million hectares)	132	153	186	186
2. Tractors (lakhs)	0.1	0.3	2.3	26.4
3. Oil engines (lakhs)	0.7	2.3	46.6	59.4
4. Electrical Irrigation pumpsets (lakhs)	0.2	2.0	89.1	125.1
5. Consumption of power (Kwh) for agriculture per thousand hectares of gross cropped area	1.5	5.5	759*	1231

SOURCE : CMIE, *Basic Statistics Relating to the Indian Economy*, Vol. 1, All India, August 1994.
Industry in Singh, Gajendra, Agriculture Machinery Industrial India 2005 Singh, Gajendra, Scope, Propers and contraints of Farm Mechanisation in India, 2005.

culture and thus improve the quality of life of the farming population.

Case for Mechanisation of Agriculture

The case for mechanisation of agriculture is based primarily on advantages of production made possible by machinery. Man by himself can produce only very little but with the help of machinery he can produce much more. What a farmer with a pair of bullocks can plough in 10 days, a tractor can do in one day, and far deeper too. Secondly, farm machinery has relieved man of much of the heavy work. For instance, land reclamation, digging and carrying of earth, ploughing, etc. are all heavy jobs. Farm machinery helps to perform these tasks easily. Thirdly, farm machinery has led to large scale production. Huge plots of land can be ploughed; large crops can be harvested; huge amounts of produce can be taken to the market; all these can be done by machinery without any loss of time. Output per acre as well as per man can be increased. The cost of production is reduced.

In Western countries, particularly the U.S.A., Canada and Australia where extensive mechanisation of agriculture has taken place, agricultural productivity has been raised manifold. In the U.S.A., for instance only 2 per cent of the population depended on agriculture in 1992. But agricultural production has been increased so much that the American farmers are able to send their surplus farm produce to other countries of the world. As India's present problem is to raise production, there is a good case for mechanisation of agriculture.

From the point of view of immediate applicability too, there is considerable scope for mechanisation. For instance, tractors are very useful for extensive jungle and soil conservation operations, etc. Besides tractors, there is good scope for pumping sets and electrically operated tubewells. Electric motors and diesel engines can be very usefully adopted for other agricultural operations such as cane crushing, oilseeds crushing etc. as well as for minor irrigation.

Case against Mechanisation

While the case for mechanisation of agriculture has some validity in the context of the need to raise agricultural production as fast as possible within the shortest possible time, the case against mechanisation is very much stronger. In the first instance, mechanisation has no scope in India because of the extremely small size of holding--between 3 and 12 acres. Even these small holdings are scattered over the village in tiny bits. The existence of a large farm is an essential condition for mechanisation. For proper and best utilisation of agricultural machines, holdings will have to be large and should be in compact blocks and not scattered in tiny plots as is the case in India. In U.S.A., the average size of a holding is about 60 hectares, in Canada it is 90 hectares and in U.S.S.R. it is 600 hectares. Mechanisation is possible in these countries but not in India. But this argument ignores the fact that machines suitable for small farms have been developed and successfully used in Japan.

Secondly, mechanisation of agriculture will result in too many agricultural workers becoming surplus. According to one estimate if complete machanisation is introduced, it is possible to cultivate the existing area of land in India with only 3 to 4 million persons. Millions of farmers will be thrown out of agriculture and will have to be provided alternative source of employment. It is impossible to absorb such a large number in non-agricultural occupations. This is the most serious objection to mechanised farming.

Thirdly, the adoption of mechanised farming will render the existing cattle population surplus and unnecessary. To cut down the existing cattle population will also be a difficult problem. However, reduction of our cattle population is necessary since feeding them is itself a huge burden. In many parts of the country, there is a serious competition among men and cattle for subsistence from land.

Finally, mechanisation may increase productivity of labour, since primarily it comes to help as well as displace labour. But it may not increase productivity of land. In India the crucial problem is to increase the productivity of land--land being a scarce resource of the country. This is more important than the problem of raising productivity of labour.

Selective Mechanisation–The Correct Approach

It is true that full-scale mechanisation is not desirable for India, as is being adopted in other countries. All the same, it is wrong to argue that there is absolutely no scope for mechanisation in a labour-surplus developing country like ours. Machines suitable for small farms can be introduced. Besides, agricultural machines may be necessary--or even inevitable--in reclamation of land, conservation of forest land or cultivation, ploughing of barren land, construction of wells in rocky areas, etc.

In view of the fact that the size of holdings is small but the size of the farming population in India

is very large, it would be a grave mistake to push forth a policy of indiscriminate mechanisation of agriculture. In India, land is scarce, but labour is an abundant factor. It is, therefore, necessary to pursue a policy of limited mechanisation so that the labour displacement effects are minimized.

Recognising the need for such a pragmatic approach, the Draft Fifth Plan stated : "The present availability in terms of power is estimated at 0.4 H.P. per hectare (of which machine power is only one-fourth) in the country. This is extremely inadequate and will need stepping up. There is also the allied consideration that the new agricultural technology requires faster farm operations as well as accuracy and timeliness in undertaking them. Finally, there is the emerging problem of increasing cost of purchasing bullocks and their recurring maintenance. While all these factors underline the need for farm mechanisation, the rate and form of mechanisation will have to be determined keeping in view other relevant factors such as size of holdings as well as the impact of mechanisation on agricultural labour employment situation."[5]

Experience of Mechanisation – Myths Exploded

1. The most important argument against mechanisation is the displacement of labour with the introduction of tractors, harvester combines etc. It may be noted that India has emerged as a leading tractor producing country producing more than 2.5 lakh tractors and 10,000 power tillers, 2.5 lakh seed drills, 4 lakh power threshers, 4.5 lakh sprayers and dusters, 7 lakh pump sets, besides a large variety of other implements, annually. Consequently, in states like Punjab and Haryana where mechanisation has been introduced, productivity gains in agriculture have led to increase in the income of farmers, a rise in the wages of farm labour and enlargement of employment. Punjab – a highly mechanized state, employs 7 lakh labourers from adjoining states, out of which 3.5 lakhs are employed on a regular basis and the remaining during the main cropping seasons. The same is true of Haryana.

2. The argument of unsuitability of big machines – 40-60 H. P tractors for small and medium farmers – is losing force. An analysis of operational holdings in Punjab and Haryana reveals that 20 per cent of medium holdings (2 to 10 hectares) account for 50 per cent of the total area and 1.7 per cent of large farms (above 10 hectares) account for 17 per cent of total cultivated area. In other words, area available for mechanisation is about 67 per cent of total area. Tractors and other equipment of suitable capacity can be used for the purpose.

3. For small farmers, hiring of agricultural equipment like small tractors, seed-cum-fertiliser drills, reapers, threshers and harvesting combines has been becoming increasingly popular. Those who cannot afford to buy costly equipment, hire it to raise their productivity.

4. Micro-irrigation systems and agro-industries have helped farmers to increase their productivity by assuring supply of water and add value to their output. This has also helped in raising crop intensity as also to encourage multiple cropping.

As a consequence of the changes in the attitudes of the farming population, the resistance to agricultural mechanisation has been considerably reduced.

Progress of Mechanisation in India

Various Government programmes pertaining to improvement of agricultural implements and machinery have been promoting farm mechanisation and the use of improved agricultural implements in the country.

As a consequence of all these efforts, the share of animal power has declined from 45.3 per cent in 1971-72 to 9.5 per cent in 2001-02. This indicates substitution of machine power in place of animal power. Tractors and power tillers have become the main sources for motive power for tillage, threshing and transport. As against 7.8 per cent, machine power now contributes 44.0 per cent of total farm power requirements. The process of mechanisation is bound to rise rapidly over time.

Table 10 : Consumption of Electricity for Agricultural Purposes

Year	*% Share of Agricultural Consumption to Total Consumption*
1990-91	26.44
1991-92	28.2
1992-93	28.7
1993-94	29.63
1994-95	30.54
1995-96	30.95
1996-97	29.98
1997-98	30.75
1998-99	31.38
1999-00	29.07
2000-01	26.76
2001-02	25.33
2002-03	24.88
2003-04	24.13
2004-05	22.93
2005-06	21.92
2006-07	21.73
2007-08	20.75
2008-09	20.43

Source : Central Electricity Authority, New Delhi.

5. Planning Commission, *Draft Fifth Five Year Plan*, 1974-79--Pt. II. p. 14.

Table 11: Percentage share of different farm power sources in Indian agriculture

Year	*Agricultural Workers*	*Draught Animal*	*Tractors*	*Power Tillers*	*Diesel Engines*	*Electric Motors*	*Power KW/ha*
1971-72	10.64	52.86	8.45	0.11	17.16	10.79	0.424
1981-82	9.20	33.55	18.46	0.11	22.85	15.82	0.592
1991-92	7.22	20.50	26.14	0.16	21.14	24.84	0.907
2001-02	5.70	11.76	36.77	0.36	19.10	26.31	1.352
2005-06	5.39	9.97	38.45	0.44	20.09	25.66	1.498
2009-10	5.12	8.55	41.67	0.52	19.01	25.13	1.658

Source : *Ministry of Agriculture, Govt. of India;* State of Indian Agriculture 2011.

Table 10 shows that since the year 1997-98 use of electrcity for agricultural purpose has been declining as percent of total cousmption of electricity. This indicates low priority of the government towards advancement in agriculture. This trend needs to the reversed to econcourage use of agricultural machinery.

Table 11 shows the increasing importance of mechanisation in Indian agriculture in the last about 4 decades, as indicated by changing relative shares of different types of power sources in Indian agriculture. The share of animal power has declined from 52.86 percent in 1971-72 to only 8.55 percent by the year 2009-10. Similarly the share of agricultural workers has also declined from 10.64 percent to hardly 5.12 percent. Declining share of animal power has be compensated by tractors power and also by electric motors.

During the Ninth Plan period (1997-2002), a total of 12 lakh tractors were sold at an annual average of about 2.4 lakhs per year. In 2010-11, total number of tractors sold was 5.45 lakhs. Uttar Pradesh leads in the purchase of about 25 per cent of the total tractor sales in India, followed by Madhya Pradesh, Punjab, Rajasthan and Haryana. These five states account for nearly 62 per cent of the total sale of tractors.

So far as power tillers are concerned, the total sale during the Ninth Plan period (1997-02) was about 75,000 at an annual average of 15,000. In 2010-11, total number of power tillers sold was 55 thousand. West Bengal leads with nearly 30 per cent of the total sales in India followed by Tamil Nadu, Assam, Karnataka, Kerala and Orissa. These six states account for 72 per cent of the total sale of power tillers in the country.

However, it may be noted that the sale of tractors and power tillers, though indicative of the progress of mechanisation in agriculture, does not indicate by itself an increase in agricultural productivity in various states in India. Uttar Praesh and Madhya Pradesh are at the top in the share of sales in tractors as compared with Punjab and Haryana who have shown much better progress in yield per acre. Similarly, West Bengal, Tamil Nadu, Assam and Karnataka are at the top in the use of power tillers, but not so in yield per hectare. Despite progressive increase in the use of agricultural machines, its sustainable benefits towards agricultural development have not been uniform in all states. In fact, these benefits have been mostly cornered by northern states and by some others where irrigation facilities have been developed.

Generally, the big farmers are using tractors and power tillers which require large size farms. In order that these are used by a very large number of small farms, the Tenth Plan advocated : "Implements and machinery used in countries like Japan which are specially suited to small farms will be adapted for India."[6]

6. Planning Commission, *Tenth Five Year Plan (2002-07)*, Vol. II, p. 365.

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CHAPTER 32

LAND REFORMS

Verify, the land belongs to him who labours on it.

— Mahatama Gandhi

"On this anniversary of our Republic we must resolve to complete the unfinished task of land reforms that we have embarked upon years ago and empower the landless poor and small farmers who have not got any benefits from the Green Revolution. Much of the poverty and unrest in rural India — the class conflicts and the economic violence — can be traced to gross injustice in the distribution of land and some kind of counter-revolution that is taking place holding up the implementation of land reforms and snatching away of whatever benefits progressive legislations had bestowed upon the poor."

— K.R. Narayanan, President of India, Presidential Speech broadcast on 25th January 1998.

1. THE NEED AND SCOPE FOR LAND REFORMS IN A DEVELOPING ECONOMY

Productivity in agriculture is mainly dependent on two sets of factors--technological and institutional. Among the technological factors are the use of agricultural inputs and methods such as improved seeds, fertilisers, improved ploughs, tractors, harvesters, irrigation, etc., which help to raise productivity, even if no land reforms are introduced. The institutional reforms include the redistribution of land ownership in favour of the cultivating classes so as to provide them a sense of participation in rural life, improving the size of farms, providing security of tenure, regulation of rents, etc. In other words, the institutional factors, such as the existence of feudal relations, small size of farms, sub-division and fragmentation, insecurity of tenancy rights, high rents, etc., act as disincentives to the peasantry to raise production. They weaken the capacity of the farmers to save and invest in agriculture as also to enjoy the fruits of their labour. Consequently, two schools of thought emerged. The Socialists believe that the existence of feudal or semi-feudal relations was the real cause of backwardness and poverty in rural communities. The emancipation of the peasanty from the bondages of institutional depressors will unleash forces which shall automatically raise levels of production in agriculture. The other school of thought believes that agricultural productivity is purely a technological phenomenon and that it can be raised by the application of superior agricultural methods. Thus, whereas the key to higher productivity lies in technological change according to one school, it lies in institutional reforms according to the other. Quite recently, both the schools of thought are con-verging and opinion has come to centre round the idea that land reforms and technological changes are not mutually exclusive factors but are complementary in the process of agricultural development. It is held that technological change can work more effectively in a congenial agrarian structure and in this way the process of development can be accelerated.

The purpose of land reforms is, therefore, twofold. On the one hand, it aims to make more rational use of the scarce land-resource by affecting condition of holdings, imposing ceilings and floors on holdings so that cultivation can be done in the most economical manner, i.e., without any waste of labour and capital; on the other, it is a means of redistributing agricultural land in favour of the less privileged classes, and of improving the terms and conditions on which land is held for cultivation by the actual tillers, with a view to ending exploitation.

The Indian National Congress in 1935 in a Resolution on land reforms stated unequivocally: "There is only one fundamental method of improving village life . . . namely, the introduction of a system of peasant proprietorship under which the tiller of the soil is himself the owner of it and pays revenues direct to the government without the intervention of any zamindar or taluqdar."

Scope of Land Reforms

Land reforms aim at redistributing ownership holding from the viewpoint of social justice, and reorganising operational holdings from the viewpoint of optimum utilisation of land. Besides this, there is the problem of conditions of tenancy, i.e., the rights and conditions of holding land. Land reforms aim at providing security of tenure, fixation of rents, conferment of ownership, etc. The entire concept of land reforms aims at the abolition of intermediaries and bringing the actual cultivator in direct contact with the state. The provisions of security of tenancy and rent regulation provide a congenial atmosphere in which the agriculturist feels sure of reaping the fruits of his labour.

The scope of land reforms, therefore, entails :

(a) abolition of intermediaries; (b) tenancy reforms, i.e., regulation of rent, security of tenure for tenants and conferment of ownership on them; (c) ceiling and floors on land holdings; (d) agrarian reorganisation including consolidation of holdings and prevention of sub-division and framentation; and (e) organisation of cooperative farms.

Basically, land reform measures are aimed at alleviating rural poverty in the following manner:

(i) By distributing land among the landless by taking possession of surplus land from large land holders;

(ii) By providing security of tenure and ownership rights to tenants and share-croppers and by regulating rent payable by them to the landlords.

(iii) By protecting the interests of tribals in land and preventing non-tribals to encroach upon tribal lands

(iv) By promoting consolidation of holding to improve the size of operational holdings thereby paving the way to raise productivity

(v) By development of public lands thereby providing better access to the rural poor to obtain fuel wood and fodder.

(vi) By providing access to women to land and other productive assets.

(vii) By protecting homestead rights of the rural poor on lands owned by them and providing them with house sites to enable them to construct residential houses.

2. THE ABOLITION OF INTERMEDIARIES

It is customary to classify the various categories of land tenure systems before independence into three broad heads : Zamindari, Mahalwari and Ryotwari.

(i) **Zamindari Tenure.** Under the Zamindari system, which was introduced by Lord Cornwallis in 1793 in Bengal, land was held by one person or at the most by a few joint owners who were responsible for the payment of land revenue. The system was introduced by the East India Company to create vested interests in land and thereby cultivate a privileged and loyal class. The various forms of tenure such as Zamindari, Jagirdari, Inamdari, the princely States etc. were artificially created. The revenue collectors were raised to the status of landowners. Earlier they were responsible for collecting land revenue for which they received a commission. The Zamindari settlements made them owners of land, thereby creating a permanent interest in land.

The Zamindari settlements were of two types—permanent settlement and temporary settlement. The permanent settlement fixed land revenue in perpetuity. This system prevailed in Bengal, North Madras and Banaras. Under temporary settlement land revenue was assessed for a period ranging between 20 and 40 years in various states. Land revenue, therefore, was subject to revision. Temporary settlement was effected with remaining zamindars of Bengal, taluqdars of Oudh, etc. Since the period of assessment was fairly long, temporary settlement was not really temporary. Land revenue was thus fixed and in doing so, the primary object of the East India Company was to fix responsibility for the punctual payment of land revenue.

The British Government pleaded that the zamindars represented the most enlightened section of the rural population and the conferment of tenurial rights could result in improvements on land and better agriculture. But these expectations were not fulfilled. With growing population and decaying village industries under the

British rule, the demand for land grew and it was possible for the landlords to charge very heavy rents from tenants. Zamindari system supposedly introduced to foster progressive agriculture, degenerated into absentee landlordism. Thus, between the state and the actual tiller there grew an intermediary who was interested in land only to the extent of extraction of exorbitant rent. Historically, the landlords as a class are known for their extravagance on women, wine and vices. The landlords of India were no exception. Thus, the money extracted from the cultivators by these parasites did not result in capital formation but increased conspicuous consumption. The zamindari villages were thus divided into two agricultural classes--the absentee owners and non-owner cultivators. The absentee owners exploited the actual tillers. Absence of state intervention of any type gave a free hand to the exploiting classes to indulge in rack renting, evictions, *begar*[1] and many other social evils. The landlords symbolised oppression and tyranny. Indian agriculture was reduced to a form of subsistence farming. It was disincentive-ridden, but there was no escape from it, since it represented the principal source of livelihood for the masses.

(ii) **Mahalwari Tenure**. Under the Mahalwari tenure, the village lands were held jointly by the village communities, the members of which were jointly and severally responsible for the payment of land revenue. The system was first introduced in Agra and Oudh and later on in Punjab. Under the system, the village common or *Shamlat* is the property of the village community as a whole. Similarly, the waste lands also belong to the village community and it is free to rent it out and divide the rents among the members of the community or partition it to bring it under cultivation without any leave of the Government. The system is the product of Muslim tradition and development, particularly in Punjab.

A certain sum is assessed as land revenue for the whole village for which the whole body of co-sharers are jointly and severally responsible. The village *lumberdar* collected revenue for which he received panchortra, i.e., 5 per cent as commission.

(iii) **Ryotwari Tenure**. Under the Ryotwari tenure, land may be held in single independent holdings. The individual holders were directly responsible to the state for the payment of land revenue. The first Ryotwari settlement was made in Madras in 1972. It was the product of Hindu tradition. This form of tenure was prevalent in Bombay, Berar and Central India. The ryot is at liberty to sub-let his land and enjoys a permanent right of tenancy so long as he pays the assessment of land revenue. Some elements of zamindari tenure did appear in this system too because the peasants in ryotwari areas could sublet their land.

The popular nomenclature of ryotwari, mahalwari and zamindari concealed the vast transformation that had taken place during 150 years of practice. Emphasizing this point, H. Venkatasubbiah mentions : "If Lord Cornwallis and Sir Thomas Munro, the respective protagonists of the zamindari and the ryotwari, were to look at the system in 1940 they would barely recognise them as such."[2] The co-existence of zamindari, ryotwari and mahalwari led to an intermixing of characteristics. But the three systems gravitated towards the tendencies of the zamindari system. Sub-letting, rack-renting became a common characteristic even in the ryotwari areas. The mahalwari system acquired the characteristics of the zamindari system in states like Madhya Pradesh and U.P. (Agra) where the Government laid emphasis on joint responsibility of the village for land-revenue assessment; at the same time, it acquired the characteristics of absentee landlordism of the ryotwari areas in Punjab where emphasis was on several responsibility for the payment of land revenue. Similarly, in inams and jagirdari areas, the zamindars demanded between a half and two-thirds as settlement. As there were no records, they could charge quit rents from the cultivators. Thus, on the eve of independence, on the one extreme, there were landless labourers and tenants-at-will and on the other, were big landlords owning huge estates. But a very disquieting feature of the situation was the absence of the proper revenue records which made the task of abolition of intermediaries more difficult. Consequently, the need for a complete census of holdings was felt. The intermixing of the various systems made it difficult to know the rentier class as defined by the earlier acts.

Abolition of Intermediaries—The Policy and Measures

Although steps were taken earlier the actual abolition of intermediaries started in 1948 with the enactment of legislation in Madras. Legislation was passed in all states, but for a few minor tenures and inams as in Assam, Gujarat, Madras and Maharashtra. Incidentally it may be mentioned that West Bengal--the state worst affected by the ravages of absentee landlordism--was among the late comers to adopt legislation in 1954-55. As a result of the conferment of rights, about 30 lakh tenants and share-croppers acquired ownership rights over a total cultivated area of 62 lakh acres throughout the country.

While the aim was to abolish intermediaries

1. A service for which no payment is made.

2. Venkatasubbiah, H., *Indian Economy since Independence*, p. 51.

between the 'tiller and the State,' in actual practice the legislative enactments equated intermediaries with zamindars and, consequently, the legislation left a class of rent-receivers and absentee landlords under ryotwari untouched. Venkatasubbiah writes : "The Party and the Government at the Centre and in the States began to give thought to curtailing the power of non-zamindari rentier only at a subsequent stage of their agrarian policy."[3]

Compensation to Intermediaries

Unlike Communist countries, abolition of intermediaries was not done in India without compensation. In Russia, China, Yugoslavia, etc., landlords were expropriated from land without any compensation. They were reduced to the position of wage earners at the collective farms. But the Congress Party which assumed power after independence was committed to the payment of compensation to the landlords. Although the makers of the Constitution provided for compensation they did not clearly mention 'just and equitable compensation.' Consequently, the Zamindari Abolition Acts were challenged in the High Courts and later taken to the Supreme Court for adjudication. The Supreme Court while upholding the right of the legislatures to acquire lands for a public purpose, ruled that compensation is a justiciable issue. The rates of compensation, the ceiling limit of compensation and even the principles determining compensation were revised and the landlords were quite successful in getting equitable and in some cases more than equitable compensation.

The basis and rate of compensation varied from state to state. Compensation was fixed as a multiple of net income of the proprietor at the time of expropriation. This multiple was high in the case of lower income brackets and declined in upper income brackets. In some States, uniform multiple of net income was introduced as compensation, but proprietors with small incomes were, in addition, to be paid rehabilitation grant. In some States compensation was a multiple of the revenue assessment. Yet in some other States compensation was correlated with the market value of land, (e.g., in Kerala).

The compensation was, however, to be paid in cash or in bonds. These bonds were to be redeemed in equal instalments spread over a long period ranging between 10 to 30 years in various states. The big proprietors were to be given bonds but the comparatively small proprietors were to be paid in cash. The ex-intermediaries were given compensation amounting to ₹ 670 crores in cash and in bonds.

3. *Ibid.*, p. 57.

3. TENANCY REFORMS

The Problem of Tenancy Cultivation

Under the Zamindari and Ryotwari systems, tenancy cultivation had been quite common in India. Tenancy cultivation may be done by small proprietors who find that they have an insufficient quantity of land or it may be carried on by landless labourers. Sometimes, the tenants holding land from an intermediary may sub-let it for cultivation. Broadly speaking, tenants are divided into three categories (i) Occupancy or permanent tenants, (ii) Tenants-at-will or temporary tenants, and (iii) Sub-tenants. The rights of tenancy of the occupancy tenants are permanent and heritable. They can also receive compensation from the landlords in case they make some improvements on land. They enjoy a fixity and security of tenure which makes them the virtual owners of land. It can be said that the only difference between the occupancy tenant and the peasant proprietor is that the former is required to pay rent to the landlord and the latter to pay land revenue to the state. So, for all practical purposes, occupancy tenants are treated as land owners.

The position of tenants-at-will and that of subtenants is extremely weak. They are subject to ruthless exploitation. Frequent enhancement of rent, evictions on minor pretexts of several kinds, extractions and *begar* are some of the popular ways of exploitation. In a country where the demand for land is much more than its supply on account of a growing population, exploitation of weak and unprotected tenants is a widespread evil. Fifty per cent of the produce was the normal rent under Batai or share-cropping. On several occasions, the peasants had to forego even two-thirds of the produce as rent. A situation like this coupled with insecurity necessisted tenancy reforms.

Extent of Tenancy

The National Sample Survey in 1953-54 (8th Round) made an estimate of the land held under tenancy and sub-tenancy in different parts of India (occupancy tenants were excluded). The percentage of area leased out varied from 11 to 26 per cent, though the all-India average was 20 per cent. It showed that about one-fifth of the total area was held under tenancy and thus it was not possible to ignore a problem affecting such a wide area. According to 1961 census, 77 per cent of the total cultivating households were in the nature of ownership holdings, 8 per cent on pure tenancy and 15 per cent in mixed tenancy.

Besides this open tenancy, there is a considerable amount of land leased out on the basis of oral or hidden tenancy which accounts for anything between 35-40 per cent of total cultivated area.

Informal or Oral Tenancy. Informal tenancy has been a common feature of traditional agricultural societies. Although attempts have been made to provide security of tenure, redistribution of land and fixation of fair rents, yet informal or oral tenancy has continued to exist even to this day. The term 'informal tenancy', loosely referred to as oral tenancy, refers to tenancy without legal sanction and permission, or without any written agreement.

In two case studies, one in a district of Eastern U.P. and the other in western U.P. conducted by Mr. D.S. Chauhan, it was revealed that in Eastern U.P., the extent of informal sub-letting was of the order of 29 per cent of the net cultivated area and 17 per cent of landholders were involved in it. In Western U.P., 13 per cent of the net cultivated area was sublet informally and 28 per cent of landholders were involved. A very disturbing feature of the prevailing situation is that formal sub-letting was less than 1 per cent of the total area in the study pertaining to Eastern U.P. and 4 per cent in Western U.P. In other words, bulk of the land is leased out on informal tenancy basis. The overall magnitude of the problem demands serious attention.

The principal purpose of shifting to informal tenancy is to extract higher land rents from tenants. This is more so in view of the high-yielding varieties programme which has brought a realisation among landlords that land is a very valuable asset and promises high rate of return. In a country marked by land hunger, it is possible to take advantage of the situation by charging high rents. Secondly, informal tenancy arrangements are a convenient device with the landlords for nullifying tenancy reforms. Thus, unrecorded or clandestine tenancy perpetuates a semi-feudal land system which was sought to be abolished by measures of land reform.

Measures of Tenancy Reform

The legislation for abolition of intermediaries was aimed at providing land to the tiller but it did not put an end to the problem of tenancy. Some leasing is bound to remain. A widow or an unmarried woman, a minor or a person suffering from mental infirmity and members of the armed forces may have to lease out their lands. Moreover, even with the limit of ceiling, it may not be possible for a family to cultivate the entire land and so some sub-letting is unavoidable. Besides, in order to induce agricultural population to take over to non-agricultural occupations, some sub-letting to tenants may be allowed. A total ban on letting or sub-letting land would neither be socially desirable nor administratively practicable. It is, therefore, more rational to take measures to minimise the evils of tenancy cultivation.

Measures of tenancy reform pertain to (i) regulation of rent; (ii) security of tenure; and (iii) conferment of ownership on tenants.

Regulation of Rents

During the pre-Independence period, rents were fixed either by custom or were the result of the market forces of demand and supply. Supply of land being fixed, the demand for land growing with an increasing population, there has been a continuous tendency for rents to rise. The decay of handicrafts increased the dependence on land further and thus pushed up rents. Rack-renting was a common feature of the Indian agrarian structure.

It was, therefore, imperative that rents should be fixed by enacting legislation. The rates of rent prevalent were one-half of the produce or more. Considering the return on investment in other sectors of the economy, these rents were excessive by any standard of social justice. Consequently, the First and the Second Plan recommended that rents should not exceed one-fourth or one-fifth of the gross produce. Various States have passed necessary legislation regulating rents, but there are large variations in the rates of rents fixed in different states. In Gujarat, Maharashtra and Rajasthan, one-sixth of gross produce is fixed as maximum rent. In Assam, Karnataka, Manipur and Tripura, maximum rents vary between one-fourth to one-fifth of the gross produce. In Punjab, one-third of produce has been considered as fair rent, while in Tamilnadu it is between 33.3 and 40 per cent of gross produce. In Jammu and Kashmir, one-third of the gross produce, in Andhra Pradesh one-fourth of the gross produce for irrigated lands and one-fifth in other cases has been fixed as rent.

Owing to the weak position of the tenants and the prevalence of the widespread land hunger, the law regulating rents is observed more in its breach than in its compliance. The Third Plan rightly asserted : "When there is pressure on land and the social and economic position of tenants in the village is weak, it becomes difficult for them to seek the protection of law. Moreover, resort to legal processes is costly and generally beyond the means of tenants. Thus, in many ways, despite the legislation, the scales are weighed in favour of the continuance of existing terms and conditions."[4]

4. *Third Five-Year Plan*, p. 223.

Another suggestion in this regard is to fix rents in cash rather than in kind. Historically, rents have been paid in kind in India but in view of the fact that the peasants have to make a good many payments in money, while purchasing seeds, fertilisers, implements and other necessaries of life, it would be desirable to switch over to cash payment of rents. This is in fitness with the requirements of a rural economy changing rapidly from barter to money exchange.

Security of Tenure

Sir Arthur Young rightly observed : "Give a man the secure possession of a bleak rock and he will turn it into a garden; give him a nine years' lease of a garden and he converts in into a desert." This remark very pithily sums up the need for providing security of tenure. The personal interest of a cultivator in land with rights of temporary tenancy is very thin. Tenants, therefore, take much less care in preparing land, sinking capital in the form of wells or tubewells on land, or putting up a permanent fence etc. The fear of loss of tenancy right saps all initiative to make improvements on land, reclaim waste-land or make long-term schemes of preserving soil fertility. Consequently, the ends of social justice and maximum production both necessitate the adoption of legislation granting security of tenure. The purpose of such legislation should be to confer the rights of permanent occupancy.

While framing legislation pertaining to security of tenure, three essential aims have to be kept in mind-firstly, that large-scale ejectments of tenants do not take place; secondly, that resumption of land may be taken up by the owner for personal cultivation only; and thirdly, that in the event of resumption, a prescribed minimum area is left with the tenant.

Ownership Rights

Experience of the implementation of zamindari abolition showed that, on the plea of resumption for personal cultivation, evictions of tenants took place on a massive scale. There is no doubt that in certain cases and categories of holders resumption should be allowed, but the plea of resumption should not lead to large-scale ejectment of tenants. For this purpose safeguards are needed. During the Second Plan, states framed provisions for resumption broadly on the following three different patterns :

(i) All tenants have been given full security of tenure, without giving the owners the right of personal cultivation.

(ii) Owners have been given the right to resume a limited area (not more than a family holding in any case) subject, however, to the condition that a minimum area is left with the tenant.

(iii) A limit has been placed on the extent of land which a land-owner may resume, but the tenant is not entitled to retain minimum area for cultivation in all cases.

Uttar Pradesh, West Bengal and Delhi belong to the first category. Gujarat, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Himachal Pradesh, Assam and Punjab belong to the second category. Jammu and Kashmir, Manipur, Tripura and West Bengal (in case of sharecroppers) belong to the third category. Obviously, the second type of legislation has by and large been accepted by the states.

Voluntary Surrenders and Restorations

Dr. Khusro's study : **"Economic and Social Effects of abolition of Jagirdari and Land Reforms in Hyderabad"** (1948) revealed that evictions of tenants took place on a massive scale. 42 per cent of the tenants suffered at the hands of landed aristocracy and every method, legal or illegal, was applied to compel them to surrender their tenancy rights. Similarly, a study conducted by V.M. Dandekar and G.J. Khundanpur in 1957 on the working of the Bombay Tenancy Act (1948) revealed that in the five years from 1947-48 to 1952-53, the ratio of protected tenants to the total number of tenants declined from more than 60 per cent to a little more than 40 per cent. Moreover, it was disclosed that while on paper 85 per cent of the area resumed by the owners had been voluntarily surrendered, the tenants concerned had in fact been under severe pressure from the owners in about two-thirds of the cases. The net result is that the tenant is reduced to an inferior position of a share-cropper and is subjected to the same risks of exploitation which he faced earlier.

To check the evil of voluntary surrenders, two recommendations were made. First, the voluntary surrenders of land by tenants should not be considered valid unless they were duly regis-tered by revenue authorities; and second, in case of voluntary surrenders, the land-owner should be entitled to undertake cultivation of land only to the ex-tent of his right of resumption by law. There is much leeway to be covered in implementation in this regard so as to save the poor tenants—the most vulnerable, though the most important section in rural India.

Rights of Ownership for Tenants

A very important feature of land reform is the provision of the right of ownership for tenants. The Second Plan considered it very desirable to bring tenants in non-resumable area in direct contact with the State. Earlier the right to purchase was optional to the tenants but this did not prove to be effective.

TABLE 1 : Ceiling Limits on Land Holdings

(In hectares)

		Irrigated with two crops	*Irrigated with one crop*	*Dry Land*
A.	SUGGESTED IN NATIONAL GUIDELINES OF 1972	4.05 to 7.28	10.93	21.85
B.	ACTUAL CEILINGS			
1.	Andhra Pradesh	4.05 to 7.28	6.07 to 10.93	14.16 to 21.85
2.	Assam	6.74	6.74	6.74
3.	Bihar	6.07 to 7.28	10.12	12.14 to 18.21
4.	Gujarat	4.05 to 7.28	6.07 to 10.93	8.09 to 21.85
5.	Haryana	7.25	10.9	21.8
6.	Himachal Pradesh	4.05	6.07	12.14 to 28.33
7.	Jammu & Kashmir	3.6 to 5.06	– – –	5.95 to 9.20
8.	Karnataka	4.05 to 8.10	10.12 to 12.14	21.85
9.	Kerala	4.86 to 6.07	4.86 to 6.07	4.86 to 6.07
10.	Madhya Pradesh	7.28	10.93	21.85
11.	Maharashtra	7.28	10.93	21.85
12.	Manipur	5.00	5.00	6.00
13.	Orissa	4.05	6.07	12.14 to 18.21
14.	Punjab	7.00	11.00	20.50
15.	Rajasthan	7.28	10.93	21.85 to 70.82
16.	Tamilnadu	4.86	12.14	24.28
17.	Sikkim	5.06	—	20.23
18.	Tripura	4.00	4.00	12.00
19.	Uttar Pradesh	7.30	10.95	18.25
20.	West Bengal	5.00	5.00	7.00

SOURCE : Ministry of Agriculture, *Agricultural Statistics at a Glance* (2002), p. 250.

Thus, the Third Plan suggested that the optional clause be removed and peasants be required to purchase land. Legislation for this purpose was enacted in various states. For instance, in West Bengal the tenants and sub-tenants have been brought into direct relationship with the state by the conferment of full ownership rights. In Punjab, the right to purchase is optional. Legislation has been enacted in Gujarat, Kerala, Madhya Pradesh, Maharashtra, Karnataka, Orissa, Rajasthan, Uttar Pradesh, West Bengal and the Union Territories. It is quite disappointing that in Assam, Bihar, Jammu and Kashmir and Tamil Nadu, no provision exists even for an optional right of purchase. While the state can facilitate the transfer of ownership rights from the landlords to the tenants, no financial burden is imposed on the state. Till date, 124.2 lakh tenants have got their rights protected over an area of 156.3 lakh acres.

Legal Protection to Tenants

Unable to bring about redistribution of ownership of land, the legislation attempted to provide security of tenure to tenants, to fix land rents and conditions of tenancy. Legislation of this type, Mydral opines, "which leaves the landlord in possession of his land while attempting to ameliorate the tenant's plight, is a compromise solution, both politically and economically."[5] Moreover, tenancy legislation being not comprehensive failed to grasp the interdependence of fixation of ceiling on rents and security of occupancy rights. Myrdal focuses attention on this problem in the following words : "In the absence of limits on rents, all rules about security of tenure can be nullified; the landlord can simply raise the rent beyond the tenant's capacity to pay and legally evict him for non-payment. By the same token, legislation on maximum rentals is meaningless if not buttressed by security of tenancy."[6] Besides this, legislation aimed to provide secuity to a minority of tenants who paid fixed rentals and left out the majority of the sharecoroppers who represented the more vulnerable section of the Indian peasantry.

Mr. Ladenjinsky, an American expert on land reforms, after a detailed survey of Tanjore district, observed : "Tanjore . . . . is a district with one of the nation's worst land tenure systems . . . . Some 20 per cent of the tenants held oral leases which deprives them of any legally enforceable tenurial status. Although the law prescribes that the owner shall not be entitled to more than 40 per cent of the produce as rent, such is the pressure of population on land . . . . that the

5. Myrdal, *Asian Drama*, Vol. II, p. 1323.
6. *Ibid.*, p. 1324.

landlord often appropriates 50 or 60 per cent of the crop or more."[7]

4. CEILING ON LAND HOLDINGS

Land reforms in India had envisaged that beyond a certain specified limit, all lands belonging to the landlords would be taken over by the state and allotted to small proprietors to make their holdings economic or to landless labourers to meet their demand for land. Professor D.R. Gadgil justifying an absolute limit to the amount of land to be held by an individual observed : "Among all resources, the supply of land is the most limited and the claimants for its possession are extremely numerous. It is, therefore, obviously unjust to allow the exploitation of any large surface of land by single individual unless other overwhelming reasons make this highly desirable. Moreover, in the context of the current socio-political climate, redistribution of land would rather appear to be imperative."[8] Thus, the case for pursuing a policy of imposition of land ceiling rests on the following grounds :--

(i) In the rural sector, land is the principal source of income. If land--the fountainhead of income--benefits only a minor fraction of the rural population, the whole structure of land ownership fails to meet the ends of social justice. The best course of bringing a reduction in inequalities of income is to bring about a reduction in inequalities of land-ownership.

(ii) A policy of application of capital-intensive methods in Indian agriculture will lead to unemployment on a massive scale. Consequently, the Indian government would like to create a large number of small peasant proprietors. Fears have been expressed by critics that the policy of breaking big estates will transfer land from the resourceful landlords to the resourceless peasants or tenants. It is alleged that such a policy may although enlarge employment, but will adversely affect production.

The whole argument of large-scale economies and maximising production is theoretical. Farm management studies reveal that gross output per acre is greater on small farms than on large farms. According to Professor Lewis, the size of farm is not very material in securing high yields. The experience of Japan--a country of small farms--justifies that labour-intensive methods can result in higher productivity per acre. In Japan, the average size of holding is 1.2 hectares and the yield per hectare for rice is 52.5 quintals. In U.S.A. whereas the average size of holding is 124 hectares, the yield per hectare is 52 quintals, almost equal to that of Japan. Similarly, the large-sized collective farms of erstwhile U.S.S.R. have not been able to produce yield rates comparable to those of Japan. The yield per hectare of rice in the U.S.S.R. was 40 quintals. Consequently, historical evidence supports the imposition of ceiling because such a policy can enlarge employment and while meeting the ends of social justice does not in any way act as a hindrance to achieving maximum production.

Legislation for ceiling on existing holdings and unit of application has been enacted in two phases. During the first phase which lasted up to 1972, ceiling legislation largely treated land holder as the unit of application. After 1972, it was decided to have family as the basis of holding. Further, the ceiling limit was also reduced to bring about a more equitable distribution of this scarce asset. (Refer table 1).

The imposition of ceiling on existing holdings is a knotty problem. In this case, a reorganisation of the present land system has to be effected. For this, a thorough verification of ownership rights has to be made. With it are connected a good many problems, viz., mala fide transfers, exemptions and disposal of surplus land.

Problems of ceiling :

(i) Mala fide Transfers

The legislation pertaining to ceiling on holdings led to a large number of mala fide transfers. These transfers are principally of three types : (a) transfers among the members of the family, (b) benami transfers and other transfers which have not been made for valuable consideration and through a registered document, and (c) transfers made for valuable consideration through a registered document. Since it has been decided to apply ceiling legislation to the aggregate area owned by a family and not by individuals, transfers falling under (a) and (b) may be disregarded. However, transfers falling under (c) may need to be dealt with separately. It is necessary to protect the rights of such transfers, at any rate, up to a prescribed limit, say, a family holding. Plugging of mala-fide transfers is quite essential because they go against the spirit of land reforms.

(ii) Compensation and Allotment of Surplus Lands

Ceiling legislation aims at obtaining surplus lands above a specified limit and then passing it on to small holders, evicted tenants or landless persons

7. Quoted by K.N. Raj, Some Current Hypotheses, *Mainstream*, Oct. 10, 1964, p. 12.

8. *Report of the Committee of Panel on Land Reforms*, p. 99.

against the payment of a purchase price. Thus, this problem has two aspects--(i) compensation that may be paid to the landowners for the acquisition of surplus land; and (ii) the price that may be recovered from the allottees of surplus lands.

With regard to the price to be recovered from the allottees, it has been suggested that the purchase price should be so fixed that the annual burden falling on the allottee on account of instalments of compensation and interest payable thereon, if any, and the land revenue should not exceed the fair rent i.e., one fourth, or one-fifth of the gross produce. The total amount payable as compensation should be recovered from the allottees so that there is no net liability on the state.

In the allotment of surplus lands those tenants who have been displaced as a result of resumption for personal cultivation should be given preference. Along with the case of farmers with uneconomic holdings, landless labourers, particularlly those belonging to scheduled castes and scheduled tribes, should be kept in the priority list.

Progress of Measures Undertaken under Ceiling Legislation

Under the old ceiling laws (till 1972) only about 23 lakh acres were declared surplus in India, out of which only about 13 lakh acres were redistributed. In Bihar, Karnataka, Orissa and Rajasthan, no land was declared surplus on the imposition of ceiling legislation. Obviously, the partitioning of land or benami transfers had taken place before the imposition of ceiling. There was considerable criticism in the country about the ceiling legislation and the way it was being implemented. The Conference of the Chief Ministers held in July, 1972 approved the following guidelines for implementation of land ceiling :

(i) The best category of land in a State with assured irrigation and capable of yielding at least two crops a year should have ceiling within the range of 10 to 18 acres, taking into account the fertility of the soil and other conditions.

(ii) In the case of inferior land, ceiling may be higher but should not exceed 54 acres.

(iii) The unit of application shall be a family of five members, the term family being defined as to include husband, wife and three minor children. Where the number of members in the family exceeds five, additional land may be allowed for each member in excess of five in such a manner that the total area admissible to the family does not exceed twice the ceiling limit for family of five members.

(iv) The ceiling should not operate on land held under tea, coffee, rubber, cardamom and cocoa.

(v) Ceiling should not operate on land held by industrial or commercial undertakings for non-agricultural purposes.

(vi) State governments may, in their discretion, grant exemption to the existing religious, charitable and educational trusts of public nature.

(vii) In the distribution of surplus land, priority should be given to landless agricultural workers, particularly to those belonging to the scheduled castes and the scheduled tribes.

(viii) compensation payable for the surplus land on imposition of ceiling laws should be fixed well below the market value of the property so that it is within the capacity of the new allottees.

(ix) The compensation may be fixed in graded slabs and preferably in multiple of land revenue payable for the land.

Distribution of Surplus Land

Following the guidelines laid down by the Chief Ministers Conference, state governments had revised ceiling legislation lowering the ceiling limits (Refer table 1).

According to the *Annual Report* (2004-05) of the Ministry of Rural Development, since the inception of ceiling laws on agricultural holdings, upto 31st March, 2004, total quantum of land declared surplus in the entire country was 73.36 lakh acres, out of which about 64.97 lakh acres have been taken possession of and a total area of 54.03 lakh acres has been distributed to 54.84 lakh beneficiaries, of whom around 36% belong to the Scheduled Castes and around 15% to the Scheduled Tribes. (Refer table 2). But as facts stand, the progress of distribution of surplus land was palpably slow. Between March 1990 and March, 2004 a span of 14 years, only 7.36 lakh acres could be distributed.

In addition to the distribution of 54.03 lakh acres of ceiling surplus land, an area of 147.5 lakh acres of Government wasteland has also been distributed among the landless and the poor.

TABLE 2: Cummulative Progress of Implementation of Land Ceiling Laws

(Lakh acres)

	As on 31.3.80	*As on* 31.3.85	*As on* 31.3.90	*As on* 31.03.04
Area declared surplus	69.13	72.07	72.25	73.36
Area taken possession	48.50	56.98	62.12	64.97
Area distributed	35.50	42.64	46.47	54.03
No. of beneficiaries	24.75	32.90	43.60	57.46

SOURCE: Ministry of Rural Areas and Employment, *Annual Report* (2004-05)

Out of a total area of 39.16 lakh acres of Bhoodan land, 21.75 lakh acres have been distributed upto 31st March 2004.

The area declared surplus so far is less than 2% of the cultivated area. The main reasons, as outlined by the Government in Ministry of Rural Development *Annual Report* (1992-93) are as under:

(i) Provisions for holding land up to twice the ceiling limit by families with over 5 members;

(ii) provision to give separate ceiling limit for major sons in the family;

(iii) provision for treating every shareholder of a joint family as a separate unit for ceiling limit;

(iv) exemption of tea, coffee, rubber, cardamom and cocoa plantations and lands held by religious and charitable institutions beyond the normal ceiling limits;

(v) *benami* and *farzi* (Fictitious) transfers to defeat the ceiling limits;

(vi) misuse of exemptions and mis-classification of land;

(vii) non-application of appropriate ceiling to lands newly irrigated by public investment.

The Government, however, is aware that the officially estimated surplus is only a fraction of the area held in large ownership holdings. "According to the National Sample Survey (26th Round, 1971-72) the area owned in holdings of 30 acres or more was 57.81 million acres. Allowing for self-cultivation by surplus owners, the potential surplus would be 21.51 million acres. Similarly the area owned in holding of 50 acres or more was 25.87 million acres and after the self-cultivation deduction the potential surplus would be 8.37 million acres."[9] According to this estimate, the surplus land should have been 30 million acres and not merely 7.4 million acres. The perfunctory manner in which land reform has been dealt with since 1977 leaves no doubt in the minds of observers that the approach to acquiring surplus lands, plugging loopholes in tenancy cultivation, reducing rents, preparation of land records and redistribution of land among the landless labourers and marginal farmers will continue to be casual and half-hearted.

The tardy progress of land ceilings may partly be explained by litigation. About 1.6 million acres or 38 per cent of the area declared surplus under the ceiling laws was under litigation with Andhra Pradesh topping the list with 5 lakh cases followed by West Bengal and Karnataka. While litigation has been an inhibiting factor, there is no explanation as to why thousands of acres, not affected by writ petitions, have not been even scrutinized.

9. Planning Commission, *Draft Five Year Plan*, (1978-83), p. 12.

Implementation of Ceiling Laws

To implement ceiling laws it is necessary to make a complete survey of the lands held in ownership by different persons/families in the village. To make a historical analysis of the ownership of land to study problems like partitioning of land, to evade the ceiling law by voluntary surrenders, or forced evictions, it would be relevant to identify big landowners in a village and prepare genealogical trees for each family. This will enable the government to know the amount of land held in ownership before the introduction of ceiling legislation and the manner in which it was dispersed among the members of the family. Sometimes it is very difficult to comprehend the dispersion of land ownership over time from official records. Land-owners by various ingenious devices try to conceal the ownership or make clandestine transfers. For instance, land owners reclassify lands under exempted categories like orchards, sugarcane plantations, tank fisheries, etc. Similarly, bogus charitable/ religious trusts are created to secure exemption. For all these sham and clandestine actions, the landlords are able to obtain the seal of civil courts. To undo the wrong done by the civil courts in collusion with landed aristocracy, it would be appropriate to conduct spot surveys so as to bring about consequential correction of record of rights. The land reform legislation should also have provisions to enable reopening of cases settled by Tribunals/Courts earlier.

Land Ceiling : A Failure

The purpose of ceiling legislation, logically speaking, was to ration out land--the most scarce yet the most basic asset in Indian rural life--among those who were actual tillers, viz., landless labourers, share-croppers or small holders. This could be done by imposing a limit on the possession of land by big holders. Apart from the objection by landlord classes against ceiling legislation, a very large number of loopholes were left in the ceiling legislation. Consequently, evasion was possible even within the legal provision.

The natural result of this was that very little surplus could be acquired after the imposition of ceiling. The intentions of land reform and the provision of ceiling were thus watered down in the process of implementation.

Secondly, law provided a number of exemptions for sugarcane farms, orchards, mango groves, grazing lands, lands for charitable and religious trusts, cattle breeding farms, All these provisions of exemption were used by the vested interests to evade ceiling on holdings.

Thirdly, the judgement of the Supreme Court that compensation should be paid at market value added another dimension to the problem in favour of vested interests. On 26th August 1974, the Parliament passed unanimously the 34th amendment to 9th Schedule of the Constitution and thus took the land ceiling law away from judicial review.

Fourthly, even when ceiling has been imposed on a family basis, the definition of family includes husband, wife and 3 minor children. For instance, if a ceiling of 15 acres has been provided for a family and there are two major children, then the total land that can be held by the family is 45 acres--15 acres for the family and 15 acres for each of the two major children. This is obviously unjust. A better course would be to treat major children as part of the family and give an additional 3 acres of land to each member of the family, subject to maximum of twice the ceiling. For instance, if there are 7 members of the family, including 2 major children, the total land made available to them would be 7 x 3 = 21 acres and not 45 acres as at present. This has now been accepted as a guideline in national policy. This course can restrict the ration of land to the owning classes so that more surpluses emerge for distribution among the landless labourers and small farmers.

The ceiling of land holdings was never implemented properly. In the words of Ladenjinsky "while officially the states accepted the ceiling programmes, they rejected them in practice."

Prevention of Alienation and Restoration of Alienated Tribal lands

Article 46 of the Constitution enjoins upon the states to promote the interests of Scheduled Castes and Scheduled Tribes and to protect them from social injustice and all forms of exploitation. Following this obligation, the State Governments have accepted the policy of prohibiting the transfer of land from tribals to non-tribals and for restoration of land which has been transferred from tribals back to them. The states with large tribal population viz., Andhra Pradesh, Madhya Pradesh, Karnataka, Gujarat, Bihar, Orissa, Rajasthan, Assam and Tripura have enacted laws for the purpose. Reports received from various States indicate that as on 30th September 2001, about 3.75 lakh cases of tribal land alienation have been registered so far, covering 8.55 lakh acres of land. Out of them, 1.62 lakh cases have been decided in favour of tribals covering 4.47 lakh acres. In other words, about 52 per cent of area claimed by tribals has been restored. The Courts have, however, rejected 1.54 lakh cases covering an area of 3.63 lakh acres. Tribals in Andhra Pradesh, Gujarat, Karnataka and Madhya Pradesh have benefited substantially from this drive.

Women and Land Rights

To improve the status of women in landed property, states like Karnataka, Tamil Nadu and Andhra Pradesh have amended the Hindu Succession Act, 1956. Some states like Rajasthan and Madhya Pradesh have decided that issues relating to property rights would be dealt with in accordance with appropriate personal laws. Other states have yet to take adequate steps to provide the Constitutional/legal protection to women with respect to their rights in landed property.

Computerisation of Land Records

Since the inception of the Scheme regarding computerisation of land records, there is a gradual progress in the implementation of the Scheme. Upto 31st December 2001, the Scheme was implemented in 569 districts of the country. A sum of ₹ 219 crores has been released by the Ministry upto 31.12.2001 for the purpose and it is hoped that substantial progress will be achieved during the Tenth Plan.

5. AN APPRAISAL OF LAND REFORMS

Land reform programmes were started with a thunderous enthusiasm, but soon the vitality of this enthusiasm was lost and the implementation of land reforms became a very tame affair. There is no doubt that land reforms were conceived broadly in a proper perspective but being riddled with loopholes, they have brought little justice to the rural people. Professor M.L. Dantwala rightly observes : "By and large land reforms in India enacted so far and those contemplated in the near future . . . are in the right direction; and yet due to lack of implementation the actual results are far form satisfactory."[10]

Reasons for the poor performance of Land Reforms Programme

In a forthright analysis, the Planning Commission Task Force headed by Mr. P.S. Appu mentions the following as the principal reasons for poor implementation of land reforms : lack of political will; absence of pressure from below because the poor peasants and agricultural workers are passive, unorganised and inarticulate; lukewarm and often apathetic attitude of the bureaucracy, absence of up-to-date land records, and legal hurdles in the way of implementation of land reforms. The Task Force categorically concludes : "In a society in which the

10. Report of the Tokyo Seminar on *Problems of Economic Growth*, Congress for Cultural Freedom, p. 2.

entire weight of Civil and Criminal laws, judicial pronouncements and precedents, administrative tradition and practice is thrown on the side of the existing social order based on the inviolability of private property, an isolated law aiming at the restructuring of property relation in the rural areas has little chance of success. And whatever little chance of success was there completely evaporated because of the loopholes in the laws and protracted litigation."[11]

The basic problem in the implementation of a programme of land reform is to break the stranglehold of the vested interests in land and the legal support given by the judiciary to the vested interests in the name of sanctity of private property. Obviously, the talk of strengthening administrative machinery without creating conditions for breaking the stranglehold of the holy trinity, i.e., landlord-moneylender-trader, is nothing but lip service to the poor peasantry. In case a frontal attack has to be made with a view to ensuring justice to the rural proletariat engaged in cultivation, the bold suggestions given by the Task Force on Agrarian relations must be implemented in letter and spirit :

1. Judiciary should not be involved at any stage in the implementation of land reforms. This suggestion has been given because civil legislation by its very nature is time-consuming and dilatory. Moreover, the decision of the Court depends upon the production of evidence and experience shows that the stronger party (viz., the landlord) has always been able to produce greater evidence by using all kinds of pressures both legal and illegal.

2. Organisation of the poor peasantry into strong trade unions is a pre-condition of land reform. The State can provide representation to the poor peasantry, specifically in the administrative machinery at various levels. For instance, land reform committees at the village, taluqa or district levels should have a majority representation of marginal farmers, sharecroppers and landless labourers. These committees should be made responsible for the implementation of land reform. The naked truth is that the share-cropper is at the mercy of the landlord for his very existence. The support given by the judiciary and the whole army of officers like tehsildars, consolidation officers, patwaris, etc., has created a feeling in the mind of the poor peasantry that the state apparatus is in collusion with the big landed aristocracy.

Following the Report of the Task Force on Agrarian Relations the Government thought of initiating measures so as to plug loopholes in the existing tenancy laws to ensure security of tenure, conferment of ownership rights on cultivating tenants and share-croppers.

Ceiling laws in all the states were revised or enacted in accordance with the national guidelines. Most of the revised ceiling laws were included in the Ninth Schedule of the Constitution, for giving protection from being challenged on constitutional grounds. However, the implementation of revised ceiling laws has been practically stalled in Gujarat, Haryana and Punjab. The Punjab and Haryana High Courts struck down certain provisions of the Punjab Ceiling Law and held that the definition of "person" so as to include "family" is artificial and unconstitutional. It also held that if some persons were to be deprived of land, compensation will have to be paid at the market value of land in accordance with Article 31-A of the Constitution. This judgement was also availed of by the land owners in Gujarat to stall implementation of ceiling legislation in that state.

The mere inclusion of a law in the Ninth Schedule to the Constitution is no guarantee against the law being challenged in the courts of law. The laws have been challenged on various other grounds, such as (*i*) inconsistency with Articles 14, 19 and 31 of the Constitution, (*ii*) discrimination between major sons and the minor sons as well as major daughters and unmarried minor daughters, (*iii*) the basis of classification of land, (*iv*) rates of compensation, (v) the manner of computing standard acres, (*vi*) arbitrariness in the definition of the word 'family', etc. Towards the end of 1984, there were as many as 1.6 million land ceiling cases pending in the courts all over the country.

Giving an overall assessment of the land reform measures, the Sixth Plan (1980-85) mentioned : "If the progress of land reforms has been less than satisfactory, it has not been due to flaws in policy but to indifferent implementation. Often the necessary determination has been lacking to effectively undertake action, particularly in the matter of implementation of ceiling laws, consolidation of holdings and in not so vigorously pursuing concealed tenancies and having them vested with tenancy/occupancy rights as enjoined under the law."[12]

Following the directions given by the Sixth Plan, some state governments barred the jurisdiction of civil courts and made provisions in ceiling laws for appeal and revisions through revenue courts and tribunals. The scope of appeals and revisions was restricted to not more than one each. A number of states took measures for reduction of permissible time for filing of appeals and revisions of petition.

11. Planning Commission, *Report of the Task Force on Agrarian Relations* (1973), pp. 9-10.

12. Planning Commission, *Sixth Five Year Plan* (1980-85), p. 115.

The Sixth Plan Mid-term Appraisal commended the efforts of the West Bengal Government in providing security of tenancy. It mentioned : "In West Bengal share-croppers are being registered in the record of rights under a special programme to enable them to get the benefit of security of tenancy . . . . The mechanism evolved in this regard in West Bengal for the recorded sharecroppers and assignees of ceiling surplus land may be adopted with suitable modifications in other areas also."[13]

The Mid-term Appraisal drew attention to the fact that the mere transfer of ownership or provision of security of tenancy was not enough in itself either to raise productivity or bring the marginal farmers/ landless labourers above the poverty line. "Unless the beneficiaries of land reform, most of whom belong to the poorest segments of the community, are supported by other ongoing rural development schemes like IRDP, DPAP, NREP, etc., it would be difficult for them to make productive use of the land or to reap the benefit of security of tenancy."[14] But the unfortunate fact is that land reforms are a low priority item in our development strategy, despite all talk of socialism and building up an egalitarian society and lifting people above the poverty line.

Seventh Five Year Plan and Land Reforms

Although emphasizing the role of land reforms, the Seventh Plan clearly states : "Land Reforms have been recognised to constitute a vital element both in terms of the anti-poverty strategy and for modernisation and increased productivity in agriculture. Redistribution of land could provide a permanent asset base for a large number of rural landless poor for taking up land-based and other supplementary activities. Similarly, consolidation of holdings, tenancy regulation and updating of land records, would widen the access of small and marginal land-holders to improved technology and inputs and thereby directly lead to increase in agricultural production"[15] yet in practice, it was found that "there was little or no linkage between this Programme and IRDP or the NREP/RLEGP, and it functioned in isolation."

As a ritual, the Ninth Five Year Plan (1997-2002) has devoted two paragraphs on land reforms. It states: "All possible efforts would be made to detect and redistribute the surplus land and to enforce ceiling laws with firmness. ... Absentee landlordism must be eliminated by plugging the legal loopholes, tightening the implementation machinery and providing for speedy adjudication of disputes in revenue courts. ... Rights of tenants and sharecroppers need to be recorded and security of tenure provided to them. This alone would provide incentive for increasing investment in agriculture, as experience in certain parts of the country has shown. Preference should be given to poor, especially women with respect to wastelands and common property resources."[16]

Dr. P.K. Agrawal who has made a study of land reforms in selected states has put forth certain additional and very useful suggestions. They are :

(i) Excess land taken over from big landholders should be distributed expeditiously and to assist the land reform beneficiaries, there is a strong need to link them for timely supply of inputs nd investment to Jawahar Rozgar Yjana/ Prime Minister's Rozgar Yojana.

(ii) Priority should be given to preparation, maintenance and computerisation of land records. All tenants including share croppers should be identified and their rights should be recorded and permanent heritable rights should be conferred on them on the lines of "Operation Barga" implemented by the West Bengal Government in a campaign mode. Certified extract of the record should be issued in the form of updated "Farmers Passbook' or otherwise.

(iii) Special attention should be paid to tribals. Loopholes in laws applicable to them need to be plugged and administrative machinery need to be strengthened. Cadastral surveys showing the extent, value and ownership of land of tribal areas should be completed where it has not been done.

(iv) The definition of personal cultivation should lay stress on the following ingredients: (a) the person claiming to be in cultivation of the land must bear the entire cost of cultivation; (b) He must cultivate his own land by his own labour or by the labour of any member of his family; (c) He or member of his family should reside for the greater part of the year in the locality where the land is located; and (d) cultivation should be the main source of his income

(v) No transfer of agricultural land should be permitted to a non-agriculturist.

(vi) Resumptions of land by landowners from tenants for self cultivation should not be allowed except in case of physically handicapped or serving army personnel.

13. Planning Commission, *Sixth Five Year Plan* (1980-85), *Mid-term Appraisal*, p. 54.
14. *Ibid.*, p. 54.
15. Planning Commission, *Seventh Five Year Plan*, (1985-90), Vol. II, p. 62.
16. Planning Commission, *Ninth Five Year Plan*, (1997-2002), Vol. II, p. 448

(vii) In case of a dispute between the landowner and the persons claiming to be tenants/share-croppers, the onus of proof should be shifted to the landowner. The tenant/share-cropper should be allowed to deposit the share of the produce of the land owner with the nearest authority.

(viii) Recognised Peasant Organisations/Agricultural Labour Organisations or acknowledged voluntary organisations should be associated with the identification of informal tenants/share-croppers and permitted to file claims for conferment of occupancy right/ownership right to the concerned person before an appropriate authority.

(ix) Political will should be created. For this landless, small and marginal farmers' representatives should be given representation in local panchayat bodies and ministries so that they are associated at each decision making level.

(x) The poor peasants may be provided legal aid upto the level of the Supreme Court. The Lok Adalats should be empowered to dispose of land reform litigations along with prompt disposal of cases by rural courts i.e. Nyaya Panchayat/rural Nyayalaya.

Land Reforms and New Economic Policy

Mr. P.S. Appu while recommending the 'Barga Operation' type land reform adopted by the Left Front Government in West Bengal in 1977, mentions: "The emphasis should now shift to the role of land reform in fostering agricultural growth and augmenting employment opportunities. An improvement in the incomes of the rural poor is a matter of high priority not just for altruistic reasons. Increasing incomes mean increased purchasing power. The resulting spurt in the demand for goods of mass consumption will foster industrial growth. And that could pave the way for the success of the new economic policy that depends on the market as the engine of economic growth. We need certain minimal measures of land reform to facilitate the growth of the Indian economy on the capitalist path of development that we have now chosen." [17]

Dr. P.K Agrawal reinforcing the view of the P.S. Appu mentions: "According to protagonists of farmers, the fort built by liberalisation and globalisation is made on sand. Unless purchasing power is given in the hands of the teeming millions, liberalisation cannot sustain. Land reform provides on area in which no financial investment is required. It certainly requires a government with strong political will which can withstand initial upheavals or shocks before achieving the goal of egalitarian society through stable instrumentality of landreform."[18]

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CHAPTER

33

SIZE OF FARMS AND PRODUCTIVE EFFICIENCY

"Land reform cannot succeed without considerable extension of credit facilities and without a programme for eliminating the weaknesses which arise from uneconomic and fragmented holdings and deficiencies in the use and the management of land."

— Third Five-Year Plan

1. THE MEANING OF ECONOMIC HOLDING

For describing a suitable unit of cultivation, various terms such as family holding, optimum holding, economic holding, etc. are used.

The term family holding was used by the Panel on Land Reforms taking income as the basis. Assuming 2 to 2.5 earners in the family of an agriculturist, the annual income of the average agricultural family should be ₹ 1,200. No unit of cultivation which yielded an income of less than ₹ 1,200 could legitimately be considered economic. Thus, the term family holding refers to a farm which yielded a gross average income of ₹ 1,600 or a net income of ₹ 1,200.

An optimum holding refers to the maximum size of holding which a family should possess. Three times the family holding was considered to be an adequate size of optimum holding. The whole idea behind imposing this ceiling on size of holdings is to fix an upper limit up to which normally, a family can be a allowed to possess land. Exception may, however, be made in the case of plantations, sugarcane growing farms, etc., where the optimum holding may be based on the economies of the scale of production. In other words, an optimum holding, in that case, would be one which permits the most efficient use of land, labour and capital with a given technique of production.

Economic holding, according to Keatinge is "a holding which allows a man a chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses". Dr. Mann, however defines an economic holding as "one which will provide for an average family at the minimum standard of life considered satisfactory." But 'minimum standard of life' and 'reasonable comfort' are vague terms. It is difficult to say definitely as to what constitutes a minimum or reasonable or high standard of living.

The Congress Agrarian Reforms Committee (1949) defined an economic holding as one which could provide a reasonable standard of living to the cultivator and give full employment for a family of "normal-size". The concept was the basis for determining the ceiling, since it was stated that no individual peasant should own more than three times the economic holding. As against this maximum, the Committee suggested the concept of

basic holding which was to be smaller than economic holding, but not "palpably uneconomic."

Factors on which the Size of Economic Holding Depends

Thus, the size of an economic holding depends upon various factors which may differ from region to region or even from locality to locality.

(*i*) ***The fertility of soil***. The more fertile the soil, the less will be the amount of land required in order to provide reasonable standard of living to the peasant family. In this connection, it is necessary to remember that those lands which have artificial irrigation facilities enjoy comparatively high fertility. Therefore, the size of economic holding of irrigated and fertile lands would be comparatively smaller.

(*ii*) ***Method of cultivation.*** The size of economic holding will depend upon the method of cultivation. If the farmer makes use of agricultural machinery such as tractors, harvesters, etc., the size of the economic holding will have to be large. On the other hand, if the farmer uses less mechanized techniques he cannot manage more than a few hectares of land, say 6 to 8 hectares.

(*iii*) ***Nature of the crops***. The size of economic holding will also depend upon the type of crops raised. For instance, vegetable cultivation is highly intensive and even a small farm of 2 or less hectares can provide full and continuous employment to an average agricultural family, and provide it with reasonable level of living. On the other hand, wheat cultivation may require about 8 hectares; while sheep breeding will require still larger size of holdings.

The idea of economic holding is quantified in terms of 'Standard Acres' which help an agricultural family to procure an income sufficient for a 'minimum level' of civilized consumption. At 1970 prices, family budget studies made in Andhra Pradesh indicate that ₹ 4,800 or say, ₹ 5,000 are required to meet expenditures on all items of civilized consumption. Studies in West Godavari District of Andhra Pradesh reveal that on average lands, the net return per annum is ₹ 2,000 per hectare, while on the best land, it is about ₹ 3,750 per hectare. Judging by the net income criterion, 2.5 hectares of average land or 1 hectare or 3.5 acres of best land constitute an economic holding. Since three times the economic holding is considered the limit for ceiling, naturally 7.5 hectares or 18 acres of average land or 4 hectares or 10 acres of best land constitutes the ceiling. Thus, the Central Panel on Land Reforms in fixing a ceiling of 10-18 acres (4 to 7.5 hectares) had in mind a holding which can provide a family an annual net income of ₹ 15,000 or a monthly income of ₹ 1,250. At Indian levels of living, a family with a monthly income of ₹ 1,250 may, not only live in reasonable comfort, it can also provide a good deal of luxury consumption.

2. CHANGING PATTERN OF OWNERSHIP AND OPERATIONAL HOLDINGS

Three conclusions can be drawn from the data given in table 1:

1. The share of marginal and small farmers in the area owned has been increasing over time, but their percentage of ownership holdings has also risen substantially.
2. The proportion both in total ownership of holdings and area operated has been rapidly declining in the case of large owners (25 acres and above) which indicates the surplus after ceiling legislation has been transferred to semi-medium and medium farmers.
3. It is the semi-medium and medium farmers who are the main gainers in terms of total area owned and this group has emerged as the politically most powerful group in rural India.

Data provided in table 2 reveals the number of operational holding increased from 88.8 million in 1980-81 to 115.6 million in 1995-96 and further increased to 129.2 million in 2005-06, even though area operated remained around 163-164 million hectares in 1980-81 and 1995-96, but declined to nearly 158.3 million hectares in 2005-06.

(a) Marginal holdings – In 1980-81, 50 million out of total of 88.8 million holdings (i.e. about 58%) belong to the size category of less than 1 hectare but area operated accounted for about 20 million hectares or 12.1% of total area. By 2005-06, the number of marginal holdings increased to 83.7 million (65% of total) and the area operated increased to 32 million hectares (20.2% of total). In other words, the increase in area operated just compensated for the increase in the number of holdings. This indicates that this group of marginal cultivators who have little land continued to the below the poverty line since the average size of marginal holdings is too meager to eke out a living. There is a growing pauperization of the Indian peasantry as indicated by the data swelling the ranks of marginal farmers or nearly landless labourers.

(b) Small holdings – This group consist of holdings in the range of 1 to 2 hectares. The 1980-81, there were 16.0 million holdings (18.1% of total in this group), but they operated 23.2 million hectares (14.1% of total area). By 2005-06, the number of these holdings increased to 23.9 million, and the area operated by them increased

Table 1: Percentage Size Distribution of Ownership Holding

Size class (acres)	*Percentage of Ownership holding*			*Percentage of Area Owned*		
	1953-54	*1982-83*	*2003*	*1953-54*	*1982-83*	*2003*
1. Landless (00-0.1)	23.1	11.3	10.0	0.0	0.0	0.0
2. Marginal (.01-2.5)	38.1	55.3	69.6	6.2	12.2	23.0
3. Small (2.5-5.0)	13.5	14.7	10.8	10.1	16.5	20.4
(a) Sub-total	**74.7**	**81.3**	**90.4**	**16.3**	**28.7**	**43.4**
4. Semi-medium (5.0 – 10.0)	12.5	10.8	6.0	18.4	23.4	22.0
5. Medium	9.2	6.5	3.0	29.1	29.8	23.1
(b) Sub-total	21.7	17.3	9.0	47.5	53.2	45.1
(c) Large (25 & above)	3.6	1.4	0.6	36.1	18.1	11.5
All (a+b+c)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source : Compiled and computed from Various Rounds of National Survey

to 33.1 million (20.9% of total area). Since the average size of these holdings declined from 1.45 hectare in 1980-81 to 1.38 hectares in 2005-06, the situation remained more of less the same. The farmers may be able to have subsistence income in this group.

(c) Semi-medium holdings – In 1980-81, semi-medium holding (2 to 4 hectares) were of the order of 12.5 million (14.0% of total) but they operated 34.6 million hectares of area (21.2% of the total). By 2005-06, there was increase in the number of semi-medium holdings to 14.1 million (10.9% of the total), and the area operated by them increased to 37.9 million hectares (24% of total area). Thus, the total area operated showed a relatively higher proportion. Since the average size of holdings in the group was 2.78 hectares in 1980-81 and 2.68 acres in 2005-06, this indicates that this group is able to earn a better living.

(d) Medium holdings are in the range of 4 to 10 hectares. In 1980-81, there were 8 million medium holdings (9% of total), but they accounted for 48.6 million hectares (29.6% to total area). By 2005-06, the number of medium holding declined to 6.4 million (4.5% of the total) and the areas operated by them also declined to 36.6 million hectares (23.1% of total). The average size of holdings in the group was 5.74 hectare in 2005-06 as against 6.0 hectares in 1980-81 – a marginal decline.

(e) Large holdings – This group comprises of

Table 2: Number and Area of Operational Holdings in India

	Number of Holdings (million)			*Area Operated (million hectares)*			*Average Size of Holding (hectares)*		
	1980-81	*1995-96*	*2005-06*	*1980-81*	*1995-96*	*2005-06*	*1980-81*	*1995-96*	*2005-06*
1. Marginal (Less than 1 ha.)	50.1	71.2	83.7	19.7	28.1	32.0	0.39	0.40.	0.38
	(56.4)	(61.6)	(64.8)	(12.1)	(17.1)	(20.2)			
2. Small (1.0 to 2.0 ha)	16.0	21.6	23.9	23.2	30.7	33.1	1.45	1.42	1.38
	(18.1)	(18.7)	(18.5)	(14.1)	(18.8)	(20.9)			
3. Semi-medium (2.0 to 4.0 ha)	12.5	14.2	14.1	34.6	38.9	37.9	2.78	2.73	2.68
	(14.0)	(12.3)	(10.9)	(21.2)	(23.8)	(23.9)			
4. Medium (4 to 10ha)	8.0	7.0	6.4	48.6	41.4	36.6	6.04	5.84	5.74
	(9.1)	(6.1)	(4.5)	(29.6)	(25.3)	(23.1)			
5. Large (10.0 ha & above)	2.2	1.4	1.1	37.7	24.2	18.7	17.41	17.21	17.08
	(2.4)	(1.2)	(0.8)	(23.0)	(14.8)	(11.8)			
All Holdings	88.8	115.6	129.2	163.8	163.4	158.3	1.84	1.41	1.23
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)			

Note: Figures in brackets are percentage of total in the respective column.
Source: Ministry of Agriculture, ***Annual Report (1994-95) and Agricultural Statistics at a Glance (2011)***

holding of the size 10 hectares and above. There was nearly 2.2 million holdings in 1980-81 (2.4% of total), but the area operated by them was of the order of 37.7 million hectares (23.0% of total area). By 2005-06, the number of such holdings declined to 1.1 million (0.8% of total) and the area operated by them also declined to 18.7 million hectares (11.8% of total area). Average size of holdings in this group which was 17.4 hectares in 1980-81 also showed a slight decline to 17.1 hectares.

Size Pattern of Operational Holdings

A number of agricultural censuses of operational holdings have been held between 1953-54, and 2000-03. The basic unit for study in these censuses has been the 'operational holding' as distinct from the ownership holding. An operational holding was defined as "all land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location." The technical unit was defined as "that unit which is under the same management and has the same means of production, such as, labour force, machinery and animals." The purpose of these agricultural censuses was to lay emphasis on the actual cultivator and not the owner. In the programmes of agricultural development, the operational holding was considered as the fundamental decision-making unit.

We have summarised above the findings of regarding the number and size of operational holdings in India. There are two contradictory trends operating in the country as regards the size of farms:

(a) There has been growing division of agricultural holdings partly due to the growth of rural population and partly due to the operation of the law of inheritance among the Hindus under which both sons and daughters get equal share in the ancestral property.

(b) Under ceiling of land holdings, large agricultural holdings have been divided — at least in those states where ceiling legislation has been properly implemented —and surplus lands have been distributed to small and marginal farmers or transferred to *benami* owners within the family.

In his Presidential address to the Indian Society of Agricultural Economics in 1979, V. S. Vyas stated: "It is well known that a direct transfer of land was not a quantitatively significant phenomenon, the total area of surplus land redistributed among landless till the beginning of 1970's amounted to hardly 1 million acres. Only in a few states did legislative intervention, mainly ceiling legislation, make remarkable impact on the size distribution of holdings, for example, in Jammu and Kashmir, Kerala and West Bengal. By and large, the indirect pressure exercised by legislation was more important."[1] Vyas further stated : "Movements such as Bhoodan and "land grab" though by themselves did not benefit small and marginal farmers in a measurable way, did contribute in creating a climate such that account of non-payment of debt. This was quite common till the 1950's but is still prevalent in most parts of the country. For another, the success of new agricultural technology has led to the gradual eviction of tenants by the richer landowners on the ground of personal cultivation. These two facts point out the possibility of decline in the number of small and marginal holdings and increase in the number of large holdings.

Despite these two contradictory tendencies operating in the country, Table 1 brings out clearly that:

The ***real change*** during this period is with regard to large holdings; the number of large holdings had declined from 2 million to 1.2 million and the area under large holdings has declined sharply from 37 million hectares to 21 million hectares during 1980-81 and 2000-01.

It is possible, therefore, to conclude that there is a gradual but positive shift in favour of small and marginal holdings and the concentration of land with very large landowners is coming down. This, indeed, is a welcome trend.

Table 3 gives the average size of operational holdings in different states for 1970-71 and 2005-06. The first striking point is that the average size of holding has been steadily declining in almost all the states between 1971 and 2006, due to pressure of population. Secondly, while the all-India average size was 1.23 hectares in 2005-06 the states above the all-India average were: Rajasthan, Maharashtra, Gujarat, Madhya Pradesh, Haryana, Karnataka and Punjab. The states below the all-India average were Andhra Pradesh, Orissa, Himachal Pradesh, Bihar, Assam, Tamil Nadu, West Bengal, U.P., Jammu & Kashmir and Kerala. The extent of variation was very large. Even if Rajasthan is treated as exception, then on one extreme, we have Punjab with an average size of 3.95 hectares and on the other, Kerala with an average size of 0.23 hectare. The range works out be 17:1.

Data about the state-wise percentage distribution of the number and operated area of holdings indicated wide variations. On the one extreme we have states like Kerala, Jammu and Kashmir, Bihar, Uttar Pradesh, West Bengal and Tamil Nadu which have a very high proportion of marginal holdings (ranging from 65 to 80 per cent of total) and accounting for a very

1. V.S. Vyas : Some Aspects of structural changes in Indian Agriculture, Presidental Address to the Indian Society of Agricultural Economics, January, 1979. p. 16.

large proportion of area (ranging from 21 to 40 per cent). In these states the proportion of large holdings is small and they also account for a relatively small proportion of the area (between 3 to 13 per cent).

TABLE 3. Average size of an operational Holding in India

State	*Average size in hectares*		
	1970-71	1990-91	2005-06
Rajasthan	5.46	4.11	3.38
Maharashtra	4.28	2.21	1.46
Gujarat	4.11	2.93	2.20
Madhya Pradesh	4.00	2.63	2.07
Haryana	3.77	2.43	2.23
Karnataka	3.20	2.13	1.63
Punjab	2.89	3.61	3.95
Andhra Pradesh	2.51	1.56	1.20
ALL INDIA	2.28	1.57	1.23
Orissa	1.89	1.34	1.15
Himachal Pradesh	1.53	1.20	1.04
Bihar	1.50	0.93	0.43
Assam	1.47	1.31	1.11
Tamil Nadu	1.45	1.93	0.83
West Bengal	1.20	0.90	0.79
U.P.	1.16	0.90	0.80
Jammu & Kashmir	0.94	0.83	0.67
Kerala	0.57	0.33	0.23

SOURCE: Ministry of Agriculture, *Agricultural Situation in India*, October, 1981 *Agricultural Statistics at a Glance* (2011).

On the other extreme, we have states like Karnataka, Madhya Pradesh, Haryana, Rajasthan, Maharashtra and Gujarat in which the proportion of marginal holdings is in the range of 24 to 33 per cent, but they account for 3 to 6 per cent of the operated area. However, these states have 35 to 52 per cent of operated area under large holdings. This indicates that bulk of the operational holdings in these states are such that they cross the barrier of subsistence holdings to qualify for an economic holding.

Taking the all-India picture, although marginal and small holdings upto 4 hectares account for 90 per cent of total holdings, the area operated by them is just 51 per cent. This underlines the fact that bulk of the peasantry subsists on marginal holdings and unless marginal farmers are either provided alternative non-agricultural employment or are employed in medium and large farms by increasing their crop intensity, the chances of removing poverty in rural India will remain very bleak.

International Comparison

Figures in Table 3 show that average size of holding is much smaller in India as compared with other countries of the world. Many factors are responsible for the small size of holdings and concentration of area cultivated in large-sized farms.

TABLE 4. Average size of Holdings in Some Selected Countries

Country	*Year*	*Hectares*
Australia	1970	1993
U.S.A.	1987	186.9
U.K.	1993	70.2
Belgium	1990	16.0
Yugoslavia	1970	5.0
India	1991	1.6
Japan	1995	1.20

SOURCE: *F.A.O.* 1, and *Indian Agriculture in Brief* (1980).

3. FARM SIZE, PRODUCTIVITY/ PROFITABILITY AND FARM-EFFICIENCY

For over two decades, economists have been engaged in a debate on the relationship between farm size, productivity and profitability. While farm productivity implies output per unit of land, farm efficiency or farm-profitability refers to the surplus of value of output over all costs (including the imputed value of inputs contributed by the farmer or his family). Originally, on a *priori* reasoning, economists asserted that small farms in India were far more productive than large holdings because of intensive cultivation. Since 1954-55, the studies in the economics of farm management undertaken by the Government of India provided a statistical base for the economists to work out the relationship between farm size on the one side and productivity and efficiency on the other. Professor Amartya K. Sen summed up the entire debate on farm-size productivity and profitability in the following three propositions.[2]

(i) "When family labour employed in agriculture is given an "imputed value" in terms of the ruling wage rate, much of Indian agriculture seems unremunerative.

(ii) "By and large, the profitability of agriculture increases with the size of holding, 'profitability' being measured by the surplus (or deficit) of output over costs including the imputed value of labour."

(iii) "By and large, productivity per acre decreases with the size of holding."

The first of these propositions asserts that much of Indian agriculture is unprofitable. The second point relates efficiency or profitability to farm-size and Sen's conclusion is that the profitability of agriculture increases with the size of holdings and that large-

2. *Farm Management in India:* A study Based on Recent Investigations, April 1966.

sized farms are, therefore, preferable. The third proposition seems to contradict the second; for it asserts that on the basis of productivity per acre, the small farms are preferable. While the first two propositions are about farm size and profitability, the last one is about productivity and farm-size. Sen's observations provoked considerable debate on the subject.

Inverse Relationship between Farm-size and productivity

Let us consider the third proposition first. It has generally been asserted that the relationship between farm-size and productivity is inverse, that is productivity per acre is high in small farms and it declines with increase in the size of farms. While Khusro confirmed the existence of the inverse relationship after analysing the farm management data, Ashok Rudra challenged the statistical validity of the inverse relationship. The findings of both economists were questioned by G.R. Saini for their aggregation bias, among other things. Saini used the disaggregated farm management data for 9 states for a few years and estimated that out of the 25 co-efficients, 22 had a negative sign and 18 of these were statistically significant also. G.R. Saini, therefore, confirms the existence of inverse relationship between farm size and productivity in traditional agriculture.

The common explanation of inverse relationship between farm-size and productivity is in terms of higher input of family labour in small farms. Sen argues that, in a labour surplus economy such as India the opportunity cost of family labour is low and, therefore, the small farms use abundant family labour and extend the cultivation up to the point where the marginal productivity of labour may approach zero or may even become zero, while in the case of large farms which use a high proportion of hired labour, the application of hired labour will be stopped at the point where the marginal productivity of hired labour equals the ruling wage rate. In the case of small farms, output per acre is maximised, while in the case of large farms using hired labour, output per unit of labour is maximised.

While the application of heavy dose of labour to small farms is obviously a factor for the inverse relationship, Sen's assumption of low opportunity cost of labour as the factor responsible for liberal application of labour in small farms is not accepted by Saini and others.

For one thing, small peasant farms co-exist with medium and large farms which engage high proportion of hired labour. This implies that the opportunity cost of peasant family labour is the market wage (*i.e.* what large farms offer for hired labour) and that peasant family will attempt to equalise its opportunity cost of work in self-employment in the family farm with the wage it can get elsewhere. Naturally, it is not correct to argue that the small farm will use labour till marginal productivity of labour becomes zero or almost zero.

Secondly, there is plenty of empirical evidence to show that the opportunity cost of labour on the small farms is not significantly different from the market wage. Thus, the explanation of inverse relationship in terms of low opportunity cost of family labour does not appear to be correct.

In this connection, Deepak Mazumdar writes: "The higher output per acre in small farms is really a function of higher input of labour per acre—the other factors varying more or less in the same proportion as labour."[3] There is greater intensity of cultivation on the smaller farms than on the larger farms. Besides, heavy input of labour on small farms is not on one crop only but on two or more crops produced on the same piece of land during a given production year. This further explains the higher productivity on smaller farms. The inverse relationship has also been due to higher intensity of cropping in smaller holdings where the proportion of irrigated land is relatively high.

We may conclude in Saini words : ".....By and large the inverse relationship between farm size and productivity is a confirmed phenomenon in Indian agriculture and that its statistical validity is adequately established by an analysis of the disaggregated Farm Management data."[4]

Manabendu Chattopadhyay and Atanu Sengupta using farm-level disaggregated data for 1989-90 for West Bengal involving 600 farmers spread over 60 blocks divided into six agro-climatic zones based on cultivation practices, types of soil, irrigation facilities and rainfall, have applied exactly the same technique of analysis that was used by Bhattacharya and Saini (1975). The study due to non-availability of data on some minor crops such as wheat, jute and potato was confined to the major crop paddy of all varieties. On the basis of the regression analysis, they conclude : "The negative relation between farm size and productivity is a confirmed phenomenon in the so-called agriculturally developed regions of West Bengal. Thus, the small farmers in agriculturally better-endowed regions are relatively more efficient compared to larger ones. Perhaps this has been possible due to the improvement of small farms through assured irrigation water round the year during the post-green revolution

3. Quoted by G.R. Saini : "Farm Size, Productivity and Returns to Scale" in *Economic and Political Weekly*, June 28, 1969.

4. G.R. Saini : Holding Size, Productivity and Source Related Aspects of Indian *Agriculture, Economic and Political Weekly*, June 26, 1971.

period."[5] However, the inverse relation finds no support in the less developed regions of the state. It is really heartening that the authors have confirmed the relationship between farm size and productivity but they have not examined the profitability of the small farms by comparing their cost with the value of the farm output. This would have given further insight into the question of farm size productivity as well as profitability.

The Inverse relationship and the Green Revolution

The green revolution in agriculture has been characterised basically by a capital-intensive technology in which hybrid seeds, use of chemical fertilisers, existence or creation of assured irrigation, etc. play a significant role. Even though the new agricultural technology is `size-neutral, the access to capital and use of inputs for small and large farms has not been the same and accordingly, the distribution of gains between them has been uneven. Saini used the Farm Management data for the States of Punjab and Uttar Pradesh to find out the impact of green revolution on the inverse relationship. His important findings can be summarised as follows:

(i) A comparison of the co-efficients over time (viz., mid-fifties and late sixties, the latter indicating the impact of the new technology) shows that they have moved nearer unity in the late sixties— pointing to the gradual closing up of the productivity gap between the small and large farms. This is in favour of big farmers.

(ii) In the mid-fifties there was an inverse relationship between farm size and income per acre but the inequalities of income arising out of the unequal distribution of land were to some extent reduced by productivity differences between small and large farms in favour of the former. The new technology shows a positive relationship between farm size and farm income per acre in the late sixties. This shows that as farm size increases, the income increases more than proportionately. This will widen inequalities of income in rural areas.

These conclusions clearly show growing disparities in income distribution because of the setting in of new technology and call for the application of suitable policy measures to correct these trends.

Farm Size and Profitability

Let us now take up the relationship between farm size and profitability. Amartya Sen who started the whole debate initially has argued that much of Indian agriculture appears unremunerative and that profitability of agriculture increases with the size of holding. As indicated earlier, Sen's thesis is based on the assumption that if family labour is given an imputed value in terms of ruling wage, much of Indian agriculture would become unremunerative.

Saini analysed the Farm management data for Uttar Pradesh and Punjab and found that the marginal value product of labour was not only positive but was also higher than the labour cost —proving clearly that much of Indian agriculture is not necessarily unremunerative, at least on the ground of valuation of family labour at the ruling wage rate. A scrutiny of profit and loss figures for different size classes of farms in different regions shows that Sen's first proposition is not correct. Saini found the following facts:

(i) A good proportion of even the smallest sized farms showed positive profit.

(ii) Losses are to be found not only in small sized farms but also in bigger land holdings.

(iii) The most interesting thing is that size classes show loss in one year but frequently profit in another year.

The unremunerative nature of Indian agriculture may, have to be found elsewhere and not in the valuation of family labour at the ruling market wage. One possible cause is the imputation of high value to owned land in terms of a rental value or in terms of interest. If rental value of owned land is deducted from cost, the losses of farms are converted into profits or losses disappear. In Saini's own words: "The evidence strongly suggests that the observed unremunerative character of Indian agriculture can be traced to and explained in terms of imputation of a value to owned-land rather than the valuation of family labour at the ruling wage rate."[6]

Sen's second proposition is obvious: with the increase in the size of holdings, and with larger application of human labour, capital equipment, fertilisers etc. profitability increases.

To sum up, the following conclusions emerge:

(i) There is general statistical validity of the inverse relationship between farm size and productivity per acre in traditional Indian agriculture.

(ii) Professor A.M. Khusro demonstrated the existence of constant returns to scale in Indian agriculture in the 1960's. He writes: "Above the 5-acre size there is nothing to choose between large farms and small farms in respect of cost efficiency and productivity; that Indian agriculture is typically a scene of

5. Chattopadhyay M and Sengupta A., Farm Size and Productivity – A New Look at the Old Debate, *Economic and Political Weekly*, December 27, 1997, p. A-174.

6. *Ibid.*

constant returns to scale; and the ceilings are size-natural."[7]

(iii) Data pertaining to 1950's indicated an inverse relationship between productivity and farm size; but the picture is likely to be totally transformed by the data of the 1960's and the later period in view of the impact of the green revolution G.R. Saini and Prem Vashisht of Delhi University, on the basis of their research, do not indicate any structural shift in farm productivity with increase in size. Rather it was revealed that differences in farm productivity are not the result of differences in size of farms but are rather the consequence of a serious maldistribution of farm inputs in favour of big landholders.

(iv) The transition from a traditional agriculture to modern agriculture characterised by a capital-intensive technology will shift the inverse relationship between farm size and productivity to one of tending towards constant returns to scale over time. Thus, under traditional agriculture in which the inverse relationship existed, the small farmers were able, to some extent, to reduce the inequalities of income arising out of unequal distribution of land among cultivating households. But with the change in favour of modern agriculture "in the initial stages of emergence of a capital-intensive technology the inverse relationship between farm size and productivity still holds. A comparison of the coefficients over time, however, shows that these have moved nearer unity in the late sixties. This is indicative of a shift in favour of the big farmers and points to the gradual closing up of the productivity gap between the small and large farms. From this we can infer that with productivity tending to move towards "constancy" .....the maldistribution of land among cultivating households is bound to end up in greater inequalities of income unless remedied through appropriate reforms."[8]

(v) G.R. Saini has argued that in the midfifties there existed an inverse relationship between farm size and income per acre .... After the setting in of the green revolution this inverse relationship has undergone a significant change. The inverse relationship has now yielded place to a positive relationship .... It shows that as farm size increases income increases more than proportionately."[9] In other words, because of green revolution the income gap between the small and the large farms has widened.

7. Khurso, A.M., ***Economics of Land Reform and Farm Size in India*** (1973), Introduction p. xii
8. Saini, G.R., *Farm Size,* ***Resource-use Efficiency and Income Distribution*** (1979), p. 155.
9. *Ibid*, p. 155.

Policy Implications

From the analysis of farm size and productivity or profitability relationships, two policy conclusions emerge: Firstly, imposition of land ceiling retains its justification on efficiency considerations (since the inverse relationship between farm size and productivity still holds) and on the basis of equity considerations, justification for land ceilings has become stronger. Secondly, not only inequality in land ownership should be remedied through appropriate policy instruments, but efforts should be made to remedy unequal distribution of farm inputs which are responsible for the growing income inequalities between small and large farms.

4. THE PROBLEM OF SUB-DIVISION AND FRAGMENTATION OF HOLDINGS

The problem of agricultural holdings in India is two-fold. Not only the average holdings are small but they are also fragmented, and are found not in one compact block but in tiny plots scattered all over the village. Each holding consists of many small pieces which are found in different parts of the village.

Causes for small size of holdings in India

(*i*) ***Growing population in the country***. With every increase in population, land gets divided and sub-divided among a large number of people and as a result the size of holdings correspondingly goes on diminishing.

(*ii*) ***The Law of inheritance***. Growing population by itself need not result in small sized farms. It is the system of inheritance which brings about the division of holdings. According to the Hindu and Mohammedan laws of succession, all sons (and daughters) are equally entitled to a share in the ancestral property. As a result, even large agricultural estates get divided and subdivided with every generation. Thus, growing population coupled with the system of inheritance has been responsible for the small sized holdings in the country.

(*iii*) ***The decline of joint family system***. The joint family system which was so common a few decades ago, held together a number of natural families. The lands were held in common and all agricultural operations were managed together. But under the impact of industrialisation and growth of towns and also because of the spread of western culture promoting individual-

ism, joint families have broken down. This has led to division and sub-division of holdings.

(iv) ***The decline of handicrafts and village industries.*** Yet another important and historical factor for the small-sized holdings in the country is the decline of village handicrafts. The handicrafts had provided employment and a source of livelihood to the artisans. Owing to competition from machine-made goods, the artisans were forced to leave their ancestral occupations and fall back on agriculture. This further increased subdivision and fragmentation.

(v) ***Rural indebtedness and indigenous money-lenders.*** The village money-lenders are highly unscrupulous and have only one interest in lending to the needy farmers, that is to grab the lands of the latter. They encourage the farmers to borrow, charge them high rates of interest and adopt many unfair practices. As the only way of recovering usurious loans is to acquire agricultural land, ultimately plots of land pass from farmers to the money-lenders in lieu of debt payments.

Problem of fragmentation of holdings

The small size of holdings is thus explained by division and subdivision of ancestral property due to the growth of population, breakdown of joint family system, the attachment to landed property, the decline of cottage industries, the laws of inheritance, the consequent pressure on land, etc. On the other hand, fragmentation of holdings is due to the sub-division of property among joint owners, each of whom wants a share in each plot of the ancestral land.

Such a process of sub-division and fragmentation may continue to such an extent that every plot may become extremely tiny. According to a study in a Maharashtra village, "fields measuring less than half an acre were found to be sub-divided into more than 20 separately owned plots." In Ratnagiri district of Maharashtra, plots were often as small as .006 acre, so that it is not possible even to turn a pair of bullocks on the tiny bits of land.

The prevalence of sub-division and fragmentation is a hindrance in the use of improved agricultural practices, such as better seeds, manures, use of superior agricultural machinery, construction of wells, fencing of land, protection of crops from pests and improvement of drainage systems. There is wastage of land in boundaries and fencing. Moreover, quarrels over boundaries of small plots lead to litigation. Thus small and scattered farms are clearly an impediment for the efficient organisation of agriculture. As a result, the cost of production becomes very high as compared to large farms.

Remedies for Sub-Division and Fragmentation

(1) ***Creation of Economic holdings.*** One of the important aspects of land reforms in India is the increase in the size of the holdings and the consolidation of scattered holdings. To establish economic holdings, the following important measures will have to be adopted.

(a) The fixation of ceiling on holdings, so that all those who have more than the prescribed maximum limit in a village will have to surrender their surplus land to the public authorities who will then distribute the same among those who have uneconomic holdings;

(b) those farmers who have extremely small holdings may be induced to give up their lands and shift to other occupations in rural areas; and

(c) the pressure on land may be reduced by the starting of industries in rural areas to provide employment to the landless labourers and marginal peasants.

It is difficult, however, to create economic holdings in India. Two specific reasons may be given. First, the number of uneconomic holdings is too large and it will be difficult to convert all or most of them into economic holdings. Second, the sentiment in favour of ownership of landed property is very strong in India. It is difficult to persuade the rich to give up their surplus lands.

Even if we assume that economic holdings can be formed somehow, it is essential that they are not divided and sub-divided again. For it is the division of landed property among the heirs which has been primarily responsible for the existence of small and fragmented farms. Sub-division of farms can be prevented. For this purpose, the present system of inheritance according to which land is shared among all sons and daughters should be so changed that partitioning of land below the minimum size is made illegal.

(2) ***Consolidation of Holdings.*** For a long time, it has been realised that the proper solution to the problem of scattered holdings is consolidation of holdings. By consolidation we mean the bringing together in one compact block all plots of land of a farmer which are scattered all over the village. Consolidation is achieved by first pooling all land in the village into one compact block and then dividing it into compact blocks among all the farmers in the village.

The consolidation movement has made considerable progress in many States particularly in Punjab. Up

to 31st January, 1956, only 4.5 million hectares were consolidated. But the movement gathered momentum and by 1972, about 33 million hectares of land was consolidated. The progress was not uniform in all the States. On the consolidation of holdings front, the Sixth Plan mentions: "It is estimated that by now nearly 45 million hectares of land, i.e. about one-fourth of the consolidable land has been consolidated all over the country. However, the implementation has been extremely patchy and sporadic. Only in Punjab, Haryana and western Uttar Pradesh, the work is complete. Even a beginning has not been made in Southern States and Rajasthan. In the Eastern States, some work has begun only in Orissa and Bihar."[10] According to the data compiled by the Ministry of Rural Development (*Annual Report 2004-05*), total area brought under consolidation as on 31st March, 2004 was 1,633 lakh acres. Out of this, two states Maharashtra and Uttar Pradesh accounted for 527 lakh acres (32.2% of total) and Uttar Pradesh 482 lakh acres (29.4%). Punjab, Haryana and Madhya Pradesh are the three other states which have taken up the work of consolidation of holdings seriously. Bihar and Jammu & Kashmir initiated steps to implement the scheme and in West Bengal and Assam, the scheme has not been implemented. Taking the country as a whole, only 49 per cent of the total cultivated area has been brought under consolidation of holdings. The state of affairs indicates our apathy towards consolidation and thus provides an explanation for the slow progress in this area.

Important difficulties which are met with in the process of consolidation are as follows:

(a) The farmers are extremely attached to their ancestral land and, therefore, are unwilling to give it up for the sake of consolidation of holdings.

(b) Those having better quality lands do not like to combine for fear that they may get inferior blocks after consolidation;

(c) Consolidation is a cumbersome process. The government officials who implement the scheme are generally slow and often corrupt; and

(d) in general the movement has not evoked the necessary co-operation from the poorer sections of the peasantry.

It is generally alleged that the small farmers are allotted compact plots either of inferior quality or situation and they are unable to receive justice from the courts. In a very forthright observation, the Planning Commission stated: "A major weakness of the programme was that the consolidation was done without taking effective steps to ensure security of tenure to tenants, particularly share-croppers. As a result, consolidation of holdings has often led to the large-scale ejectment of insecure tenants."[11]

Lamenting the poor progress on the work of consolidation of holdings, it has been noted in the data provided by the *Annual Report*, Ministry of Rural Development (1997-98) have been repeated by the (2004-05) Report. This implies that there is virtual abandoment of the work on consolidation of holdings. *Annual Report* (2004-05) of the Ministry of Rural Development, therefore, laments : "In the state of Uttar Pradesh, even now, consolidation of holdings is in operation in about 9000-10,000 villages. In other States, work was continued for some years, but lost momentum thereafter." (*p*.113)

(3) ***Co-operative Farming***. According to some authorities as well as the Indian Government, a permanent solution to the problem of small and scattered holdings is co-operative farming. Since the Government of India at one stage accepted co-operative farming as the official policy in the scheme of agrarian reorganisation, we shall deal with co-operative farming in detail.

5. CO-OPERATIVE FARMING

The ultimate objective of land reforms was to establish co-operative farms in India and to set up a co-operative rural economy. The Indian National Congress recognised long ago that in India co-operatives would be of great use in mobilising individual initiative for social and economic ends. Mahatma Gandhi wrote: "I firmly believe, too that we shall not derive the full benefits of agriculture until we take to co-operative farming. Does it not stand to reason that it is far better for a hundred families in a village to cultivate their lands collectively and divide the income therefrom than to divide the land anyhow into a hundred portions."[12] Again, the Congress Agarian Reforms Committee presided over by J.C. Kumarappa studied the complex problem of land reforms and came to the conclusion: "Without various co-operative moulds — co-operative better farming for family farms and co-operative joint farming for holdings below basic—the efficiency of agriculture cannot be substantially increased."[13]

Kinds of Co-operative Farming

The Co-operative Planning Committee classified co-operative farming into four types:

10. Planning Commission, *Sixth Five Year Plan* (1980-85), p. 115.

11. Planning Commission, *Draft Fifth Five Year Plan* (1974-79), part II, p. 43.
12. *Harijan*, February 15, 1942.
13. *Congress Agrarian Reforms Committee Report* (1949), p. 10

(*i*) ***Co-operative tenant farming*** refers to a system in which a society, consisting of a number of farmers, owns land which is divided into smaller holdings and then leased to individual members of the society. The society provides facilities of credit, seed, manure and implements and undertakes marketing of members' produce. Every member pays a fixed rent for his holding but the produce of his holding is his own and is entirely at his disposal.

(*ii*) ***Co-operative collective farming*** implies the type in which members surrender their land irrevocably. Land, livestock and other equipment are joint, work is common and the management is generally through an elected council. Under this system of farming, besides, wage, every person gets a share in the surplus produce of the farm. The collective farm is a large-scale farm and is highly mechanised.

(*iii*) ***Co-operative better farming*** implies the system in which some or all the farmers in a village join together for purposes of improved methods of farming. They will combine together in all agricultural operations, such as ploughing, weeding, harvesting, etc. In this type of farming every farmer is independent, can put his land to any use he likes and does not lose his title to land.

(*iv*) ***Co-operative joint farming*** implies pooling of land on the part of small cultivators whose separate holdings are not large enough to permit economic cultivation. The plots are pooled into one unit and the cultivation is joint, though every farmer retains ownership of his land.

The term co-operative farming may stand for different types, but as we understand here, it refers to co-operative joint farming. Its main features are:

(*a*) farmers join the system voluntarily and not through compulsion; (*b*) they retain their land, in the sense, they never surrender their right to land; (*c*) they pool their land, their live-stock, etc., (*d*) the farm is managed as one unit; (*e*) the management is elected by all the members; and (*f*) everyone gets a share in the produce according to the land contributed as well as labour performed.

A Critical Evaluation of Co-operative Farming in India

The decision of the Government to set up co-operative joint farms came in for much criticism. Co-operative joint farming was viewed as the first stage to ultimate policy of a switchover to collective farming. In fact, however, the practice of co-operative farming has revealed that it is being used as a convenient device to by-pass land reforms, help the privileged classes in maintaining ***status quo*** and also to use it as a tool for receiving a preferential treatment in the allocation of grants and loans from government agencies. The main points of criticism are:

(1) ***Failure to make a frontal attack on the existing inegalitarian economic structure***. Myrdal, in a sharp comment. argues: "Co-operative farming in the Indian sense is far less radical than it seems on the surface. Indeed its major weakness is that it produces virtually no change in the status quo. Traditional status distinction between land-owners and landless labourers and share-croppers are maintained and, under the cover of respectability provided by the label co-operation may even become deeply entrenched."[14]

(2) ***Co-operative farming societies functioning as joint-stock companies with paid managers help capitalistic agriculture in India***. Though theoretically land is pooled, in practice it is not treated as joint property. Owners of land receive an ownership dividend and thus there is a clear recognition of the principle of charging rents and crop-shares from tenants as was the practice earlier. The principles governing the distribution of produce between the land-owners and workers have never been clearly defined in this country, although ideologically, it was hoped that wages of workers will show an improvement, but the record of co-operative farming societies does not indicate any redistribution of income in favour of the landless peasants, share-croppers, or marginal farmers. Myrdal condemns the misuse of co-operative farming to subserve the ends of rural aristocracy. Many urban landowners in particular, regard this system as a convenient device for converting sharecroppers into wage labourers, and hence a means whereby absentee owners of even relatively small pieces of land can—without giving up their absenteeism—reap gains from agricultural modernization that are unobtainable when land is cultivated by share-croppers. They can count on receiving the benefits of the preferential treatment and subsidies afforded to co-operatives by governmental agencies... land pooling in co-operatives was expected to protect them against land reform measures, as co-operative farms are usually exempt." Thus, co-operation is reduced to a mere name when it encourages joint stock farming, a concomitant of capitalist agriculture.

(3) ***Opposition by Indian bureaucracy***. It is hardly possible to carry out reforms with the help of a bureaucracy which has no faith in them. The community development projects and Panchayati Raj have suffered on this account. Cooperative farming is another victim in this series. Daniel Thorner pointedly states the position in this regard : "At the Centre, in

14. Myrdal, G. ***Asian Drama***, Vol. II, p. 1350.

the States, and in the Districts, the administration is manned by men who do not believe in co-operative farming. If anything, they have less faith in this latest Government policy in panchayat and communtiy projects, to say nothing of their hostility to land redistribution."[17]

To sum up, co-operative farming as practised in India did not succeed in India and has failed to serve the ends for which it was conceived. By June 30, 1970, a total of 8,819 co-operative farming societies with a membership of nearly 2.41 lakhs were working. Hardly 2 per cent of the cultivators have formed into co-operative farming societies and they cultivate barely 4.75 lakh hectares, *i.e.* barely 0.4 per cent of the total cultivated area.

AFCB Experience of co-operative Joint Farming – A success

The experiment with paddy cultivation under joint farming co-operative system by the Adat Farmers Co-operative Bank (AFCB) in Kerala's Thrissur district is a success story for all peasants with small holdings to follow. In this experiment 2,400 farmers of small size holding contributed their land for co-operative joint farming. There was a realization among small farmers that the small size of the unit of cultivation is probably the biggest factor responsible for low productivity, higher costs of cultivation and low net incomes to farmers.

In a joint farming co-operative, the members pool their holdings, which are not large enough for profitable farming and cultivate them jointly, adopting improved practices, each member receives wages in proportion to the number of hours of work contributed.

When the produce in sold at the end of the season, he gets an ownership dividend in proportion to the land contributed by him. The co-operative farming society jointly makes its purchases of seeds, fertilisers or equipment and undertakes land improvement work. It also takes care of the irrigation needs of the joint farms.

The AFCB undertook the cultivation, right from pumping out water from the paddy fields, which remained waterlogged for about seven months a year. It distributed ₹ 1.5 crores as interest free loan of ₹ 6,000 to each of them. The total cost of cultivation was ₹ 2.10 crores. The sale proceeds of paddy fetched ₹ 5.10 crores. This provided a dividend surplus of ₹ 3 crores which was distributed among the farmers proportionate to the contribution of land. The success of this experiment re-affirms the faith in co-operative joint farming as a strategy to improve productivity of small farms and thus improve the income levels of farmers. Joint farming is thus hailed as a strategy of agricultural development in India with 93 per cent of small size farm households.

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CHAPTER

34

ORGANISATION OF RURAL CREDIT IN INDIA

"In the village itself no form of credit organisation will be suitable except the Co-operative Society—Co-operation has failed, but co-operation must succeed."

— All-India Rural Credit Survey (1954)

1. NEEDS FOR CREDIT FOR INDIAN FARMERS

The financial requirements of the Indian farmers can be classified into three types depending upon the period and the purpose for which they are required:

Period of Credit

(a) Farmers need funds for short periods of less than 15 months for the purpose of cultivation or for meeting domestic expenses. For example, they want to buy seeds, fertilisers, fodder for cattle, etc. They may require funds to support their families in those years when the crops have not been good or adequate for the purpose. Such short-period loans are normally repaid after the harvest.

(b) The farmers require finances for medium period ranging between 15 months and 5 years for the purpose of making some improvement on land, buying cattle, agricultural implements, etc. These loans are larger than short-terms loans and can be repaid over longer periods of time.

(c) The farmers need finances for the purpose of buying additional land, to make permanent improvements on land, to pay off old debt and to purchase costly agricultural machinery. These loans are for long periods of more than 5 years.

Productive and unproductive loans

We can further classify the credit requirements of farmers into two types—productive and unproductive loans. The former include loans (a) to buy seeds, fertilisers, implements, etc. (b) to pay taxes to the Government and (c) to make permanent improvements on land, such as digging and deepening of wells, fencing of land, etc. All these forms of credit help the farmers in their agricultural operations or in improving their land.

The Indian farmers often borrow for unproductive purposes too, such as for celebration of marriages, births and deaths, for litigation etc. Unproductive loans raised at exorbitant rates of interest are highly improper and unjustified.

Sources of Rural Credit

Broadly, there are two sources of credit available to the farmers—institutional and private. Institutional

credit refers to loans provided to farmers by co-operative societies and co-operative banks, and commercial banks including regional rural banks (RRBs). Non-institutional or private sources include money-lenders, traders and commission agents, relatives and landlords.

Non-institutional sources — money- lenders landlords, traders etc. accounted for 93 per cent of the total credit requirements in 1951-52 and institutional sources including the Government accounted for only 7 per cent of the total credit needs in that year. The All India Debt and Investment Survey (1981), estimated that the share of non-institutional sources had slumped to about 37 per cent in 1981, moneylenders accounting for barely 16 per cent; the share of institutional credit, however, had jumped to 63 per cent— co-operatives contributing 30 per cent and commercial banks about 29 per cent.

Non-Institutional Sources:
A. Money-Lenders

There are two types of money-lenders in rural areas. There are rich farmers or landlords who combine farming with money-lending. There are also professional money-lenders whose only occupation or profession is money-lending.

The cultivators depend upon the money-lenders for their requirements of cash. The Government and the Reserve Bank of India have been propagating that the importance of the money-lenders as suppliers of loans to the farmers has been declining rapidly. However, there are many reasons for the preponderance of the village money-lenders in rural areas even now.

(a) The money-lender freely supplies credit for productive and non-productive purposes, and also for short-term and long-term requirements of the farmers.

(b) He is easily accessible and maintains a close and personal contact with the borrower, often having relations with family extending over generations.

(c) His methods of business are simple and elastic.

(d) He has local knowledge and experience and, therefore, can lend against land as well as against promissory notes. He knows how to protect himself against default, through legal and illegal methods.

B. Landlords and Others

Traders and commission agents supply funds to farmers for productive purposes much before the crops mature. They force the farmers to sell their produce at low prices and they charge a heavy commission for their dealings. This source of finance is particularly important in the case of cash crops like cotton, groundnut, tobacco, etc., and in the case of fruit orchards like mangoes. Traders and commission agents may be bracketed with money-lenders, as their lending to farmers is also at exorbitant rates and has other undesirable effects too.

Farmers often borrow from their own relatives in cash or kind in order to tide over temporary difficulties. These loans are generally contracted in an informal manner; they carry low or no interest and they are returned soon after the harvest. Farmers, particularly small farmers and tenants, depend upon landlords and others to meet their financial requirements. This source of finance has all the defects associated with money-lenders, traders and commission agents. Interest rates are exorbitant. Often the small farmers are cheated and their lands are appropriated. The landless labourers are forced to become bonded slaves. What is worse, this source of finance is becoming more important.

2. CREDIT DELIVERY MECHANISM IN RURAL FINANCE: MULTI AGENCY APPROACH

Need for Institutional Finance

The need for institutional credit arises because of the weakness or inadequacy of private agencies to supply credit to farmers. Private credit is defective because:

(i) it is based on profit motive and, therefore, it is always exploitative;

(ii) it is very expensive and is not related to the productivity of land;

(iii) it does not flow into most desirable channels and to most needy persons;

(iv) it is not available for making agricultural improvements—and much of the necessary improvements are not undertaken as funds are not available for long periods at low rates of interest; and

(v) it is not properly integrated with the agriculturist's other needs.

Institutional credit is not exploitative and the basic motive is always to help the farmer to raise his productivity and maximise his income. The rate of interest is not only relatively low but can be different for different groups of farmers and for different purposes. Institutions also make a clear distinction between short-term credit and long-term credit requirements and give loans accordingly. Finally, institutional credit is fully integrated with other needs of agriculturists. The farmers require not only credit but also guidance in the planning of their agricultural operations like the use of seeds, fertilisers, pesticides

etc., assistance in raising crops and in general, help for maximising their income. Agricultural credit and agricultural improvement should go hand in hand and the farmers should be taught improved farming methods and also be provided adequate and cheap credit. In all developed countries, provision of credit facilities and extension services go hand in hand. This work can be done best by institutions like co-operative societies and commercial banks and not by rapacious money-lenders and commission agents.

National Policy and Objectives

Since independence, *a multi-agency approach* consisting of co-operatives, commercial banks and regional rural banks—known as institutional credit—has been adopted to provide cheaper and adequate credit to farmers. The major policy in the sphere of agricultural credit has been its progressive institutionalisation for supplying agriculture and rural development programmes with adequate and timely flow of credit to assist weaker sections and less developed regions.

The basic objectives of this policy are:

(a) to ensure timely and adequate flow of credit to the farming sector;

(b) to reduce and gradually eliminate the money-lenders from the rural scene;

(c) to make available credit facilities to all the regions of the country, i.e., reduce regional imbalances; and

(d) to provide larger credit support to areas covered by special programmes like Pulses Development Programme, Special Rice Production Programme and the National Oilseeds Development Project.

Institutional credit, as mentioned earlier, refers to the funds made available by co-operative societies, commercial banks, and Regional Rural Banks (RRBs).

Evolution of Multi-agency Approach

Faced with the serious problem of deteriorating agricultural production and the rapacious money lenders, the Government set up co-operative credit societies and land mortage banks. Much was expected from the co-operative credit movement as it was led by the farmers themselves. A survey of rural credit in 1950-51 showed that the co-operatives could meet barely 3.3 per cent of the total credit requirements of farmers, while the money-lenders accounted for 93 per cent of the credit needs of the farmers. The All-India Rural Credit Survey Committee (1954) stated: "Co-operation has failed, but co-operation must succeed." It was the All India Rural Credit Survey Committee (1969) which recommended the adoption of "multi-agency approach" to finance the rural sector. For the first time, the Government openly accepted that rural credit could not be met by co-operative societies alone and that commerical banks should play an important role in the rural sector.

On the recommendations of this committee, RBI took a series of measures to strengthen the co-operative movement. The State Bank of India was set up in 1955 after nationalising the Imperial Bank of India to show a special concern for agricultural credit.

In 1969 14 leading banks were nationalised. This was followed by the setting up of Regional Rural Banks (RRBs). Thus, the multi-agency approach of institutional credit to agriculture was evolved over a number of years.

While RBI was helping the co-operative sector directly, it was felt that the multi-agency approach to rural finance required a special banking institution to coordinate and help all the institutions specialising in rural finance. It was for this reason that NABARD was set up as the apex bank for rural finance in 1982.

Growth of Institutional Credit for Farmers

The extent of institutional credit for farmers in recent years is given in table 1.

Table 1 shows that total agricultural credit

Table 1: Institutional Credit to Agriculture

Year	*Cooperative Banks Amount*	*%*	*RRBs Amount*	*%*	*Commercial Banks Amount*	*%*	*Total*	*%*
1984-85	3,440	55	–	–	2,790	45	6,230	100
1997-98	14,090	44	2,040	6	15,830	50	31,960	100
2002-03	23,720	34	6070	9	39,770	57	69,560	100
2006-07	42,480	21	20,440	10	1,40,380	69	2,03,300	100
2007-08	48,258	19	25,312	10	1,81,088	71	2,54,658	100
2008-09	36,762	13	26,724	9	2,28,951	78	2,59,337	100
2009-10	63,492	17	35,218	9	2,85,799	74	3,84,514	100
2010-11	NA	NA	NA	NA	NA	NA	4,47,514	100

Source: *Economic Survey*, 2010-11, NABARD, *Annual Report (Various Issues)*
* Upto Sept. 2010

from institutional sources had steadily increased from ₹ 6,230 crores in 1984-85 to ₹ 2,03,300 crores in 2006-07. The contribution of co-operatives was 55 per cent of total institutional credit in 1984-85 but was only 21 per cent in 2005-2006. Correspondingly commerial banks including RRBs have raised their share from 45 per cent to 69 per cent during this period.

The Tenth Plan (2002-07) projected a substantial jump in institutional credit flow to the agricultural sector to the tune of ₹ 7,36,600 crores - almost three times, as compared to the Ninth Plan) — and the annual average credit flow would be ₹ 1,49,120 crores — as against ₹ 46,000 crores during the Ninth Plan.

Table 1, however, shows that during Tenth Plan (2002-03 and 2007-08), there was substantial increase in institutional credit flow and by the year 2010-11, it reached ₹ 4,47,514 crores.

Table 1 shows that even though total institutional credit to agriculture, has been steadily rising, there has been

(a) steady decrease in percentage terms, in the contribution of cooperative banks in rural credit – from 55% in 1984 to 17% in 2009-10.

(b) The share of RRBs continue to reamain low (around 10 percent).

(c) The share of commercial banks has been steadily rising and reached 74 percent in 2009-10. It would be a good idea if cooperative banks and RRBs are made subsidiaries of commercial banks.

Shortcomings of Institutional Credit

Way back in 1950 the private money-lender reigned supreme in rural India and institutional sources met no more than three per cent of the credit requirements of farmers. Thanks to progressive institutionalisation of agricultural credit under the Five Year Plans, over 60 per cent of the required short-term (including medium-term) production credit is now provided by co-operatives, commercial banks, and RRBs in many States.

It should, however, be remembered that all the changes and improvements in the last 30 years in the field of rural credit appear to have failed to make a dent on poverty and provide adequate credit to improve the economic condition for the bottom 70 per cent of our rural population. In this connection, it can be safely asserted:

(i) The many new institutions created by the Government and the vastly extended facilities of rural finance provided by these institutions have generally been appropriated by the top 30 per cent of middle and affluent farmers in the country.

(ii) Even those credit facilities exclusively created for marginal and small farmers and for economically backward classes do not reach the target groups but are misappropriated by more affluent farmers through collusion with government officials and politicians.

(iii) Precious little is being done for the weakest of the rural population consisting of bonded labourers, landless agricultural labourers, tribals, scheduled castes and scheduled tribes, etc. These people, constituting about 25 to 30 per cent of the total rural population, continue to be cruelly exploited by the high caste money-lenders and landlords.

This has led to extensive suicides by farmers all over the country, specially in Andhra and Karnataka.

Problems of Multi-agency Approach

The government was of the view that multi-agency approach to rural credit was the real solution to the emancipation of small farmers from the clutches of money lenders. But the Working Group under the chairmanship of C. E. Kamath brought out the following problems of multi-agency approach :

(*i*) There has been a steady declining trend in the share of cooperative banks in the flow of institutional credit over the years – from 55% in 1984-85 to 40% in 1999-00 and further to 28% in 2004-05. This indicates the need of restructuring and reforming these banks.

(ii) There was no coordination between different agencies operating in the same area and, as a result, there was multiple financing, over-financing in some areas and under-financing in others.

(iii) Despite the adoption of lead bank scheme and district credit plans, the different agencies often failed to formulate and develop meaningful agricultural credit programmes in given blocks and districts.

(iv) Despite guidelines issued by RBI, different agencies adopted different procedures and policies in the matter of providing loans and in their recovery. The result was unnecessary competition among the different agencies.

(v) There were practical problems in the recovery of loans when different agencies had lent to the same persons against the same securities. Ultimately, there were heavy overdues.

The recently introduced "service area approach" (SAA) is definitely an improvement in the credit delivery system but it does not do away with the weakness of the multiple agency approach.

The major problem faced by the lending institutions, particularly the cooperatives, is the most unsatisfactory level of overdues. The ratio of overdues to demand is around 40 to 42 per cent in the case of co-operatives and 47 per cent in the case of regional rural banks. Accordingly, the health of agricultural credit institutions, both co-operatives and RRBs, is in a very sad state in several parts of the country. The Planning Commission regretfully admits: "Wilful default and overdues are mounting in a number of states including some co-operatively progressive states like Maharashtra and Gujarat. By writing off agricultural loans and providing subsidies out of the state exchequer, some of the states have set a bad example to the entire country. If this trend is not reversed and if banks are reduced to institutions providing grants rather than recycling scarce resources to get the maximum benefits for the country as a whole, the banking system will be unable to provide more credit to meet the growing needs of the farmers."[1]

H.T. IIEF Study on Rural Credit (2004)

The Hindustan Times (HT) and **Invest India Economic Times (IIEF)** using IRES data (2004) has brought out startling facts about earners, who use money lenders as the source of credit. The study has revealed the following facts:

1. The share of various sources in rural credit by earners reveals that the share of money lender in total credit is 70 percent. In absolute terms, it is of the order of ₹ 67,000 crores. The share of public sector banks is 10 percent, followed by co-operative societies at 9 percent. The share of self-help groups (SHGs) is 1 percent. Government loans also account for barely 1 percent and other sources account for 9 percent.

Table 2: Share of Different Agencies in Rural Credit (2004)

Agency	*Share in total credit (%)*
Moneylenders	70
Public Sector Banks	10
Co-operatives Banks & Societies	9
Government Loans	1
Self Help Groups (SHGs)	1
Others	9
Total	100

Source: *Hindustan Times – IIEF Study (2004)*

2. 46 million earners use moneylenders and nearly half of them reside in some of the richest states including Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra and Gujarat.

3. Majority of the borrowers are farmers (32%) or agricultural or wage labourers (39%), Nearly 3.7 million customers of moneylenders are regular salaried employees. Another 7.4 million earn over ₹ 60,000 while 3.6 million of them are taxpayers.

4. Increasingly, nearly 88 percent of all moneylender customers can access a government credit programme within one kilometer from their homes while 30 percent have access to SHGs. However, 29 million earners prefer to use moneylenders for their credit needs.

5. Moneylenders charge an average interest of 24 percent per annum compared to 12 percent by nationalized PSU banks and co-operative banks. Even then, 70 percent of customers avail of the credit of moneylenders.

6. Average outstanding credit from all sources is ₹ 22,910. Of this, the moneylenders hold an average credit of ₹ 14,610 i.e. nearly 64 percent.

Obviously, the hold of moneylenders in total rural credit has bounced back to 70 percent and PSU banks and co-operative banks have trailed behind at merely 19 percent. This shows the failure of institutional credit to meet the needs of farmers, landless labourers and wage earners in rural India. Surprisingly, access to and knowledge of cheaper alternative credit sources have not dampened the demand of moneylenders. This is not due of lack of information but other factors like procedural delays and lack of promptness by institutional credit as compared to easy and prompt delivery by moneylenders.

Pitiable financial condition of small and marginal Farmers

The farming community, all over the country has been seething with anger and dissatisfaction about the falling interest rates of banks not reaching them and being forced to borrow at exorbitant rates from the moneylenders. There were a series of suicides among farmers in Andhra Pradesh, Maharashtra and Punjab. This was one of the major reasons for the fall of NDA Government in 2004.

The UPA Government realized the need to enhance credit flow to agriculture. In consultation with RBI, NABARD and commercial banks, the UPA Government announced a package for agriculture: The initiatives announced in June 2004 include:

(*i*) Stepping up agricultural credit from all lending

1. *Seventh Five Year Plan* (1985-90), Vol. II, p. 17.

institutions (co-operative banks, RRBs and commercial banks) from about Rs 85,000 crores to ₹ 1,05,000 crores (30 percent increase – this would continue year after year).

The farm credit package of the UPA Government has increased year after year — ₹ 125,000 crores in 2004-05, ₹ 1,80,480 crores in 2005-06 and ₹ 2,04,000 in 2006-07. If these figures are true, as farm credit, why do farmers commit suicide. This can only mean that much of the farm credit goes to well-to-farmers.

(ii) The branches of commercial banks and RRBs would be energized to enhance the flow of agricultural credit.

(iii) Under special agricultural credit plan, at least 100 new farmers would be financed at each rural and semi-urban branch during each year.

(*iv*) Financing of at least 2 to 3 new investment projects by each branch in plantations and horticulture, fisheries, organic farming, etc.

(*v*) Providing credit to tenant farmers and oral lessees.

(*vi*) Debt restructuring as opposed to debt write-off in the following forms:

(*a*) Relief to farmers in distress by rescheduling their loans and making them eligible for fresh loans; and

(*b*) One-time settlement for small and marginal farmers and consider them eligible for fresh loans.

None of these proposals worked satisfactorily. The money lenders still continue their strangehold on poor and marginal farmers. The banks have increased their lending considerably but to the well to do farmers only. Farmers suicides continue.

3. RURAL CO-OPERATIVE CREDIT SOCIETIES

Indian planners considered co-operation as an instrument of economic development of the disadvantaged, particularly in the rural areas. They saw in a village panchayat, a village co-operative and a village school, as the trinity of institutions on which a self-reliant and just economic and social order was to be built. The non-exploitative character of co-operatives, voluntary nature of membership, the principle of one man one vote, decentralised decision-making and self-imposed curbs on profits eminently qualified them as an instrument of development combining the advantage of private ownership with public good.

The rural co-operative movement was started in over 100 years back largely with a view to providing agriculturists funds for agricultural operations at low rates of interest and protect them from the clutches of money lenders.

The organisation of the co-operative credit for short period is briefly outlined here:

Primary Agricultural Credit Society. (PACS) A co-operative credit society, commonly known as the primary agricultural credit society (PACS) may be started with ten or more persons, normally belonging to a village. The value of each share is generally nominal so as to enable even the poorest farmer to become a member. Primary Agricultural Credit Societies (PAC S) are the grassroot level arms of the short-term cooperative credit strucure. PACS deal directly with farmer-borrowers, grant short term and medium term loans and also undertake distribution and marketing functions.

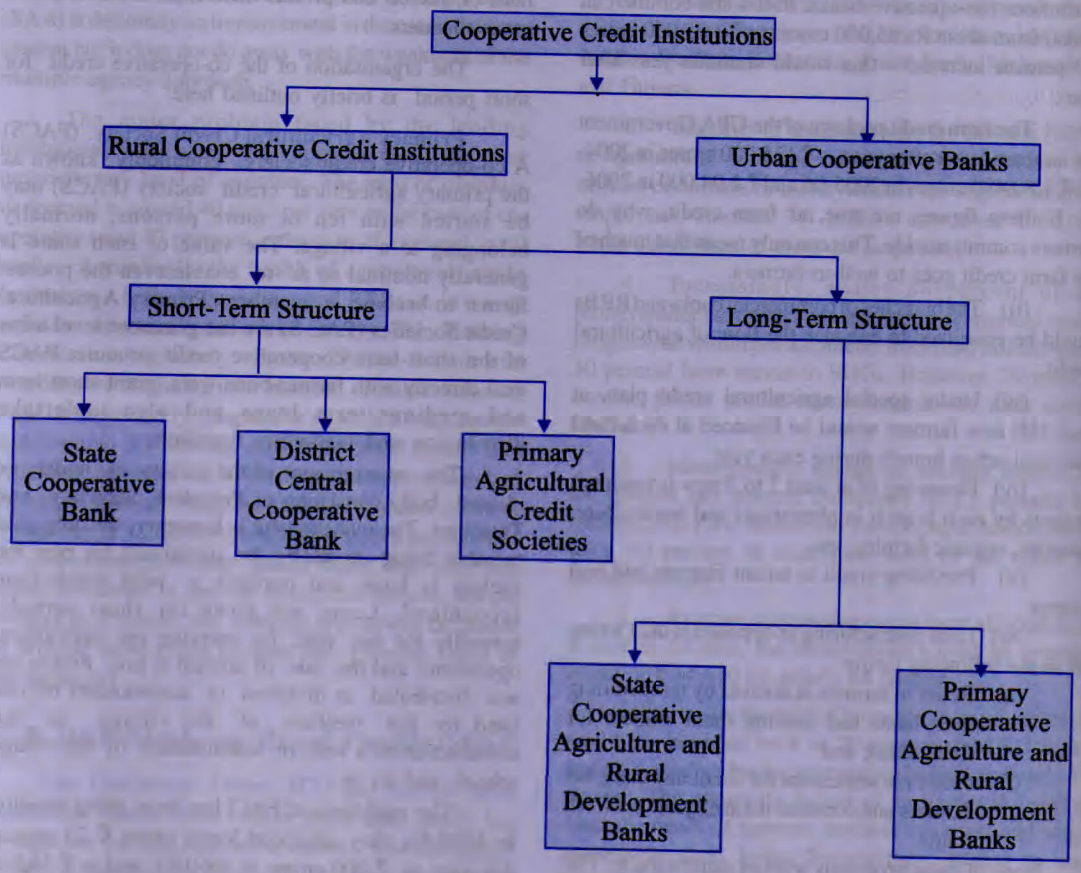
The management of the society is under an elected body consisting of President, Secretary and Treasurer. The management is honorary, the only paid member being normally the accountant (in case the society is large and requires a paid whole-time accountant). Loans are given for short periods, normally for one year, for carrying out agricultural operations, and the rate of interest is low. Profits are not distributed as dividend to shareholders but are used for the welfare of the village, in the construction of a well, or maintenance of the village school, and so on.

The usefulness of PACs has been rising steadily. In 1950-51, they advanced loans worth ₹ 23 crores; this rose to ₹ 200 crores in 1960-61, and to ₹ 34,520 crores in 2000-01. The PACS have stepped up their advances to the weaker sections particularly the small and marginal farmers. This progress has been quite spectacular but not adequate considering the demand for finance from farmers. However, "the primary credit society has continued to remain the weakest link in the entire co-operative structure."[2]

Restructuring of PACS. Considerable attention was given during the past few decades to build the PACS into strong institutions. Such a structure, close to the farmers, is very essential for disbursing rural credit, particularly to small farmers. A programme was introduced by the Government and RBI to reorganise and revitalise the primary agricultural credit societies. It was completed in Rajasthan, Orissa, Madhya Pradesh, Kerala, Tamil Nadu and Gujarat. In other States, it has not made much headway.

The number of PACS had come down from 2,12,000 in 1960-61 to 1,61,000 in 1970-71 and 1,06,380 at the end March 2006 with estimated membership of over 10 crore farmers.

2. *Report of the Banking Commission*, 1972, p. 13.



SOURCE : RBI, *Report on Trend and Progress of Banking,* 2001–02.

Most of the PACS are dependent on the finance provided by central cooperative banks (CCBs). In case the CCBs are weak, the PACS are starved of finance which affects the credit functions of PACS. As at the end of March 2006, the loans and advances outstanding for PACS were about ₹ 51,780 crores.

Financial Strength of PACS. To make all primary agricultural societies viable and ensure adequate and timely flow of co-operative credit to the rural areas the Reserve Bank of India, in collaboration with State Governments, had been taking a series of steps to strengthen PACS and to correct regional imbalances in co-operative development. Steps were taken to reorganize viable PACS and for amalgamation of non-viable societies with farmers' service societies or large sized multipurpose societies. These efforts are being intensified by providing larger funds to weak societies to write off their losses, bad debts and overdues. The programme of re-organisation of PACS has been under implementation for the last two decades and is almost completed in all states except Gujarat, Maharashtra and Jammu & Kashmir.

PACS and Weaker Sections. The major objective of the co-operative development programmes is to ensure that the benefits of co-operative activities flow increasingly to weaker sections including scheduled castes and scheduled tribes. The Government seeks to achieve this through expanding the membership of the weaker sections in the existing PACS and ensuring larger flow of funds and services to them. In the tribal areas, large sized multipurpose societies are being organised mainly for the benefit of the tribals.

PACS and Commercial Banks. The commercial banks in India introduced in 1970 a scheme of financing PACS, through which the funds of the commercial banks are being made available to PACS. This scheme came in handy to commercial banks which could use PACS for disbursing agricultural loans and thus find a way out of the serious problem of not having close contacts with farmers through their own branches and field staff. The scheme, however, has not been as successful as was anticipated.

Firstly, the two systems with two unrelated

cultures—one commercial and the other co-operative—could not be linked effectively. Difficulties have arisen from this basic incompatibility.

Secondly, state co-operative banks as well as central co-operative banks have not liked successful PACS being taken away from their fold by the commercial banks.

However, a good deal of scope for co-ordination exists between PACS and the branches of commercial banks in rural areas :

(a) The rural branches of commercial banks can assist such of those members of the PACS who are eligible for loans but who are unable to get finance from PACS for lack of funds.

(b) They can also help the PACS with advice on management e.g., proper maintenance of books of accounts, accounting procedures, etc.

(c) The PACS, in their turn, can help commercial bank branches to identify eligible borrowers and to recover loans.

Shortcomings of PACS. The co-operative credit system makes credit available to the farmers at convenient distances and has intimate knowledge of the local conditions and problems. But it is organisationally and financially weak and hence, in practice, its ability to support credit to the agricultural sector is considerably limited. The All-India Rural Credit Review Committee brought out the following weaknesses of the primary credit societies:

(a) Co-operative credit still forms a small portion of the total borrowings of the farmers;

(b) Tenants and small farmers find it difficult to satisfy their need for funds fully from PACS alone.

(c) Most primary credit societies are financially weak and are unable to meet fully even the production-oriented credit needs of farmers.

(d) Overdues at all levels are financially increasing alarmingly indicating the failure of co-operative credit institutions; and

(e) PACS have not been able to ensure adequate and timely credit for the borrowing farmers.

District Central Co-operative Banks (DCCBs).. *These are now at the end of March 2006* 369 District Central Cooperative Banks. The loans outstanding came to ₹ 79,200 crores. These are federations of primary credit societies in specified areas normally extending to a whole district (hence they are sometimes known as district co-operative banks). These banks have a few private individuals as shareholders who provide both finance and management. Their main task is to lend to village primary societies, but they are expected to attract deposits from the general public also (volume of deposits). But the expectation has not been fulfilled and many of the co-operative central banks act as intermediaries between the State Co-operative Bank on the one hand and the village primary credit societies on the other. The Reserve Bank — now NABARD has formulated a scheme for the rehabilitation of weak central co-operative banks. NABARD is providing liberal assistance to the State Governments for contributing to the share capital of the weak central co-operative banks selected for the purpose.

State Co-operative Banks (StCBs). There are now 31 State Co-operative Banks (StCBs) in the country. They form the apex of the co-operative credit structure in each State. The StCB finances and controls the working of the District central co-operative banks in the State. It serves as a link between NABARD (formerly RBI) from which it borrows and the co-operative central banks and village primary societies. The State Co-operative Bank obtains its working funds from its own share capital and reserves, deposits from the general public and loans and advances from NABARD (formerly from RBI). The last mentioned source is quite important, as it constitutes between 50 and 90 per cent of the working capital of State Co-operative Banks in the country. The State Co-operative Bank are not only interested in helping the rural co-operative credit movement but also in promoting other co-operative ventures and in extending the principles of co-operation. During 2005-06 the 31 state cooperative banks had lent about ₹ 48,260 crores to District central co-operative banks.

The Problem of Overdues

A highly distressing fact of rural co-operative credit is the heavy overdues estimated around ₹ 15,500 crores at the end of March 2006. According to RBI "Study Team on Overdues of Co-operative Credit Institutions". "Lack of will and discipline among the cultivators to repay loans was the principal factor responsible for the prevalence of overdues of co-operatives. Defective lending policy pursued by co-operatives, the apathy of management in taking quick action against recalcitrant members and absence of favourable climate were other contributory factors."[3]

Apart from these common factors normally responsible for a high level of overdues, intervention of external forces such as loan waivers, concessions in various forms towards repayment of principal and payment of interest had also affected the recovery performances of credit institutions to a significant extent. The problem is further accentuated on account of the State Governments' inability to meet the financial commitments to cooperative banks emanating from

3. R.B.I. *Report on Currency and Finance*, 1973-74, p. 139.

waiver of loans, interest subsidy, etc.[4]

Loans overdue, it is disquieting to note, represent 45 per cent of loans outstanding in all-India; the percentage ranges from 23 in the case of Tamil Nadu to 77 in the case of Bihar.

In recent years, the farmers are getting organised and one of the chief demands of the farmers' union is the cancellation of their debts to co-operative societies and banks. States have meekly surrendered to such demands to write off these debts. This tendency of States to write off the debts is a matter of extreme concern, as it hampers recovery of dues from the farmers. The National Front Government wrote off farmers' debts upto the value of ₹ 10,000.

The problem of loan overdues is a matter of serious concern, as it affects the recycling of funds and credit expansion on the one hand, and economic viability of the lending institutions, specially the cooperatives and the RRBs, on the other.

Other Weaknesses of Co-operative Credit Movement

Another weakness of rural credit co-operation is that in the case of tenants, share-croppers, landless agricultural labourers and rural artisans who are the poorest and, therefore, the most needy, the flow of co-operative credit in terms of percentage share continues to range around 3 to 5 per cent over the years. The small and marginal farmers are apparently getting credit in larger proportion, viz., 35 per cent of the total. But since these farmers depend mainly on credit for the purchase of their inputs, the available credit to them is still inadequate. In other words, even though the share of the weaker sections of the rural community has been steadily increasing over the years and is, at present, placed around 40 per cent of the total, this share falls short of their essential production needs.

There is also the problem of uneven distribution of co-operative benefits as between different States. For instance, the loans advanced per member varied widely; the farmers of Gujarat, Punjab, Haryana and Tamil Nadu are getting much more than those in Orissa, Bihar, U.P. and West Bengal. Viewed in another way, that is, in terms of average credit per hectare of cropped area, it is only in five States, namely, Gujarat., Haryana, Kerala, Punjab and Tamil Nadu, that such credit is much higher than (double or more than double) the All-India average.

Apart from considerable regional disparities in credit availability, the co-operatives have not been able to ensure an increasing flow of production loans and investment credit in most of the tribal and hill areas.

Moreover, though the co-operatives have now come to cover almost the entire countryside, the membership is only around 45 per cent of the rural families; agricultural labourers and rural artisans constituted only 10 per cent of the total membership. The weaker sections of the rural community are still not adequately represented in the membership roll.

In the ultimate analysis, the most outstanding of the weaknesses, which indeed is at the root of many of the shortfalls in the co-operative performance, is in the area of management. There has been considerable discussion over the years at all levels in regard to the need for proper man-power development in the co-operative sector. Not much progress has taken place. The co-operatives themselves have shown a singular lack of appreciation of this problem.

4. LONG TERM RURAL CREDIT : COOPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANKS (CARDBs)

Land Mortgage Banks

The long-term requirements of the farmers were traditionally met by the money-lenders but later by other agencies also, such as the State Governments and the co-operative credit banks. But these agencies were found defective for one reason or another. There was, thus, a great need in India for an institution specially designed to cater to the long-term credit needs of the agriculturists, which would offer long-term funds at moderate rates and recover loans in annual or semi-annual instalments spread over a number of years. Initially, land mortgage banks were organised for the purpose of providing long-term credit to farmers. These banks were later called land development banks. In recent years, they have been renamed as cooperative agricultural and rural development banks. (CARDBs). These are classified into Primary Co-operative agricultural and rural development banks (PCARDBs) and State Co-operative Agricultural and Rural Development Banks (SCARDBs).

The real beginning in land development banking was made by Madras with the organisation of central land development bank in 1929 for centralising the issue of debentures and for co-ordinating the working of primary banks in the State. The progress of land development banking has been very slow and also uneven. During the great depression, (1929-33) land-develop-ment banks received some stimulus as agri-

4. *Report on Trend and Progress of Banking in India, 1989-90.*

cultural prices fell considerably and the farmers needed financial assistance. But with the Second World War, the farmers experienced a good measure of prosperity and were in a position to repay their debts with the land development banks. But after Independence, land development banks have been enjoying a great degree of prosperity. However, it is important to note that whatever progress was achieved was concentrated in only a few States, viz., Andhra, Tamil Nadu, Karnataka, Maharashtra and Gujarat. The number of PCARDBs and their branches increased from 286 in 1950-51 to 696 in 2005-06, while that of State cooperative agricultural and rural development banks (SCARDBs) increased from 5 to 20 during the same period.

Total loans advanced by PCARDBs during 2005-06 were ₹ 2,250 crores and the loans outstanding at the end-March 2006 stood at ₹ 12,740 crores. On the other hand, SCARDBs had sanctioned loans worth ₹ 2,900 crores in 2005-06 and the amount of loans outstanding at the end-March 2006 was ₹ 17,710 crores.

The Structure of CARDBs

The long-term credit structure consists of the central land development banks generally one for each State and are now called State Cooperative Agricultural Rural Development Banks (SCARDBs) and Primary Cooperative Agricultural Rural Development banks (PCARDBs). In some States, there are no primary land development banks but in their place, there are branches of central land development banks. In Madhya Pradesh, the State Co-operative Bank itself functions as a central land development bank through a separate land development banking department. In Andhra, Kerala and Maharashtra, there are more than one central land development banks and efforts are being made to integrate them into a unified bank for the whole State. Similarly, there are considerable differences in the organisation of PCARDBs in different States.

Finances of CARDBs

CARDBs obtain their funds from share capital reserves, deposits and issue of bonds or debentures. However, the last is the most important. Debentures are long-term loans which are issued by SCARDBs, carrying fixed interest and for fixed periods, generally up to 20 years. These debentures are guaranteed by State Governments in respect of payment of interest and repayment of principal. They are subscribed by the LIC, the commercial banks, the State Bank of India and its subsidiaries and by the Reserve Bank of India. Besides ordinary debentures, SCARDBs float rural debentures for periods up to 7 years which are subscribed by farmers and panchayats and by the Reserve Bank of India (up to 66 per cent of the value of the rural debentures). In recent years, the substantial refinance facilities provided by NABARD to SCARDBs have helped enlarge the lending operations of these banks.

Loan Operations of CARDBs

The main function of CARDBs is to grant loans on the security of agricultural properties :

(a) Since they grant loans which run for several years, strict rules are laid down with regard to the security against which they can advance loans.

(b) Generally, these banks restrict their loans to first mortgage of agricultural property, though in a few cases they may advance loans against the security of second mortgage as well.

(c) They generally lend up to 50 per cent of the value of the security. In order to assess the value of land against which they lend they employ experts who assess the value of land and are conversant with local conditions. In assessing the value of land such factors as the amount of land tax paid, the rental value of land, gross and net income from the land, sale value of the land etc., are taken into account.

(d) While granting loans the banks consider not only the value of the security offered but also examine the repaying capacity of the applicants.

(e) Finally, they are able to lend at fairly low rates of interest and enable the needy farmer to secure funds for long periods.

CARDBs provide credit for a variety of purposes such as redemption of old debts, improvement of land, purchase of costly agricultural equipment, construction of wells and erection of pumps and so on. At one time, the redemption of old debts was the most important and, in a sense, the only purpose for which the farmers approached the land development banks. In recent years, however, farmers have been borrowing from CARDBs mainly for the purpose of land improvement and development including sinking of wells (56 per cent) and purchase of agricultural machinery (30 per cent).

Problems of CARDBs

Land development banking is yet to take strong roots in India barring a few States. However, CARDBs have contributed in large measure to agricultural development by lending specially for minor irrigation. All their loans are for productive purposes benefiting mostly the small farm holders. Though land

development banking has made considerable progress in recent years, it has not really contributed much to the improvement of the financial position of the farmers. A large number of factors are responsible for the relative ineffectiveness of CARDBs.

Problem of overdues. Mounting overdues in most of the CARDBs have crippled the structure badly, in recent years. Overdues at the level of PCARDBs have been put between 42 to 44 per cent. Overdues have caused innumerable financial problems besides limiting the capacity of these banks to lend and operate as viable units. The financial discipline imposed on the banks in the matter of eligibility to undertake fresh lending based on recovery performance has been the main limiting factor for quantitative growth of credit operations. To some extent, the banks themselves are to be blamed for this predicament due to faulty loaning policies, inadequate supervision, over-utilisation of loans, ineffective measures for recovery etc. Which have contributed to the deterioration in recovering the loans. Even when the wilful defaulter's lands are attached and auctioned under the provision of law, the banks find few coming forward to purchase such lands. Various suggestions for making the coercive measures effective have largely remained unimplemented at the levels of State governments. With large overdues, restricted lending eligibility and financial problems, the operations of the banks in a few states have come to a standstill. Unfortunately, there are neither permanent arrangements to rehabilitate borrowers and banks, nor any credit stabilisation arrangements take care of overdues affected by national calamities and other factors beyond the control of CARDBs and the borrowers. Overdues, however, are not peculiar to CARDBs alone. The position is equally bad in other sectors of rural credit. Some serious thinking is called for to remedy the situation at the higher levels before the institutional rural credit arrangements are put out of gear.

Lack of trained manpower. No doubt CARDBs have grown over the years, but not enough attention has been paid to build up the manpower capable of shouldering the increasing volume of business and to face the emerging challenges. To bring about qualitative changes in lending, the CARDBs should have adequate technical personnel and supervisory staff. Diversification of loans for certain non-traditional purposes of agricultural development and for non-land based investment activities has to take place if the CARDBs have to expand their loaning business. This requires comprehensive changes in the legal framework of respective co-operative societies Act and bylaws of the CARDBs.

Diversification of loans. For the success of diversification, the banks have to change the traditional norms of landed security against loans to other forms of securities like hypothecation of assets, charge on land, government guarantee, personal surety, etc. provided investment proposals are otherwise viable. Landless labourers, village artisans and marginal farmers who could take up certain productive activities are not able to secure credit from the CARDBs mainly because they do not possess land or adequate security to offer against loans. But in some states the CARDBs have made a beginning in diversifying the loans which have enabled a large number of farmers and weaker sections to take loans for several activities like dairy farming, poultry farming, inland and marine fisheries, sheep rearing, sericulture, gobar gas plants and bullock carts. There is good scope for financing agro-processing industries and rural and cottage industries which have so far remained outside the purview of CARDBs operations. For expansion of their business and to play the role expected of them, the CARDBs have to explore the possibilities of financing various diversified activities and exploit the potential area of agricultural and rural development.

Future of CARDBs

Since the Seventh Plan, the CARDBs were the main institutional agency to implement the minor irrigation programmes. Apart from minor irrigation, the CARDBs are also stepping up their credit assistance to several other agricultural development activities and for various subsidiary occupations. The integrated rural development programme now covers the entire country to improve the rural economy and institutional agencies including the CARDBs are involving themselves effectively to support various productive activities which, besides supplementing the income of the people, result in creating employment potential in rural areas.

5. RURAL CO-OPERATIVE MOVEMENT IN INDIA—AN EVALUATION

The co-operative movement has been in existence for over a century. According to many critics, the movement is an utter failure and should be scrapped. The movement has done nothing to abolish poverty of the rural masses. Nor has it contributed to increase agricultural production, to establish better marketing conditions, better living, etc. It has not reduced, leave alone, eliminated, the rapacious money-lender from the rural scene. The utter insignificance of the co-operative movement was indicated by the fact that in

1954 (exactly after 50 years of its existence) the co-operative institutions supplied just 3 per cent of the credit requirements of the farmers. The All-India Rural Credit Survey Committee (1954) stated: "Co-operation has failed, but co-operation must succeed."

Since then, with the Government and the Reserve Bank taking active interest, the cooperative movement has made great progress. The progress in the last four decades is much more than the progress which was achieved in the first 50 years of its existence.

Benefits

Co-operative societies have provided credit to the farmers at a cheap rate. Since 1954, the co-operative credit societies are meeting increasingly the requirements of farmers. More than 60 per cent of the credit needs of farmers are met by the co-operative societies. The monopoly of the money-lenders, landlords etc. is being broken in the villages. While at one time the money-lenders provided more than 70 per cent of the farmer's credit needs, they are now providing less than 35 per cent. In course of time, therefore, co-operative credit would become so significant that the village money-lenders will have no role to play in rural finance.

The co-operative societies had led to the use of better farming methods, such as the use of improved seeds, manures, etc. The marketing and processing societies have helped members to buy their requirements cheaply and sell their agricultural produce at good prices. It has also provided good storage facilities to the farmers.

Co-operative societies have also helped in improving life in rural areas. They have educated the farmers so that the latter could give up many of their bad habits like gambling, drinking, etc. They have attempted to remove undesirable social customs like reckless spending during marriages, religious ceremonies, etc. They have discouraged farmers from going to the courts and indulging in costly litigation; they have attempted to solve disputes at the village level itself. In other words, they have been attempting to improve the farmers socially and morally.

The non-credit societies, like the housing co-operative societies, the consumers' co-operative societies, etc., have helped their members to raise their economic condition and have saved them from the exploitation of powerful groups. For instance, in many urban areas, housing co-operatives have enabled middle income groups to secure plots of land and also construct their own houses. Consumer co-operatives have done great service to the community by helping to distribute goods in short supply equitably and in selling goods at reasonable prices. In many places they have been instrumental in preventing the private shopkeepers from taking advantage of supply shortages and charging exorbitant prices. Likewise, societies meant to help artisans like handloom weavers may have helped their members with finance and marketing facilities.

The rural co-operatives have played a significant role in areas of credit, agricultural production, agricultural processing and marketing. The guiding principles of co-operatives are voluntary and open membership, democratic control and equitable distribution of profit and utilisation of resources. The present thrust of the movement has been to build a democratically vibrant, economically viable and self-reliant co-operative movement in India.

Except for the year 1990-91, when there was a dip in credit from the co-operative sector, there has been steady increase in co-operative credit over the year — ₹ 3,440 crores in 1984-85 to ₹ 20,660 crores in 1999-2000 and ₹ 42,480 crores in 2006-07.

Weaknesses of the Movement

There are many reasons for the painfully slow growth of the movement in the first 50 years of its existence. The All-India Rural Credit Survey Committee as well as many individuals and committee have brought out the various weaknesses of the movement in India and have suggested methods for improving and reorganising the movement.

(*i*) **Lack of spontaneity**. The co-operative movement in India did not spring from the people themselves. The movement was not voluntary, and the people did not come forward to organise societies to satisfy their needs. On the other hand, the movement took the form of a government department. The villagers among whom the credit societies were started generally thought of the societies as government lending agencies. The government officials who ran the movement were ignorant of the ideals of co-operation. They were neither properly trained, nor were they aware of the needs of the farmers.

(*ii*) **Lack of funds**. A basic weakness of the co-operative movement was the lack of funds. It was felt that the members themselves should save and deposit their savings and thus contribute a large share to the working capital of the societies. The central and the state co-operative credit societies could not attract as much deposits from the general public as was anticipated. This is the position even now. The Reserve Bank was willing to lend to the co-operative banks, and at concessional rates, but even this facility could not be taken advantage of by the State co-operative banks. Lack of funds was one of the basic weaknesses of the movement.

(*iii*) **Loans for productive purposes only**. The co-operative credit societies did not help the farmers in meeting all their credit requirements. They gave loans only for agricultural operations. But the farmers required loans to meet many of their other requirements also. For these purposes, the farmers had to depend upon the money-lenders. In other words, the co-operative credit societies should have met all the requirements of the farmers, otherwise they would not receive full loyalty of the farmers.

(*iv*) **Provision of credit only**. The co-operative movement failed to appreciate the organic connection between credit, marketing and processing. As a result, the co-operative societies provided loans to the farmers but did not help the latter in any other way. In certain areas different societies were started for different purposes. What was really needed was a co-operative society which would meet all the needs of the farmers and keep in continuous touch with them throughout the year. The failure to provide credit, marketing, processing, better farming, etc., to the farmers was one of the basic factors responsible for the weakness of the movement in India.

(*v*) **Competition from private agencies**. From the very beginning, the co-operative movement met with competition from powerful vested interests. In villages, the money-lenders and traders worked for the failure of the village societies. In urban areas, consumer societies faced bitter opposition and hostility of traders and speculators. But such opposition to the co-operative movement was not anything unique to India; such was the experience of other countries too. But on account of the financial weakness of the movement in India, co-operation could not make much headway in the face of powerful competition.

(*vi*) **Lack of co-operation on the part of the people**. In India, people have been largely illiterate, ignorant and extremely conservative. For one thing, most of them did not understand the real meaning and objective of co-operation. For another, the principle of unlimited liability which was the basis of the village credit societies prevented the better farmers to join the movement. Co-operation cannot succeed unless there is willing and complete co-operation from the people.

(*vii*) **Defective management and leadership**. The failure and liquidation of many societies in rural areas was directly due to the defective management and leadership. As mentioned earlier, the village economy is dominated by the landlords. The small farmers owe blind allegiance to the landlords. But these landlords did not care much about the success of the co-operative movement. Nor did they take genuine interest in promoting the welfare of the farmers. Besides, the work of the societies suffered from nepotism, favouritism and partiality. For instance, loans and other assistance flowed easily to rich farmers and to the relatives and friends of the office-bearers. The needy and the poor failed to get any assistance. Moreover, the office-bearers were not strict in getting repayments from those in whom they were interested. In general, the management was weak and inefficient.

(*viii*) **The attitude of the Government**. The Government was correct in encouraging the movement in all possible ways. The mistake it made was to convert co-operatives into a government department with all the rigidities and short sightedness associated with a government department. The tendency was to officialise the movement too much and leave little to private initiative. Moreover, the Government put more emphasis in quickening the pace of the movement instead of consolidating it. Government did not take adequate interest in improving the financial strength of the societies, particularly the village primary credit societies.

(*ix*) **The nature of Indian rural society**. Conditions in Indian rural society did not promote co-operation among people. The average Indian farmer is illiterate and ignorant and has not been able to understand the significance and utility of co-operation. Besides, rural society is riddled with caste spirit, religious feelings and other conditions which hamper the growth of the co-operative spirit and of the co-operative movement. To a large extent, these conditions prevail even now.

We may conclude our assessment of the co-operative movement by two quotations from two international surveys of the co-operative movement. After a study of the co-operative movement in Iran, Sri Lanka and Pakistan, U.N. Research Institute for Development (UNRID) concluded:

"The co-operatives have not . . . . . really helped members to improve their position or fought against those who exploit the peasants and restrained their development".

Another survey concluded :

"The co-operatives are marginal institutions that survive as instruments of government or because they reinforce existing structures."

6. COMMERCIAL BANKS AND RURAL CREDIT

An important argument in support of bank nationalisation was that commercial banks had kept themselves aloof from the problems of agriculture and had remained largely indifferent to the credit needs of farmers for agricultural operations and land improvement. When social control of banks was introduced in 1967, a rapid expansion in bank branches in rural areas was started. By July 1969, all

commercial banks had over 1,860 branches in rural and semi-urban areas; this number had increased to over 30,585 by June 2006. There were 3,07,17,195 million agricultural borrowing accounts with commercial banks amounting to ₹ 3,08,087 crores (2007-08), as compared to only 0.2 million accounts with total outstanding advances to the extent of about ₹ 160 crores in June 1969. A large number of village co-operatives are among the borrowers, some of them borrowing from other financial agencies as well.

Direct Finance by Commercial Banks

At the time of bank nationalisation, it was clearly conceded that the commercial banks did not have the necessary experience or the personnel to deal with the farmers directly, while the co-operatives had been specialising in rural credit since the beginning of the century. Even then, the nationalised banks were expected to go vigorously in support of the farmers in general and the small cultivators in particular. In the initial stages, for obvious reasons, the nationalised banks concentrated their attention on large cultivators and other special category farmers such as those engaged in raising high-yielding varieties of foodgrains. At present short term crop loans account for nearly 42 to 45 per cent of the total loans disbursed by the commercial banks to farmers. Term loans for varying periods for purchasing pump sets, tractors and other agricultural machinery, for construction of wells and tube-wells, for development of fruit and garden crops, or levelling and development of land for the purchase of plough animal, etc. are provided. These term loans account for about 35 to 37 per cent of the total loans disbursed by commercial banks.

Finally, commercial banks extend loans for such activities as dairying, poultry farming, piggery, bee keeping, fisheries and others—these loans account for 15 to 16 per cent. Regionwise, Southern region accounts for the bulk of the credit disbursed by commercial banks viz., 52 per cent of the total credit extended.

Commercial Banks and IRDP

Since October 1980, the Government has extended the integrated rural development programme (IRDP) to all development blocks in the country and has asked the commercial banks to finance IRDP. The leading banks have to prepare banking plans, and allocate the responsibility of financing the identified beneficiaries among the participating banks. It has been found that commercial banks have not implemented IRDP enthusiastically. But commercial banks have valid reasons for their lukewarm attitude.

In the first place, commercial banks have been asked to finance all economically and backward people identified by government agencies. Commercial banks have found that most of the affluent farmers have managed to get their names inserted in the beneficiaries list through paying the Government officials or through using political pressure. In other words, all the prospective borrowers are not really economically backward and banks have the responsibility to find out the eligible beneficiaries.

Secondly, commercial banks have found that all the beneficiaries do not utilise the loans for which they are granted. In many cases, the farmers may use the bank loans for unproductive purposes but may produce receipts of purchase of buffaloes through bogus sellers (who may oblige for a commission). Commercial banks have to ascertain the credibility of sale-purchase transactions before disbursing loans.

Finally, small and marginal farmers are fleeced by petty government officials, veterinarians, local politicians and panchayat samiti members before they could become beneficiaries of bank loans. Ultimately it is the banks which suffer due to heavy overdues. Accordingly, banks are reluctant to finance IRDP.

Indirect Finance by Commercial Banks

Even though the scope for direct financing by commercial banks would be limited for some years to come, there is considerable scope for indirect financing by commercial banks. For instance, commercial banks are financing co-operative societies to enable them to expand their production credit to the farmers. More especially, they increasingly finance co-operatives engaged in the marketing and processing of agricultural produce or in activities ancillary to agriculture such as dairy farming, poultry farming etc. In this connection., the State Bank of India and its subsidiaries are already playing an active role in financing co-operative marketing and processing.

Commercial banks are providing indirect finance for the distribution of fertilisers and other inputs.

Commercial banks extend credit to manufacturing or distribution firms and agencies and co-operatives engaged in the supply of pumpsets and other agricultural machinery on a hire-purchase basis. They finance the operations of the Food Corporation of India, the State Government and others in the procurement, storage and distribution of foodgrains.

Finally, commercial banks increasingly subscribe to the debentures of the central land development banks and also extend advances to the latter. This enables land development banks to expand their medium and long-term advances to farmers for purposes of land improvement and land development.

Commercial Banks and Small Farmers

It has been estimated that nearly 70 per cent of farmers owning less than 2 hectares of land are not getting bank credit; only large landowners have been found creditworthy and suitable for bank advances. But such a situation cannot continue for long. Under the direction of the Planning Commission, Small Farmers Development Agencies (SFDAs) have been set up to identify small farmers and work out economically viable schemes of agricultural development. Commercial banks have to group them into various categories for credit support so as to enable them to become viable cultivators.

For instance, in areas where the subsoil water table is high, the small cultivator has to be helped by banks to convert his dry holding into wet holding. With a pumpset loan, the cultivator can change the cropping pattern into double or even multiple cropping activity. As regards small cultivators near urban areas and with irrigation facilities, commercial banks can help them to go in for poultry farming and maintaining one or two vegetable cultivation or combine it with small milch cattle.

Problems of Commercial Banks in Agricultural Credit

The annual credit needs of the agricultural sector in the next few years are estimated to rise to ₹ 2,00,000 to ₹ 3,00,000 crores. To meet these needs is an enormous task, and responsibility will have to be borne by cooperatives and commercial banks. As resources available to commercial banks in the agricultural sector will naturally be limited, it is important that every commercial bank attempts to make optimum use of its limited resources in this sector.

In the field of financing of agriculture, the problem is not merely quantitative but also of coverage vis-a-vis the organisation and the personnel available to the nationalised banks. The majority of the rural population consists of small farmers. Further, there are 5,50,000 villages spread throughout the country. To reach all of them with only about 47,000 banking offices is, no doubt, a stupendous task. Even with the completion of the branch expansion programmes of the commercial banks now in hand or those which may be undertaken during the next 5 to 10 years, commercial banks may not be in a position to cover many of the villages. Moreover in recent years, the rural branches of commercial banks in general and branches of regional rural banks (RRBs) in particular have been under severe financial strain on account of higher transactions costs involved in handling of large number of small-size loan accounts and somewhat lower interest income as a result of concessional rate of interest on small-size loans. The lower proportion of current deposits in total deposits of rural branches has also placed them at a disadvantage with regard to cost of resources. Finally, the presence of overdues, particularly after the implementation of Agricultural and Rural Credit Debt Relief Schemes, 1990 has further adversely affected the viability of rural branches of commercial banks.

Under these conditions, if the development of agriculture is not to suffer for want of credit and if there has to be some improvement in the lot of innumerable small farmers, new dimensions will have to be given to schemes of financing agriculture.

RBI Guidelines on Farm Credit, 1998

As far back as 1970, RBI circulated among all commercial banks a circular entitled "Guidelines for the financing of agriculture by commercial banks" so that the rationale, the policies and procedures for making agricultural loans might be clear to commercial banks.

(a) Credit norms and scales of finance : Commercial banks should extend "credit not only to already viable cultivators for further increasing their surpluses but more important to marginal and potentially viable cultivators."

(b) Margins of security : Banks were asked to be liberal in their loans to the farmers, and were asked to keep as low a margin on the loans as possible. Most commercial banks were keeping 25 per cent margin on the loans given to the cultivators.

(c) Securities against loans to cultivators : As lending was production-oriented, a mere charge or hypothecation of crops should be sufficient for short term loans. Besides, pledge of produce, banks could also accept such securities as hypothecation of machinery, mortgage of land by deposit of title deeds, pledge of gold ornaments, guarantee of one or two solvent parties, etc. The idea was that the farmer should be able to provide the necessary security without much difficulty.

(d) Recovery of defaults : Commercial banks should evolve a suitable set of rules and procedures to determine the circumstances in which defaults might be condoned on account of crop failures and the manner in which the farmer-borrower might be given relief, as for example, by the extension of the loan or its conversion from a short-term to a medium-term loan. As for wilful defaulters, efficient supervision and timely action alone could help to keep them in check.

(e) Need for coordination : In the initial stages of the entry of commercial banks in the field of rural finance, there was unavoidable duplication; it was found that more than one commercial bank as well as co-

operative society had financed the same borrower for the same purpose and against the same security. Such duplication would have to be avoided.

The Reserve Bank of India set up in December 1997 a high-level Committee on agricultural credit, chaired by Mr. R. V. Gupta, a former Deputy Governor. The Committee submitted its report in April 1998. Important recommendations of the Gupta Committee are as follows :

(a) Free interest rates on farm loans : According to Gupta Committee, commercial banks should be free to fix lending rates for loans of all amounts, like in the case of co-operative banks and RRBs. At the moment, interest rates on loans above ₹ 2 lakhs have been freed but banks charge 12 per cent for loans below ₹ 2 lakhs. However, the interest costs on these loans are passed on to the loans above that amount. Thus banks charge rates as high as 19 per cent for higher quantum loans. The Gupta Committee refers to this disparity in interest rates as "cross subsidisation" and recommends complete freeing of interest rates as a solution. According to the Committee, the agricultural community places more importance on timely availability of adequate credit rather than on lower interest rates. This is the most controversial recommendation of the Gupta panel.

(b) Scrap 18% target for agricultural lending: Instead of fixing targets on agricultural credit, RBI should indicate the expected increase in flow of credit in a given year over the previous year and individual banks should prepare appropriate credit plans.

(c) Modify service area approach : RBI should modify the service area approach and allow banks to operate outside their areas and the agricultural borrowers should be free to go to any branch.

(d) Offer farmers a composite credit package : The banks should formulate and offer a composite credit package to satisfy all their short term credit needs.

(e) Devise a liquid savings package : It is well-known that farmers tend to invest in land and gold. The banks should devise a liquid savings package for the farmers.

Government's Directives to RBI and NABARD

Towards the end of May 1998, RBI announced its acceptance of the recommendations of the Gupta Committee and directed all scheduled commercial banks to immediately take appropriate action to implement the Committee's recommendations and speed up the flow of credit to the farm sector. The RBI's decision followed Government's directive to RBI and NABARD to reschedule loans to farmers and waive off interest in view of large scale suicides by farmers following crop failures in several parts of the country.

1. Banks should introduce annual composite cash credit limits to all agricultural borrowing families and disburse all loans in cash to facilitate dealer choice to borrowers and foster an environment of trust.

2. Banks should delegate adequate powers to branch managers to enable them to dispose of 90 per cent of loan applications at the branch level itself.

3. The pre-sanction appraisal of the borrower should focus on income stream of the borrower, his credibility, his capability for taking up the proposed activities, and the technical viability of the proposal. The manager should desist from asking for additional collateral by way of guarantors.

4. Banks should design specific loan products to borrowers in non-farm sector for enabling them to pursue a number of non-agricultural activities alongside their farm activities for supplementing their income.

5. Banks should design a fully liquid savings module with an appropriate return and in-build the same in the loan product. This should take care of the interests of the farmers in the event of adverse price fluctuations or natural calamities.

6. Banks should furnish borrowers with a clear statement of the credit facilities availed, indicating separately various fees and charges.

7. Banks should link up the activities of the rural branches with farmers' clubs established through the initiative of NABARD to facilitate technology transfer regarding agricultural operations, wherever possible.

8. Banks should review hi-tech agricultural branches to identify those that are not working well due to inadequate expertise or lack of demand and also ensure that these branches are used to disseminate information relating to agricultural operations, specially for providing technical information regarding cultivation of high value crops. The banks should also ensure that the farmers are given right advice regarding cultivation of crops or inputs to be used.

9. Banks should ensure operationalisation of a model set of documents prescribed by the working group on NGOs relating to loan formats agreements and applications forms.

In general, RBI has urged chairmen and managing directors of banks to pay surprise visits to their rural branches during tours to states so as to send appropriate signals to field level staff. Internal inspection teams must visit a few service area villages and obtain a feedback from farmers directly on the quality of interaction which the branch officials have at the ground level.

It is now common knowledge that the flow of institutional credit to farmers has not been adequate, forcing the farmers, especially the small farmers, to take loans from money lenders at exorbitant rates of interest — this has led to a series of suicides among heavily

indebted farmers. Any number of guidelines and directives from the Government or from RBI will have no effect unless there is a fundamental change in the attitude of bank officials at all levels. There is not going to be much change in the quantum and quality of farm credit in the near future, despite all assurances by the Finance Minister.

7. LEAD BANK SCHEME (LBS)

With the nationalisation of 14 banks the Government took the initiative of extending the banking system to rural areas and was looking for a scheme of rapid branch expansion. The National Credit Council Study Group under the chairmanship of Prof. D.R. Gadgil first recommended the "area approach" to nationalised banks. The Committee of Bankers (known as the Nariman Committee) appointed by the Reserve Bank of India in 1969 accepted the "area approach" and gave a practical shape to it under the title "Lead Bank Scheme". Towards the close of 1969, the Reserve Bank of India accepted the scheme and finalised a Lead Bank Scheme for all the 380 districts in the country. Under the scheme, all the nationalised banks and a few private sector banks were allotted specific districts and were asked to play the "lead role". The allotment of districts of the various banks was based on such criteria as the size of the bank, the adequacy of its resources for handling the volume of work, contiguity of districts, the regional orientation of banks, the desirability for each State to have more than one lead bank operating in the territory and, to the extent possible, for each bank to operate in more than one State.

Objectives of the Scheme

The basic aim of the Lead Bank Scheme is that one of the commercial banks performs as a lead bank in a district for coordinating credit deployment in a district. Under the scheme, the Lead Banks act as leaders to bring about a co-ordination of co-operative banks, commercial banks and other financial institutions in their respective districts to bring about rapid economic development. They make a quick survey of their lead districts, identify unbanked centres and prepare a phased programme for branch expansion in the district. On the basis of the surveys, the Lead Banks estimate the deposit potential and the credit gaps and take steps to tap the deposit potential and fill the credit gap.

The close involvement of the Lead Bank with a particular area should result in deposit mobilisation and also in the expansion of finance to agriculture and small industries. Individual banks make a detailed survey of the area, of their operation and the potential in that area for economic growth and evolve schemes to accelerate their involvement in their respective areas. The following important benefits are expected to flow from the scheme:—

(a) The whole country is served by a well-knit system of commercial and co-operative banking;

(b) branch expansion, supervision and guidance have become effective;

(c) a dynamic relationship between commercial banks, co-operative credit institutions and government authorities at the district level is being evolved;

(d) there is generally a close integration of credit and banking business with other activities; and

(e) major bottlenecks in the development of the district are identified and the Lead Bank brings pressure on the appropriate agencies to take remedial action.

Weaknesses of the LBS

The LBS did not have a proper start. From the very beginning there was inadequate understanding, and even serious misunderstanding, of the scope of objectives of the Lead Bank Scheme. In an article of the Reserve Bank of India Bulletin, it was stated : "There was much misunderstanding about the purpose of surveys, not to mention the functions of leadership in a district. In the minds of bankers, the Lead Bank Scheme had obviously not taken a distinct operational shape."[5]

The Banking Commission (1972) came across two divergent views on the role of the Lead Bank Scheme. One view was that the Lead Bank of a district conducts district surveys, identifies places of banking potential and offers the list to all interested to open branches; the Lead Bank itself would open branches only in those places which were not taken up by other banks.

The second view was that the Lead Bank had the full responsibility to open branches in the district entrusted to it. This confusion as to the real meaning and content of the Lead Bank Scheme naturally hampered the progress of the scheme in the initial years.

The criterion of contiguity of districts could not always be followed in practice. Some regional banks were allotted districts and States where they had no foothold whatsoever, e.g., Canara Bank, Syndicate Bank and Union Bank were allotted districts of U.P. and Haryana. Many of the Lead Banks could not develop the "personal feel" for local problems and deposit

5. "The Lead Bank Scheme : Progress and Perspective", *Reserve Bank of India Bulletin*, November, 1970.

potential. Other difficulties for regional banks which were allotted lead districts away from the base of their operations include : recruitment of new staff and posting of the existing staff in far-flung areas, lack of knowledge of the local language, differences in customs, aptitudes and attitudes, etc. Supervision, control and guidance by the head office became difficult in such cases.

The Banking Commission 1972 (Chairman, R.G. Saraiya) found that the Lead Banks were not properly equipped to conduct the techno-economic surveys of the districts allocated to them. Moreover, in the opinion of the Commission, such surveys should be conducted by the State Governments as they were said to be useful from the point of view of comprehensive planning. As the Banking Commission emphasised, the function of planning and the function of banking were separate. It should be the responsibility of the State Government and not of the Lead Bank to plan the development of a district.

The Banking Commission pointed out serious difficulties at the operational stage. The Lead Bank was expected to be a co-ordinating agency for commercial and co-operative banks, short-term and long-term credit and financial institutions and the district authorities in the State. The Commission pointed out that the Lead Bank had no authority over others, nor was it necessary for others to approach the Lead Bank for any specific purpose. Besides, in a far-off district, comparatively junior officers of a Lead Bank might be posted and they might find it difficult to get the necessary co-operation from officers of other banks if the latter happened to be seniors. These were real obstacles which would hinder the emergence of the lead role of the Lead Banks.

Finally, the Commission indicated a word of caution about the role of Lead Banks. Extension of banking facilities was an important part of the infrastructure needed for the development of an area in combination with other infrastructural facilities such as transport, communications, storage, processing and marketing facilities etc. But then, when such facilities were not adequately provided for in a district, the Lead Bank could have only limited success.

Implementation of the Scheme

By 1973-74 surveys had been completed in 380 districts to be covered under LBS. The surveys covered 90 per cent of the districts in the underdeveloped States of Assam, Bihar, West Bengal, Orissa, M.P., and U.P. The Lead Banks had also constituted district level consultative committees comprising representatives of scheduled commercial banks and other financial institutions operating in the district, State Government officials, etc., to help in identifying bankable schemes, in evolving methods for exchanging information about borrowers, lending to priority sectors, etc.

RBI set up a High Power Committee (HPC) in March 1976 to monitor the overall progress of LBS and to issue guidelines for the effective functioning of the scheme. On the basis of the directives given by the H.P.C., the Lead Banks had to formulate district credit plans (DCPs) for three-year periods at a time. The district credit plan was to be of a comprehensive nature indicating credit targets for institutional credit agencies in the district on a block-wise, sector-wise, scheme-wise and bank-wise basis.

During 1978-79, the Government introduced the integrated rural development programme (IRDP) in order to lift the identified target groups above the poverty line and create additional employment opportunities in the rural areas. Lead Banks were advised to prepare banking plans, to allocate responsibility of financing the identified beneficiaries for different activities among the participating banks and integrating the same with the annual action plans (AAPs). The lead banks were given the responsibility for processing and sanctioning applications of identified beneficiaries from the villages allotted to them. Under the directions of the Government of India, commercial banks adopted from , April 1989, the service area approach as part of the LBS for improving the quality of rural lending by them.

Programmes incorporated in the district credit plans were not always implemented successfully either because they were not tested for their feasibility or for want of adequate infrastructural support and forward and backward linkages. To ensure effective implementation of the lead bank scheme, the officers of RBI monitor the preparation and implementation of the district credit plans more closely.

The Lead Bank Scheme now covers districts of the country. All the public sector banks are actively involved in the implementation of Lead Bank Scheme(LBS). The main objective of the scheme has been to co-ordinate the activities of the banks and other developmental agencies to facilitate the flow of credit to the priority sector.

Special Agricultural Credit Plans

Public sector banks (PSBs) were advised to formulate Special Agricultural Credit Plans (SACP) since 1994-95 to fix targets for agricultural lending for each year. Since the introduction of the SACP, there has been substantial increase in the flow of credit to agriculture from ₹ 8,255 crores in 1994-95 to ₹ 44,000 crores for the year 2003-04 and ₹ 2,57,000 crores during 2006-07.

8. SERVICE AREA APPROACH: NEW STRATEGY FOR RURAL LENDING

Public sector banks undertook a study on the impact of bank credit on the rural sector during

November-December 1987 in selected districts all over the country. On the basis of these studies, they adopted (since February 1988) a new strategy for rural lending, viz., "Service Area Approach" (SAA) under which each semi-urban and rural branch of commercial bank was assigned a specific area comprising a cluster of villages within which it would operate, adopting a planned approach for its economic growth. The rationale of this approach was to avoid duplication of efforts and scattered lending over wider areas. The compactness in the area of operation will make it easy for the clientele to approach the bank for credit. It would also ensure credit planning and close monitoring of the end use of funds.

The implementation of the Service Area Approach involved five stages, viz.,

(a) identification of the service area for each branch in the rural and semi-urban centres,

(b) survey of the service area for assessing the potential for lending for different activities and selection or identification of beneficiaries,

(c) preparation of credit plans on an annual basis,

(d) co-ordination on an on-going basis for the effective implementation of credit plans, and

(e) a continuous system of monitoring the progress in the implementation of the plans.

Major advantages of this approach. The main advantages claimed for this new strategy were as follows:

(i) concentrated attention to the development of the service area designated for each branch,

(ii) avoidance of duplication of efforts,

(iii) organised and planned lending, instead of scattered lending over wide areas,

(iv) easier and effective monitoring of the end-use of credit and assessment of its impact on production levels, and

(v) development of a sense of pride, motivation and involvement of the branch manager in the success of his own plans and thus bringing about an improvement in the quality of lendings, optimising the use of credit and establishment of better linkages with production and productivity.

In February 1988, N.D. Tiwari, the then Finance Minister, announced in his budget speech that the banks were to adopt this new approach. RBI instructions were issued immediately and on April 1, 1989—within a year of its announcement—the scheme was launched all over the country. It was obvious that political expediency had dictated this speedy implementation. "A bank for every village" made an excellent election slogan.

With a view to ascertain the manner of implementation of the Service Area Approach in the rural branches, the public sector banks conducted field studies in December 1989 to ascertain :

(a) the manner of implementation of the service area approach.

(b) the problems encountered; and

(c) the steps needed for improving the operational aspects of the scheme.

Following this study, the consensus was that the scheme held promise for improving productivity of rural credit and that efforts should be made towards stabilising it early. Commercial banks were told to prepare branch credit plans for the year 1990-91 keeping in view the deficiencies observed in the credit plans of the previous year and the need to remove them. Further, the cooperative banks were also advised to fall in line with commercial banks in preparing credit plans.

Problems Faced in Service Area Approach (SAA) Strategy

The following problems have been encountered while implementing the SAA :

(a) Allocation of Villages. The initial allocation of villages under the service area approach was not always acceptable to all bank branches. In some cases, villages previously well-served by certain bank branches, were allotted to other bank branches which were new and which could not provide the same service. This was, however, a short period problem which could be solved over a period of time.

(b) Under-utilisation of bank staff. Some banks had created special structures for mobilising rural deposits and for rural lending through the setting up of specialised rural branches — e. g., SBI's Agriculture Development Branches, Bank of Baroda's (BOB) Gram Vikas Kendras, etc. — and operated in large areas. Under the new strategy of SAA, the area of these new bank branches was curtailed. This naturally made much of the specialised staff under-utilised and redundant. At the same time, the new bank branches which were allotted some of these previously well-served villages could not fully meet the credit requirements of the farming community.Besides, the staff posted to rural areas were and are generally reluctant to move and live in rural areas because of the absence of facilities for their housing, education of their children, and so on. The bank staff like to be posted in urban areas and those opting to be posted in villages tend to live in nearby urban or semi-urban areas.

In this connection, we should refer to the need to

train branch managers and lead bank managers to understand and interpret village level data, evaluate the credit needs of the farmers and rural artisans in a sympathetic manner and, at the same time, be strict and vigilant to prevent overdues. Such training of managers and officials was a necessity, if SAA had to succeed.

(c) Tribal and Hilly areas. Tribal and hilly areas in North Eastern States, Orissa, South Bihar, etc. are under-developed and under-banked. Under the system of SAA, as many as 50 to 100 villages were allotted to be served by a single bank branch. Such allocation does not serve any useful purpose. What was really needed was to step up the setting up of bank branches in these areas.

While bank branches were choosy in respect of rural lending and confine their activities to high potential areas, SAA strategy expected each rural branch to be equally effective in all the villages. Naturally, banks found it difficult to implement SAA. The normal tendency was to neglect backward areas and to finance high value loans in selected villages.

Many bank branches were not well organised and did not start rural lending in the area allotted to them in right earnest and as a result, farmers in these areas had not been served adequately by these branches.

(d) Organisational problems. The strategy of SAA gave full responsibility on the bank branches to look after the credit needs of the service areas. As a result, the organisational weaknesses of rural branches of commercial banks came out clearly now. For instance, the single-person rural branches operating in backward areas or in areas where loaning potential was considered inadequate could not meet the requirements of SAA.

Further, only those bank branches which were located in semi-urban areas or those located in prosperous villages were staffed with field staff and technical staff — indicating that the bank management was choosy and selective in staffing rural branches. They were forced to adopt such policy because of RBI control on bank interest rates, constraints of CRR and SLR and the resultant poor profitability. SAA could be fully implemented and could become effective only when these constraints were removed.

The SAA strategy can succeed only if :

(a) a time bound programme for its success was worked out by all banks, with full support of RBI and the Government of India ; and

(b) banks were compelled to switch over to the new approach completely, instead of granting partial or full freedom not to implement the scheme due to organisational weaknesses.

SSA Strategy Scrapped

From the very beginning, critics of SAA asserted that the mass adoption of the new credit delivery strategy was not going to achieve any miracle. It was simply an approach to rationalise rural lending, reduce cost of supervision by

(a) reducing number of villages in which bank branches operate, and

(b) avoiding duplication of efforts in lending in the villages by branches of more than one bank.

A.R. Patel of the Agricultural Finance Consultants states: "We have had other experiments in the past with financing through co-operative societies adopted in1971, farmer service societies launched in 1973, and regional rural banks which were sponsored by Central and State Governments and commercial banks in 1975. None of these have proved to be God's answers to rural banking as they were envisaged."[6]

According to the Government, however, the new strategy was different from past experiments because no new institution was being set up; instead, existing institutions are being geared up to function more effectively.

The Panel of Bankers of the Indian Bankers' Association (IBA) suggested (in 1998) that SAA should be abolished, as it has resulted in a large number of unviable rural bank branches. The Panel of Bankers has further demanded that the banks — and not the government agencies — should be given power to identify the beneficiaries since the current system has resulted in ***inefficient use of funds***. This view was accepted by the Government of India and SAA was given up quietly.

9. REGIONAL RURAL BANKS (RRBs)

One of the important points of the 20-point economic programme of Mrs Indira Gandhi during Emergency was the liquidation of rural indebtedness by stages and provide institutional credit to farmers and artisans in rural areas. It was in pursuance of this aspect of the New Economic Programme that the Government of India setup regional rural banks (RRB).

The main objective of the RRBs is to provide credit and other facilities particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs so as to develop agriculture, trade, commerce, industry and other productive activities in the rural areas.

6. Quoted by Seva Sarkar in Business India, June 12-25, 1989: ***Business at the Grassroots.***

"Regional rural banks (RRBs) were conceived as institutions that combine the local feel and familiarity of cooperatives and the business organisation ability of the commercial banks. In a multi-agency approach for agricultural and rural credit in India, RRBs have a special place".

Initially, five regional rural banks were set up on October 2, 1975 at Moradabad and Gorakhpur in Uttar Pradesh, Bhiwani in Haryana, Jaipur in Rajasthan and Malda in West Bengal. Each regional rural bank had an authorised capital of ₹ 1 crore, and issued and paid-up capital of ₹ 25 lakhs. The share capital was subscribed by the Central Government (50%), the State Government concerned (15%), and the sponsoring commercial bank (35%). The RRBs though basically scheduled commercial banks, differ from the latter in certain respects :

(a) The area of RRBs is limited to a specified region comprising one or more districts of a State.

(b) The RRBs grant direct loans and advances only to small and marginal farmers, rural artisans and agricultural labourers and others of small means for productive purposes.

(c) The lending rates of RRBs should not be higher than the prevailing lending rates of co-operative societies in any particular State. The sponsoring banks and the Reserve Bank of India provide many subsidies and concessions to RRBs to enable the latter to function effectively.

Concessions to RRBs

From the beginning, the sponsor banks have continued to provide managerial and financial assistance to RRBs and also other concessions such as lower rate of interest (8.5 per cent) on the latter's borrowings from sponsor banks. Further, the cost of staff deputed to RRBs and training expenses of RRB staff are borne by the sponsor banks.

The Reserve Bank of India has been granting many concessions to RRBs :

(a) They are allowed to maintain cash reserve ratio at 3 per cent and statutory liquidity ratio at 25 per cent; and

(b) They are provided refinance facilities through NABARD.

RRBs and NABARD

National Bank has the responsibility to lay down policies for RRBs, to oversee their operations, provide refinance facilities and attend to problems faced by them. The National Bank undertakes all work relating to the establishment of RRBs, administration of refinance scheme, formulation of appropriate operational policies, monitor their performance, and keep liaison with the Reserve Bank in regard to branch expansion and the statutory inspection of RRBs.

Progress of RRBs : An Evaluation

RRBs have an important role to play in our rural economy as they have to act as alternative agencies to provide institutional credit in rural areas. In course of time, they are intended to eliminate money-lenders altogether. However, they were not set up to replace co-operative credit societies but to supplement them. In the last 30 years, RRBs have been active participants in programmes designed to provide credit assistance to identified beneficiaries under the new 20-point programme, IRDP and other special programmes for scheduled castes and tribes. They are also implementing differential rate of interest (DRI) schemes for the weaker sections, physically handicapped persons who are gainfully employed, can secure finance from RRBs for purchase of artificial limbs, hearing aids, wheel chairs etc. subject to a maximum of ₹ 2,500 per borrower. The RBI conducted a field study in April 1981 on all qualitative aspects of lending by RRBs. This study established clearly that, by and large,

(a) RRBs had followed instructions given by RBI and the Government of India regarding loan policies, procedures, etc.;

(b) the basic aim of setting up RRBs viz., developing the rural economy by providing credit for the development of agriculture, trade, commerce industry and other productive activities in rural areas was being fulfilled;

(c) RRBs had successfully maintained their image as a small man's bank by confining their credit facilities to the target groups viz., small, marginal farmers, agricultural labourers, artisans and small enterprises for productive activities; and

(d) the recovery position was not satisfactory.

Evaluation of RRBs

According to Reserve Bank of India, "The RRBs have fared well in achieving the objective of providing access to the weaker sections of the society to institutional credit but the recovery position on the whole is not satisfactory"[7]

At the time they were set up, RRBs were expected to revolutionise rural banking by bringing in all the advantages of commercial banks to the door steps

7. RBI, *Report on Trend and Progress of Banking in India, 1989-90*, p. 66.

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Progress of Banking in

of the small and marginal farmer and the rural artisan. They were expected to be concerned with the credit needs of the rural poor. RBI has officially lauded the work of RRBs.

The Narasimham Committee on the Financial System (1991) evaluated the working of RRBs. They were established to provide a low cost alternative to the operation of commercial bank branches but the functioning of the RRBs has given much cause for concern. According to the Committee, there were three basic problems :

(a) On account of the many restrictions placed on the business they could undertake, RRBs had low-earning capacity;

(b) the wage and salary scales of RRBs have been rising and, in fact, with the recent award of a tribunal, their scales would approximate those of commercial banks; with the increase in salary scales, an important rationale for the setting up of RRBs had ceased to exist; and

(c) the sponsoring banks were also running their own rural branches in the very area of operations of the RRBs; this had given rise to certaim unomalies and to avoidable expenditure on controls and administration.

In the opinion of the Narasimham Committee, the problem was one of improving the viability of RRBs without sacrificing the basic objectives for which they were originally set up. The Government should help in evolving a rural banking structure which could combine effectively the advantages of the local character of RRBs with the financial strength and organisational and managerial skills of the commercial banks.

The Narasimham Committee recommended that commercial banks should segregate the operations of their rural branches through the formation of one or more subsidiaries. Each rural subsidiary should have a compact area of operations so as to facilitate recruitment and deployment of manpower apart from providing the needed thrust in business operations and effective improvements in the control and supervision and information systems.

The Narasimham Committee also recommended that banks should have the freedom to swap rural branches—banks with fewer rural branches in certain areas should cede them in favour of those banks which have a larger presence.

The rural subsidiaries should be treated at par with RRBs in regard to cash reserves and statutory liquidity requirements (SLR) and refinance facilities from NABARD. All concessions in lending to agriculture and small industry should be phased out; and there would be saving in costs of administration brought through the process of rationalisation. Accordingly, the rural subsidiaries would become more viable and eventually profitable.

The Narasimham Committee left the option to RRBs and their sponsoring banks as to whether the former should retain their identiy or whether they should be merged on a voluntary basis with the sponsor banks' rural subsidiaries. Such mergers should be considered mainly on commercial and development considerations.

In case RRBs retain their identity and continue to function, they should be permitted to engage in all types of banking business. Their focus should be to continue to lend to the target groups but they should not be forced to restrict lending operations to the target groups alone.

Finally, NABARD should help RRBs to earn higher level of interest income for their surplus cash balances and for their funds presently invested in government securities or in government guaranteed securities for SLR compliance. These measures would help to improve the viability of RRBs.

Khusro Committee on RRBs

The Agricultural Credit Review Committee under the chairmanship of Dr. A.M. Khusro observed that the weaknesses of RRBs were endemic and non-viability was built into their structure. The RRBs had accumulated huge losses; and in a few cases, the losses had eroded even a part of their deposits. There was thus a strong case for winding up such an insolvent institution. Besides, the RRBs were able to serve the interests of the largest groups in the manner expected of them. According to the Khusro Committee, therefore, there was no place for RRBs in the country's rural credit system in the near future and that they should be merged with sponsor banks.

The Government of India considered the recommendations of Narasimhan and Khurso committees. The Government was of the view that RRBs, together with Commercial banks and cooperatives have a critical role to play in multi-agency approach to delivery of agriculture and rural credit. In 2004, the Finance Minister announced the Government's intention to double the flow of credit by banks to the agricultural sector in three years. Under this policy the Government took a series of steps to improve the strength and functioning of RRBs and thereby enable them to meet their primary objectives.

Restructuring of RRBs

The Reserve Bank of India appointed the M. C. Bhandari Committee to suggest measures for restructuring RRBs. Most of the recommendations of the Bhandari Committee are being implemented. The issued share capital of RRBs has been enhanced — from ₹ 75 lakh to ₹ 1 crore. NABARD monitors the working of RRBs as regards productivity, cash management, advances portfolio and recovery performance. NABARD has devised a package of short-term measures for RRBs :

(a) RRBs are freed from their service area obligations.

(b) They are allowed to increase their non-target group financing from 40 per cent to 60 per cent.

(c) They are permitted to relocate some of their loss-making branches at agricultural produce centres, market yards, ***mandis***, etc.

(d) They are given freedom to open extension counters.

(e) They are allowed to give loans for non-priority sector purposes like loans for consumer durables etc. and

(f) They are allowed to upgrade and deepen the range of their activities to cover non-fund activities.

To implement its 2004 policy, the Government entrusted the task of restructuring the RRBs to RBI and NABARD. The recommendations Prof. V.S. Vyas "Advising committee on Flow of credit to Agriculture and Related Activities to restructure RRBs in order to improve their operational vialilty and to take advantage of the economies of scale was accepted. After consultation with all concerned parties, state Governments and commercial banks, the Government of India amalganated 147 RRBs into 46 new RRBs in September 2005. These new bank are sponsored by 19 banks in 17 states. The total number of RRBs have now declined from 196 to 95 (as on September 2007).

The role and financial performance of RRBs have been evolving in response to policy initiatives and changing business environment. Their loans outstanding to the agricultural and rural sector have amounted to

March 31, 2006 — ₹ 13,877 crores

March 31, 2007 — ₹ 18,707 crores

March 31, 2008 — ₹ 32,216 crores

March 31, 2009 — ₹ 37,367 crores

March 31, 2010 — ₹ 46,282 crores

10. NABARD AND ITS ROLE IN RURAL CREDIT

Since its inception, RBI had shown keen interest in agricultural credit and maintained a separate department for this purpose. RBI extended short-term seasonal credit as well as medium-term and long-term credit to agriculture through State level co-operative banks and land development banks.

At the same time, RBI had also set up the Agricultural Refinance Development Corporation (ARDC) to provide refinance support to the banks to promote programmes of agricultural development, particularly those requiring term credit. With the widening of the role of bank credit from "agricultural development" to "rural development" the Government proposed to have a more broad-based organisation at the apex level to extend support and give guidance to credit institutions in matters relating to the formulation and implementation of rural development programmes. A National Bank for Agriculture and Rural Development (NABARD) or the National Bank, for short, was, therefore, set up in July 1982 by an Act of Parliament to take over the functions of ARDC and the refinancing functions of RBI in relation to co-operative banks and RRBs. NABARD is linked organically with the RBI by the latter contributing half of its share capital—the other half being contributed by the Government of India—and nominating three of its Central Board Directors on the board of NABARD, besides a Deputy Governor of RBI being appointed as Chairman of NABARD.

Resources of NABARD

The authorised share capital of NABARD was ₹ 500 crores and its paid-up capital was ₹ 100 crores, contributed equally by the Central Government and the Reserve Bank. The paid-up capital of NABARD was raised from ₹ 100 crores to ₹ 500 crores and then to ₹ 2,000 crores by the year 1999-00. The resources of the National Agricultural (long-term operations and stabilisation) funds were transferred to NABARD. World Bank and IDA have also been providing funds to NABARD for implementation of the projects financed by them. The most important source of NABARD's funds are now RIDF deposits, closely followed by market borrowings.

In recent years, there has been considerable improvement in the resource position of NABARD mainly due to :

(a) Significant rise in the deposits under the Rural Infrastructure Development Fund (RIDF) by commercial banks;

(b) use of tax-free bonds through the issue of capital gains bonds and priority sector bonds.

(c) acceptance of priority sector deposits from private banks.

NABARD cannot accept short-term public deposits and, therefore, it has depended on the general line of credit (GLC) from RBI from its inception in 1982. NABARD's dependence on GLC from RBI is quite large and NABARD uses this source to meet short-term credit and working capital requirements.

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Functions of NABARD

NABARD has a dual role to play :

(a) as an apex institution and

(b) as a refinance institution. NABARD has inherited its apex role from RBI i.e. it is performing all the functions formerly performed by RBI with regard to agricultural credit. At the same time, NABARD has taken over the functions of ARDC and thus provides refinance facilities to all banks and financial institutions lending to agriculture and rural development.

(i) NABARD services as a refinancing institution for all kinds of production and investment credit to agriculture, small-scale industries, cottage and village industries, handicrafts and rural crafts and real artisans and other allied economic activities with a view to promoting integrated rural development;

(ii) it provides short-term, medium-term and long-term credits to State Co-operative Banks (SCBs), RRBs, LDBs and other financial institutions approved by RBI;

(iii) NABARD gives long-term loans (up to 20 years) to State Governments to enable them to subscribe to the share capital of co-operative credit societies;

(iv) NABARD gives long-term loans to any institution approved by the Central Government or contribute to the share capital or invests in securities of any institution concerned with agriculture and rural development;

(v) NABARD has the responsibility of co-ordinating the activities of Central and State Governments, the Planning Commission and other all-India and State level institutions entrusted with the development of small scale industries, village and cottage industries, rural crafts, industries in the tiny and decentralised sectors, etc;

(vi) it has the responsibility to inspect RRBs and co-operative banks, other than primary co-operative societies; and

(vii) it maintains a Research and Development Fund to promote research in agriculture and rural development, to formulate and design projects and programmes to suit the requirements of different areas and to cover special activities.

Working of NABARD

NABARD is the apex organisation with respect to all matters relating to policy, planning and operational aspects in the flow of credit for the promotion of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts and other allied economic activities in rural areas.

NABARD is performing the various functions assumed by it smoothly and efficiently. For instance, it sanctioned short-term credit limits worth ₹ 8,820 crores during 2003-04 and ₹ 16,100 crores during 2006-07 for financing seasonal agricultural operations at the concessional rate of 3 per cent below the Bank Rate. NABARD has attempted to ensure the flow of credit to weaker sections of society under the new 20-point programme by making it obligatory for banks to disburse a specified percentage of short-term loans to small and marginal farmers and other economically weaker sections.

NABARD has continued to follow the policy earlier laid down by the Reserve Bank in regard to sanction of medium credit limits for approved agricultural purposes. It also grants longterm credit to State Governments for contribution to the share capital of co-operative credit institutions.

NABARD provides two types of refinance. The first is extended to RRBs, Apex Rural Credit Institutions, *viz.*, State Cooperative Banks and State Governments. The second type of refinance is extended to provide resources for ground level deployment of rural credit.

In the first case, NABARD provides refinance to State Cooperative Banks and RRBs for their short-term and medium-term requirements. The total outstanding refinance to State Cooperative Banks and RRBs amounted to ₹ 14,600 crores during 2006-07. NABARD's refinance facilities to State Governments is for long periods and is specifically meant to help State Governments to contribute to the share capital of weak credit cooperative societies and banks. The total outstanding refinance to State Governments came to ₹ 335 crores by the end of June 2007

The second type of refinance from NABARD is meant to increase ground level credit to finance short-term seasonal agricultural operations through credit co-operatives. The Central Cooperative Banks (CCBs), can secure refinance facilities from NABARD under certain minimum eligibility conditions or norms—as for example, CCBs are required to have minimum loan recovery of 50 per cent or NPA (non-paying assets) not exceeding 20 per cent of outstanding loans and advances. Apart from short-term seasonal agricultural operations, NABARD provides refinance facilities for buying, stocking and distribution of fertilisers and other inputs and for production and marketing activities of weavers societies, industrial cooperative societies, etc.

Purpose-wise, minor irrigation has continued to occupy an important place in schematic lending of NABARD—about 13 per cent of the schemes sanctioned in recent years consisted of minor irrigation works; it was as high as 24 per cent during 1992-93.

Farm mechanisation has been a major area of NABARD refinancing — it is around 28 per cent of total refinance. NABARD's refinance assistance under IRDP is specifically to help weaker sections of the rural community for minor irrigation, dairy development, sheep/goat/piggery rearing, fisheries, small business, etc. Land development, command area

development (CAD), plantations and horticulture, poultry, sheep breeding etc. are more important schemes which are financed by NABARD.

State Cooperative Agricultural and Rural Development Banks (SCARDBs — formerly the land development banks) now lead in availing refinance facilities from NABARD, closely followed by commercial banks including RRBs and State Cooperative Banks.

NABARD has vigorously continued its efforts in promoting investments in the agricultural sector in the less developed/under-banked states—Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Orissa, in that order, have been the biggest beneficiaries.

NABARD is playing an energetic role in strengthening and re-organizing the co-operative credit structure in the country. The programme of reorganization of Primary Agricultural Credit Societies (PACs), aimed at building a strong and viable base level structure in the co-operative credit system is more or less complete in all states except Gujarat, Maharashtra and Jammu and Kashmir. NABARD has formulated a set of guidelines for planning the future development of reorganised societies in a phased manner. NABARD is also working towards an effective integration of co-operative credit institutions. Under an original suggestion made by RBI, State Governments have been asked to take steps to ensure functional coordination between short-term and long-term cooperative credit—NABARD has set up a cell to monitor implementation of this programme. NABARD is constantly reviewing the rehabilitation programme of those Central Cooperative Banks (CCBs) who have been identified as weak and who were being helped to rehabilitate themselves. NABARD is also helping in rehabilitating as well as improving the organisation and managerial efficiency of State Agriculture and Rural Development Bank and Agriculture and Rural Land Development Banks.

NABARD and Rural Infrastructure Development Fund (RIDF)

The Government was worried at the lacklustre growth in agricultural investment particularly in rural infrastructure. The RIDF was created to extend loans to State Governments to enable them to complete the implementation of the existing rural infrastructural projects which were held up for want of funds. Infrastructure projects refer to irrigation, rural roads, rural bridges, watershed development, flood protection, market yard/godown, cold storage, fisheries, forest development, inland water ways, etc.

The Union Budget for 1995-96 proposed the creation of Rural Infrastructure Development Fund (RIDF) in NABARD with a corpus of ₹ 2,000 crores. This corpus was contributed by all the Indian scheduled commercial banks (other than RRBs) to make up for their short fall in agricultural lending target of 18 per cent of net bank credit. With every successive budget, the Indian Government continued RIDF, designating as RIDF-I, RIDF-II and so on. The mode of contributions by scheduled commercial banks was, however, changed.

Table 3 brings out the sanctions and disbursement of loans under RIDF by NABARD.

The progress of completion of projects was satisfactory only under RIDF-I to RIDF-III when the disbursement was as high as 90 to 91%. From RIDF-IV, disbursements declined considerably. For instance, between RIDF-IV to RIDF-VIII (for the years 1998-2002), loans disbursed as percentage of loans sanctioned declined from 78 percent to 40 percent. The fund was extremely underutilised and, in fact, during the year 2006-07, disbursement was a pathetic 15 per cent of the loans sanctioned. However disbursement reached 66 percent in 2009-10. Under-utilisation of funds under RIDF was essentially due to the indifference and incompetence of State Governments in getting various infrastructural projects prepared and in getting the necessary clearances in time.

NABARD was able to mobilise deposits from all banks under RIDF to the tune of ₹ 35,720 crores

TABLE 3: Financial Assistance under RIDF by NABARD

(*₹ crores*)

RIDF Phase	*Year*	*Fund Corpus*	*Amount Sanctioned*	*Amount Disbursed*	*Disbursement as percentage of sanctions*
RIDF I to III	1995-97	7,000	7,290	6,600	92–90
RIDF IV to VIII	1998-02	21,500	21,950	13,470	78–40
RIDF-IX	2003-04	5,500	5,600	4000	72
RIDF-X	2006-07	10,000	10,600	1540	15
Upto RIDF-XV	2009-10	1,00,000	1,16,154	76,904	66
Upto RIDF XVI*	2010-11		1,31,937	92,187	70

SOURCE: RBI, *Report on Trend and Progres of Banking in India, 2006-07, Economic Survey 2010-11.*
*Upto Novermber 30, 2010.

Table 4 : Amount of Debt by Occupational Categories

Year	Amount of Debt (₹ Crores)			Share of cultivators in (%)	
	Cultivators	Non-cultivators	All	Total Debt	Total No. of Households
1971	3,374	474	3,848	87.7	72.4
1981	5,737	456	6,193	92.6	76.3
1991	17,668	453	22,211	79.5	66.1
2002	81,709	29,759	1,11,468	73.3	59.7

Source: *NSS 59th Round* (January-December 2002)

between 1996 and 2007. This was in addition to ₹ 60,000 crores contributed by the Government.

NABARD has initiated several measures to make the loans under RIDF more attractive and to increase the reach of such loans. For instance, the interest rate on RIDF loans has been reduced from 13% to 10.5% and finally to 6.5%. Apart from State Governments, other institutions and groups, such as Panchayat Raj institutions, self-help groups, NGO's etc. can now implement RIDF projects.

The scope of the projects eligible for RIDF loans has also been enlarged to include innovative projects such as mini-hydel under power sector, rain-water harvesting, construction of primary schools, primary health centres, etc. The total number of projects financed through RIDF was over 2,44,000 in 2006-07

Purpose-wise, the funds of RIDF are being used for the construction completion of irrigation projects related to rural connectivity, *viz.*, rural roads and bridges..

Between 1995 and 2007, over ₹ 61,540 crores were sanctioned out of RIDF funds. Purpose-wise, rural roads and bridges—they relate to rural connectivity-account for 45 per cent of the all sanctioned amounts. If we include irrigation also, as much as 80 per cent of all sanctions out of RIDF funds went to three major purposes, *viz.*, irrigation, rural roads and bridges. Other projects assisted by RIDF include: watershed development, flood protection, market yard/ godowns, command area development, drainage, cold storage, fisheries, forest development, inland water ways, primary schools rural drinking water, soil conservation, etc.

Revamping of Cooperative Credit Structure

In January 2006, the Government announced a package for revival of the Short-term Rural Cooperative Credit Structure involving financial assistance of 13,596 crore. The National Bank for Agriculture and Rural Development (NABARD) has been designated the implementing agency for the purpose. States are required to sign memorandums of understanding (MoUs) with the Government of India and NABARD, committing to implementation of the legal, institutional and other reforms as envisaged in the revival package. So far twenty- five States have executed such MoUs. This covers 96 per cent of the primary agricultural cooperative societies (PACS) and 96 per cent of the Central cooperative banks (CCBs) in the country. As of November 2010, an amount of ₹ 8009.75 crore has been released by NABARD as Government of India share for recapitalization of 49,983 PACS.

To conclude, NABARD has thus been playing a pivotal role in the channelisation of bank credit to the rural sector. It provides refinance and improves the resource base of institutions providing credit to the rural sector. It also supervises the working of the rural co-operative banks.

APPENDIX 1: THE PROBLEM OF RURAL INDEBTEDNESS

The Indian farmer borrows year after year but he is not in a position to clear off the loans, either because the loans are larger or because his agricultural output is not large enough to pay off his debt. Therefore, the debt of the farmer goes on increasing—this is what is known as rural indebtedness. It is a well known saying in the country—"The Indian farmer is born in debt, lives in debt and dies in debt."

NSS 59th Round Survey of Rural Indebtedness

NSS 59th Round Survey was devoted to the study of indebtedness as on 30th June 2002. For the purpose of comparison, it has provided information for 1971,1981,1991 and 2002. The data reveal the following:

Data provided in table 4 reveals that the aggregate amount of debt of rural households has been increasing during the last three decades. The total debt of rural households showed the sharpest incurred from Rs 22,211 crores in 1991 to ₹ 1,11,468 crores in 2002 – by over 500 percent. The distribution of total household debt showed that in 2002, 73 percent of total debt was increased by about 60 percent cultivator households. The non-cultivator households (40%) accounted for 27 percent of total debt. The share of total debt for cultivator households

peaked at 93% in 1981, and it declined to 80% in 1991 and dropped further to 73% in 2002.

Incidence of Indebtedness in 2002

Data provided in table 5 reveals that 27 percent of total rural households were indebted in 2002.The percentage for cultivator households was 30 percent and for non-cultivator households was 22 percent. The data also reveals that the percentage of households increases with the increase in asset holding. This implies that poor households with very small asset holding are

Table 5: Incidence of Indebtedness of Rural Households in 2002

Asset household class (Rs 000)	*Incidence of indebtedness (%)*		
	Institutional	*Non-Institutional*	*Total*
Less than 15	3.6	12.0	15.0
15-30	6.2	13.9	19.0
30-60	8.7	17.7	25.2
60-100	10.9	17.7	26.5
100-150	13.6	17.9	28.3
150-200	14.6	17.1	28.7
200-300	16.2	15.7	28.7
300-450	18.7	13.2	28.7
450-800	22.0	13.0	31.0
800 & above	26.7	10.3	32.9
All	**13.4**	**15.5**	**26.5**

Source: *NSS 59th Round*

more indebted to non-institutional sources, but the richer households are more indebted to institutional sources. In other words, poorer households benefit from institutional sources is much less compared to non-institutional sources. Poor households depend more on non-institutional agencies and with increase in assets of households, there is a shift in favour of institutional agencies.

Relative Position of Different Agencies of Rural Credit

Among institutional agencies are included government, co-operative societies/banks, commercial banks, insurance companies, financial corporations etc. Among non-institutional agencies are included landlords, agricultural money lenders, professional money lenders, traders, relatives and friends, and others such as doctors lawyers etc.

Table 6: Percentage share of different rural credit agencies in 2002

	% Share
A. Institutional	**57.1**
Co-operative societies	27.3
Commercial banks	24.5
Government	2.3
Others	3.0
B. Non-institutional agencies42.9	
Professional money lender	19.6
Agricultural money lender	10.0
Relatives and friends	7.1
Others	6.2
Total (A+B)	**100.0**

Data in table 6 reveals that institutional credit accounted for 57 percent of total rural credit and non-institutional credit for 43 percent. The major source of institutional credit in 2002 were co-operative societies, banks and commercial which together provided about 52% of total credit. Among the non-institutional sources, money lenders (both professional and agricultural) accounted for 30%, relatives and friends 7% and others 6.2%.

Table 7: Changing share of Institutional agencies

Year	*Share in total rural credit by*	
	Institutional	*Non-institutional*
1971	29	71
1981	61	39
1991	64	36
2002	57	43

Institutional agencies provided only 29% total rural credit in 1971 and their share shot up to 64% in 1991, but there was a marginal decline to 57% in 2002. The trend is clear:

(a) Institutional credit is becoming more significant for all rural households.

(b) After nationalization of leading banks in 1969, banks have played a leading role in lending to rural households, to cultivators as well as non-cultivators. To a large extent, they have overtaken the co-operative societies/banks, which were the traditional institutional source.

(c) With the growth of institutional credit agencies, the dependence of the rural households on money-lenders and other non-institutional credit agencies has come down considerably. This trend is to be welcomed as the interest burden of institutional credit is much lower than that of non-institutional credit.

TABLE 9: Average amount of Debt and Debt-asset Ratio (2002)

Asset holding class (₹000) (1)	Average amount of assets (₹) (2)	Average amount of Debt (₹) (3)	Debt-asset ratio (%) 4 =\ 3/2* 100
Less than 15	7,071	1,423	20.1
15-30	22,523	2,243	10.0
30-60	44,609	3,153	7.1
60-100	78,431	4,301	5.5
100-150	123,412	5,299	4.3
150-200	173,382	5,696	3.3
200-300	244,339	7,059	2.9
300-450	366,134	9,857	2.7
450-800	591,676	15,085	2.6
800 & above	1,668,644	33,414	2.0
All	**265,606**	**7,539**	**2.8**

Source: NSS 59th Round

TABLE 8: Distribution of credit on the basis of Rate of Interest

	Rate of interest on Rural Loans (2002) Percent Distribution
Interest free	8
Simple interest	
a. Less than 15%	26
b. More than 15%	43
Compound interest	
a. Less than 15%	11
b. More than 15%	10
Concessional	2
Total	100

Source: *NSS 59th Round*

Payment of Interest

Table 8 shows the distribution of loans on the basis of rate of interest. It may be noted that 8% of total loans are interest free and 2% are concessional. Loans carrying simple or compound interest of less than 15% account for 37% of total while those carrying more than 15% interest (simple or compound) account for 53% of total. This implies that more than half of the total rural credit was at an interest rate of 15% which imposes higher burdens on the rural people and need remedial action.

Average Amount of Debt and Debt-Asset ratio

Data provided in table 9 reveals that although the households in the higher asset classes reported a higher average debt, they, in general, had to bear a lower debt burden. The debt-asset ratio steadily decreased with a rise in asset class. In other words, the households with low valued-assets i.e. poorer households, had to carry, relatively speaking, a heavier burden of debt compared to households with high-valued assets. The debt asset ratio declined from 20.1% for the poorest households to 2.0% for the richest households in the asset range 8 lakhs and above. There is a continuous decline in the debt-asset ratio as we proceed from poor to less poor, to rich and to richer households.

Debt According to Purpose

The debt surveys provide information regarding the distribution of credit by purposes. The purposes of the loans do matter. Broadly, loans are classified into two categories – productive and unproductive.

(a) Productive purposes – both farm and non-farm business for current as well as capital expenditure. These loans are expected to accelerate the economic activity of the household and ultimately promote their welfare. Larger share of productive loans is a sign of flourishing economic activity.

(b) Unproductive loans are taken for meeting household expenditure, costs of litigation and other loans for various personal needs. Money spent on these loans neither results in the production of goods and services nor brings economic prosperity to the households. Such loans, if large or frequent, may lead to perpetual debt or misery.

TABLE 10: Distribution of cash credit by purpose of loans of all households

Percentage

	1971	1981	2002
1. Farm business	44.7	60.1	41
2. Non-farm business	5.4	9.1	12
A. Productive purpose (1+2)	**50.1**	**69.2**	**53**
3. Household expenditure	40.9	22.3	35
4. Others	9.0	8.5	12
B. Unproductive Purpose (3+4)	**40.9**	**30.8**	**47**
All Purposes (A+B)	**100.0**	**100.0**	**100**

SOURCE: *Various surveys of NSSO.*

Credit for productive purposes increased from 50% in 1971 to 69% in 1981. This was a healthy development because it helped to enlarge the productive capacity of households to earn income. However, thereafter, a decline in the share of productive credit was witnessed and it came down to 53% in 2002. This is not a sign of good health as it affects both rural growth and economic welfare. Simultaneously, credit for unproductive purposes sharply increased from about 31% in 1981 to 47% in 2002 – a big increase by 16 percent. Out of this, about 13% was due to a rise in household expenditure.

Causes of Rural Indebtedness

The main cause of the indebtedness of the farmers is his poverty. The farmer has to borrow for various purposes, as he has no past savings of his own. Sometimes, the crops fail because of the failure of monsoons, or because of floods, etc. When he has to make some improvement on his land as bunding, construction of wells, etc. or when he has to buy costly implements, he is forced to borrow. Just as poverty forces him to borrow, it is his poverty again which forces him to have so little for paying off his debt.

Secondly, the farmers have a tremendous passion for land and desire to make improvements on land. This is a good thing. There is nothing wrong in trying to have more land or in making improvements on land. But this should be done through saving and not through borrowing. But farmers mostly borrow for these purposes.

Thirdly, the farmers are to incur certain types of expenditures which automatically lead them to borrowing and indebtedness. For instance, they respect social customs very much and, therefore they have to celebrate marriages, religious festivals, etc. Births and deaths are also sources of unnecessary and unproductive expenditure. Again, Indian farmers are given to litigation, which is highly expensive in India. All these are highly unproductive loans and the farmers who borrow for these purposes rarely get the necessary savings from agricultural production to pay off the debts incurred.

Fourthly, much of the debt may be inherited. A person inherits his father's property; likewise he inherits his father's debts too. In many cases bonded labourers continue to be so, often for generations.

Finally, the money-lenders themselves are responsible to a large extent for rural indebtedness. They are more interested in forcing the borrowers to part with their land. Consequently, they encourage the farmers to borrow from them, get their lands mortgaged to them, charge very high rates of interest, keep false accounts and finally, when the farmers' debt has accumulated to a sufficient amount, they take away the land of the borrowers. Like a fly in the cobweb, which can rarely escape, so also, the farmer once caught by the money lender can rarely come out of his clutches. Loans from the money-lender support the farmer as the hangman's rope supports the hanged.

Consequences of Rural Indebtedness

Economically, increasing rural indebtedness has resulted in growing pauperisation of the small and marginal farmers. As already indicated, the small farmers mortgage their landed property to the money-lenders and ultimately lose it to the latter. Then, they join the ranks of the landless labourers.

Thus the small farmer loses both ways—gets a low price while selling his produce, but has to pay high prices while buying inputs. Rural indebtedness is, therefore, the cause as well as the effect of the growing poverty of the Indian farmers.

Socially, rural indebtedness creates a class of landless labourers and tenants in the place of independent farmers. In some cases, where the landless labourers do not have anything worthwhile to pledge to the landlords and money-lenders, they are forced to pledge their own person and become bonded slaves to the landlords and money-lenders. In many parts of the country, the small peasants, who have lost their land to the money-lenders and the large landlords, have risen against the latter in a violent manner. The problem is particularly serious in parts of Bihar, Orissa and Andhra Pradesh where the high caste money-lenders have fraudulently deprived the simple and illiterate adivasis of their meagre land ownership. This has been the direct cause of Naxalite movements in these areas.

Remedies to the Problem of Rural Indebtedness

The problem of rural indebtedness has two aspects and, therefore, the solution is also two-fold. In the first instance, measures may be devised for cancelling old debts. Secondly, measures should be devised to see that fresh borrowing is limited to the minimum necessary and to the productive type. At the same time it is necessary to control the money-lender and regulate his activities.

(a) **Settlement of old debt.** Most State Governments and Union Territories have enacted appropriate legislation to scale down the debts of small farmers and to discharge non-institutional debts of weaker sections like landless labourers and rural artisans. In most States, legislation exists for compulsory reduction of ancestral debt and in a few cases, even for their liquidation. The difficulty with such legislation is that the farmers and the landless labourers may not take advantage, either because they are ignorant of such legislation or because they are afraid of the money-lender.

(b) **Reduce dependence on money-lenders.** In order to reduce the dependence of the rural people on local money-lenders, the network of institutional

credit structure, comprising cooperatives, commercial banks and RRBs, is being rapidly expanded throughout the country to provide timely and adequate credit support to the small farmers and artisans. In practice, however, these services are being monopolised by the richer farmers.

(c) **Control of new loans.** It is not sufficient to help in the settlement of old debts. It is necessary to see that the farmers resort to borrowing only for the most essential and productive purposes. Non-productive loans should be avoided, but here the government can do very little.

Social and religious functions form an important part of the life of our villages. The expenditure in connection with them cannot be eliminated so easily by advising farmers. Actually some institutional finance should be arranged for this purpose. In its report submitted in April 1976, the Sivaraman Committee outlined these proposals:

(*i*) consumption loans for marriages, births and deaths, religious expenses, medical expenses, education etc., should be provided by the Government corporations and nationalised banks to small farmers, landless labourers and artisans;

(*ii*) banks and co-operatives should provide similar loans to marginal farmers, and

(c) schemes should be devised to enable these classes of people to return these loans.

In some States, legislation has been passed to prevent farmers from selling their lands to professional money-lenders who are not farmers. At the same time, measures have been taken to control the activities of money-lenders.

Under the 20-point Programme, in 1975, the Government had declared a moratorium on the recovery of debt by money-lenders from farmers, landless labourers and rural artisans. Liquidation of rural indebtedness and abolition of bonded labour were two dynamic aspects of the old 20-point economic programme.

Agricultural and Rural Debt Relief Scheme, 1990

In presenting his budget for the year 1990-91, Madhu Dandawate, the then Union Finance Minister announced the Agricultural and Rural Debt Relief Scheme also called the loan waiver scheme. The Scheme came into force from May 1990. The Scheme provided debt relief up to ₹ 10,000 to the borrowers of public sector banks and RRBs. The borrowers include those engaged in agricultural and allied activities and artisans engaged in any activity of rural development relating to cottage and village industries, handicrafts, weaving, etc. The eligible loans for debt relief under this Scheme covered :

(*i*) that part of the short term loans, including converted/rescheduled medium term loans, availed of by an individual borrower on or after April 1, 1986 and overdues of term loans by "non-wilful defaulters";

(*ii*) chronic overdues including interests i.e., overdues for more than three years;

(*iii*) loans taken by a borrower who had died before October 2, 1989; and

(*iv*) the overdue loan of a borrower who has been declared insolvent or where petition is pending in the court for being declared insolvent.

A scheme on similar pattern was framed and put into operation by the State Governments and applied to banks in the cooperative sector.

In the budget for 1990-91, the Central Government made a provision of ₹ 1,000 crores towards the debt relief scheme and committed to underwrite the entire burden of the relief which would be provided by commercial banks and RRBs. In addition, the Central Government was also committed to providing 50 per cent assistance for the relief to be provided by the cooperative credit insitutions. While the initial estimates placed the debt relief at ₹ 14,000 crores, the Government estimate was a total relief to the value of ₹ 2,840 crores.

In his budget speech for 2008-09, the Finance Minister indicated one time debt waiver for all marginal and small farmers holding upto 2 hectores of land. The waiver would involve a total amount of ₹ 61,000 crores. Certain modifications were made regarding the size of holdings. The banks have waived

Table 11 : Performance of the National Agricultural Insurance Scheme (NAIS)

Season	*No. of farmers (in million)*	*Area Covered (in million hectares)*	*Sum Insured (₹ crores)*	*Premium Paid (₹ crores)*	*Total Claims (Rs crores)*
1999-00	9.0	14.0	7,260	212	1,230
2000-01	10.6	15.9	3,900	285	528
2003-04	17.1	36.3	15,520	520	500
2006-07	17.9	27.3	21,750	610	2,250
2008-09	19.2	26.5	26,811	807	3,863
2009-10	23.9	33.7	38,544	2014	2993*

Source : Government of India, *Economic Survey* (2007-08). Ministry of Agriculture and Cooperation Annual Report 2010-11

Note : *as on 31-01-2011

farm loans to the extent of nearly ₹ 65,000 croses. The Government of India would reimburse the banks in two instalments.

While many experts have praised this one time waiver as a welcome step to help poor and weak farmers, others have criticised the scheme as an undesirable one. For, it has penalised honest repayers to the banking and cooperative sector. Besides, without tackling the problem of money lenders, no scheme to help farmers can really succed. In the future too, farmers may resort to wilful defaulting of their institutional loans and hope to get repeat "one time" waivers.

APPENDIX 2: AGRICULTURAL INSURANCE

Comprehensive Crop Insurance Scheme, 1985

Agriculture is highly susceptible to such risks as drought, flood etc. It is necessary to protect the farmers from natural calamities and ensure their credit eligibility from the next season. Towards this purpose, the Government of India introduced a comperhensive crop insurance scheme throughout the country from Kharif 1985 covering major cereal crops, oilseeds and pulses. Farmers availing of crop loans from cooperative credit institutions, commercial banks including RRBs were covered under this scheme. The sum insured equal to crop loan disbursed subject to a maximum of ₹ 10,000 per farmer The premium charged was at the rate of 2 per cent for rice, wheat and millets and 1 per cent for pulses and oilseeds.

The Comprehensive Insurance Scheme (CIS) covered 15 states and 2 Union territories. The participation in the scheme was voluntary and States were free to opt for the scheme. Around 5 million farmers and between 8 to 9 million hectares were annually covered by the crop insurance scheme.

If the actual average yield in any area covered by the scheme fell short of the guaranteed yield, the farmers were entitled to an indemnity on compensation to the extent of shortfall in yield. The General Insurance Corporation of India (GIC) administered the scheme on behalf of the Ministry of Agriculture, Government of India.

Since the inception of the scheme in 1985, about 65 million farmers were covered upto Rabi 1997-98 season. The total amount of claims paid was ₹ 1,623 crores as against a premium collection of only ₹ 313 crores. The scheme was thus unviable. The losses incurred were met by the Government of India and the concerned State Governments in the ratio of 2:1.

A major drawback of the scheme could be seen from the fact that out of the all-India claims of ₹ 1,623 crores, Gujarat State alone received ₹ 792 crores for one single crop viz., groundnut — i.e. about 49 per cent of total claims between 1985 to 1997-98. The scheme was scrapped in 1997.

The Government of India introduced an experimental crop insurance scheme during 1997-98 covering ***non-loanee small and marginal farmers growing specified crops in selected districts***. The premium was totally subsidised. Both premium and claims were shared by Central and State Governments in the ratio of 4:1. The scheme could be implemented only in 14 districts of 5 States and only 5 lakh farmers were covered for a sum of ₹ 172 crores. The premium collected was about ₹ 3 crores and the claims amounted to ₹ 40 crores. The Government discontinued the scheme during 1997-98 itself.

National Agricultural Insurance Scheme, (NAIS)

The Government of India experimented with a comprehension crop insurance, scheme which failed. The Government then introduced in 1999-2000 a new scheme titled "National Agricultural Insurance Scheme" or "Rashtriya Krishi Bima Yojana". The new Scheme (NAIS) envisages coverage of all food crops (cereals and pulses), oilseeds, horticultural and commercial crops. It covers ***all farmers*** (both loanees and non loanees, under the scheme). The premium rates vary from 1.5 per cent to 3.5 per cent of sum assured for food crops. In the case of horticultural and commercial crops, actuarial rates are charged. Small and marginal farmers are entitled to a subsidy of 50 per cent of the premium charged – the subsidy is shared equally between the Government of India and the States. The subsidy is to be phased out over a period of five years.

The new scheme operates on the basis of:

(a) Area approach – defined areas for each notified crop for widespread calamities; and

(b) On individual basis for localised calamities such as hailstorm, landslide, cyclone and floods.

Under the scheme, each State is required to reach the level of Gram Panchayat as the unit of insurance in a maximum period of 3 years. The GIC is currently implementing the scheme but the Government has plans to set up an exclusive organisation for implementation of the

new scheme. The working of the NAIS is summarised in Table 11.

During 2009-10 nearly 23.9 million farmers were covered and the sum insured was ₹ 38,544 crores and the insurance charges were ₹ 807 crores. The total claims during the year came to ₹ 1863 crores. At present, the scheme is being implemented by 25 states and 2 Union Territories.

The Government has set up the "Agriculture Insurance Co. of India (in December 2002) with capital participation of GIC, the four public general insurance companies and NABARD.

Farm Income Insurance Scheme (FIIS)

The Central Government has formulated a new insurance scheme for farmers known as Farm Income Insurance Scheme (FIIS). The two critical components of a farmer's income are yield and price. FIIS targets these two components through a single insurance policy so that the insured farmer gets a guaranteed income. The main features of FIIS are:

(a) The scheme provides income protection to the farmers by insuring both production and market risks.

(b) The insured farmers will be ensured minimum guaranteed income (that is, average yield x minimum support price (MSP).

(c) If the actual income is less than the guaranteed income, the insured will be compensated to the extent of the shortfall by the Agriculture Insurance Company of India.

(d) Initially, the scheme would cover only wheat and rice and would be compulsory for farmers availing crop loans.

(e) National Agricultural Insurance Scheme (NAIS) will be withdrawn for the crops covered under FIIS but would continue to be applicable for other crops.

FIIS has been introduced as a pilot project from Rabi 2003-04 covering wheat and paddy in 18 districts of 12 states. The scheme would be extended, with necessary changes, on the basis of the pilot project.

Weather Based Crop Insurance

The Union Budget 2007-08 announced one more insurance scheme for farmers – viz., the weather based crop insurance scheme (WBCIS). The scheme was implemented in some selected areas of Karnataka on a pilot basis. The WBCIS intends to provide insurance protection to farmers against adverse incidene, such as deficit and excess rainfall which would impact adversely crop production. The premium is kept low and the scheme is implemented by the Agricultural Insurance Company of India Ltd. The scheme is being extended to other areas also and private insurance like ICICI-Lombard are also included.

So far various agricultural insurance schemes have been introduced and implemented for some years. Some have been withdrawn and new ones introduced. One important point comes out clearly: the bureaucrats in the agriculture ministry have no clear understanding of the problems of our farmers. They continue with their insurance experiments – sometimes for specific crops, sometimes for stable farm incomes, sometimes for specific areas. In the meanwhile, farmers suffer from crop failures and commit suicides in different parts of the country. During Kharif 2007– to Kharif 2010, about 81 lakh farmers have been covered under the pilot scheme.

The Pilot Modified NAIS (MNAIS)

Keeping in view the limitations/shortcomings of the existing scheme, the Government has approved the Modified NAIS for implementation on pilot basis in 50 districts from rabi 2010-11 season. The major improvements made in the MNAIS are: actuarial premium with subsidy in premium at different rates, i.e. 40 per cent to 75 per cent depending upon the slab, provided to farmers, all claims liability on the insurer, unit area of insurance reduced to village panchayat level for major crops, indemnity for prevented/sowing/planting risk and for post harvest losses due to cyclone, payment up to 25 per cent advance of likely claims as immediate relief, more proficient basis for calculation of threshold yield, minimum indemnity level of 70 per cent instead of 60 per cent, and private-sector insurers with adequate infrastructure allowed (at present, ICICILombard, IFFCO-Tokio and Cholamandalam-MS). Only upfront premium subsidy is shared by the Central and State Governments on 50: 50 basis and claims are the liability of the insurance companies. Seven States have already notified the areas for implementation of the scheme during rabi 2010-11. It is expected that the scheme will be notified by 14-15 States.

Livestock Insurance

Since 1993-94, the Government of India has been implementing the Livestock Insurance Policy through the General Insurance Corporation of India (GIC). Under this policy, cover is provided for the sum insured or the market value of the animal at the time of death, whichever is less. Animals are normally insured upto 100 per cent of their market value. The scheme is extended to 300 selected districts covering all states. The scheme

benefits farmer and cattle bearers having witch cattle and buffaloes. In 2010-11 ₹ 20.12 crore has been released upto December 2010 and 20.63 lakh animals have been insured from 2006-07 to 2009-10.

APPENDIX 3: RECENT DEVELOPMENTS IN THE FIELD OF RURAL FINANCE

Micro-Finance

Micro credit or micro finance is a novel approach to "banking with the poor". In this approach, very successfully tried in Bangla Desh, bank credit is extended to the poor through Self Help Groups (SHGs), Non-Government Organizations (NGOs), credit unions, etc. Micro credit attempts to combine lower transaction costs and high degree of repayments. This is essentially because of the involvement of potential beneficiaries of rural credit in the credit delivery system. The SHG-bank linkage programme, introduced and encouraged by NABARD, is now being implemented vigorously by more than 30,000 branches of commercial banks, RRBs, and cooperative banks in over 520 districts in 30 states and Union Terrirories.

At the end of March, 2007, as many as 2.9 million SHGs are now linked with banks and 7,000 NGOs are associated with the scheme. It is estimated that, at the end of March 2007:

(a) 20 million very poor families were brought within the fold of formal banking services

(b) The notable feature was the active women-participation; more than 90 per cent of the groups linked with banks were exclusive women groups;

(c) There was strong repayment performance - at more than 95 per cent of the loans disbursed;

(d) Disbursement of bank loans to SHGs was Rs 18,040 crores in 2006-07 (Rs 11,400 crores in the previous year).

(e) Average loan per SHG came to nearly ₹ 30,000 ; and

(f) Average loan per family came to ₹ 1, 770.

Micro-finance initiatives have shown that banking with the poor is a viable proposition. Micro-credit has been hailed as the best method of creating additional employment and removing poverty. NABARD has been playing a catalytic role in terms of promotional support to NGOs and also in nurturing quality SHGs. It has launched a pilot project (in 2005-06) for promotion of micro enterprises among the members of mature SHGs.

Weaknesses of Micro-finance

Despite significant progress of micro-finance or micro-credit programmes in the country, there are some issues of concern.

(a) Out of an estimated 56 million poor families at the end of March 2004 (this meant that, at the average rate of 5 persons to a family, there were 260 million poor in the country, at the end of March 2004) only 17 million poor families (or 85 million poor) or 30 per cent of the poor families have been covered by micro-finance schemes. Nearly 70 per cent of poor families are yet to be covered. In other words, the SHG-bank linkage is gaining momentum, but it has to grow still faster.

(b) At present, Andhra Pradesh accounts for 40 per cent of SHGs linked to bank credit. The next three States, viz Tamil Nadu, Karnataka and Uttar Pradesh, together accounted for only 30 per cent of SHGs linked to bank credit. Thus, only four states in the country account for 70 per cent of SHGs linked to bank credit and 80 per cent bank loans. In other words, most States in the country have not yet encouraged the organization and promotion of SHG - bank credit link.

RBI has been making efforts to give a fillip to micro finance initiatives through creating an enabling environment. It is looking into issues relating to creating an enabling environment.

(i) Structure and sustainability

(ii) Funding,

(iii) Regulation, and

(iv) Capacity building of micro finance institutions.

The success of SHGs in both urban and rural areas will have a positive effect on poverty alleviation.

Kisan Credit Cards

Another notable development in recent years is the introduction of Kisan Credit Cards (KCC) in 1998-99. The purpose of the KCC scheme is to facilitate short term credit to farmers. The scheme has gained popularity and its implementation has been taken up by 27 commercial banks, 187 RRBs and 334 Central Cooperative Banks. Since its inception till the end of September 2010, nearly 970.66 lakh KCCs have been issued. The KCC scheme has become very popular with farmers. KCC holders are also provided personal accident insurance cover of ₹ 5,000 for death and ₹ 25,000 for disability.

Interest Subsidy inAgricultural Credit

From Kharif 2006-07 to 2008-09, farmers were receiving crop loans up to a principal amount of ' 3 lakh at 7 per cent interest. In the year 2009-10, Government provided an additional 1 per cent interest subvention to those farmers who repaid their short-term crop loans as per schedule. The Government has raised this subvention for timely repayment of crop loans from 1 per cent to 2 per cent from the year 2010-11. Thus the effective rate of interest for such farmers will be 5 per cent per annum from 2010-11.

Rehabilitation Package for Distressed Farmers

The Government is implementing a rehabilitation package for 31 suicide- prone districts in the States of Andhra Pradesh, Karnataka, Kerala, and Maharashtra involving a financial outlay of ₹16,978.69 crore. Special packages are being implemented in Kerala for the development of Kuttanad wetland ecosystem and mitigation of agrarian distress in Idukki district with an outlay of ₹ 1840.75 crore and ₹764.45 crore respectively.

With the Central Government taking keen interest in increasing credit flow to the agricultural sector, NABARD advised banks to identify and cover all farmers including defaulters, oral lessees, tenant farmers, and share croppers who might have been left outside the hold of KCC for any reason as also new farmers so that all farmers might be covered under the scheme by end March 2007. Further NABARD has advised banks to issue KCCs in a hassle free manner, extend crop loans only through KCCs and renew then so as to ensure quality in operations.

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CHAPTER

35

AGRICULTURAL MARKETING AND WAREHOUSING

"The purchase of the agriculturists's requirements and the scale of his produce are key activities in the business of farming . . . Due to his inability to secure a fair deal at these two stages, the average agriculturist is denied the full fruits of his industry."

– First Five-Year Plan

1. THE PRESENT STATE OF AGRICULTURAL MARKETING IN INDIA

Marketing of his produce is the most important activity of a farmer. This is particularly ture in the case of small farmers who have small surpluses for marketing.

There are many ways by which the farmer may dispose of his surplus produce. The first and the most common method is to sell away his surplus produce to the village money-lender-cum-trader, who may buy it either on his own or as an agent of a bigger merchant of the neighbouring 'mandi' town. It is estimated that in the Punjab, 60 per cent of wheat, 70 per cent of oils and 35 per cent of cotton are sold in the village itself.

The second method adopted by the Indian farmer is to dispose of his produce in the weekly village markets known in Hindustani as the 'hat'. Besides, fairs are held once a year in important villages or towns in connection with religious festivals. In 'hats' and fairs, the farmers bring their produce as well as livestock and sell them.

The third method of agricultural marketing is through the mandis in small and large towns. The mandi may be located at a distance of several miles and, therefore, the farmer has to make special effort to carry his produce to the mandi. In the mandis, there are brokers or 'dalals' who help the farmers to dispose of their produce to the wholesalers known as 'arhatiyas'. The wholesalers may dispose of the agricultural produce which they have purchased from the farmers to retailers or flour mills and processing units. For instance, in the case of cotton, the wholesaler sells to the cotton ginning factories, and in the case of foodgrains like wheat he sells to the flour mills or to retailer.

Basic Facilities Needed for Agricultural Marketing

In order to have best advantage in marketing of his agricultural produce the farmer should enjoy certain basic facilities :

(i) He should have proper facilities for storing his goods.

(ii) He should have holding capacity, in the sense, that he should be able to wait for times when he could get better prices for his produce and not dispose of his stocks

immediately after the harvest when the prices are very low.

(iii) He should have adequate and cheap transport facilities which would enable him to take his surplus produce to the mandi rather than dispose it of in the village itself to the village money-lender-cum-merchant at low prices.

(iv) He should have clear information regarding the market conditions as well as about the ruling prices; otherwise, he may be cheated. There should be organised and regulated markets where the farmer will not be cheated by the dalals and arhatiyas.

(v) The number of intermediaries should be as small as possible so that the middlemen's profits are reduced. This increase the returns to the farmer.

Defects of Agricultural Marketing in India

Judging from these considerations, the position of agricultural marketing in India is still deplorable. The Indian farmer does not have facilities for storing his produce. The storage facilities which are available in the village at present are so poor that 10 to 20 per cent of the produce is eaten away by rats.

Secondly, the average farmer is so poor and indebted that he was no capacity to wait for better prices. He is forced to sell his output to the money-lender or to the trader so as to clear his debts. Such distress sales weaken the already miserable position of the average Indian farmer further.

Thirdly, the transport conditions in rural areas continue to be bad that even richer farmers, who have large amounts of surplus, may not be interested in going to the mandis. Most roads are kachcha (unmetalled) and in rainy season they are unusable.

Fourthly, the conditions in the mandis are such that the farmer may have to wait for some time before he may be able to dispose of his produce. He may not have proper warehousing facilities to keep his stock while he waits. The method of transaction is generally against the interest of the farmer. In the mandis the farmer makes use of the services of a dalal (broker) to sell his output to the arhatiya. The dalal is often in collusion with arhatiya and, therefore, the price which is settled is generally to the advantage of the arhatiya and not to the farmer. Moreover, through unnecessary deduction on the plea that his produce is of inferior quality, the farmer often loses in going to the mandis.

Fifthly, the number of intermediaries and middlemen between the farmer and the final consumer of his produce is too many and the margin going to them too large.

Finally, the farmers do not ordinarily get information about the ruling prices in the big markets. As a result the farmers have to accept whatever price is quoted to them and have to believe whatever the traders tell them.

2. REGULATED MARKETS

The purpose of a regulated market is to eliminate unhealthy market practices, to reduce marketing charges and to ensure fair prices and in general, to protect the interests of farmers. All the States had passed legislation known as State Agricultural Produce Marketing (Development and Regulation) Act for the establishment of regulated markets. In 1951, there were more than 200 regulated markets in India and by the end of the Second Five-Year Plan, i.e., in 1961, there were nearly 1,000 regulated markets. By the end of March 1998 over 7,060 agricultural markets in the country had been regulated.

Features of a Regulated Market

A regulated market is started under the law either for any specific commodity or for a group of commodities. Such a market is administered by a market committee, which consists of representatives of the State Government, the legal bodies (as for instance, the district board), the traders, the commission agents or the dalals and the farmers themselves. The committee is appointed by the government for a specific period and is entrusted with management of the market.

The market committee fixes the market charges, such as the commission to be charged. It ensures that no dalal represents either the buyer or the seller. It prevents unauthorised deductions from the price paid to the farmer and ensures that correct weights and measures are always used. The committee hears all the complaints and settles them. In cases of dispute, it arranges for arbitration. The committee is responsible for the licensing of brokers and weighmen. It is vested with powers to punish any one who is found guilty of dishonest and fraudulent practices.

The system of regulated markets has been found to be very useful in removing fraudulent practices followed by brokers and commission agents and in standardising market practices. They have helped farmers to secure fair prices for their produce and to come to the market without fear of being cheated. They have helped in using standard measures and weights throughout the country. Hence it is the policy of the government to convert all markets in the country into the regulated type.

Regulated markets aim at the development of the marketing structure to:

(a) ensure remunerative price to the producer of agricultural commodities,

(b) narrow down the price spread between the producer and the consumer, (c) reduce non-functional margins of the traders and commission agents.

To achieve these objectives, the Government went for comprehensive and rapid expansion of regulated marketing system. Considerable success has been achieved in States like Punjab and Haryana, where regulated markets have been established in major producing areas, with linked up satellite markets in the rural growth. The regulated marketing system has also proved a good source of generating income for the marketing boards and for use in rural infrastructure. The regulated market complex also includes facilities for grading and for monitoring of prices.

The regulated markets are set up especially in areas where commercial crops like cotton, jute, tobacco and important non-traditional crops are produced and sold in weekly markets and 'hats'. Co-operative marketing and distribution and banking are also linked with the regulated markets.

New Thinking on Regulated Markets

To protect and promote the interests of farmers, the Government of India, as well as State Governments promoted organized marketing of agricultural commodities through a network of regulated markets. In recent years, however, there has been a new thinking on the part of the Central Government. The Government now feels that regulated markets have had only limited success since they have restricted (a) development of farm marketing, (b) smooth supply of raw materials to agro-producers, (c) exchange of information, and (d) adoption of new innovative marketing systems and technologies.

The Central Government would like the farming community to benefit from new market opportunities, through integrating and strengthening the internal agricultural marketing system. The Central Government formulated and circulated a model Act in the place of the existing State APMC Act. The proposed Act would encourage: (a) development of competitive agricultural marketing; (b) deregulate the marketing system; and (c) promote private investment in marketing infrastructure. Some of the salient features of the Model Act (2003) are:

(i) Permission to farmers, local authorities and others to establish new markets in any area;

(ii) No compulsion to growers to sell their produce through existing regulated markets;

(iii) Setting up of purchase centres, farmers/consumers markets for direct sale;

(iv) Promotion of public-private partnership in the management and development of agricultural markets;

(v) Setting up of special markets for such perishable commodities as onions, vegetables, fruits and flowers; and

(vi) Regulation and promotion of contract farming arrangements in the country.

3. CO-OPERATIVE MARKETING

Before 1954, separate co-operative marketing societies were established as distinct from the co-operative credit societies. Since 1954, however, multipurpo se societies have been started with the purpose of giving credit to the farmers and marketing their surplus produce.

The co-operative marketing society functions in the following manner : The members of the society agree to sell their surplus produce to the society. As soon as they supply the produce to the society, they get an advance to carry on with their agricultural operations. The society collects the produce of all the members as also of the non-members of the village who are willing to sell their produce, often processes the produce and then disposes it of in the mandi. It does away with many of the middlemen. If the current prices are not favourable and if it is anticipated that prices may rise in the future, the society may decide to stock the commodity. As soon as the produce is sold, the society pays the farmers the balance of the amount due to them. An important feature of the marketing society is that it is managed by paid staff. Usually a society covers a number of villages so that it may be effective and successful.

Advantages of Co-operative Marketing Societies

In some of the Western countries, co-operative marketing has been extremely successful. Denmark has been well-known throughout the world for co-operative marketing of dairy products. Many advantages are claimed for agricultural marketing on co-operatives basis. They are :

(a) The marketing society substitutes collective bargaining in place of individual bargaining. The farmer by himself is weak but the marketing society is said to be strong.

(b) It advances loans to the farmers and enables them to wait for better prices. Besides, it lends to them for their other needs. Thus, co-operative marketing societies can link credit, farming, marketing and processing to the best advantage of the farmers.

(c) It can have its own storage and warehousing

facilities, it can thus remove the damage to agricultural produce through rats, ants, dampness etc.

(d) It can arrange to have quick and cheap transport and sometimes it can even have its own transport.

(e) It can encourage the farmers to produce graded and standardised products and discourage them from adulterating their produce.

(f) It can control the flow of supplies and thus influence the prices.

(g) It can eliminate many of the middlemen and thus remove their large-profit margins.

(h) Apart from selling the produce of the farmers it can supply them such essential goods as seeds, fertilisers, implements etc. Thus the co-operative marketing society is probably the best method to reorganise rural marketing and promote planned growth of our rural areas.

Development of Co-operative Marketing

There is great scope for the development of co-operative marketing societies. In the first place, there is the necessity to co-ordinate better farming, finance and marketing. At present efforts are being made to have one society which will perform all the three services for the farmers.

Secondly, the marketing societies increasingly undertake processing of agricultural goods. Several agricultural goods can be more favourably marketed if they are processed before sale. Cotton can be ginned and pressed; oilseeds can be crushed and oil may be sold; jute can be processed and baled; and so on.

Thirdly, the co-operative marketing societies can attempt to sell agricultural goods to consumers directly (wherever this is possible) and thus eliminate the middlemen and their commission.

Fourthly, the co-operative marketing societies should be made to grade their goods. The grading facilities may be made available to them by the Government through the Agricultural Marketing Department. Grading will not only help the societies to secure better prices for their produce but also induce them to bring pressure upon their members to improve the quality of their products through the use of improved seeds, etc.

Fifthly, the co-operative marketing societies are going for their own storage and warehousing facilities in the rural areas and "mandis." This may be promoted through the provision of grants and subsidies by the Government or through cheap finance provided by the State Bank and the Reserve Bank of India.

Sixthly, the area of operation of the co-operative marketing society should be expanded to cover many villages (if necessary, even a tehsil) so that it may render effective marketing service to the farmers. This will also enable it to engage qualified men to manage its affairs.

Seventhly, there is very great scope for co-operative marketing societies to supply inputs to their members, such as fertilisers, certified quality seeds, agricultural machinery and implements, pesticides etc. Nearly 47 per cent of the total fertilisers distributed in the country are sold through co-operative marketing societies.

Finally, the government should use the co-operative marketing societies whenever it is possible and necessary. The Food Corporation of India should buy foodgrains from the co-operative marketing societies and thus eliminate the usual channels of trade. This will encourage the formation of cooperative marketing societies.

Progress in Co-operative Marketing

Under the active encouragement of the Government and the Reserve Bank of India, co-operative marketing has made great progress in Maharashtra, Andhra, Tamil Nadu, Uttar Pradesh and Bihar. The Cotton Sale Societies of Maharashtra and Gujarat gin and press cotton for members and have provided considerable benefit to them. The sugarcane marketing societies of U.P. and Bihar protect the interests of the members as against sugar mills and also help to improve the quality of sugarcane; they advance funds as well as undertake welfare activities in the villages. Besides they supply cane to the factories and finance the purchase of seeds and manures. There are co-operative societies in Maharashtra specialising in the sale of tobacco, fruit, vegetables, etc. They sell members' produce on a commission basis, but in some cases process the produce and supply manures and pure seeds. Under the recommendations of the All-India Rural Credit Survey Committee, attempts were made to link co-operative marketing with co-operative credit. On the eve of the Fourth Plan, about 66 per cent of the primary agricultural credit societies were linked to marketing societies. The balance of 34 per cent of credit societies were also affiliated to the marketing societies subsequently.

The net work of cooperative marketing structure now comprises over 6,000 primary marketing societies, of which 3,500 are special commodity marketing societies; at the district level, there are 160 central marketing societies, covering nearly all the important mandis in the country; at the State

level, there are 29 general purpose State level Co-operative Marketing Federations and 16 Special Commodity Marketing Federations and, at the all-India level, there are: the National cooperative Development Corporation (NCDC), the National Agricultural Co-operative Marketing Federation (NAFED), National Cooperative Tobacco Growers Federation Ltd., the National consumers' Cooperative Federation, and the Tribal Cooperative Marketing Development Federation of India— all these are working in the field of agricultural marketing.

The marketing of agricultural produce through cooperatives has registered a remarkeable growth. For instance, the co-operative marketing societies marketed agricultural produce worth ₹ 169 crores during 1960-61; this had increased to ₹ 1,950 crores in 1980-81 and to over ₹ 11,500 crores in 1995-96. States of Punjab, Maharashtra, Uttar Pradesh and Gujarat accounted for 75 per cent of the total value of the agricultural produce marketed by co-operatives. The three major commodities which accounted for about 75 per cent of the total sales are foodgrains, sugarcane and cotton. The other commodities handled by co-operatives are oilseeds, fruits and vegetables, jute and plantation crops. Co-operatives are increasingly involved in the procurement operations of cotton and jute on behalf of the cotton and jute corporations. Co-operatives have also recorded significant progress in the distribution of fertilisers and other agricultural inputs, improved seeds, agricultural machinery and pesticides.

Cooperative Processing

There are now over 2,500 co-operative agricultural processing societies organised in the co-operative sector as against only 326 in 1962-63. Co-operatives continue to be the major sector in the sugar industry accounting for 58 per cent of the national production of sugar.

There are 220 co-operative sugar mills in the country, which have exhibited great efficiency in sugar recovery, capacity utilisation and utilisation of by-products. The co-operative sugar factories have taken up installation of distilleries, paper mills and alcohol-based chemical units. The factories provide such socio-economic services to the surrounding rural community as irrigation facilities, promotion of dairy and poultry activities, agricultural extension and establishment of educational institutions and hospitals. They also act as catalyst for industrialisation to provide direct and indirect employment opportunities to the rural masses.

In the dairy programme of "Operation Flood", co-operatives are playing a significant role. In the field of manufacture of fertilisers, the Indian Farmers Fertilisers Co-operative Ltd. (IFFCO) accounted for 12 per cent of nitrogenous fertiliser production and 26 per cent of the phosphatic fertiliser production in the country. Other prominent cooperative processing units are co-operative spinning mills, rice mills, dal mills, ginning and pressing units, oil mills, jute baling units, and fruits and vegetable processing units.

Since processing of agricultural produce has strategic place in the rural economy for providing better returns to the farmers, co-operative processing helps to create a non-exploitative industrial environment in the rural agro-industry. The Government has made sustained efforts to promote and develop processing activities in the co-operative sector in the last 30 years.

Cooperative Storage

Agricultural cooperatives require godowns for undertaking various functions like marketing of agricultural produce, supply of agricultural produce, supply of agricultural inputs and distribution of consumer goods. The Seventh Plan envisaged creation of 2 million tonnes of additional storage in the cooperative sector. This target has been over-achieved in the first three years of the Plan by creating additional storage capacity of 2.4 million tonnes. About 46,000 primary agricultural cooperatives in the country and most of the cooperative marketing societies at various levels have their own godowns. This achievement has been made possible by the implementation of cooperative storage projects in several States by National Cooperation Development Corporation (NCDC) with assistance from World Bank and European Economic Community (EEC).

In this context, we may refer to the setting up of cold storages by cooperatives, particularly for potatoes through financial assistance extended by NCDC.

Role of NAFED and NCDC

The National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED) is the apex co-operative organisation at the national level; it deals in procurement, distribution, export and import of selected agricultural commodities.

NAFED promotes inter-state and export trade of farm produce. It exports commodities like onions, pulses, chillies, ginger, garlic and cardamom to many countries. Export of pulses, HPS groundnut, onions and potatoes is canalised through NAFED. It also undertakes movement of essential commodities from surplus areas to scarcity areas and helps ease consumer supplies NAFED is a central nodal agency for undertaking price support operations for pulses and

oilseeds and market intervention operations for horticultural items like kinoo/malta, onions, potatoes, grapes, black pepper and red chillies, etc. During 1994-95, NAFED's turnover was nearly ₹ 720 crores and was expected to exceed ₹ 810 crores during 1997-98. In general NAFED has played a useful role in stabilising market prices of such commodities like onions and potatoes in principal producing areas through strategic market interventions.

Thus NAFED has been exercising a healthy influence on market operation and market prices in favour of both producers and consumers.

We may also refer to a few other organisations in the cooperative sector, such as the national co-operative Tobacco Growers Federation Ltd., the National Consumers Cooperative Federation, Tribal Cooperative Marketing Development Federation of India Ltd (TRIFED), dealing specifically to the marketing problems of tribal areas.

The National Co-operative Development Corporation (NCDC) was set up in 1963 under an Act of Parliament with the object of planning and promoting programmes for the production, processing, storage and marketing of agricultural produce and notified commodities through co-operative societies. The Corporation supports these programmes and has initiated a number of new schemes for which assistance is provided to the State Governments. The NCDC has played an active role in the development of co-operative marketing and processing, both in terms of expertise and financial assistance. The NCDC has extended its activities to the development of cooperative dairy, fisheries and minor forest produce which are basically intended to benefit the weaker sections of the community. The total financial assistance provided by the NCDC since its inception up to end-March, 1996 amounted to ₹ 2,800 crores. Being the principal financing and promotional organization at the national level for the development of cooperative marketing, storage, processing etc., the NCDC was lending greater support to these activities on an expanded scale.

NCDC has actively promoted distribution of essential consumer articles such as foodgrains, sugar, edible oils, controlled cloth, kerosene, salt, soft coke, etc, in rural areas through service cooperatives.

4. GOVERNMENT AND AGRICULTURAL MARKETING

Let us consider the various measures which the Government has taken so far in the field of agricultural marketing.

***(i)* Marketing Surveys.** In the first place the government has undertaken marketing surveys of various goods and has published these surveys. These surveys have brought out the various problems connected with the marketing of goods and have made suggestions for their removal. The Government gives vide publicity to prices of agricultural goods in all major markets.

***(ii)* Grading and Standardisation.** The government has done much to grade and standardise many agricultural goods, Under the Agricultural Produce (Grading and Marketing) Act, 1937 the government has set up grading stations for commodities like ghee, flour, eggs, etc. To facilitate grading, standards have been laid down for 162 agricultural and allied commodities. The graded goods are stamped with the seal of the Agricultural Marketing Department--AGMARK. The 'Agmark' goods have a wider market and command better prices.

A Central Quality Control Laboratory has been set up at Nagpur and eight other regional laboratories in different parts of the country with the purpose of testing the quality and purity of agricultural products applying for the Government's 'Agmark' have been created. The Government is further streamlining quality control enforcement and inspection and improvement in grading. The number of testing laboratories is being increased and the programme of grading at producers' level is receiving greater attention especially for commercial crops.

***(iii)* Setting up of regulated markets.** A very important measure which the Government has taken to improve agricultural marketing has been the setting up of regulated markets in the country. There are now 7,062 regulated markets. With the establishment of these regulated markets, the malpractices in mandis have disappeared and the market charges have been rationalised. As much as 80 per cent of agricultural produce is now sold in regulated markets.

***(iv)* Provision of Warehousing Facilities.** To prevent distress sale by the farmers, particularly, the small and marginal farmers, due to prevailing low prices, rural godowns have been set up. The government has done much to provide warehousing in towns and villages. The Central Warehousing Corporation was set up in 1957 with the purpose of constructing and running godowns and warehouses for the storage of agricultural produce. The States have set up the State Warehousing Corporations with the same purpose. At present the Food Corporation is constructing its own network of godowns in different parts of the country.

The total storage capacity in the country is now 35 million tonnes.

(v) Organisation of Co-operative marketing Societies. The Government has given active encouragement to the organisation of multi-purpose co-operative societies with emphasis on credit and marketing. The primary marketing societies have been encouraged to form central marketing societies and apex marketing societies (at the state level) and the National Agricultural Co-operative Marketing Federation (NAFED). The Government has also provided larger financial resources to the co-operative marketing societies and federations through the State Bank of India and other nationalised banks.

In this connection, we should refer to the setting up of the National Co-operative Development Corporation (NCDC) by the Government of India in 1965 to plan and promote programmes for the production, processing, storage and marketing of agricultural produce through co-operative societies.

(vi) Setting up of Special Boards: The Central Government has set up a number of development councils for special commodities like rice, pulses, jute, millets, cotton, tobacco, oilseeds, sugarcane, arecanut, etc. The Government of India has also set up export promotion councils such as Cashewnuts Export Promotion Council and the Agricultural and Processed Food Export Development Authority.

(vii) Boost to Export of Agricultural Products. Under Government support, export of agricultural products has shown an increasing trend in recent years — as for example, ₹ 7,880 crores in 1992-93 and ₹ 34,000 crores in 2003-04. India's agricultural exports include pulses, rice, wheat, tobacco, sugar and molasses, poultry and dairy products, spices, cashew nuts, sesame and niger seed, groundnut, oilmeals, castor oil, shellac, fruits and vegetables, meat and meat preparations, marine products, etc. The share of agricultural exports in India's exports ranges around 12 to 15 per cent.

Foreign Trade Policy (2004-09) of the Government of India has emphasized the importance of agricultural exports and has initiated a new scheme – Special Agricultural Produce Scheme – for promoting the export of fruits, vegetables, flowers, minor forest produce. The Government is earmarking funds to assist states for development of Agro Export Zones (AEZ)

(viii) Agricultural Marketing Reforms. The Government appointed an Inter-Ministerial Task Force on Agricultural Marketing Reforms to suggest measures for making agricultural marketing system more vibrant and competitive. The Task Force has in its report submitted in June 2002 recommended:

(*i*) Promotion of direct marketing and contract farming;

(*ii*) Development of agricultural markets in private and cooperative sectors;

(*iii*) Expansion of future trading to cover all agricultural markets;

(*iv*) Introduction of negotiable warehouse receipt system; and

(*v*) Use of information technology to provide market-led extension services to the farmers.

The Government of India has drafted and circulated a Model Act on agricultural marketing which, among other items, will provide for the establishment of direct purchase centers, farmers' markets for direct sale to consumers (thus eliminate middlemen, such as wholesale and retail traders), complete transparency in the pricing system, payment to farmers on the same day, public-private partnership for professional management of existing markets, etc. In 2004, state Governments agreed to adopt the Model Law.

(ix) Futures Trading. As part of economic reforms, the Government permitted the resumption of futures trading in gur, potato, castor seed, pepper, turmeric and hessian. During 1997-98 the Government extended futures trading in coffee, cotton, castor oil and jute goods. In the 1998-99 budget, the Government announced futures trading in oilseeds, oilcakes and edible oils. The Government has allowed international futures trading in pepper and caston oil.

In 2003-04, the Government of India initiated major steps towards introduction of future trading in all commodities by setting up the National Level Commodity Exchanges. The major agricultural commodities traded at these exchanges are wheat, kapas (cotton), soya oil, guar gum, jute, rubber, pepper, turmeric, etc. These commodity exchanges have introduced various innovations which would increase efficiency of agricultural marketing in the country. Basically, physical delivery is blocked by warehouse receipt – the rigidity inherent in the trading of physical goods is thus eliminated. There is also a judicious mix of protection against both price and quality risks. The National Commodity and Derivative Exchange, Mumbai has launched pilot projects in the states of Gujarat, Madhya Pradesh and Andhra Pradesh to help farmers understand the concepts and benefits of hedging the price risk on trading platform of an Exchange prior to harvesting.

5. WAREHOUSING IN INDIA

Warehousing facilities are necessary to prevent the loss arising out of defective storage and also to equip the farmers with a convenient instrument of credit. Both the Agricultural Finance Sub-Committee (1945) and the Rural Banking Enquiry Committee (1950) emphasised the importance of warehousing as a method of promoting rural banking and finance in India. An important landmark in the filed of warehousing was the detailed recommendation of the All-India Rural Credit Survey Committee (1954) for initiating a country-wide programme of warehousing development. This Committee recommended a three-tier system at (a) the National level, (b) state and district level, and (c) village and rural level. In accordance with its recommendation, the Food Corporation of India and Central Warehousing Corporation were required to create storage facilities at centres of all-India importance, the State Governments and State Warehousing Corporation at centres of state/district level importance and the rural storage needs were to be looked after by the co-operatives. The Government of India accepted the recommendations of the committee and set up the NaTional Co-operative DevelopmenT and Warehousing Board (in 1956) and the Central Warehousing Corporation (in 1957). This was followed by the setting up of State warehousing corporations by all states.

At present, there are three main agencies in the public sector which are engaged in building large-scale storage/warehousing capacity viz., the Food Corporation of India (FCI), Central Warehousing Corporation (CWC) and 16 State Warehousing Corporation (SWCs). FCI provides storage capacity for foodgrains. It has its own godowns and it also hires storage capacity from other sources such as CWC, SWCs, and private parties. The total capacity with FCI is about is 16 million tonnes.

The main functions of the CWC and SWCs are to acquire and build warehouses at suitable places and operate them for storage of agricultural produce, fertilisers, etc. The Central Warehousing Corporation (CWC) owns and manages about 470 warehouses with a total capacity of 7 million tonnes. The number of warehouses owned and managed by State Warehousing Corporations (SWCs) are about 2,000 with a storage capacity of 10 million tonnes.

In 1960-61, there were only 40 general warehouses in the country with a total capacity of less than 0.1 million tonnes. At present, the three public sector units together have a storage capacity of nearly 35 million tonnes.

Besides, public sector agencies, cooperatives have also constructed warehouses in rural areas for storage of their members' produce, for stocking of fertilisers and other inputs and consumer articles. To avoid unfair competition with the godowns of the co-operative marketing societies, the state warehousing corporations do not open warehouses at any place below the sub-divisional level. By the end of 1997-98 a total storage capacity of over 14 million tonnes in the cooperative sector was available.

Over 52,600 primary agricultural co-operative societies and most of the marketing co-operatives in the country now own and operate godowns with funds provided by NCDC.

Besides warehouses, there are cold storages which help farmers/producers to avoid distress sales of perishable commodities like onions, potatoes, fruits, vegetables, fish, meat, dairy products etc. The total number of cold storages in the country at present is 2,970 with a capacity of about 8 million tonnes. Of this, co-operative cold storages number 250 with a capacity of nearly one million tonnes.

Central Sector Schemes for construction of rural godowns

With a view to create scientific storage in rural areas, the Government is implementing since 2001 a Central Sector Scheme for the construction of rural godowns. The scheme provides a subsidy to private and co-operative bodies on the capital cost of the storage projects. By the end of 2003-04, over 4,850 storage projects were sanctioned by banks involving an investments of ₹ 1,300 crores. The scheme is extended up to the end of the Tenth Plan i.e. 2006-07. The scheme has helped the farmers to store commodities near their fields and obtain pledge loans and marketing credit from the banks, thereby avoiding distress sale at the time of harvest.

Warehousing during Five Year Plans

During Sixth and Seventh Plans, the Central Government has been promoting a national programme of storage with a view to develop "a well-spread out storage grid from the farm to the national level." At the base the programme envisaged the construction of rural godowns each of 100 tonnes capacity. Bulk of these rural godowns were in the co-operative sector. This was supplemented by a Rural Godowns Scheme, which was centrally sponsored but implemented through Market Committees and State Warehousing Corporations. The objective was to build godowns of larger capacity of 200 to 1,000 tonnes in rural areas to facilitate storage of produce of small and marginal farmers.

At the regional and national level, additional capacity was being created by SWCs and CWCs and the Food Corporation of India. Over and above these, another 1 million tonnes capacity was to be added in the private sector under the NABARD assisted scheme on guaranteed utilisation by FCI for a stipulated period.

The Government is aware of the fact that an adequate amount of cold storage and processing facilities is critical for perishable commodities. The Government would like these facilities to be provided increasingly in the co-operative sector and are operated for their benefit. NCDC has helped the co-operatives to put up cold storages which are being primarily used by small and marginal farmers.

Warehouses have two definite advantages--(i) to provide better and scientific storage facilities at reasonable cost, and (ii) to provide farmers and traders with a convenient instrument of credit in the form of warehouse receipt against which they can borrow from banks. Both the advantages are significant but the second one depends upon the first. In other words, the warehouses should attract adequate custom, by providing storage facilities at cheap rates consistent with local requirements.

At the same time, banks should be induced to advance loans to traders and producers on the new system of storage in warehouses.

During the Ninth Plan, the target for the contribution of 34.2 lakh tonnes of storage capacity was fixed with an allocation of ₹ 718 crores. But on the basis of the actual capacity already created and anticipated, the Working Group on Agricultural Infrastructure has estimated an additional capacity achievement of 32.4 lakh tonnes, i.e. about 95 per cent of the target to be achieved in the Ninth Plan.

As a result of the efforts made under various plans, the cumulative storage capacity constructed by various organizations till the end of 2000 was of the order of about 702 lakh tonnes. (Refer Table 1)

FCI is the major contributor to warehousing capacity creation to the extent of 150 lakh tonnes (21.4% of total), followed by Co-operatives through NCDC—137.4 lakh tonnes (19.6%), various agencies through NABARD 135 lakh tonnes (19.2%). State Warehousing corporations account for 111.4 lakh tonnes (15.9%). Besides them, the Central Warehousing Corporation accounts for 64 lakh tonnes and Department of Rural Development 21.3 lakh tonnes.

Taking an over-all view, at the macro level, there is no shortage of capacity of foodgrains storage. However, there is a mismatch at the micro level, especially for rural public distribution system, hilly, remote and inaccessible areas. Efforts should be directed to bring about balance at the micro level as well.

TABLE 1: Cummulative Storage Capacity Constructed by Various Organisations by the End of 2000

Organisation	*Total Capacity (Lakh tonnes)*	*Percent of Total*
FCI	150.4	21.4
CWC	64.0	9.1
SWC	111.4	15.9
Co-operatives through NCDC	137.4	19.6
Deptt. Of Rural Development	21.3	3.0
Various agencies through NABARD	135.0	19.2
Other agencies	82.1	11.7
Total	**701.6**	**100.0**

Note : FCI (Food Corporation of India), CWC (Central Warehousing Corporation), S WC (State Warehousing Cororation), NCDC (National Co-op. Development Corporation).

SOURCE: *Tenth Five Year Plan (2002-07)*, Vol. II, p. 548.

6. REFORMS IN AGRICULTURAL MARKETING WITH SPECIAL REFERENCE TO MODEL APMC ACT

After independence there was a general feeling that agricultural markets do not function in an efficient manner. There exist inefficiencies in distribution, including wastage of agricultural produce. Farmers suffer due to exploitation by traders on different accounts such as weight, illegitimate deductions, delayed payments etc. To overcome such problems different state governments enacted their respective APMC Acts. Stringent provisions were made under these Acts, to safeguard the interests of the farmers and save them from exploitation ensuring efficiencies. Norms were made for spending market fees on different heads including infrastructural developments.

Structure of APMC committee, the apex decision making body in respective Mandis was made such that farmers were in an overwhelming majority and Chairman of the committee would also be a farmer. There is no doubt that with time we have to bring amendments in the laws, howsoever good they may be in their original form. Emerging changes in the field of agriculture, do call for changes in laws pertaining to agricultural marketing.

With the stated objective of making the agricultural marketing system more vibrant and competitive, Government of India first constituted an

Expert Committee on Agricultural Marketing and later on 'Inter Ministerial Task Force on Agricultural Marketing Reforms' was constituted. Main recommendations of the Expert Committee are listed as follows:

(a) An alternative marketing systems to promote direct marketing,
(b) Increasing Credit flow to agricultural sector
(c) Introducing a system of negotiable warehouse receipt
(d) System of 'Forward' and 'Futures' contracts be evolved and modalities be worked out
(e) Promoting Information Technology in the field of agricultural marketing.
(f) Extension and training services

'Inter Ministerial Task Force on Agricultural Marketing Reforms' set 9 priority areas for itself which are as follows :

(a) Legal reforms;
(b) Direct marketing;
(c) Market infrastructure;
(d) Pledge financing;
(e) Warehousing receipt system;
(f) Forward and futures markets;
(g) Price support policy;
(h) Information Technology in agricultural marketing and
(i) Marketing extension, Training and Research.

The Task Force made various recommendations. The most important recommendations included amendments to the State APMC Act and Contact Farming.

Salient features of amendments in States' APMC Acts

In order to guide the states in the implementation of suggested reforms, central government drafted a 'Model Act on Agricultural Marketing' which inter-alia provided for the establishment of direct purchase centers and farmers' markets for direct sale to consumers. 'The Model Act' and the suggested reforms were discussed at the National Conference of State Agriculture Ministers held on 7th January 2004 at New Delhi and on 19th November, 2004 at Bangalore. The states were requested to complete the process of amendment to the APMC Act within 2-3 months time. So far a number of states have either amended their respective APMC Acts in tune with APMC Model Act or have started the process for the same. Some states have even notified the new legislation. In some other states process of amendment have initiated or is about to be initiated.

In most states the APMC Act prohibits transactions outside the mandis. Even in states that allow transactions outside the mandi, the Act states that while procurement may be direct, companies need to pay a mandi tax.

The Model APMC Act, sought to amend the APMC Act to permit private and corporate bodies to establish a marketing network for agriculture produce.

States such as Madhya Pradesh, Rajasthan and Uttar Pradesh had amended their respective APMC Acts at the first instance. Many other states have either amended their APMC Acts in tune with Model APMC Act or are making efforts to amend their respective state APMC Acts. The intentions of Model APMC Act prepared by the government of India and being imposed are clear from the following points:

1. The monopoly of Government regulated wholesale markets has prevented development of a competitive marketing system in the country, providing no help to farmers in direct marketing, organized retailing, a smooth raw material supply to agro-processing industries and adoption of innovative marketing system and technologies.
2. Inter-Ministerial Task Force On Agricultural Marketing Reform, set up by the Ministry has suggested promotion of new and competitive agricultural markets in private and cooperative sectors to encourage direct marketing and contract farming programmes, facilitate industries and large trading companies to undertake procurement of agricultural commodities directly from the farmer's fields and to establish effective linkages between the farm production and retail chains.
3. If agricultural markets are to be developed in private and cooperative sectors and to be provided a level competitive environment vis-à-vis regulated markets, the existing framework of state APMC Act will have to undergo a change. The state has to facilitate varying models of ownership of markets. Working of existing government regulated markets also needs to be professionalized by promoting public private partnership in their management. Appropriate legal framework is also required to promote direct marketing and contract farming arrangements as alternative marketing mechanism. Therefore, there is a need to formulate a new model law for agricultural market.
4. Provision made for the appointment of Chief Executive Officer of the market committee from among the professionals drawn from open market(Section- 36).
5. Provision made for the purchase of agricultural produce through private yards, directly from agriculturists in one or more than one market area. (Section- 45) Adoption of the Model APMC Act in place of the earlier APMC Acts of different states is expected to

bring some unfavourable impact on the farmers, traders and agriculture at large.

License to the Private yards -Multiple Mandis in one Area

Earlier agricultural market (mandi) could be established under the Act, where market committee is constituted by elections, where majority of the members are farmers a few members from the trading community would be there. Chairman of the committee would be a farmer. For establishing a market of agricultural produce, license by the competent authority is a must, and not more than one mandi would be established in the area earmarked for that market. Thus, overlapping jurisdiction was practically ruled out.

In the Model Act, any private person or local government official can establish the market for agricultural produce. In such a case farmers would no longer be important in the establishment and management of the mandis. The result would be establishment of many mandis.

b.Special markets

In the earlier Acts, though different types of agricultural markets are allowed to be established, but there was no provision of establishment of private markets.

In the Model Act, any agricultural market could be given the status of special market. These special markets would be established on the wish of the government and its market committee would not be constituted by way of elections and market committee would be completely nominated by the government. In such committee chairman, vice-chairman and executive committee members would all be nominated and a member of this committee would be Chief Executive Officer (CEO) who would be in full command of the special market.

The provision of special market would be mean establishment of two types of markets in a particular area, which are governed by two different set of rules. In India where small farmers tend to keep on changing their crop pattern, special markets may not be successful. This system may be successful in countries like US where there are only few crops.. But in a country like India where we have diversified crop pattern, this system is uncalled for.

c. Contract Farming

There is as yet no national policy on contract farming in India and the laws pertaining to the same. The Model Act seeks to introduce contract farming by way of changing land leasing laws to facilitate renting of the operational land by private companies.

Contract farming refers to a system wherein, a farmer/primary producer agrees to supply a pre-agreed quantity/acreage of a certain quality/ variety produce at a pre-agreed price and time, to a processing/marketing firm (a known buyer). it is also known as out grower scheme, and satellite farming. The contracts could be only procurement arrangement or resource providing as well. The relevance and importance of each type varies from crop/product to product over time and these types are not mutually exclusive.

Theoretically, a farmer may prefer a contract due to:

- Access to additional source of capital,
- A more certain price,
- Access to new technology and inputs.

Argument of the government is that in wake of economic liberalization, the concept of contract farming in which national or multinational companies enter into contracts for marketing of the horticultural produce and also provide technologies and capital to contract farmers has gained importance whereby the farmer assumes the production related risks, price risk is transferred to the company.

In India, where contract farming is prevalent across regions and crops, it has moved from firm farmer(two-party) system to tri and quad-partite arrangement wherein state and its apparatus have been involved e.g. in Punjab. There have also been some cases of group contracting. In both, state and agribusiness models, contract growers have faced many problems like:

- Undue quality cut on produce by firms,
- Delayed deliveries at the factory.
- Delayed payments,
- Low price and
- Pest attack on the crop with no compensation.

The reasons for failure of contract farming have been mainly in the design and the management of the projects by the companies and their partner institutions. The model has moved on to the franchisee route more recently. Whereas companies are sharing their risk with other companies/ intermediaries and banks, the farmer's risk is not being shared. A new chapter on 'Contract Farming' has been added in the Model APMC Act.

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CHAPTER 36

AGRICULTURAL LABOUR

"It is one of the primary objects of the Five-Year Plans to ensure fuller opportunities for work and better living to all sections of the rural community and in particular, to assist agricultural labourers and backward classes to come up to the level of the rest."

— Third Five-Year Plan

1. PRESENT POSITION OF AGRICULTURAL LABOUR IN INDIA

Agricultural labour is provided mostly by economically and socially backward sections; poor sections from the tribes also swell their ranks. It may be divided into four types :

(*a*) Landless labourers who are attached to the landlords;

(*b*) Landless labourers who are personally independent but who work exclusively for others;

(*c*) Petty farmers with tiny bits of land who devote most of their time working for others; and

(*d*) Farmers who have economic holdings but who have one or more of their children and dependants working for other prosperous farmers.

The first group of agricultural workers has been more or less in the position of serfs or slaves; they are also known as bonded labour. They do not normally receive wages in cash but are generally paid in kind. They have to work for their masters and cannot shift from one to another. They have to provide ***begar*** or forced labour. In some cases, they have to offer cash and also supply fowls and goats to their masters. Among the other groups mentioned above the second and the third are quite important. The problem of landless labourers is the most serious problem in the rural sector.

Magnitude of Agricultural Labour

Accurate figures about the number, income, standard of living, etc., of rural labour are not available. But some information is available in the form of the reports of committees and commissions. According to the Second Agricultural Labour Enquiry published in 1960, agricultural labour families constituted nearly 25 per cent of all rural families. According to this, more than 85 per cent of the rural workers are casual, serving any farmer who is willing to engage them and only 15 per cent of agricultural labourers are attached to specific landlords. More than half of the workers do not possess any land, and even the rest of them own only very little of land. Agricultural labourers predominantly belong to the scheduled castes, scheduled tribes and other backward classes. According to one estimate, between 75 and 80 per cent of all agricultural labourers belong to the scheduled castes.

According to the National Commission on Rural Labour (1991), during 1987-88, out of a total of 108.4 million rural households, 43 million households belonged to rural labour households and among them, agricultural labour households were of the order of 33.3 million. In relative terms, rural labour households accounted for 39.7 per cent of total labour households and agricultural labour households were of the order of 30.7 per cent. This implies that agricultural labour households constituted about 77 per cent of all rural labour households in 1987-88.

Analysis of 1981 census data reveals that agricultural labourers were 64.4 million. As a percentage of total workers (main plus marginal) which were 224.6 million, agricultural labourers constituted 26.3 per cent of the total labour force. In 1961, agricultural labourers numbered only 31 million. This indicates that there has been a sharp increase in the number of agricultural labourers. The National Commission on Rural Labour states: "During the seventies and the eighties, the rural population registered an annual growth rate of 2 per cent and 1.5 per cent respectively. However, for the corresponding decades, the growth in the number of agricultural labourers has been at higher levels of 4.1 per cent and 3.0 per cent per annum respectively."

This implies that marginal farmers have been swelling the ranks of landless labourers. On account of the increasing economic compulsions in terms of past debts, they have been forced to sell their lands. This supports the popularly held view that the benefits of millions of rupees invested in irrigation, tubewells, fertilizers or roads have gone to the big farmers. It also implies that cooperatives and rural banks have also helped the rich farmers.

According to *NSS 7th Rural Labour Enquiry (1999-00)*, the average wage employment for men and women was 222 days and 192 days per year. This was lower than the average wage employment of Rural Labour Households from 235 days and 203 days respectively in 1993-94, according to 6th Rural Labour Enquiry. This decline in the days of employment did produce an adverse effect on the earnings and debt conditions of agricultural labour households.

It has also been found that the proportion of wage labour to total work force increased at the All-India level from 34.1% in 1972-73 to 41.4% in 1987-88. During the same period, the proportion of casual wage labour to total wage labour increased from 64.8% in 1972-73 to 75.8% in 1987-88. Explaining the growing trend towards casualisation of agricultural labour, NCRL states unequivocally:" The technological change in agriculture, marginalisation of small farmers, eviction of tenants, destruction of traditional cottage industries, inflation etc., are some of the important factors that are operating differently in different regions of India leading to the swelling of the number of agricultural labourers."[1]

According to the data provided by the Census of India (1991), the number of agricultural labourers increased from 27.5 million in 1951 to 74.6 million in 1991 – indicating an increase by 171 per cent during the 40-year period. Mean while the total workers in agriculture (cultivators plus agricultural labourers) increased from 97.2 million in 1951 to 185.3 million in 1991, indicating an increase of 90.5 per cent in the 40-year period. This further substantiates the view of NCRL that as a result of the Green Revolution, marginalisation of small farmers and eviction of tenants have been the major contributing factors to a faster increase in the number of landless agricultural labourers. It may be noted that the census data is confined to main workers only and does not include casual workers. Consequently, the proportion of agricultural labourers among agricultural workers has gone up form 28.3 per cent in 1951 to 40.3 per cent in 1991.

Official data about land distribution indicate that 61 per cent of the rural households either own no land or small fragments of land or marginal uneconomic holdings of less than 1 hectare. Taken together, 61 per cent of households own barely 8 per cent of cultivated area. Out of them, 22 per cent households own no land at all; another 25 per cent own less than half a hectare (1.2 acre). Thus, these marginal farmers are the recruits in the army of landless labourers, since they subsist at the border of the poverty line and have been gradually slipping below poverty line.

Wages and Earnings of Agricultural Labourers

Data about the wages paid to agricultural labourers reveals that the agricultural labourers do not receive notified minimum wages except in certain parts of the country like Kerala, Punjab, Haryana and Western U.P. Even in these states, females do not get remuneration as per the notified minimum wages. Growing awareness and organisations of agricultural labour, wherever active, have pushed up wages closer to the minimum wages. Wherever agricultural labourers are unorganised and thus have weak bargaining power, the gap between actual wage paid and the minimum wage fixed by the state is large.

According to *NSS Rural Labour Enquiry (1999-00)*, the total number of Rural Households was 137 million, out of which Rural Labour Households was 55 million (about 40 per cent). The Agricultural Labour Households were 41.4 million i.e. 80 per cent of Rural Labour Households.

1. Ministry of Labour, ***Report of the National Commission on Rural Labour*** (1991), Vol. I, p. 59.

Table 1: Average Daily Earnings of Rural Labour Households

	Money Earnings (₹ At current prices)		*Real Earnings (₹ At 1993-94 prices)*		*Percent Increase*	*Index of Real Wage Earnings*
	1993-94	*1999-00*	*1993-94*	*1999-00*	*4/3*100*	
	(1)	(2)	(3)	(4)	(5)	(6)
Men	21.35	40.15	21.35	26.17	22.5	100.0
Women	15.18	28.35	15.18	18.50	21.9	70.7
Children	12.43	24.23	12.43	15.80	27.1	60.3

The figures have been calculated on the basis of Consumer Price Index of Agricultural Labourers with 1986-87 as base=100.
Source: N.S.S. (2003), Rural *Labour Enquiry Report on Wages and Earnings of Rural Labour Households-1999-2000.*

Average daily earnings of Rural Labour Households for 1993-94 and 1999-00 are given in table 1:

A comparison of Real Wage Earnings shows that they improved from ₹ 21.35 to Rs 26.17 for men (22.5%) and from 15.8 to Rs 18.50 for women (21.9%) and from Rs 12.43 to Rs 15.80 for children (27.1%).

Index of Real wage earnings for women shows that they earned 71 per cent as compared to men and children who earned about 60 per cent. In other words, earnings of men, women and children indicated the same proportions for 1993-94 and 1999-00. There is no change in the disparity between men and women in terms of daily earnings.

NCRL explaining the decline in the disparity of male-female wages of agricultural labour mentions: "Factors like implementation of rural employment and afforestation programmes (which stipulated minimum wages and catered to the employment needs of poor rural women), periodical revision in minimum wages and notification of equal wages for equal work, productivity gains brought about by new technology and growth of general awareness seem to have contributed significantly to the higher increases in real wages for rural females in agricultural sector."[2]

The living conditions of agricultural labour households continue to be pathetic. The proportion of labour households with monthly per capita expenditure of less than ₹100 was about 70% which clearly shows that vast majority of the agricultural labour households are below the poverty line.

Causes of the Poor Economic Condition of farm Labour

The following important reasons explain low wages and poor economic conditions of agricultural labour :

(1) **Low social status.** Most agricultural workers belong to the depressed classes which have been neglected for ages. The low caste and the depressed classes have been socially handicapped and they had never the courage to assert themselves. They have been like dumb-driven cattle.

(2) **Unorganised.** Agricultural workers are illiterate and ignorant. They live in scattered villages. Hence, they cannot easily be organised in unions. In urban areas workers can generally organise themselves and it is convenient for political parties to take interest in trade union activity. This is extremely difficult in case of farm labour. Accordingly, it is difficult for farm workers to bargain with the land owners and secure good wages.

(3) **Seasonal employment.** The agricultural workers do not have continuous work. On an average a farm labourer finds employment for about 200 days in a year and for the rest of the year he is idle. Apart from under-employment there is also unemployment in rural areas. Unemployment and under-employment are two important factors responsible for low income and consequently low economic position of the agricultural workers in India. But then the nature of work in agriculture is such that a farm labourer cannot get work continuously. In most cases, work on the farms is seasonal and intermittent. In many cases, there is single cropping which means work only for six to seven months in the year.

(4) **Paucity of non-agricultural Jobs.** Paucity of non-agricultural occupations in village areas is another important factor for the low wages and poor economic condition of the farm labourers. For one thing, the growing pressure of population is increasingly felt in rural areas and the number of landless labourers is steadily increasing. For another, the absence of another occupation in rural areas and lack of inter-regional mobility have been responsible for worsening the pressure of population on land.

(5) **Rural Indebtedness.** Agricultural labour is heavily indebted. Normally, the farm labourers borrow from the landowners under whom they work. Since they have no security to offer, they pledge themselves to the moneylenders and rich landlords and become bonded labourers in many areas. Naturally, they are forced to accept lower wages.

Thus, partly because of factors beyond their control and partly because of their inherent bargaining weakness, the farm labourers have been getting very

2. *Ibid.*, p. 62

low wages and have, therefore, to live a miserable sub-human life.

Improving the condition of agricultural labour

The following suggestions have been made for the improvement of agricultural labour :

(i) **Removal of serfdom**. Agricultural serfdom which exists in many parts of the country should go. In fact, according to the Constitution of India, the practice of slavery in any form is prohibited. But agrarian serfdom which has been in vogue for centuries cannot disappear so easily. This is so because the labourers are helpless, ignorant and illiterate. Education of the rural masses and better opportunities are some of the remedies for the removal of the system of slavery. The abolition of bonded labour and control of the activities of the money-lenders, provision of house sites for landless labourers, etc., under the 20-point economic programme are desirable steps, if they are honestly implemented.

(ii) **Better implementation of minimum wages in agriculture**. Agricultural workers have been getting very low wages except in Punjab and Kerala. Measures should be taken to raise the wages of farm workers. Unless this is done it is impossible to raise the economic condition of the agricultural workers. Minimum wage legislation alone is not sufficient but steps should be taken to enforce it. In the Indian context with unchecked growth of population, it is almost impossible to enforce such legislation.

(iii) **Rehabilitation of landless agricultural workers**. In order to improve the conditions of agricultural labour, the landless workers should be provided with land. This can be done in many ways. One way is that the new reclaimed land may be allotted only to them. The Bhoodan movement is another method through which those who have land contribute voluntarily for those who have not.

(iv) **Improvements in agriculture**. The agricultural labourers do not have full-time employment because of seasonal character of Indian agriculture. Both intensive cultivation and extension of irrigation are very much needed to increase agricultural work. By these methods, there will be double/multiple cropping and employment will be available for the whole year round. Besides, there will be increase in the productivity of labour which will also increase the wage of workers. There is very great scope for the setting up of village and agro-processing industries which will use the raw materials readily available in the villages. There can be small size industries employing modern techniques which can be easily set up now-a-days because of the extension of electricity to rural areas. The setting up of such industries will help agricultural labour in many ways, as for instance : (a) seasonal unemployment will be reduced; (b) surplus labour power will be diverted to these industries; (c) the pressure of population on agriculture will be reduced and this will help to raise agricultural productivity and also raise wages of agricultural labour; and (d) those unable to find employment in agriculture may be readily employed and thus help to supplement the income of the family.

(v) **Peasant Unions for Agricultural Labour**. Wherever labour unions have been organised for agricultural workers, their wages have been protected and their exploitation by powerful landlords and money-lenders can be eliminated. Hence, greatest emphasis should be placed on the formation of unions of farm labourers and the Government should help actively in the formation of such unions.

(vi) **Public works programme**. One very good method of providing employment to rural labour and of utilising it fully is the construction of public works by the government. The government can plan its projects in the rural areas carefully, so that the workers who may be unemployed during the off-seasons may be gainfully employed. Such projects include the construction of roads, the digging and deepening of tanks and canals, afforestation, etc. The setting up of small industries and public works programmes have great importance in the mobilisation of manpower resources in villages and in raising the wages of the rural masses and, indirectly the income of the country.

Government Measures pertaining to agricultural labour

Since Independence, the Centre as well as the State Governments have taken some measures to improve the economic condition of agricultural labour. They include the passing of legislation to fix minimum wages for agricultural labour, the removal of disabilities, the ceilings on holdings and the redistribution of land among the landless labourers, etc.

(1) **Indian Constitution**. The Indian Constitution has declared the practice of serfdom an offence. It has abolished agrarian slavery including forced labour by law but it will take some time before it is removed in practice.

(2) **Minimum Wages Act**. The Minimum Wages Act was passed in 1948, according to which every State Government was asked to fix minimum wages for agricultural labour within three years. The minimum wages are fixed keeping in view the total costs and standard of living. Since conditions in various parts of the country are different and even within a state the law allows different rates of wages to be fixed. In many states, the rates are fixed even below the current rates of wages. In practice, it has failed to increase the wages and earnings of agricultural labour.

(3) **Other legislative measures.** The zamindari system has been abolished by law in all the States and with that all the exploitation associated with the system has been removed. Besides, tenancy laws have been passed in most of the states protecting the interests of the tenants and labourers, and enabling them to acquire the lands they cultivate. Many states have passed legislation fixing ceiling on agricultural holdings by which the maximum amount of land which a person can hold has been fixed by law. According to these laws, the surplus land of rich land-owners is to be distributed to the landless labourers.

(4) **Organisation of labour co-operatives.** During the Second Five-Year Plan, efforts were made to encourage the formation of labour co-operatives. These cooperatives whose members are workers undertake the contract of government projects, such as, construction of roads, digging of canals and tanks, afforestation, etc. They provide employment to agricultural workers during off-season and also eliminate the possible exploitation of workers by the private contractors. The basic idea of the movement is commendable. The movement has yet to gain momentum in the rural areas.

(5) **Employment Guarantee Scheme.** The Government of Maharashtra introduced in 1977 the Employment Guarantee Scheme under which any able bodied person in rural areas can apply for a job to the Collector of his district or to his authorised subordinate officials and the latter will provide him employment within 5 kilometers of his place of residence. For this purpose, the Government has to prepare and keep in readiness various public works, such as irrigation works, road construction, etc. The rate of wages will not be such as to attract agricultural workers from their normal employment in agricultural operations. This was a pioneering scheme which the Government has been trying to improve upon with the experience gained. Under the scheme, the State assumes the responsibility to provide work on demand. If work is not provided in a fortnight from the date of demand, a payment in the form of a compensatory allowance has to be made. Following the scheme adopted by the Maharashtra Government, the Central Government has passed the National Rural Employment Guarantee Act (2005) which makes it mandatory for the Government to provide 100 days of employment per rural household. This is the first Act of its kind adopted by the Central Government. The State Governments have been directed to implement this Act. The Central Government would provide 90 percent funds for the purpose. However, the success of this unprecedented Act will depend upon the quality of implementation by the State Governments.

(6) **20-Point Programme.** In July, 1975, the Government introduced the 20-point economic programme which included a number of measures to improve the economic condition of the landless workers and other weaker sections of the community in our villages. These measures were :

(a) Speedy implementation of ceiling legislation and distribution of surplus land among landless labourers and small peasants;

(b) provision of house sites for landless labourers and conferment of ownership rights of the houses if they have been occupying them for a certain period;

(c) abolition of bonded labour;

(d) liquidation of rural indebtedness and moratorium on recovery of debts from landless labourers, artisans and small peasants; and

2. AGRICULTURAL LABOUR AND MINIMUM WAGES

After the Minimum Wages Act, 1948 was passed, pressure was brought upon the Government to extend the Act to cover agricultural labour. The Act was subsequently extended but there are still some States which have not brought large sections of agricultural labour within the ambit of the Act. Even where the Act is implemented, the machinery for the fixation and enforcement of minimum wages is not uniform. In some States, it is the Revenue Department which implements the Act and in some others this is done by the Labour Department. But generally speaking :

(i) The Act has been a dead letter in every state; (ii) minimum wages in agriculture are not being revised over long periods; (iii) almost everywhere, the actual wages rule higher than the minimum wages during the peak season and tend to fall in slack seasons; (iv) the machinery for enforcement is hopelessly inadequate to cope with the task of effective implementation the institution of proceedings under the Act is almost negligible and successful prosecution even more disappointing; and (v) other difficulties in the implementation of the Act arise mainly from poverty and illiteracy of agricultural labour, absence of knowledge of the existence of legislation, scattered nature of agricultural farms, casual nature of employment, unorganised character of agricultural labour, etc.

There is strong opinion in favour of suspending the operation of the Minimum Wages Act in rural areas. The basic argument is that at the peak of the agricultural season, labour can dictate its own terms and naturally actual wages will tend to be much higher than the minimum wages, under these conditions the enforcement of minimum wages has no meaning. On the other hand, during the slack season, the supply of agricultural

labour is much in excess of demand and, therefore, the enforcement of the minimum wages may be difficult. The National Commission on Rural Labour gave due weight to this view, yet it strongly recommended the continuance of the Act on the ground that in the long run, with greater awareness of their rights on the part of agricultural labourers, the fixing of minimum wages would be useful. As regards enforcement, the Commission suggested that the Panchayats might be asked to enforce minimum wages, even though this has obvious defects. The Commission also suggested wide publicity to the fixing of minimum wages and the notification of wages at a public place.

There are considerable disparities in wages between regions, between different crops as well as between wages paid to men, women and children. The National Commission on Labour had sufficient evidence before it to conclude that between 1956 and 1963 the incomes of agricultural labour increased faster than the wages of industrial workers. This was mainly due to the fact that the average wage in rural areas was increasing significantly. This was especially true in the case of Punjab and in some selected areas of Tamil Nadu.

The Labour Ministers' Conference held in August 1981 on the question of minimum wages under the Minimum Wages Act decided that (i) minimum wages should not fall below the poverty line, (ii) mechanism should be devised to link minimum wages with the consumer price index numbers as has been done by some States, to the extent possible, and (iii) to introduce a comprehensive legislation to amend the Minimum Wages Act to remove the defects and to make it more effective.

In pursuance of these recommendations, a new concept of General Minimum Wages was devised which would provide for the necessities like food, fuel and shelter in respect of workers in general who may not be covered under the Minimum Wages Act. It may be noted that the abolition of rural poverty largely depends upon the guarantee of minimum wages.

According to a notification issued by the Government of India in December 1998, the Central Government has directed all state governments and Union Territories not to fix the minimum wages for workers in the unorganised sector below ₹ 40 per day, the basic subsistence wage.

The Labour Ministry further advised the states in February 2011 to revise minimum wages for all scheduled employments not below ₹ 156. As per information available, various state governments have fixed upper and lower wage limits of minimum wage rates as given in table 2:

It may be observed that in quite a large number of states, lower limit of minimum daily wage is below ₹ 156. Only in one state, Haryana, the Minimum Wage rate is above ₹ 156 recommended by the Central Government.

Table 2: Minimum Wage Rates Fixed in Various States (2010-11)

	Lower Rate (1)	*Upper Rate (2)*
1. Kerala	110.0	322.10
2. Maharashtra	95.65	248.15
3. Karnataka	82.57	227.81
4. Tamil Nadu	81.91	222.35
5. Haryana	173.19	173.19
6. Madhya Pradesh	119.0	169.03
7. Gujarat	100.0	169.00
8. Uttar Pradesh	100.0	160.15
9. Chattisgarh	104.6	151.04
10. Punjab	147.73	147.73
11. West Bengal	112.50	146.53
12. Bihar	138.0	144.0
13. Jammu & Kashmir	110.0	110.0
14. Assam	66.5	100.0
15. Orissa	90.0	90.0
Central Government	**156.0**	**256.0**

Note: State have been arranged on the basis of a declining trend of maximum rate.
Source: Ministry of Labour, Annual Report (2011-12)

It may be noted that fixation of minimum wages is no guarantee for their payment. This depends on the role of the state and on the extent of unionization among agricultural workers.

3. ABOLITION OF BONDED LABOUR

One item of the 20 point economic programme was the abolition of bonded labour. It came as a great surprise to most urban dwellers that millions of landless labourers were still being treated as bonded labour or contract labour and that they have been living like serfs or slaves. Bonded labour has existed in India for

centuries. It is a peculiar phenomenon of our agricultural economy. The system grew out of extreme poverty and helplessness of scheduled castes, Adivasis and semi-tribal communities, who have always depended on wage-income which too they received only for a part of the year. When they needed foodgrains during the lean agricultural season or when they needed money for special occasions such as marriage or festival or for medical treatment, they had to borrow but they had no security of offer in the form of land, jewellery or any other property except their own labour. Accordingly, they 'pledged' themselves. The moneylenders and the high caste landlords took advantage of their helplessness and ignorance, and entered into repressive contracts. The wages were so low and the rate of interest so high —often 25 to 50 per cent--that the total loan got accumulated with the passage of time. In fact, the total burden of the loan became so huge that it could not be repaid even with the labour of many generations of the debtor's family. Once a landless labourer borrowed money, he and his descendants were doomed to perpetual slavery. Even in modern times, the scheduled caste agricultural labourers who could secure employment for hardly five or six months a year had to subsist for the rest of time on money and foodgrains borrowed from their landlords. Bonded labour is known by various names in the country, as for example, 'Paniyas' in Madras, 'halia' and 'mulia' in Orissa, 'baramasia' in North Bihar and 'Kamia' in South Bihar, 'harwaha' in Madhya Pradesh, 'sewak' and 'haris' in Uttar Pradesh, etc.

Extent of Bonded Labour

There are no reliable estimates of bonded labour even though the system has existed for centuries. Gandhi Peace Foundation (GPF) and National Labour Institute (NLI) conducted a survey of bonded labour for 10 major states of India for 1978-79. The major findings of the GPF-NLI Survey are as under:

(*i*) The total number of bonded labourers in the 10 states surveyed was estimated to be 26.17 lakhs.

(*ii*) Uttar Pradesh had the highest number of bonded labourers: 5.5 lakhs, followed by Madhya Pradesh: 5.0 lakhs, Orissa: 3.5 lakhs and Andhra Pradesh: 3.25 lakhs. These four states accounted for 17.25 lakhs of bonded labourers i.e. about 66 per cent of the total bonded labourers in the country.

(*iii*) For India as a whole, 5.7 per cent of the total agricultural labourers constituted bonded labourers. This, obviously, takes besides bonded debt, the denial of the right of freedom of occupation and geographical mobility. However, this proportion was as high as 18.4 per cent in Orissa and as low as 2 per cent in Maharashtra.

(*iv*) About 87 per cent of the bonded labourers belonged to Scheduled Castes, Scheduled Tribes and Adivasis

Another estimate of bonded labourers for 12 states was conducted in March 1990 by the State Governments and the total number of bonded labourers was estimated at 2.45 lakhs.

Very wide divergence was found between GPF-NLI estimate for 1978-79 and the estimate of State Governments. The GPF-NLI Survey was handled by motivated social workers and that of the State Governments by the rural bureaucracy like Tahsildars, Revenue Staff and Block Development Personnel. The methodology of the GPF-NLI Survey to assure the identity of interests and confidence building yielded better results. But even the GPF-NLI Survey is an under-estimate because it did not cover the entire country.

The International Labour Organisation (ILO) estimated the number of bonded labourers in India to be around 150 lakhs, out of which 50 lakhs are children. As against it, the Government of India has estimated bonded labour to be of the order of 3.53 lakhs. ILO estimate has been based on the surveys by "independent agencies" while the estimate of bonded labour of the Government of India is based on the data provided by National Sample Survey. The Government of India figure is a serious under-estimate since ILO has estimated 20 lakh bonded labourers only in agriculture. But besides agriculture, bonded labour is widely prevalent in mines, carpet-weaving industry and domestic service.

Efforts were made in the past to abolish bonded labour. The earlier effort was the law passed in 1933 by the British Parliament to abolish slavery throughout the British empire. Unfortunately it did not have any impact in India as the different states felt that there was no slavery in India. After Independence, the Constitution prohibited slavery, ***begar*** and other forms of forced labour. Soon after some states passed laws to abolish bonded labour. But the system persisted since the laws were not enforced and the urban people were either not aware of the evil or did not take notice of the evil. A series of agitations by the bonded Adivasi labourers against their exploiters were organised by the communists. They focussed attention of the Government and of the general public to their terrible exploitation by the high caste land-owners and rapacious money-lenders. Often these movements were condemned as communists uprisings and were cruelly suppressed. At the same time, the Government was influenced by the regular reports of the Commissioner for Scheduled Castes and Scheduled Tribes highlighting the exploitation and the humiliation of the backward communities. The bonded labour system was abolished throughout the country with effect from 25th October 1975 under the Bonded Labour System (Abolition) Act, 1976. For the first time, the Government took swift action against money-lenders, building

contractors, quarry-owners and others who have been found practising some form of bonded and contract labour.

During the Sixth Plan (1980-85) the maximum cost of rehabilitating a bonded labourer was limited to ₹ 4,000 out of which the State Governments were given 50 per cent matching grants. The assistance was given to the freed bonded labourers through delivery of income-generating economic kits such as agricultural implements and inputs; poultry sheep/pig units and tools and equipment for carpentry and such other skill-based occupatons suitable to individual aptitutes and requirements.

Future of Bonded Labour

The Programme Evaluation Organisation (PEO) of the Planning Commission in its report (1984) on bonded labour brought out the following facts and made recommendations :

(i) State and district authorities have, by and large, failed to provide sufficient subsistence allowance during the intervening period of release and rehabilitation, thereby exposing most of the freed bonded labourers to the danger of hunger and relapse into bondage.

(ii) About 50 per cent of freed bonded labourers depend upon borrowing from some source or the other which place them in danger of going back to bondage since they have no capacity to repay the loans. Co-operative credit societies have not been able to do much to assist their rehabilitation.

(iii) The PEO has, therefore, recommended that the Protection of Civil Rights Act be enforced strictly and reputed voluntary organisations be encouraged to undertake social reforms.

Following these recommendations, the Seventh Plan has provided for a sum of ₹ 15 crores for the rehabilitation of bonded labour during 1985-90.

As per information available with the Ministry of Labour from the State Governments, as many as 2,83,379 bonded labourers were identified and released upto the 31st December 2004. Of those freed bonded labourers, 2,61,417 were fully rehabilitated. It implies that 92 per cent of the bonded labourers identified were rehabilitated. This appears to be encouraging, more so, when it is realised that the matching grant by the Central Government for rehabilitation has been raised from ₹ 4,000 per bonded labourer to ₹ 6,250 with effect from February 1, 1986. It has further been raised to ₹ 20,000 per bonded labourer. The Central Government provided ₹ 67.5 crores for the purpose upto 2004.

However, it is very presumptuous on the part of the Ministry of Labour to state that only 22,000 bonded labourers need to be rehabilitated, but they are not traceable. There is a need to have periodic surveys of bonded labour in collaboration with NGOs like Gandhi Peace Foundation, Bandhua Mukti Morcha and various peasant oganisations committed to the emancipation of bonded labour. The Central Government has not even considered the recommendations of the National Commission of Rural labour in this regard, not to speak of taking steps to implement them. This is due to the fact that bonded labourers have not been organised as a pressure group.

4. RECOMMENDATIONS OF THE NATIONAL COMMISSION ON RURAL LABOUR (NCRL)

The present agrarian structure has fostered inequality of land-ownership and forced small and marginal farmers to sell their land to big peasants. This has accelerated the process of proletarianization of the marginal farmers. NCRL clearly states: "The new technology, being market oriented and capital intensive, has mainly favoured the big peasants; the small farmers not possessing the required resource base or requisite knowledge and risk-bearing capacity have lagged behind in the adoption of technology. Small and marginal farmers are, therefore, placed at a disadvantage vis-a-vis the big-owners and sometimes economic pressures might have forced them out to join the swelling ranks of agricultural labourers."[3]

There is no hope of altering the distribution of land-ownership in India. It would be totally unrealistic to expect that the rural poor can be absorbed in agriculture as owner-cultivators. This being the stark reality, NCRL has proposed the following measurers to alleviate the lot of the agricultural labourers.

The Commission is of the view that the strategy capable of making the poor agricultural labourers viable has necessarily to be multi-dimensional. The first thing is to create and/or strengthen infrastructure of irrigation, drainage and flood control and rural electric supply as well as introduction of dry farming technology, which will result in increasing agricultural productivity and employment.

Secondly, it would be necessary to undertake employment generation programmes which should aim at absorbing the excess supply of labour for agricultural operations and these, in turn, will raise the income of agricultural labourers. Enforcement of minimum wages and social security are the essential components of employment programmes.

Thirdly, agricultural labourers should be provided with house sites and homesteads not only to meet their basic need but also to enable households to take up supplementary land-based activities like poultry, dairy etc.

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3. Ibid., p.65

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urgent need for a Central Legislation to cover agricultural labour. This legislation should provide for security of employment for agricultural labour, prescribed hours of work, payment of prescribed wages and machinery for the settlement of disputes. The legislation should also make enabling provisions to prepare schemes for welfare and social security measures.

The Commission recommends a separate department of Rural Labour at the Central and the State levels with functionaries below the State level as well.

The Commission endorses the provision for enabling formation of trade unions and agricultural labourers to carry on their activities under applicable laws.

The Commission recommends the establishment of Agricultural Labour Welfare Fund to provide assistance to women agricultural labour for maternity leave for two surviving children, old age pension at the rate of ₹ 100 per month and death and injury compensation. The resources to the fund will comprise of contribution of the employer, say, a cess on land, and a nominal contribution from agricultural labour at the rates to be prescribed by the Government. However, these are not to generate adequate funds and the Commission is, therefore, of the view that there must be a sharing of a contribution to the fund by Central Government and State Government at least on a 50:50 basis after the Central Government meeting 100% expenditure for first three years.

To sum up, it may be stated that agricultural labour constitutes the poorest section of the rural population. The NCRL records that as against the general (Rural) poverty ratio of 33.4 per cent in 1987-88, the poverty ratio for the rural labour households (NCRL) would be around 57 per cent. Consequently, the Commission has made recommendations so that steps may be initiated to bring this group suffering from deprivation for centuries, above the poverty level. It is true whereas agricultural labour has contributed to green revolution significantly, it has not benefitted in terms of the betterment of its conditions, except for marginal gains by way of increased wages in some states. To help agricultural labourers, the Commission has emphasized on the one hand an employment-oriented strategy of development and on the other, suggested the organisation of agricultural labourers into trade unions to improve their bargaining strength. To supplement these efforts, the Commission has indicated that the Central Government should initiate legislation to introduce a scheme of social security.

Following the recommendations of NCRL, (1991) the Central Government has prepared draft Central Legislation for Agricultural Workers and circulated it at the 42nd Conference of State Labour Ministers held on 7-8 July 1993 to elicit their comments. It is heartening that the Central Government has been awakened by the NCRL to take steps to improve the economic condition of the poorest of the poor in our society.

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PART IV

INDIAN INDUSTRIES

- Industrial Pattern and the Plans
- Some Large-Scale Industries
- Information Technology (IT) Industry
- Small-Scale Enterprises
- Unorganised Sector and Informalisation of the India Economy
- Labour Problems and Labour Policy
- Second National Commission on Labour

CHAPTER

37

INDUSTRIAL PATTERN AND THE PLANS

"It is only when India has acquired the ability to design, fabricate and erect its own plants without foreign assistance that it will have become a truly advanced and industrialised country."

—Jawaharlal Nehru

1. THE ROLE OF INDUSTRIALISATION

Industrialisation has a major role to play in the economic development of the underdeveloped countries. The gap in per capita incomes between the developed and underdeveloped countries is largely reflected in the disparity in the structure of their economies; the former are largely industrial economies while in the latter production is confined predominantly to agriculture. Table 1 clearly reveals the positive relationship between per capita income and the share of manufacturing output (industry including construction). Undoubtedly, some countries have achieved relatively high per capita incomes by virtue of their fortunate natural resource endowments. Petroleum exporting countries like Saudi-Arabia, Kuwait, and UAR have achieved higher per capita income by exploiting the strong advantage that they enjoy in international trade. But these countries are a rather special case.

The pattern of 'growth through trade' in primary commodities was, however, realised in the nineteenth century when industrialization was closely linked with international trade, because

(a) countries previously isolated by high transport costs as well as other barriers came to specialize, and (b) economic development through trade was diffused in outlying areas because the pattern of advance in the rising industrial countries happened to be such as to cause a rapidly growing demand for crude products of the soils which those areas were well-fitted to supply. This traditional pattern of growth through trade is out of place now. As rising levels of per capita consumption have gradually transformed the composition of demand for goods and services and as technological changes have resulted in the more economic use of new materials or the creation of synthetic substitutes, the growth of import demand of the advanced countries for most primary products has lost the momentum of the earlier period and, currently, it lags behind the growth in their domestic incomes and output. The volume of exports from the underdeveloped countries expanded at a rate of 3.6 per cent per annum while the exports from the developed countries rose at the rate of 6.2 per cent. This export lag is accompanied by a deterioration in their terms of trade. Thus in view of unfavourable trends in world trade of primary commodities, industrialisation is the only effective answer to the problems of under-developed countries. They can no longer depend

TABLE 1. Percentage Industrial Distribution of Gross Domestic Product and Per Capita Income (2009)

Country	*Per capita income in U.S. Dollar (2008)*	*Industrial origin of Domestic Product at factor cost (Percentages)*		
		Agri culture	*Industry*	*Services*
U.S.A.*	46,436	1.3*	20.8*	77.3*
Belgium	44,429	.8*	23.1*	76.1*
U.K.*	35,164	.7*	23.7*	75.1*
Japan	39,726	1.4*	29.3*	69.3*
China	3,744	10.3	46.3	43.4
India	1,134	17.1	28.2	54.6

SOURCE : World Bank, *World Development Indicators*, 2010
*2008

upon trade for their development; they have to activise dynamic elements within their economies.

Besides the limitation of 'trade gap', these countries are facing a relentless increase of population combined with a likelihood of diminishing returns in agriculture which is instrumental in creating the trap of poverty. The essential precondition for development (and to break this vicious circle) is an all-round rise in low productivity occupations to high productivity occupations. In general, the net value of output per person is higher in industry than in agriculture. In industry, the scope for internal as well as external economies is greater than in other sectors and certainly greater than in agriculture. As industrialisation proceeds, economies of scale and inter-industrial linkages (complementarity) become more pronounced. It also leads to the creation of economic surplus in the hands of industrial producers for further investment.

The industrial sector which possesses a relatively high marginal propensity to save and invest contributes significantly to the eventual achievement of a self-sustaining economy with continued high levels of investment and rapid rate of increase in income and industrial employment. Besides, the process of industrialisation is associated with the development of mechanical knowledge, attitudes and skills of industrial work, with experience of industrial management and with other attributes of a modern society which in turn, are beneficial to the growth of productivity in agriculture, trade, distribution and other related sectors of the economy. As a consequence of these factors, any successful transfer of labour from agriculture to industry contributes to economic development. Industrialisation is thus inseparable from substantial, sustained economic development because it is both a consequence of higher incomes and a means of higher productivity. With the rise in income levels people tend to spend more on manufactured goods than on food. The differential income elasticity of demand confers an advantage on the manufacturing countries in the form of providing expanding market higher productivity makes it an attractive occupation to effect population transfer so as to arrest the tendency of diminishing returns in agriculture. Industrialisation acts as an instrument both of creating capacity to absorb excess labour power and of catering for the diversification of the market required at higher stages of economic development.

In many cases, the diversion of underemployed rural labour to non-agricultural occupations is an urgent requirement for development. But it does not mean that industrial development can be dissociated from progress in the agricultural sector. Improvement in productivity in agriculture creates surplus which can be utilised to support increasing labour force in industries. Besides providing a large part of the sustenance for the growing urban population, the agricultural sector supplies a market for manufactured goods out of higher real incomes and a source of foreign exchange to pay for imported capital goods for industry; it also provides a source of capital for industry through the medium of capital accumulated by traders and leads to the growth of an exchange economy—all these factors promote the growth of manufacturing industry. In fact, unless agriculture is modernised substantially, industrial expansion is likely to proceed at a slow speed due to lack of purchasing power in the hands of the bulk of population. The problem facing the less developed countries is, therefore, not one of choosing between primary and secondary activities but rather one of ensuring the balanced expansion of all appropriate sectors of the economy.

2. THE PATTERN OF INDUSTRIALISATION

While there is now almost universal agreement on the importance of industrialisation, there is still much debate regarding the proper pattern of industrial development. Historically, industrial development has proceeded in three stages. In the first stage, industry is concerned with the processing of primary products: "Milling grain, extracting oil, tanning leather, spinning vegetable fibres, preparing timber and smelting ores." The second stage comprises the transformation of materials making bread and confectionery, footwear, metal goods, cloth, furniture and paper. The third stage consists of the manufacture of machines and other capital equipments to be used not for the direct satisfaction of any immediate want but in order to facilitate the future process of production. Hoffmann classified all industrial output into two categories, consumer goods and capital goods output and classified various stages in terms of the ratio of consumer goods output to that of capital goods output. "In stage I the consumer goods industries are of overwhelming importance, their net output being on the average five times

as large as that of capital goods industries."[1] This ratio is 2.5 : 1 in the second stage and falls to 1 : 1 in the third stage and still lower in the fourth stage. Both these types of classifications emphasise the increasing role of the capital goods industries in the economy as industrial development takes place.

Though the general development of industry itself has proceeded from consumer goods to the capital goods, there are many variations of this pattern, both in terms of time taken to attain later stages and in terms of relative importance of each of the stages. Soviet pattern of industrialisation involves a straight jump from the first to the third stage while British pattern is that of a gradual evolution. Similarly, underdeveloped countries may also evolve a different pattern of industrialisation suitable to their economic conditions. It has been suggested that the pattern of industrialisation in under-developed countries should be guided primarily by considerations arising from the relative scarcity of capital. Since labour is relatively plentiful and capital scarce, the development of labour-intensive consumer goods seems quite legitimate. However, the basic premise of this approach is inappropriate. The problem is not how to economise the use of capital (this has to be done as an inevitable condition) but how to increase its supply. Since most underdeveloped countries do not produce these goods at home, the only alternative to increasing their supplies is through imports. This depends upon the rate of growth in exports of primary commodities and manufactured goods. As it has been pointed above, the countries are facing an "export lag" in their exports of primary commodities. Consequently, primary commodity exports do not seem to be a reliable source of foreign exchange earning in order to increase the import of capital goods.

The alternative to the increase of exports of primary products from under-developed countries would be to develop export promoting manufacturing industries. But the main trouble is that in producing goods of this sort, say textiles, the advanced industrial countries themselves are likely to have an overwhelming comparative advantage. This does not necessarily mean that export promoting industries should not be developed, it only means that specialisation in a few industries for export is not a substitute for the growth of a diversified domestic industry. If, however, the growth in foreign exchange earnings cannot be strengthened by the promotion of export industries, the spread of import substituting consumer goods industries can release foreign exchange for imports of capital goods. Import substitution is of two types :

(a) the substitution of home produced goods for imported goods, and

(b) the substitution of capital goods imports for consumer goods imports.

Thus, if a country cannot increase its export earnings sufficiently, it can still increase its import of capital equipment by cutting down its imports of consumer goods. This process of import substitution, itself creates import demand for certain ancillary goods which are needed for the production of those consumer manufactures. We are thus faced with a problem of choice between expansion of export-oriented industries or of import-substitution industries. The capital available for investment in an under-developed economy being limited, the allocation of funds to an export project reduces the scope of investment oriented towards import-substitution. If export-oriented industries are successful in stimulating exports, they increase the supply of foreign exchange and if import substitution is effective, it releases foreign exchange so that the effect of these alternatives on the supply of foreign exchange is identical. How should we decide between these two alternatives?

Although, the effect of the development of these two types of industries on foreign exchange is similar, yet an import-substituting industry strengthens the economic independence of the country, while export-oriented prospect, on the contrary, increases its dependence on the fluctuations of prices and volume of trade in foreign markets. Therefore, in general, an import-substitution project should be preferred to an export-oriented project.

To sum up, industrial development depends upon the rate of capital formation. Supply of capital goods can be augmented either through imports or through domestic production. Increase in the imports of capital goods depends upon the rate of growth of exports. Since the scope for the expansion of the exports of primary commodities is limited, export promoting manufacturing industries may be developed or alternatively, certain import substituting domestic industries may be developed, the effect of which will be to release foreign exchange for the imports of capital goods. In addition, within the current volume of imports, capital goods may be substituted in place of consumer goods. Thus, export-promoting industries, import-substituting industries and domestic capital goods industries are not mutually exclusive alternatives. Simultaneous development of all the three classes of industries will prove to be the most effective strategy of industrialisation. The relative role of each is likely to vary with the particular economic circumstances of individual countries as well as with their current phase of industrialisation.

3. INDUSTRIAL PATTERN ON THE EVE OF PLANNING

Before the rise of the modern industrial system Indian manufacturers had a world-wide market. Indian muslin and calicoes were in great demand the world over. Indian industries not only supplied all local wants but also enabled India to export its finished products. Indian exports consisted chiefly of manufactures like cotton and silk fabrics, calicoes, artistic ware, silk and woollen cloth. The impact of the British connection and industrial

1. Hoffmann, W.G., ***The Growth of Industrial Economies***, Oxford, 1958, p.3.

revolution led to the decay of Indian handicrafts. Instead, machine-made goods started pouring into India. The void created by decay of Indian handicrafts was not filled by the rise of modern industry in India because of the British policy of encouraging the import of manufactures and export of raw materials from India.

The British Government in India provided discriminating protection to some selected industries since 1923. This protection was accompanied by the most favoured nation clause for British goods. Despite this factor, some industries such as cotton textiles, sugar, paper, matches and to some extent iron and steel did make progress. But one thing was quite obvious that during the British period no effort was made to foster the development of capital goods industries. Rather the British Government put definite hindrances and cold-shouldered their development. The main features of the industrial pattern in India on the eve of planning (1950) were as under:

(1) **Lop-sided pattern of industry.** The Indian industrial structure reflected a lop-sided size-pattern. The total number of persons employed in manufacturing in mid-1956 was about 15 million. Out of this, only 3.9 million were employed in factories (defined by the Act as unit of production employing 10 or more persons); 11.1 million were employed in household enterprises and workshops employing less than 10 persons. Out of total factory employment of 3.9 million persons, 1.2 million or 31 per cent were in small factories, 1.0 million or 26 per cent were in medium factories and 1.7 million or 43 per cent were concentrated in large factories. The peculiarity of the industrial pattern of India was the high concentration of employment either in small factories and household enterprises, i.e., the lowest size-group or that there was a high concentration of employment in large factories, i.e., the highest size group. The medium size factories did not develop in India. The existence of this lopsided industrial pattern was due to the colonial nature of our economy. The foreign firms and those owned by big business and industrial magnates were of a very large size coming at the top of the pyramid, and at the bottom were a very large number of indigenous small size firms. The lopsidedness of the industrial pattern was reflected in the absence of the middle entrepreneurs running medium sized firms.

(2) **Low capital intensity.** Another feature of the Indian industrial pattern was the prevalence of low capital intensity. It was the result of two factors—first, the general level of wages in India was low, and, second, the small size of the home market in view of the low per capita income and the limited use of mass production (or high capital intensity) techniques resulted in low capital per worker employed.

A comparison of the two sets of figures provided by the United Nations reveals that capital employed per worker was very low in India vis-a-vis U.S.A. Low capital intensity was reflected not only in consumer goods industries like bakery, cloth, sugar, etc., but also in capital goods industries like iron and steel. (Table 2.)

Table 2. Capital Per Worker Employed in Some Industries

	In thousands of dollars at 1960 prices	
	U.S.A.	*India*
Alcoholic Beverages	16.0	6.1
Bread bakery products	5.0	3.5
Cotton yarn and cloth	8.7	1.8
Flour and gristmill products	39.1	5.6
Iron and steel	32.1	5.7
Sugar-refinery	26.8	2.6
Wood-pulp, paper and paper products	10.2	0.6

Source: United Nations, *Industrialisation and Productivity*, Bulletin No. 1. 1958.

(3) **Composition of manufacturing output** reflects the preponderance of consumer goods industries vis-a-vis producer goods industries. In 1953, the ratio of consumer goods to producer goods worked out to be 62 : 38. According to the criteria suggested by Hoffmann India seems to have entered the second stage of industrial development. But even then, there is no doubt that the capital-goods sector is under-developed and there is a need for the expansion of this sector so as to ensure a rapid rate of growth to make the economy self-reliant and ultimately foster the pace of industrialisation in the country. Only then can per capita income be pushed up at a fast rate.

There was a structural imbalance in the industrial pattern. In case of consumer goods, domestic supply was more than the demand. The index of domestic supplies of consumer goods was 112 as compared to domestic demand equal to 100. But in case of producer goods, the domestic supplies fell short of domestic demand. The index number of domestic supplies in relation to demand was 80. This increased our dependence on other countries in the capital goods sector. The conclusion is obvious. There was a great need for increasing the output of final and intermediate producer goods so as to correct the imbalance between their demand and supply. Industrial development "is not solely a process of expanding output to meet the rising demand created by growing per capita incomes, it is also a process in which existing demand for manufactures is met increasingly from domestic production instead of from foreign sources."[2]

In short, the industrial pattern in India on the eve of planning was marked by low capital intensity, limited development of medium sized factory enterprises and imbalance between consumer goods and capital goods industries. It would be of interest to examine the extent to which the Five-Year Plans have made an attempt to improve the industrial pattern, correct its lopsidedness and develop the capital goods sector.

2. United Nations, *World Economic Survey*, 1961, p. 34.

4. INDUSTRIAL PATTERN AND THE FIVE-YEAR PLANS

The Government of India launched the process of industrialisation as conscious and deliberate policy of economic growth in early fifties. The Government recognised the significant contribution industrialisation could make to the development process, "as a base for the growth of the primary sector, as a catalytic agent for the development of infra-structure, as a stimulant to generation of technologies through R & D effort . . . and as a growth multiplier."

Industries and the Second Plan (1956-61)

The Second Five-Year Plan programme for industrialisation was based on the Industrial Policy Resolution of 1956 which envisaged a big expansion of the public sector. A base of heavy industry was sought to be created. The actual investment in the public sector on organised industry was ₹ 870 crores. Private sector investment was ₹ 675 crores during the Second Plan period—more than envisaged in the Plan. Similarly, investment in village and small industries was ₹ 265 crores (in both public and private sectors). Taken together, total investment in industries was ₹ 1,810 crores, i.e., 27 per cent of the total investment during the Second Plan.

The industrial pattern sought to be developed during the Second Plan was conceived in terms of the following priorities :—

(i) increased production of iron and steel and of heavy engineering and machine building industries;

(ii) expansion of capacity in respect of other development commodities and producer goods such as aluminium, cement, chemical pulp, dyestuffs and phosphatic fertilisers, and of essential drugs.

(iii) modernisation and re-equipment of important national industries which have already come into existence such as jute and cotton textiles and sugar;

(iv) fuller utilisation of existing installed capacity in industries where there are gaps between capacity and production; and

(v) expansion of capacity of consumer goods keeping in view the requirements of common production programmes and the productions targets for the decentralised sector of industry.

During the Second Plan a major task in industry was the building up of three steel plants in the public sector: Rourkela Steel Plant in Orissa, Bhilai Steel Plant in Madhya Pradesh and Durgapur Steel Plant in West Bengal. The other programmes of industrial development included the manufacture of electrical equipment, expansion of Hindustan Machine Tools, expansion of Sindri Fertiliser factory and the establishment of a fertilizer plant at Nangal, further expansion of Hindustan Shipyard and Chittaranjan Locomotive factory.

The Second Plan witnessed a major diversification of the industrial spectrum. It strengthened further the programmes of development in respect of oil exploration and coal and made a beginning with the development of atomic energy.

Most of the investments in the Second Plan were in heavy and basic industries. There was also rapid expansion of machine-building industries for use in agriculture and transport and for such industries as chemicals, textile, jute, cement, tea, sugar, flour and oil mills, paper, mining, etc. Good progress was also recorded in modernisation and re-equipment of important industries such as jute, cotton textiles and sugar. Quite a number of new industrial items, e.g., industrial boilers, milling machines, tractors, motor cycles, scooters, etc., were also produced in large quantity.

In the sphere of village and small industries, substantial progress was recorded. About 60 industrial estates comprising 1,000 small factories were set up. The period also witnessed the rise of a vigorous class of small entrepreneurs. In a number of items such as machine tools, sewing machines, electric motors, fans, bicycles, hand tools, etc. production increased from 25 to 50 per cent during the five-year period. Khadi, handloom and powerloom cloth production increased from 1,610 million metres to 2,150 million metres.

Industries and the Third Plan (1961-66)

With the base created in the first two Plans, the Third Plan called for the ***maximum rate of investment*** to (a) strengthen industry, power and transport and (b) hasten the process of industrial and technological change.

The overall financial outlay in organised industries and mining during the Third Plan period was ₹ 3,000 crores, out of which the outlay in the public sector was about ₹ 1,700 crores and that in the private sector ₹ 1,300 crores.

The key role in industrial development programme was for the public sector. The aim was to make the economy self-sustaining in producers' goods industries such as steel, machine building, etc., so that the quantum of external assistance needed could be curtailed to a very low level. An overall target of 7 per cent increase in industrial production was envisaged in the Plan.

Except for the year 1965-66, industrial output increased steadily at the rate of 7.6 per cent per annum. The achievement was lower than the average of 14 per cent per annum visualised in the plan. Although the increase in the

output of producer and basic industries was higher than the actual growth in the general index of production, yet it was much lower than the target set out in the Third Plan.

Despite the overall under-achievement of targets the Third Plan reflected the first stage of a decade or more of intensive development leading to a self-reliant and self-generating economy. Engineering industries like automobiles, cotton textile machinery, diesel engines, electric transformers and machine tools, advanced according to set-targets as did industries such as petroleum products, heavy chemicals, cement, etc. Mining and extractive industries also showed considerable progress. It was during this period that a fairly sound base for future industrial growth was laid through the completion of projects of the HEC for manufacture of machinery and equipment for steel plants, the MAMC for the production of mining equipment and Bharat Heavy Electricals for power generation and transmission equipment.

Industries and the Fourth Plan (1969-74)

The Fourth Plan intended to complete industrial projects undertaken in the Third Plan. It also aimed to enlarge capacities in export promotion and import substitution industries.

During the Fourth Plan, the actual outlay on organised industry was of the order of ₹ 2,700 crores in the public sector. Thus, the financial investment was short of the targets set out in the Fourth Plan. Nearly three-fourths of the total investment was in the core sector, viz., iron and steel, non-ferrous metals, fertilisers, petroleum and petro-chemicals, coal and iron ore.

The performance in industry was far short of even the modest targets set out in the Fourth Plan. On an average, the growth rate in industry was around 5 per cent which was much below targeted growth rate of 8 per cent envisaged in the Plan.

Industries in the Fifth Plan (1974-78)

Programmes of industrial development in the Fifth Plan were formulated keeping in view the objectives of self-reliance and growth with social justice. The Plan proposed to lay emphasis on the following:

(i) Rapid growth of core sector industries by giving high priority to steel, non-ferrous metals, fertilisers, mineral oils, coal and machine building.

(ii) Development of industries which promise a rapid diversification and growth of exports.

(iii) Enlarging the production of industries supplying mass consumption goods, viz., cloth, edible oils and vanaspati, sugar, drugs, bicycles.

(iv) Restraint on the production of inessential goods, except for exports.

(v) Development of small industries by reserving 124 items exclusively for them and by initiating an intensive programme for the development of ancillary industries as feeder industries to large-scale units.

Against the targeted annual growth rate of 8.1 per cent in the industrial sector, the actual annual industrial growth rate was of the order of 5.3 per cent during 1974-75 to 1977-78—much below the target.

Industries in the Sixth Plan (1980-85)

The Sixth Plan (1980-85) intended to work within the overall developmental strategy particularly with regard to the objectives of structural diversification, modernisation and self-reliance. The other elements of policy included the following:

(a) To meet foreign exchange requirements, export of engineering goods and industrial products, as also project exports would be stepped up.

(b) A judicious blend of permitting import of contemporary technology and promoting the development of indigenous know-how through domestic research and development.

(c) New strategies for development of backward regions would be devised. The thrust would be to implement a new model of development which would prevent concentration of industry in existing metropolitan areas.

A review of the progress of the industrial growth during the Sixth Plan reveals that as against the target of 7% growth in industrial productions, the growth rate achieved, however, was only 5.5 per cent. This was lower than the trend growth rate of 6 per cent witnessed in the earlier three decades.

Industries in the Seventh Plan (1985-90)

In consonance with the guiding principles of the Seventh Plan, viz., to achieve growth with social justice, and improving productivity, the objectives of the development programmes in the industrial sector were:

(i) to ensure adequate supply of wage goods and consumer articles of mass consumption at reasonable prices and of acceptable quality;

(ii) to maximise the utilisation of the existing facilities through restructuring, improved productivity and upgradation of technology;

(iii) to concentrate on development of industries with large domestic market and export potential to emerge as world leaders in them;

(iv) to usher in 'sunrise' industries with high growth potential and relevance to our needs; and

(v) to evolve an integrated policy towards self-

reliance in strategic fields and opening up of avenues for employment of skilled and trained manpower.

The Seventh Plan provided for an investment of ₹ 19,710 crores in large and medium industries and ₹ 2,750 crores for the development of village and small industries. Total investment in the industrial sector would thus be of the order of ₹ 22,460 crores or 12.5% of the total Plan outlay. The annual target growth rate was 8 per cent.

The main elements of the Seventh Plan industrial strategy were :

(i) Rapid removal of infrastructural constraints, by placing greater emphasis on additional availability of power through more efficient use of existing capacity as well as the establishment of new power stations including super thermal and nuclear plants.

(ii) Encouragement of modernization and technological upgradation in industries like textiles and sugar where a large number of units were set up in the early part of the 20th century.

(iii) Specific targets of productivity for major industries like steel, fertilizers, non-ferrous metals, petro-chemicals, paper and cement were to be set for the Plan.

(iv) Export production was to be made an integral part of production in the domestic economy. A special effort was to be made in selected industries in which the country has comparative advantage and has reached a degree of industrial maturity.

(v) Encouragement of 'sunrise' industries such as telecommunications, computers, micro-electronics, ceramic composites and bio-technology. Industries were to be encouraged to adopt technologies like fibre optics, lasers, robotics etc. for enhancing productivity and quality.

(vi) Location of industries near the small district towns which were not industrialized so far would be promoted with a view to removing regional disparities and encouraging dispersal of industries.

(vii) About 30 per cent of industries—large and medium—had already installed pollution control system. The Seventh Plan intended to enlarge the coverage of this programme as also to strengthen it.

A review of the progress of the Seventh Plan reveals that the annual growth rate of the industrial sector including mining, manufacturing and electricity generation during the Seventh Plan period was 8.5% which though marginally lower than targeted 8.7% was much higher than the 5.5% achieved during the Sixth Plan.

Industries in the Eighth Plan (1992-97)

The Eighth Plan was formulated under a new environment when a number of reforms in industrial, fiscal, trade and foreign investment policies were introduced in the economy – commonly called as economic liberalisation. In the context of the new Industrial Policy of July 1991, the role of the public and private sector was reviewed. In the initial phase of planned development the public sector played a pioneering role but its principal weakness was its extremely poor performance and its inability to generate adequate resources for sustaining the growth process. During this period, the private sector has come of age and has developed considerable entrepreneurial, managerial, technological, financial and marketing strengths. Thus, the private sector should henceforth play a greater role in the process of development. This new approach is consistent with the general philosophy of placing greater reliance on competitiveness of industries and efficiency of operations. Future growth would, therefore, be more in those sectors where the country has comparative cost advantage.

Eighth Plan allocated a total investment of ₹ 38,083 crores for industry and mineral production (at 1991-92 prices). A review of the progress of actual outlay revealed that at current prices, ₹ 40,759 crores were spent, but when measured at 1991-92 prices, this worked out to be ₹ 31,382 crores. In other words, actual investment worked out to be about 82 per cent of planned investment. There was, therefore, a serious shortfall of the order of 18 per cent.

Performance of the industrial sector in the Eighth Plan is shown in table 3.

It may be noted that the overall rate of industrial production witnessed an average growth rate of 7.3 per cent against the target of 7.4 per cent in the Eighth Plan.

Analysing the factors for the slow growth of the industrial sector, it may be stated that the sudden opening up of the economy to the private sector and facilitating the entry of foreign investors as contemplated in the Industrial Policy of 1991 exposed the industry to foreign competition for which it was hardly prepared since it has been operating under a totally protected environment for the last four decades. Consequently, the slowdown was reflected in very low growth rates realised in the first two years of the Eighth Plan due to a slow down in investment. Capital goods sector was hit the most and it recorded negative growth rate of (–) 12.8%, (–) 0.1% and (–) 4.1% during 1991-92, 1992-93 and 1993-94 respectively. However, it did pick up during 1994-95 and 1995-96.

A number of industries could not face foreign competition as a result of reduction in import duties. Copper and paper industry were not in a position to face external competition. In hydrocarbon sector also, a number of petroleum products were imported while domestic capacity faced under-utilisation. Dumping by foreigners also created problems for many industries. The Government was not able to gear up anti-dumping machinery to face the challenge.

Inadequate availability of infrastructure like power and transport bottlenecks and inadequate handling facilities at ports, also affected industrial production. It is really disappointing that the addition to power capacity in the Eighth Plan was less than that in the Seventh Plan even in

absolute terms. The average growth rate of electric energy during the Eighth Plan was 6.6 per cent as against the target of 7.8 per cent for the Plan. This also acted as a constraint. In fact, the Government withdrew from investment in electricity generation in the hope that the private sector would fill the gap, but this did not materialise.

All the above factors resulted in shortfalls in industrial production. Though the overall target was nearly fulfilled, but still in many crucial areas production targets could not be achieved. The capital goods sector was specially a victim of new Industrial Policy.

TABLE 3 : Annual Growth Rates of Industrial Production

(Base 1993-94 =100) Percent

	Mining	*Manufacturing*	*Electricity*	*General*
CAGR (1992-97)	**3.8**	**8.0**	**6.6**	**7.3**
Ninth Plan				
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1.0	7.1	7.3	6.7
2000-01	3.7	5.3	4.0	5.0
2001-02	1.8	2.9	3.1	2.8
CAGR (1997-02)	**2.5**	**5.3**	**5.5**	**5.0**
Tenth Plan				
2002-03	5.8	6.0	3.2	5.7
2003-04	5.2	7.4	4.9	7.0
2004-05	4.4	9.1	5.1	8.4
2005-06	1.0	9.1	5.2	8.2
2006-07	5.3	12.5	7.3	11.5
CAGR (2002-07)	**5.5**	**9.0**	**5.2**	**8.2**
2007-08	5.1	9.0	6.3	8.5
2008-09	2.6	2.7	2.8	2.7
2009-10	9.9	10.9	6.0	10.5
2010-11	5.2	8.9	5.5	8.2
2011-12	–1.9	3.0	8.2	2.8

CAGR : Compound Annual Growth Rate.

Note: Growth rates from 1994-95 onwards are based on Index of Industrial production (IIP): Base 1993-94=100.

SOURCE: Planning Commission, ***Tenth Five Year Plan (2002-07)***, Vol. II, and ***Handbook of Statistics on the Indan Economy***, *(2009-10)*. CSO, Press Release June 12, 2012

Industries during the Ninth Plan (1997-2002), Tenth Plan (2002-07) and onward

Ninth Plan targeted a growth rate of 8 per cent for industry, but realized growth rate was only 5.0 per cent which was even lower than the growth rate of 7.3 per cent realised in the Eighth Plan. In this way, it may be stated that the Ninth Plan was a failure. As against the target of 5.9 per cent for mining, the realised growth rate was barely 2.5 per cent. Similarly, achievement in manufacturing was 5.3 per cent as against the target of 8.2 per cent and in electricity, the realised growth rate was 5.5 per cent as against the target of 9.3 per cent.

Ninth Plan allocated ₹ 69,972 crores for industry at 1996-97 prices, but the Tenth Plan reveals that the total allocation to industry in the public sector was ₹ 44,695 crores at 2001-02 prices. If we revalue the proposed allocation of the Ninth Plan of ₹ 69,972 at 1996-97 prices, it works out to be ₹ 88,730 crores at 2001-02 prices. Comparing it with the public sector outlay of ₹ 44,695 crores, it implies that actual outlay of the public sector was only 50.3 per cent of the proposed outlay. It was hoped that the private sector would fill the gap, but this did not happen.

Reviewing the internal and external factors for the slowdown during the Ninth Plan, the Tenth Plan states: "The industrial slowdown is widespread, covering all broad sectors, e.g. manufacturing, electricity and mining and all end-use based groups such as capital goods, intermediate goods and consumer goods (both durables and non-durables). The slowdown in domestic and global demand appeared to be a major factor constraining industrial growth. Another major reason has been the decline in investment, noticeably by the private sector."[3]

The difficulties caused by internal factors were aggravated by the slow growth of the world economy, which resulted in a substantial slowdown in manufacturing exports. This implies that failure of the Ninth Plan in industry can be attributed to the fall in public sector investment which was not compensated by an upturn in private investment.

Reviewing the performance of the Tenth Plan, Eleventh Plan states the following: "Industrial performance in the Tenth Plan period improved to a respectable level of 8.9% from the very low level of growth rate of 4.3% in the Ninth Plan. The revival of industrial growth is a major achievement of the policy in recent years. However, industrial performance needs to be improved if high quality employment in non-agricultural sector is to be generated. Within industry, the manufacturing sector, accounting for 77 percent of industrial output has shown significant growth acceleration in the last two years. This revival of dynamism in industry has to be sustained to reverse the unacceptable decline in the share of manufacturing in GDP that has happened since 1991. This will also generate more employment opportunities for the burgeoning workforce. The Eleventh Plan aims at double digit growth both in manufacturing and in industry at the same time, it will be critical to improve the performance of the core sector (Steel, Coal, Cement, Oil, Fertilizers and Refined Petroleum) to ensure that their supply response is adequate to sustain double digit manufacturing and industrial growth.[4] It may be mentioned that the Eleventh Plan has set a target of 10-11 percent growth in industry, both in industry and in manufacturing. In the first year of Eleventh Plan (2007-08) industrial growth was satisfactory, but performance in the year 2008-09 was not satisfactory. But it again improved in 2009-10 and 2010-11. Industrial growth dipped in the second, third and fourth quarters of 2011-12.This resulted in slippage of industrail growth rate to 2.8 percent in 2011-12.

3. Planning Commission, ***Eighth Five Year Plan*** (1992-97), Vol. II, p. 106.
4. Planning Commission (2007), ***Eleventh Five Year Plan*** *(2007-2012)*, Vol. I, p.31.

5. REVIEW OF INDUSTRIAL GROWTH UNDER PLANNING—STRUCTURAL TRANSFORMATION

The progress of industrialisation during the last 50 years since 1951 has been a striking feature of Indian economic development. The process of industrialisation, launched as a conscious and deliberate policy under Industrial Policy Resolution of 1956 and vigorously implemented under the five year plans, involved heavy investments in building up capacity over a wide spectrum of industries. As a result, over the last nearly 50 years, industrial production went up by about five times, making India the tenth most industrial country of world. The industrial structure has been widely diversified covering broadly the entire range of consumer, intermediate and capital goods. The progress India has made in the field of industrialisation is clearly reflected in the commodity composition of India's foreign-trade in which the share of imports of manufactured goods has steadily declined; on the other hand, industrial products, particularly engineering goods have become a growing component of India's exports. Finally, the rapid stride in industrialisation has been accompanied by a corresponding growth in technological and managerial skills for efficient operation of the most sophisticated industries and also for planning, designing and construction of such industries.

Industrial Progress since Independence

A major achievement in the industrial sector has been the diversification of India's capability. Table 4 indicates the growth of the industrial output in selected commodities. The figures show clearly the tremendous increase in production of some important goods in the country.

India has attained self-sufficiency in almost all consumer goods. Growth of capital goods production has been specially impressive. An impressive industrial capacity has been achieved in mining and metallurgical industries, chemical and petrochemical industries, fertilizer production, capital goods industries including sophisticated equipment for steel mills, fertiliser plants, chemical plants, etc. light, medium and heavy engineering industries, power and transportation industry, construction industry, etc. Further, India can now sustain the future growth of vital sectors of the economy primarily through domestic effort and only with marginal imports. Finally, the infrastructure including R and D capability, consultancy and design engineering services, project management services and innovative capacity to improve and adapt technologies have indeed shown an impressive record of progress.

Rate of Industrial Growth

Industrial growth, however, has not been uniform since 1951. After a steady growth of about 8 per cent during the initial period of 14 years (1951 to 1965), there was a fluctuating trend since then—near stagnancy during 1966-68, a high level of 9.5 per cent during 1976-77, a minus 1.4 per cent in 1979-80. In the sixties (1961-70) the average growth rate of industrial output was put at 5.5 per cent and in the seventies (1971-80) the average growth rate was about 4 per cent per annum. Even during 1980-85, the growth rate of industrial production was 5.5 per cent per annum. The basic fact was that the rate of industrial growth had been slowing down. During the 7th Plan (1985-90), the growth rate had picked up to an average of over 8 per cent per annum and in the Eighth Plan, it had declined to 7.3 per cent per annum.

During the Ninth Plan (1997-2001-02), industrial growth slumped to 4.6 per cent per annum, but during the 10th Plan (2001-02 to 2006-07), it picked up significantly to 8.2 per cent per annum. This is a healthy development.

Strategy of Industrial Development

The development strategy adopted by the Indian planners consisted of accelerated industrialisation with a base of heavy industry. Such a strategy required development of high technological capability which, in

5. Planning Commission, *Tenth Five Year Plan (2002-07)*, Vol. II, p. 678

TABLE 4 : Growth of Commodity Production since Independence

Commodity	*Unit*	*1950-51*	*1970-71*	*1990-91*	*2000-2001*	*2010-2011*
Cloth metres	Million	4215	7,602	1,881	14,173	60,938
Fertilisers (N)	'000 tonnes	9*	830	9,122	14,770	16,378
Cement	Million tonnes	2.7	14.3	46.6	94.6	209.7
Finished Steel	Million tonnes	1.0	4.6	9.6	30.3	66.0
Electricity	Billion kwh	5	56	264	500	811
Aluminum	'000 tonnes	4	169	443	552	790.4
Paper and Paper board	'000 tonnes	116	755	2,433	3,090	4,959**
Commercial Vehicles	Thousand numbers	9	41	146	152	567**

* very low base ** 2009-10

SOURCE: Compiled from *Economic Survey*, 2011-12, RBI, Handbook of Statistics on the Indian Economy (2009-10).

turn, necessitated the creation and promotion of the engineering sector in all its phases—as for instance, strong infrastructure, advanced expertise and appropriate production equipment. From the very inception of economic planning in India, the engineering industry including machine-building industry represented the core of India's development process. The engineering industry alone could provide the base for the industrialisation thrust contemplated in Indian planning. A broad-based industrial structure could not be sustained except on the basis of a strong, vibrant, growth-oriented engineering sector. At the same time, the engineering industry was encouraged to develop indigenous skills and know-how and reduce dependence on imported technology. Above all, our planners recognised that technological skills and expertise alone could lead to high productivity levels and consequently to high levels of incomes. The engineering industry was, therefore, promoted to act as a catalytic agent for over-all economic development.

There was yet another aspect to industrial strategy adopted by our planners. From the very beginning, the planners anticipated shortage of foreign exchange as a major constraint to the development effort. For decades, primary commodities exported by developing countries were priced adversely and there was no hope to fill the gap between expanding demand and the earnings of foreign exchange. The planners, therefore, rightly decided to develop industries to reduce demand of imports and to generate expanding foreign exchange earnings. Of late, the inflow of remittances has been very high. Further there has been substantial measure of import substitution and our foreign exchange situation has improved to an extent where it is no longer a major constraint on development. However, the success in import substitution was achieved in some cases at an unduly high cost.

Growing Importance of Basic and Capital Goods

One striking feature of the period of planning was that the structure of Indian industries had changed in favour of basic and capital goods sector. The study of structural transformation of the Indian industries reveals that there was a clear shift in favour of basic and capital goods sector. This group accounted for about 50 per cent of productive capital in 1959 but in 1991-92, its share in productive capital rose to nearly 79 per cent. In total employment, its share rose from 25 per cent to 52 per cent between 1959 and 1991-92. Similarly, the contribution in value added improved from 37 per cent to 56 per cent during this period. Basic industries which include iron and steel, fertilisers, chemicals, cement, non-ferrous metals have thus improved their position significantly under the impact of industrialisation. Several capital goods industries hitherto unknown have been brought into existence and developed. On the other hand, during the same period the share of consumer goods industries such as textiles, sugar, paper, tobacco, etc., declined in terms of productive capital, employment and value-added.

Structure of Effective Demand and Pattern of Industrial Development

A disquieting feature is that the pattern of industrial development that has emerged in the last five decades reflects the structure of effective demand which is determined by the distribution of incomes. An unduly large share of resources is absorbed in production which relates directly or indirectly to maintaining or improving the living standards of the higher income groups. The demand of this relatively small class, not only for a few visible items of conspicuous consumption but for the outlay on high quality housing and urban amenities, aviation and superior travel facilities, telephone services, etc., sustains a large part of existing industrial structure. This means that the further expansion of industry is limited by the narrowness of the market.

Consumer durables like refrigerators, air-conditioners, TVs, cars and scooters, etc., go to satisfy the wants of the richer sections of the community while the consumer non-durables like sugar, tea, cotton, cloth, vanaspati, matches, etc., enter into mass consumption. Between 1961 and 1974, the industries producing non-durables recorded very slow growth rate (barely 2.6 per cent) and this was an important factor for inflationary rise in the price level. It resulted in wiping out the increase in real wages and, consequently, ushered an era of strikes which again slowed down production. On the other hand, the capitalist classes were able to appropriate the gains of inflation and thus, they boosted the demand for consumer durables. All this led to a distortion in the emerging industrial structure which was deleterious to social welfare. Commenting on this development, Professor K.N. Raj writes: "If this continues, a pattern of industrial development based on high rates of growth of demand for luxury and semiluxury products may well come to be regarded as the only way of maintaining a high rate of growth of output in this sector."[5]

During 1993-94 and 2010-11, the 17-year period following introduction of economic reforms, there is a change in the pattern of growth rate of industrial production. As is evident from Table 5, there was a slowdown in the rate of growth of basic industries, there was a relatively a faster average rate of growth of capital goods and consumer goods. In the period after 2004-05 the average rate of growth of consumer durables slightly improved to 16.2 per cent, but that of consumer non-durables slipped to 4.6 per cent per annum. This is not a healthy development.

Per worker consumption of power. Since 1951 till now the number of workers engaged in factories and mines has increased by nearly three times, but during the same period, per capita consumption of power for industries

5. K.N. Raj, Growth and Stagnation in Industrial Development, *Economic and Political Weekly*, Annual Number (1975), p. 226.

and mines increased about tenfold. Since per worker electricity consumption for industrial purposes can be taken as a good indicator of mechanisation or technological sophistication of production processes, it is an index of the growing capital intensity in factory sector. Despite the ten-fold increase in power consumption per worker, India is far below the corresponding levels reached in developed countries.

TABLE 5. Average Annual Growth Rate of Production

	1980-85 VI Plan	*1985-90 VII Plan*	*1994-95 to 2004-2005*	*2004-05 to 2011-12*
Basic industries	8.3	7.4	4.9	5.6
Capital goods	7.1	15.7	8.8	15.8
Intermediate goods	6.2	5.5	7.7	5.4
Consumer goods	6.5	6.6	7.7	8.7
(a) Durables	15.2	12.1	12.0	16.2
(b) Non-durables	5.3	5.4	5.9	4.6

Source : Government of India, Ministry of Industry, Handbook of Industrial Statistics (1987) and RBI Handbook of Statistics on ***Indian Economy*** 2010-2011.

However, it is generally forgotten that 27 per cent of all workers in manufacturing are employed in factories, the remaining 73 per cent are employed in smaller establishments, which do not use power. There is a need for a massive effort for electrification of production processes in small-scale and cottage industries. This transformation would raise their productivity and hence income generated therefrom.

Growth of Infrastructure

The rapid pace of industrial growth and the development of productive capacity has been marked by remarkable, though still inadequate, expansion of infrastructural facilities in the country with expansion and modernisation of coal which is India's primary fuel source, by more than three-fold and notable success in the exploration of oil and gas both on and off-shore. The Sixth Plan summed up the success in infrastructure admirably. An efficient complex of refineries, pipelines, storage and distribution has been developed and India has entered the petrochemical age. A large infra-structure has been built to sustain this sub-continental economy– a network of irrigation, storage works and canals, hydro and thermal power generation, regional power grids, a largely electrified and dieselised railway system, national and state highways on which a rapidly growing road transport fleet can operate and telecommunications system covering most urban centres and linking India with the world'[6]. The development of modern industry as well as of agriculture has stimulated the growth of banking, insurance and commerce and required matching expansion and modernisation of ports, shipping and internal and external air services. The major beneficiaries of all these services, as pointed out already, however, have been the wealthier sections of the population both in urban and rural areas.

Science and Technology

Significant progress has been recorded in the field of science and technology. India now ranks third in the world in respect of technological talent and manpower. Indian scientists and technologists are working in many areas on the frontiers of today's knowledge, as in agriculture and industry, in the development of nuclear power and the use of space technology for communications and resource development. For further industrial and scientific advance, with growing competence in adaptive research and development, we need only a selective import of technology. The country has been able to train a cadre of technical manpower which can handle cement factories, chemical fertiliser units, oil refineries, power houses, steel plants, locomotive factories, engineering industries, etc. More than a lakh and half degree and diploma holders are turned out by the technical institutions. Similarly in plant training and sending brilliant young men and women abroad for training in top skills has helped to generate skilled manpower and thus reduce dependence on foreign technicians and experts. However, small and cottage industries, and other rural activities have not received the research and development support that they required.

Inadequacies of the Programme of Industrialisation

Without under-estimating the achievements of the process of industrial expansion initiated during the planning era, it may be emphasised that much of the industrial growth is only apparent and not real. Our reasons for this are as under:

Secondly, the share of industry in national income in 1948-49 was 17 per cent. In 1996-97, it was around 21 per cent — an increase of just 4 per cent in 50 years. Thus, in terms of contribution of national product, the share of manufacturing industry sector continues to be low. In most of the developed nations, this share is between 30 and 50 per cent.

Thirdly, the process of industrialisation has not been able to make a dent on the problem of unemployment. The high capital intensity of public sector investment generated a very small amount of employment. Factory employment absorbed only 2 per cent of the labour force. Professor Gunnar Mydral studied the spread effects of industrialisation on employment and also its back-wash effects in terms of unemployment on the traditional sector. After a careful examination of the situation, Myrdal observed: "The employment effects of industrialisation cannot be expected to be very large for several decades ahead, that is, until the region is much more industrialised. For a considerable time the net employment effects may even be negative. This dimension of the problem, as well

6. ***Draft Sixth Five Year Plan*** (1978-83) (Revised) Part I, p.3.

TABLE 7: Principal Characteristics of Factories

	Unit	1990-91	2009-10	AverageAnnual Growth Rate(%)
1. No. of factories	Nos.	1,10,179	1,58,877	1.94
2. Invested capital	₹ crores	1,94,913	19,33,054	12.83
3. No. of workers	lakh	63.1	91.6	1.97
4. Other employees	lakh	18.5	25.6	1.71
5. No. of employees (3 + 4)	lakh	81.6	117.2	1.90
6. Wages to workers	₹ crores	13,192	68,941	9.09
7. Emoluments to other employees	₹ crores	7,394	78,066	13.20
8. Total emoluments	₹ crores	20,586	1,47,007	10.90
9. Net value added	₹ crores	51,515	5,92,114	13.71
10. Gross capital formation	₹ crores	32,559	3,61,844	13.51
11. Profits	₹ crores	11,389	3,32,931	28.50
Some Important Ratios				
12. Average wage per worker	₹	20,916	75,263	
13. Average emoluments per other employee	₹	39,968	3,04,945	
14. Value added per unit of capital	%	26.4	30.6	
15. Rate of profit per unit of investment	%	5.8	17.2	

SOURCE: Compiled and computed from *Annual Survey of Industries* (2010-11)

as the wider consequences for labour utilisation outside the modern sector, is overlooked in the vision that sees industrialisation as the remedy for 'unemployment' and 'under-employment."[7]

Fourthly, the process of industrialisation rapid expansion of large sector resulted in comparative neglect of the small and medium sector.

From the data provided in Table 6, the following trends become visible. Firstly, although during the 19-year period (1990-91 and 2009-10), there is a sharp increase in invested capital from ₹1,94,913 crores in 1990-91 to ₹ 19,33,054 crores in 2009-10 (nearly 8.2 times) the total employment has increased from 81.6 lakhs to 117.2 lakhs during this period in the factory sector. This is indicative of the fact that the factory sector is purusing a capital intensive path of development, which can be appropriately described as 'jobless growth' of the factory sector since during. The 19-year period, total employment increase by merely 35.6 lakhs. Although net value added from the factory sector has shown a growth rate of 16.3 per cent per annum, the employment growth during the same period is negligible at 1.9 per cent. From this it follows that there can be no hope from the factory sector to absorb new additions to the labour force, since its employment growth has shown neglible growth in the post-reform period. Secondly, the profit per unit of investment has risen from 5.8 per cent in 1990-91 to 17.2 per cent in 2009-10. Lastly, whereas average wage per worker has risen from ₹ 20,916 in 1990-91 to ₹ 75,263 in 2009-10 — an increase by 360 per cent, the average emoluments of other employees, i.e. supervisors, managers, business executives have risen from ₹ 39,968 to ₹ 3,04,945 during the same period — a relatively much higher increase of 763 per cent. For the generation of more employment, the country has to depend on the small scale industries.

Though the Government has been proclaiming the policy of developing new growth centres so as to diversify the industrial structure, its policies have only resulted in concentration of industrial development in metropolitan areas, in selected states and among the top capitalists. Obviously, as a deliberate policy, the promotion of small-scale sector in consumer goods required for mass consumption can reconcile the objectives of higher growth and higher employment. Sufficient attention has not been paid in this direction during the last five decades of planning. In this connection, the Sixth Plan states: "The expansion of large-scale industries has failed to absorb a significant proportion of the increment to labour force and led in some cases to a loss of income for the rural poor engaged in cottage industries like textiles, leather, pottery, etc."[8]

To sum up, the process of industrialisation has not generated sufficient growth potential either in terms of contribution of output or in terms of employment; and what is really serious is that the rate of growth of industrialisation has been declining with every decade. It is only during the Tenth Plan (2002-07), the growth rate of industrial production rose significantly to 8.2 per cent. This needs to the accelerated further.

6. PATTERN OF OWNERSHIP OF INDUSTRIES

The Annual Survey of Industries has reclassified data about the ownership pattern of industries into three categories. In the non-corporate sector are included

7. Mydral, *Asian Drama*, Vol. II. p. 1173.

8. Op. cit., p.8

Table 7: Ownership of industries (2007-08)

	Factories	*Productive Capital (₹ crores)*	*Employees ('000)*	*Net Value Added (₹ crores)*	*Wages per Worker (₹)*
1. Non-Corporate Sector	95,635	1,02,212	2,604	53,307	43,282
2. Corporate Sector	59,277	16,13,529	6,321	5,31,511	88,394
(a) Private	58,338	15,33,820	6,144	4,80,984	1,18,369
(b) Public	939	79,709	177	50,526	2,15,108
3. Others	3,966	24,187	232	7,295	77,206
Total (1+2+3)	1,58,877	17,39,928	9,158	5,92,114	75,277

Note:

1. Non-corporate sector comprises of individual proprietorship, Joint Hindu Undivided Families (HUF) and Partnerships.
2. Private corporate sector includes public and private limited companies
3. Others include Khadi & village industry, handloom, co-operative societies etc.

Source: *Annual Survey of Industries (2009-10)*

* *for 2007-08.*

industrial units which are owned by individuals proprietorships, joint families (Hindu Undivided families -HUF) and partnerships. Secondly, the corporate sector is sub-divided into two sectors – (a) private corporate includes public and private limited companies; and (b) public corporate sector includes Government Departmental Enterprises and public corporations. There is third category 'others' comprising of khadi & village Industry, Handloom and co-operative societies running industrial units e.g. sugar mills run by co-operative societies in Maharashtra etc.

In terms of number of units, the non-corporate sector accounts of 60.2% of units, mostly in small industries sector referred to as the unorganized sector, but they employed 5.9% of productive capital, accounted for only 9.0% of value added, but provided employment to nearly 28.4% of industrial labour.

The corporate sector accounted for 92.7% of the productive capital, 90% of value added and provided employment to about 69% of industrial labour. Within the corporate sector, the private sector accounted for 88.2% of productive capital and 81.2% of the value added and provided employment to about 67.1% of industrial labour. Along with this, the public sector provided 4.6% of productive capital with 8.5% of value added and provided employment to only 1.9% of total industrial labour.

Others were a minor category where contribution to productive capital, value added and employment was just insignificant.

Although public sector was relatively small in comparison to the private sector, yet a noteworthy feature of the changing industrial pattern in the planning era in India is the growth of the public sector in a big way in the heavy and basic industries, the machine goods sector, engineering industries etc. which provided the industrial base of the economy and thus created basic infrastructure of the economy to enable the private sector to flourish later. In this sense, the role of public sector as the engine of growth is unique.

Interestingly, the wages per worker received in 2009-10 reveal that they were lowest in non-corporate sector as ₹ 43,282. They were higher in 'others' as Khadi & Village Industries, Handlooms etc. as ₹ 77,206 mainly because the State fixed the wages, irrespective of the profit earned. In the corporate sector or the organized sector, the average wages per worker per annum was the highest at ₹ 88,394. Within the Corporate sector, wages in the public sector were the highest at ₹ 2,15,108 and the private sector at ₹ 1,18,369. Since the public sector is a pace setter in improving the level of wages, it provides the lead to be followed by the private sector.

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CHAPTER

38

SOME LARGE-SCALE INDUSTRIES

"With abundant supplies of raw cotton, raw jute, easily mined and exceptionally high grade iron ore; with a redundant population often starving because of lack of profitable employment.... with an excellent market within her own border and near at hand in which others were selling greater quantities of manufactures; with all these advantages, India, after a century, was supporting only about two per cent of her population by factory industry."

—D.H. Buchanan

We shall consider in this chapter the problems relating to the growth of six major traditional industries, namely, Iron and Steel, Cotton Textiles, Jute, Sugar, Cement and Paper and one new industry viz. Petro-Chemicals. In the next chapter we shall deal with the growth of Information Technology (IT) industry. These industries occupy an important position in the country. Their production ranges from basic producer goods, such as cement and iron and steel, to the most important consumer goods—cotton textiles and sugar. Thus, the growth of these industries provides a fair understanding of industrial growth on the one hand and the relationship between government policies and their growth on the other.

1. THE IRON AND STEEL INDUSTRY

The rapid development of steel capacity is indeed a logical corollary of any programme of rapid industrialisation for a developing country. Steel is used as a basic material in the manufacture of metal products, electrical machinery, transport equipment, textile and other machinery. To Jawahar Lal Nehru, the first Prime Minister of India, steel was a symbol of the strength of the economy, and a portent of the glory of India of the future.

India has many intrinsic advantages in the production of steel. Some of the richest iron ore mines with the highest iron content are to be found in India. What is more, coal and iron ore are found in close proximity to each other. In fact at one time, the cost of production of steel in India was much lower than that in other countries.

On the eve of independence in 1947 total capacity of iron and steel industry was of the order of 1.3 million tonnes—1 million tonnes from Tata Iron and Steel Co. (TISCO) and 0.3 million tonnes from Indian Iron and Steel Co. (IISCO). By 1990-91, iron and steel industry had six integrated plants with an installed capacity of 10 million tonnes of steel ingots. From the point of view of total investment, iron and steel industry is the most important industry, accounting for a total investment of ₹ 4,000 crores. Major portion of this investment is in the public sector plants. The industry provides direct employment to 2.5 lakh workers. In spite of the tremendous importance given to the iron and steel industry and the heavy investment made, it is a pity that the country had to import increasingly large amount of steel – the value of imports of finished steel was ₹ 11,678 crores in 2004-05.

India is only 15th in the world ranking of steel producers. In terms of per capita consumption, Indian average of 11 kg. of steel compares poorly with 685 kg. in the U.S.A., 428 kg. in Russia 623 kg. in Sweden and 494 kg. in Japan.

Steel Industry in the Public Sector

The Industrial Policy Statement of 1956 placed iron and steel in Schedule A, which included all those industries in the case of which all new units would be set up only by the government. The existing privately-owned units, however, would not be barred from expanding their capacities. This was the initial blunder made by our policy makers.

The first step in the direction of public-owned steel plant was taken in 1954 when an agreement was signed with the German Krupp-Demag combine for an integrated plant to be established at Rourkela. In 1955, an agreement was signed between the Indian and USSR governments for building a second steel plant at Bhilai. The agreement with the British consortium for a third steel plant to be set up at Durgapur was signed in 1956. These concrete steps for the setting up of three entirely new integrated iron and steel works each with a capacity of one million tonnes of ingot per year, truly involved tremendous task, at that time, for a poor country like India with its narrow industrial base and limited resources of capital and know-how.

The progress of steel industry was quite rapid in the initial phase of planning. From the Third Plan, however, the rate of growth slowed down and targets could not be fulfilled. The setback to production was due to (i) power shortage affecting all plants except Bhilai, (ii) inadequate availability of coal, and (iii) disturbed industrial relations at Durgapur and, to some extent, at Rourkela.

During the period of Emergency (1975-77) there was better utilisation of capacity in all steel plants; capacity utilisation was as high as 90 per cent. Besides, there was greater availability of coal, transport and power, apart from improvement in industrial relations leading to greater discipline in the industry.

The Steel Authority of India Limited. (*SAIL*) was created in 1974 and was made responsible for the development of the steel industry and also for the major inputs for the industry, *e.g.*, coking coal and iron ore. SAIL was to bring about a co-ordinated and synchronised development of all the major units brought under its control, *viz.*, Hindustan Steel Limited, Bokaro Steel Limited, Salem Steel Limited, Hindustan Steelworks Construction Limited, Bharat Coking Coal Limited, and National Mineral Development Corporation Limited. The actual achievement was much lower than planned.

Progress of Steel Industry since the 1980's

The growth of the steel industry is summarised in Table 1. By the beginning of the Sixth Plan (1980-85), the capacity utilisation of the integrated steel plants had declined rapidly from 90 per cent in 1977-78 to 69 per cent in 1979-80. We understand that there has been a short-fall in the production of steel in India, resulting in imports of steel. While supply of steel was increasing at the annual rate of about 5 per cent, the demand for it was surging forward at the rate of about 9 per cent per year. As a result India had become a net importer of steel since 1970-71. The Sixth Plan adopted a strategy to reverse this trend and boost the production of steel to 11.5 million tonnes. Production of saleable steel did improve but the target of 11.5 million tonnes of finished steel or saleable steel fixed for the Sixth Plan remained unfulfilled.

Table 1. Production in Steel Industry

(million tonnes)

Year	*Finished steel*
1950-51	1.0
1980-81	6.8
1990-91	9.6
2000-01	30.3
2007-08	56.1
2008-09	57.2
2009-10	60.6
2010-11	66.0

Source: *Economic Survey*, 2011-12. RBI Handbook of Statistics on the Indian Economy (2009-10).
@Provisional

The shortfall in production of steel was primarily due to infrastructural constraints in terms of availability of coal, power and rail transport. The shortage of power was a major constraint - even the molten steel that was produced with the restricted supplies of coal could not be converted into saleable steel.

The Seventh and the Eighth Plans provided for comprehensive planning in the sphere of iron and steel industry involving modernisation, upgradation of technologies, replacement of obsolete equipment, provision of balancing facilities and removal of technological imbalances. During the Ninth Plan (1997-2002) there was considerable capital restructuring of the PSUs.

There was a sudden spurt in investment during the Ninth Plan. This was directly the result of liberalization and policy reforms. As a consequence, there was considerable improvement in the steel sector. There was also significant rise in export of steel. Domestic demand for steel rose, partly owing to the highway construction. These factors have led to a strong recovery in the steel industry.

However, at the time when the Tenth Plan was formulated, there was general slow down in the major steel consuming sectors. There were also restrictions imposed by major steel importing countries. As a result, our

planners felt that there was excess capacity in the domestic steel manufacturing sector and hence did not provide for additional capacity in steel manufacturing during the Tenth Plan.

Progress of production of steel, its exports, imports and consumption is given in Table 1 and 2.

TABLE 2. Production, Consumption, Export and Import of Finished Steel and pig iron

(In million tonnes)

		2002-03	2006-07	2009-10
Finished steel including alloy steel	Production	37.17	52.53	60.9
	Consumption	30.68	46.78	57.7
	Import	1.66	4.93	7.3
	Export	4.52	5.24	2.5
Crade steel	Production	34.71	50.82	64.9

SOURCE : Annual Report 2010-11 Ministry of Steel, Govt. of India

According to World Steel Association, India has been ranked among the world's top 10 producers of crude steel. Though it is a good achievement but we have miles to go before we reach the level of Japan and China.

TABLE 3 : World's Top 10 Crude Steel Producers (2009)

Production in million tonnes

	2010
1. China	626.6
2. Japan	109.6
3. United States	80.6
4. Russia	67.0
5. India	**66.8**
6. South Korea	58.5
7. Germany	43.8
8. Ukraine	33.6
9. Brazil	32.8
10. Turkey	29.0

SOURCE : *Annual Report, Ministry of Steel 2010-11*
Original Source : *World Steel Association*

An Assessment of the Progress of the Industry

Initially, the development of the steel industry was regarded as an opportunity and a challenge. In a way, the iron and steel industry has made considerable progress-from 1 million ton of finished steel in 1950-51 to 66.0 million tonnes in 2010-11. This rate of growth though impressive, is not satisfactory. India became a net exporter of steel in 2006-07 but by 2009-10 it turned one to be a net importer as export of finished steel was 2.5 million tonnes while import was 7.3 million tonnes.

An important feature of the growth of iron and steel industry is the growth of research, design and development within the country. India is self-reliant and is now in a position to set up new steel plants without depending on foreign countries. For instance, India set up the Bokaro steel plant almost entirely on its own.

Secondly, the government gave licences to set up electric arc furnace units—popularly known as mini steel plants. They account for 30 per cent of the steel production in the country, producing mild steel as well as alloy steel. There are 179 mini-steel plants with a total capacity of 5.6 million tonnes.

Thirdly, India has potentialities of becoming a great exporter of steel. Exports of finished steel had gradually increased from 4.52 million tonnes in 2002-03 to 5.24, million tonnes in 2006-07 but fell to 2.5 million tonnes in 2009-10. Exports of steel was picking up and what is more important is that exports of value added items of steel are coming to occupy a more significant share. India has emerged as a leading exporter of iron ores too. But due to global slow down our export of finished steel has been badly hit and in the year 2009-10, it recorded a big fall and dropped to 2.5 million tonnes.

In recent years reforms in the iron and steel sector consisted of liberalisation of import and export of steel materials, abolition of price and distribution controls, and successive reduction of import duties on iron and steel products. The iron and steel industry is now faced with a competitive environment. The competitive pressures are likely to increase with further liberalisation in trade policy. It is the Government's belief that the Indian steel industry, which has access to the source of best quality iron ore from domestic mines and also substantial proportion of coking coal, could improve its efficiency and face foreign competition successfully.

The steel industry has performed very well in recent years due to recent libralisation measures, such as the abolition of Steel Development Fund (SDF), steady reduction of import tariff, the modernisation and upgradation of technology, the compulsory cost reduction through quality improvement and optimum capacity utilisation and switch-over to product-mix of higher value.

Problems of the Iron and Steel Industry

Inefficiency of public-sector units. The first major problem relates to the inefficient functioning of public sector units since they were set up. These units have been losing continuously and heavily particularly because of heavy investment on social overheads, poor labour relations, poor and inefficient top management, under-utilisation of capacity, etc. In recent years, however, there has been clear improvement in the working of the public sector.

The problem of administered prices. The government had been following, for many years, a system of administered prices, and controlled distribution of

steel among consumers. In the face of very heavy demand for various items of steel, price control and distribution of steel led to heavy black marketing and acute shortage of steel. Only, the private distributors stood to gain; the main producers were denied the advantage of higher prices paid by the consumers and the government lost heavily through the distributors' black market income being outside the tax net.The administered price regime has been dismantled and the industry is now free to fix prices.

Under-utilisation of capacity. The iron and steel industry had been working below full capacity. In 1970-71, capacity utilisation of all plants was 67 per cent, the highest being TISCO with 86 per cent capacity, and the lowest being Durgapur with less than 40 per cent capacity. In 1977-78 the utilisation of capacity went up to 84 per cent with Bhilai registering 94 per cent and TISCO 98 per cent. The factors responsible for the record performance of the steel industry were the availability of coal, transport and power and improvement in industrial relations leading to greater discipline in the industry.

Since 1977-78, capacity utilisation declined again till it touched 75 per cent in 1981-82. The under-utilisation of capacity resulting in high cost of production and losses was due to various factors—inadequate supply of coal and power and transport bottlenecks, lack of proper maintenance, poor management, specially frequent changes in the top management of public sector steel plants, and extensive labour troubles. Steel industry suffered, in recent years, from lack of demand by engineering industries like railway wagons. As mentioned earlier, the Tenth Plan did not provide for creation of additional capacity in the steel sector as the planners assumed the existence of excess capacity. However, from the middle of the Ninth Plan, capacity utilisation has improved smartly.

Sickness of mini-steel plants. We should now refer to the problem of sickness among mini-steel plants. "The main problems faced by these units included short supply of inputs and a sharp increase in prices of inputs like electrodes and scrap, inadequate power supply, constraint of working capital and poor management."[1] With a view to helping mini-steel plants to become viable, the Government of India has provided the following facilities: (a) liberal import of melting scrap and sponge iron without import duty, (b) free diversification into all grades of carbon and alloy steels, including stainless steel, (c) installation of captive rolling mills, and (d) addition of balancing facilities like continuous casting machines, heat treatment furnaces, etc. With these facilities, there was a revival and an improvement in the working of mini-steel plants.

Problem of metallurgical coal. Finally, we should refer to the problem of metallurgical coal. It has been estimated that India's supply of high grade coal for making coke for the smelting of iron is quite low. With the expansion of the iron and steel industry, the demand for coking coal is on the increase. This necessitates the formulation of a new policy—conservation of high grade coal reserves and imports of such coal to supplement local production. In recent years, however, the supply of coking coal has generally been good because of better availability of both domestic and imported coking coal.

Policy regarding Iron and Steel Industry

In recent years, Government of India have announced important changes in policy. Price and distribution controls on iron and steel were removed from January 1992. This led to rise in prices of various items of steel. The imports of all items of steel are now freely allowed. Along with the deregulation of iron and steel, import duty on various items of steel were also reduced. This has had a moderating influence on market prices of steel.

Government of India announced a new industrial policy in July 1991. Under the policy, the steel sector which includes mini steel plants, has been exempted from licensing subject to, however, locational stipulation. The Government envisages considerable additions to capacity in the steel sector specially from the sponge iron segment.

The Government has also removed the barriers pertaining to private sector. This is likely to boost private sector investment in steel. There was a sudden spurt in investment during the first half of the Ninth Plan. However, due to recession during the 1990s, the investment already made as well as committed has not produced the much desired result.

Besides, the recent upswing in the steel industry is due to strong growth in demand propelled particularly by the demand for steel in China coupled with strong domestic demand. As a result, world steel prices have steadily risen upwards since 2001.

2. THE COTTON AND SYNTHETIC TEXTILE INDUSTRY

The organised cotton textile industry is one of our oldest and most firmly established major industries. There are about 1,100 mills in the country (900 spinning mills and 200 composite mills) with 28 million spindles and 2 lakh looms.

The structure of the textile industry is extremely complex with the modern, sophisticated and highly mechanised mill sector on the one hand and the hand spinning and hand-weaving (handloom) sector on the other; in between falls the decentralised small scale powerloom sector. If we include all the three sectors, the cotton and synthetic textile industry in India is the largest industry in the country, accounting for about 20 per cent of the industrial output, providing employment to over 20 million persons and contributing around 33 per cent of the total export earnings. The textile industry

1. RBI, *Report on Currency and Finance*, 1979-80, Vol. I, p. 47.

Table 4. Production of Fabrics in India

Year	Production of cloth (In million sq. metres)			Percentage share of	
	Mill Sector	Decentralised Sector	Total	Mill Sector	Decentralised Sector
1950-51	3,730	1,010	4,740	79	21
1970-71	4,050	3,550	7,600	53	47
1990-91	2,590	20,340	22,930	11	89
2000-01	1,670	38,563	40,233	4	96
2008-09	1,796	53,170	54,966	3	97
2009-10	2,016	58,317	60,633	3	97
2010-11	2,205	60,337	62,542	3	97

Source: Economic Survey, 2010-2011, Annual Report, Ministry of Textiles 2008-2009.

is one in which India has an opportunity for success on a global scale, given the low cost of labour.

The Indian textile industry is predominantly cotton-based with 65 per cent of the cloth production in the country being accounted for by cotton. Production of raw cotton varies from year to year depending upon rainfall and weather conditions, and price fluctuations in raw cotton affect the industry.

Production of yarn is almost entirely in the organised sector and over the years, it has been showing a steadily rising trend — as for example, from 550 million kg in 1950-51 to over 6,379 million kg in 2008-09. The fabric production has also recorded an increasing trend over the years - from 4,740 million metres in 1950-51 to 62,542 million meters in 2010-2011. In the production of fabrics, the decentralised sector accounts roughly 97 per cent and the mill sector has approximately 3 per cent share only.

The growth of production of fabrics in the cotton and man-made textile industry is given in table 4. These figures reveal that mill sector has been losing to the decentralised sector (which consists of powerlooms and handlooms) both in absolute and relative terms. The share of the mill sector, which stood at 79 per cent in 1950-51, came down to 3 per cent in 2010-2011, whereas that of the decentralised sector including handlooms rose from 21 per cent to 97 per cent during the same period. The pattern of cloth production of the different varieties of fabrics for the last few years is given in Table 5. Table 5 brings out two significant trends in textile industry in the last two decades or so. First, the fibre-mix pattern of fabrics has undergone radical change. For instance:

During the last 30 years, the share of cotton cloth in total cloth production had declined from 73 to 50 percent. During the same period, other fabrics have raised their share from 27 to 50 per cent. This clearly shows the marked preference of the general public in favour of blended cloth and 100% man-made fabrics.

Second, the mill sector production of all fabrics has been declining over the years mainly because of the intense competition offered by the decentralised sector (also known as the powerloom sector). The Government indirectly encouraged this competition. As a result, the decentralised sector's production of all the three kinds of fabrics rose continuously. The mill's share in the total production of all fabrics has declined from 39 percent in 1979-80 to just 3 per cent in 2009-10. On the other hand, the decentralised sector has raised its share in total production of fabrics from 61 per cent to 97 per cent

Table 5. Production of Cotton and Man-Made Fabrics

(In million square metres)

	1979-80		2005-2006		2010-11 (P)	
(i) Mill Sector						
(a) Cotton fabrics	3,230		1,1,92		1,604	
(b) Blended/ mixed fabrics	850		464		526	
(c) Man made Fibre fabric etc.	–		–		75	
Total Mill Sector	4,080	(39)	1,656	(3)	2205	(3)
(ii) Decentralised Sector						
(a) Cotton fabrics	4,300		22,681		30,138	
(b) Blended/mixed fabrics	630		6,046		7,753	
(c) 100% man made fibre fabrics, etc.	1,360		19,194		22,446	
Total decentralised sector	6,290	(61)	47,921	(97)	60,337	(97)
Grant Total (i + ii)	10,370	(100)	49,577	(100)	62,542	(100)

Note: Figures in brackets are percentages of total.
***Source:** Economic Survey, 2011-2012, Annual Report, Ministry of Textiles 2008-2009.
P : Provisional

between 1980 and 2009. Further, the dominance of the decentralised sector in the production of 100% man-made fibre fabrics is complete and the mill sector is almost wiped out from this field.

The organised textile industry consists of three distinct categories viz. (i) spinning mills, (ii) coarse and medium composite mills, and (iii) fine and superfine composite mills. Spinning mills are generally small in size. Coarse and medium composite mills are not able to adjust their cost in the face of rising prices of raw materials and increase in wages. Consequently, many of them became uneconomic units and ran into difficulties. Fine and superfine composite mills use foreign cotton, they are not subject to stock restriction and can, therefore, carry on stable production programmes.

Pattern of Consumption of Textiles

The pattern of consumption of textiles is undergoing a change. Man-made fibres are slowly entering the consumption pattern. As illustrated in Table 5, the average per capita consumption of cloth (cotton plus man-made fibres) rose marginally between 1960-61 and 1980-81. Since then the average per capita consumption of cloth has increased steadily to touch 43.1 metres in 2009-10. There has been a steady increase in the per capita consumption of both cotton cloth and man-made fibres.

A significant feature of the consumption pattern is the last 30 years or so is the shift to polyester and polyester blends. The polyester blends are priced 3 to 4 times more than cotton textiles but have a wear-life 3 to 4 times, and in some cases even longer than that of cotton cloth. Moreover, the wash-and-wear qualities of polyester and blended fabrics reduce the maintenance cost in terms of washing and ironing of the clothes. Consequently, there is a shift in consumption in favour of polyester and blended fabrics.

Table 6. Per Capita Availability of Cloth

(In metres)

Period	*Total*
1960-61	15.0
1980-81	17.3
2000-01	30.7
2007-08	41.85
2008-09	39.0
2009-10(P)	43.1

Source: *Economic Survey*, 2009-10. Annual Report, Ministry of Textiles 2008-09. P-Provisional

Export of Cotton Fabrics and Apparel

India is a leading exporter of cotton textile fabrics and apparel (readymade garments). In 1960-61 export of textile yarn and fabrics was a modest ₹ 65 crores; but in 2007-2008, it had risen to ₹ 21,089 crores. India's exports of readymade garments had picked up very swiftly in recent years. The export of readymade garments was hardly ₹ 1 crore in 1960-61. It rose rapidly since then, and exceeded ₹ 4,000 crores in 1990-91 and touched ₹ 38,214 crores in 2007-08. In fact, export of readymade garments of all types is now the second largest item of India's exports, after gems and jewellery.

Problems of Cotton Textile Industry

In the past, cotton mill industry suffered from incompetent and selfish managing agents and directors who were more interested in their own profits. They did not take sufficient interest in accumulating financial reserves or in proper maintenance of machinery and modernisation. If management of textile units had been selfish and exploitative, the role of trade unions in the industry has not been helpful either. In fact, the closure of many textile mills in the country was forced upon by short-sighted union leadership. The Bombay mill industry, for instance, was literally ruined by one-year long strike organised by Dutta Samant controlled unions. Besides these, the two most important factors which have spelt disaster to the industry in the last three decades are Government's textile policy and growth of the powerloom sector. The result was that many textile mills became uneconomic—one-third of the mills became sick and were closed down. As many as 132 mills were closed down.

Government controls and heavy excise duties. The cotton textile industry has suffered badly due to wrong and, often confused policies of the Government. In the past Government had sought control of price, distribution of yarn, pattern of production, etc. At one time, prices of cloth were fixed by the Government far below cost. Under the yarn distribution scheme of 1972, the Government made it obligatory on all mills to supply 50 per cent of the production of yarn to the decentralised sector at reduced rates. The duty on imported cotton was quite high and it not only made import of cotton quite expensive but exercised an upward pressure on the price of indigenous cotton. The excise duties on different varieties of cotton cloth were quite heavy and, besides, they were discriminatory.

A serious problem of the mill sector at one time related to production of controlled cloth. To ensure availability of coarse and medium varieties of cotton cloth, the Union Government raised in 1974 the total quantity of controlled cloth to be produced by mills from 400 million metres to 800 million metres. The industry vainly protested that it was losing at the rate of 80 paise per sq. metre on the production of controlled cloth. The Planning Commission openly admitted that a contributory factor for the sickness of the cotton textile industry was the controlled cloth scheme under which the price of cotton alone was higher than the

stamped price of cloth. It was only in October 1978 that the Government exempted the mills from the obligation to produce controlled cloth. But by that time, cotton mill industry was ruined and many mills were forced to shut shown.

Problem of raw materials. The industry faces the problem of building up a regular supply of its raw material—cotton—in adequate quantities. The latter constitutes the largest single element in the cost of yarn and cloth production. Despite the importance of the industry and the long period of its growth, the position of raw material has remained unstable. The most disappointing feature of cotton cultivation is that whereas India has the largest area under cotton (26 per cent of the world acreage) the country accounts for only 10 per cent of the world output of cotton. Uncertainties in the raw material market and, in particular, fluctuations in the prices of raw cotton are two major causes of sickness and consequently closure in the textile industry[2].

Obsolete machinery and need for modernisation. The mill sector has been working with obsolete machinery. According to one estimate, over 80 per cent of the machinery in the cotton textile mills is old and should be scrapped. The problem of replacement of obsolete machinery and modernisation have become really acute since the Indian mill industry has to compete with countries like Taiwan, Hongkong, South Korea, etc., all of which are using the latest sophisticated machinery.

The industry, however, has no resources for the huge task of replacement and modernisation. The Government set up in 1986 the Textile Modernisation Fund of ₹ 750 crores and asked the IDBI to operate it.

High cost and competition in foreign markets. The Indian cotton textile industry has been facing increasing competition in world markets. This is largely due to low productivity and high cost and consequently high prices of Indian textiles. It is paradoxical that in a country where wages are low and cotton is internally available, production costs should be high. But the advantage of lower wages is offset by higher cost of raw materials and inefficiency in production caused by the use of outmoded machinery.

Competition from the decentralised sector. An important factor for the growing sickness of the mill sector is the growth of the decentralised sector. Being a small-scale sector, the Government allowed excise concessions and other privileges, such as exemption from the production of controlled cloth. The workers in the powerloom sector were either not organised or organised loosely, so that the level of wages in this sector was much lower than that in the mill sector. Often, the decentralised sector made use of the names of the well-known mills and outsold the latter. As Table 4 shows clearly, while the share of mill sector declined from 79 to 3 per cent between 1951 and 2006, the share of decentralised sector has been rising rapidly over the last many years and is around 97 per cent now.

Government Takeover of Sick Mills

On account of the various reasons we have mentioned above, many cotton mills became sick and closed down. At one time, nearly one-third of the mills were closed down, throwing thousands of workers out of employment. The Government set up the National Textile Corporation (NTC) to run these sick mills. At present, NTC has 119 mills under its management out of which 66 have been identified as unviable mills and 53 are viable mills. The Government of India has been regularly pumping in money to rehabilitate and modernise these mills. However, these mills continue to incur losses which are borne by the general tax-payer.

Textile Policy 2000

The Government of India is keen to modernise the textile sector which is critical for facing competition from other textile producing countries like China, Taiwan, South Korea, Japan etc. The Government of India announced its Textile Policy in November 2, 2000 to make India a global player in textiles and readymade garments by raising the industry's exports from $ 11 billion to $ 50 billion by 2010. Out of this, the share of readymade garments would be $ 25 billion. The Government has decided to dereserve the garment industry from the SSI category so as to make the industry internationally more competitive.

Two more modifications were introduced. Firstly, FDI limit of 24 per cent was removed and foreign companies could make 100 per cent investments through Foreign Investment Promotion Board (FIPB) route. Secondly, 50 per cent export obligation on firms in which foreign equity was allowed, was removed.

The Government did not agree to the recommendations of the Satyam Committee to abolish the Handloom Reservation Act and removal of hank yarn obligation due to social causes including the need to protect handloom weavers.

The Government would implement in a time-bound manner the Technology Upgradation Fund Scheme covering all manufacturing sectors of the textile industry. The main aim of the policy is to achieve an increase in cotton productivity by at least 50 per cent by upgrading quality to global standards.

For the spinning sector, the New Textile Policy would continue to modernise, liberalise and encourage

2. RBI, *Report on Currency and Finance* (1987-88), Vol. I. p. 99.

export of cotton yarn and review the hank yarn obligation while encouraging adequate quantity of yarn to handloom weavers.

Assessment of the New Textile Policy

It is really unfortunate that the NDA Government decided to dereserve Garment Sector from the SSI list with a view to raise export of readymade garments from the level of $ 4.4 billion in 1998-99 to $ 25 billion in 2010. This decision is made on the plea that the large sector would infuse modernisation and dynamism, which the small sector was unable to achieve. It was also being made out that small sector was unable to face world competition and thus the large sector supported by foreign companies would be able to do the job argument.

Exports of readymade garments during the 13-year period 1987-88 to 2000-01 rose from $ 1,430 million to $ 5,580 million — nearly four times. The annual average growth rate of exports of readymade garments during this period was 11 per cent as against the overall growth rate of exports by 10.6 per cent.

Exports of readymade garments have been improving over the period to the developed countries. In USA, as against an export of $ 430 million in 1987-88, there was an export of $ 1,500 million - more than three times. Similar increases were observed in the case of UK, Germany, France, Canada, Italy, Japan and Netherlands.

The rising trend of our readymade garment exports even in the most developed countries proves beyond doubt the competitive ability of the small sector in the export sector. Had this sector been given adequate facilities through promotional measures, the record of the small sector would have improved considerably.

Secondly, the Government policy was logically inconsistent. On the one hand, it wooed the foreign investors by abolishing FDI cap of 24 per cent and allowing 100 per cent foreign companies, on the other hand it removed the export obligation of 50 per cent of their total production. The most intriguing part was that while the FDI cap was being removed so that foreign companies could modernise the textile sector to international levels, the removal of 50 per cent export obligation only underlines that they would capture the Indian market rather than promote exports. Claude Alvares writing in ***Indian Express***, January 29, 1984 in an article entitled 'Gandhi's Second Assassination' said: "How long can we continue to assume the illusion that when the British destroyed local industries, that was wicked but when we do so, it is desirable." This aptly applied to the present situation. Earlier the foreigners forced us to export raw materials and then captured the Indian market by importing finished goods into India. Now we are inviting multinationals to come and produce in India in fully owned foreign companies and export their profits after capturing the Indian market. What a change!! Did we conceive this during the freedom struggle?

Thirdly, the Government policy only pays lip sympathy to protecting the interest of workers in sick mills as well as in the small sector who would be displaced as a consequence of the dereservation and privatisation of NTC mills. The history of privatisation and dereservation in India did not provide any empirical evidence in this regard.

Lastly, it would have been far better if the Government had reconciled the production and export objectives with the employment objective.

New Challenges to Textile Industry

The Indian textile industry is at the crossroads with the phasing out of quota regime from January 2005 and the full integration of the textile sector in the WTO. It may be mentioned here that the global trading regime in textiles and clothing sector had a long history — as, for example, voluntary export restraints for cotton textiles in the 1950s, the Long Term Agreement in International Trade in cotton textiles (known as LTA) in the 1960s and 1970s and Multi-Fibre Agreement (MFA) between 1974 and 1994 which was replaced by WTO Agreement on Textiles and Clothing (ATC) in 1995 with specific quotas and finally ultimate removal of these quotas and full integration of the textile sector into WTO rules after a transition period of 10 years (ending in December 2004).

With ATC coming to an end and with it, the dismantling of the quotas, the new system of free global trade in textiles has started. India has to face stiff competition with China, Sri Lanka, Bangladesh and Pakistan.

India has a natural competitive advantage in terms of a strong and large multi-fibre base, abundant cheap skilled labour and the entire range from spinning, weaving and manufacture of garments. But, with the end of the quota system and emergence of intense competition, specially from China, India's advantages in the textile sector may not be adequate. Accordingly, the Government is encouraging the industry in many ways through cost cutting measures, upgrading of technology, favourable tax measures etc. There are now clear signs of resurgence in textile exports.

The Ministry of Textiles is currently implementing the newly-launched schemes for Integrated Textile Parks which involve creation of 25 textile parks covering all sectors of the textile industry. The scheme is expected to facilitate new investment of ₹ 7,500 crores and additional

production of textiles worth ₹ 20,000 crores per year. The scheme involves public-private partnership.

Textile Industry as a Foreign Exchange Earner

The Government has established Textile Export Promotion Council (TEXPROCIL) to strengthen and facilitate the export of textiles which is a good foreign exchange earner. Data given in table 7 shows that during the first year of the 10th Five Year Plan i.e. 2002-03 textile exports earned $ 12,445 million and by 2010-11, this figure shot up to $ 23312 million — an increase of 87.3 per cent in the brief span of 8 years which is really encouraging.

TABLE 7. Exports of all commodities vis-a-vis Textile and Clothing

US $ *million*

Year	*Total Exports*	*Textile/ clothing exports*	*Per cent share*	*Rate of growth*
1	*2*	*3*	*4 = 3/2 × 100*	*5%*
2002-03	52,370	12,445	23.8	-
2003-04	63,622	13,532	21.3	8.7
2004-05	83,501	14,021	16.8	3.6
2005-06	102,710	17,885	17.4	27.6
2006-07	126263	19,146	15.2	7
2007-08	162904	22,146	13.6	15.6
2008-09	182800	20016	11.0	–9.6
2009-10	178151	19853	11.1	–0.8
2010-11	254402	23312	9.2	17.4

SOURCE: *DGCI & S*, Office of the Textile Commissioner.

According to B.K. Patodia, Chairman of TEXPROCIL, "Falling share of textile sector in overall exports was due to other sectors like Information Technology, Engineering and Automobiles and Pharmaceuticals etc. recording a very high growth. Textiles, on the other hand, lagged behind and consequently the share in the country's total exports has dwindled. Reasons are many : lack of investments, outdated technology, capacity constraints, skewed government policies, etc." (*Business Line*, September 19, 2006). In the recent year we find a fast growth in the textile exports. Table 7 describes the growth in textiles and clothing exports.

3. THE JUTE INDUSTRY

The jute industry was started in 1885. Its importance to the economy lies in its capacity to earn foreign exchange. The total number of looms installed in 69 units was about 44,900 and the industry accounts for 30 per cent of the world output of jute. Besides providing direct employment to about 2.5 lakh persons, nearly 40 lakh families derive their living from jute cultivation.

Production of Raw Jute

Since the partition of the country, jute industry is facing a veritable crisis due to the acute shortage of raw jute. More than 70 per cent of the area under jute cultivation now lies in Bangladesh. In 1951, the total production of raw jute was 3.3 million bales while the requirements of the industry at full capacity were of the order of 7.2 million bales. In order to bridge this gap various programmes of intensive and extensive cultivation were undertaken in the first two Plans. As a result, production rose to 4.1 million bales in 1960-61 and 4.9 million bales by 1970-71. It did, of course, rise since then, till it reached a record output of 10.5 million bales in 2004-05. Even though India is the largest producer of raw jute in the world, followed closely by Bangladesh, internal production is insufficient to meet fully the needs of the country.

Ever since Independence, efforts have been made to improve the yield per hectare of raw jute. With the use of better quality seeds and manures, the yield per hectare had risen from about 1,040 kgs. per hectare in 1950-51 to 2,026 kgs in 2000-01 and 2,233 Kgs. in 2004-05. Jute is one crop which has shown maximum fluctuation in area, output and yield per hectare from year to year. It is very necessary that efforts be made outside West Bengal to cultivate jute. The Governments of Assam, Bihar and Orissa are making efforts in this direction. Recently, governments of Uttar Pradesh and Andhra Pradesh have joined in the drive for more jute production.

Production of Jute Goods

Production of jute textiles was stagnant for many years despite all types of measures and incentives given by the Government. The jute industry is now modernising its post-spinning equipment by new high speed machines and the installation of broadlooms for the manufacture of carpet backing. The industry has also taken advantage of the phenomenal growth of the demand for carpet backing cloth in the U.S. market in recent years. The entire production is exported and the principal export market is the United States. Thus, the discovery of new uses and new products should be the strategy of development in the jute industry. Some of the other specialities which are manufactured now are cotton bagging, jute tarpaulins, paper lined hessian, jute carpets and jute webbing.

In the last two decades or so there has been gradual improvement in production of jute textiles which was the direct consequence of better utilisation of capacity and improved power supply position. However, much of this increase was in the form of sacking needed

increasingly within the country. In fact, domestic consumption of jute textiles was increasing steadily over the years, arising out of better agricultural output. (Table 8).

TABLE 8. Production, Exports and Consumption of Jute Textiles

('000 tonnes)

Year	*Production*	*Exports*	*Consumption*
Year	Production	Exports	Consumption
1950-51	890	790	120
1970-71	1,090	640	480
1990-91	1,430	220	1,230
2007-08	1,775	207	1410

SOURCE: RBI, Handbook of Statistics on the Indian Economy, 2007-08.

Over the years, the volume of jute exports has regularly declined (Table 8) from 790,000 tonnes to 200,780 tonnes between 1950-51 and 2007-08. Table reveals that exports as a proportion of total production are on the decline. This is because domestic consumption has been continuously rising since 1951. In order to boost exports of jute textiles, the Government removed all the export duties on the three main varieties of jute textiles, *viz.*, hessian, sacking and carpet backing, in 1976. With a view to promoting export of jute goods, the Government took some short-term measures such as continuation of Cash Compensatory Support (CCS) scheme and permission to Jute Corporation of India to import raw jute to tide over scarcities. These efforts of the Government have resulted in boosting jute exports to Soviet Union, Japan and the USA to some extent.

Problems of the Jute Industry

Though an important export industry, jute industry has had a chequered career, with years of prosperity alternating with years of depression. We shall briefly discuss the problems and the attempts by the industry and the Government to solve them.

(*i*) ***The problem of raw materials.*** The problem of raw materials for the jute industry is as old as the partition of the country in 1947. In spite of vigorous drive to increase domestic production of raw jute, the supplies of raw jute have often been inadequate and irregular and partly dependent on imports. The domestic production of raw jute has been fluctuating considerably from year to year. The same is the case with the average yield per hectare. This has necessitated imports to supplement domestic production of raw jute.

(*ii*) ***Modernisation of plant and machinery.*** The jute textile industry has for long been faced with the problem of obsolete and worn-out plant and machinery. The industry did not accumulate internal resources for modernisation of plant and machinery. The jute barons were more interested in their profits and did not bother to accumulate internal resources for modernisation. The Government of India originally set up the National Industrial Development Corporation (NIDC) to assist the jute industry in its efforts at modernisation. The Government has announced a package of assistance of ₹ 150 crores under the Jute Modernisation Fund Scheme. This assistance is available for healthy as well as sick units.

(*iii*) ***Competition from substitutes.*** Before Independence and partition, India enjoyed a natural monopoly in raw jute and manufactures. The owners of jute mills exploited this monopoly position by charging exorbitant prices in the international markets. The Government too joined this racket by imposing very high export duties and made the foreigners pay. This led to the discovery and use of synthetic substitutes to jute. The Indian jute industry is constrained by competition from synthetic substitutes in domestic as well as international markets and competition from rival producing countries. Indian jute industry faces very stiff competition from new producers like Bangladesh, Philippines, Japan and Brazil. Some of these countries like Bangladesh have the additional advantage of using the latest technology and machinery. A whole range of rival packaging materials has been introduced like paper and cloth which offer stiff competition to jute goods. It is to overcome the second aspect of the problem that the industry is being encouraged to diversify its production, specially towards carpet-backing cloth for which there is a good demand in U.S.A. and Russia. Concerted efforts are being made continuously to diversify into newer uses, like jute handlooms and handicrafts, jute packing, non-woven and industrial applications, geo-textiles, etc.

(*iv*) ***High Prices.*** The Indian jute industry is being competed out of international markets because of high prices. The high prices of Indian jute goods are explained by the use of obsolete machinery, the existence of inefficient and uneconomic units, high price of raw jute and highly unreliable supply position with regard to raw jute. There was also stiff competition from synthetics in the United States. It is high time that measures are taken to reduce the cost of production. Fortunately for India, the price of synthetic substitutes is ruling higher than jute manufactures giving the latter a price advantage. It is imperative that the Government does not burden the industry through the imposition of heavy export duties.

Thus, in the last few years, jute industry has not fared well. The output of jute textiles had either declined or had remained stagnant and exports too had been declining since 1980-81. This fall in exports was owing to recession in the developed countries, competition from synthetic substitutes and other major jute goods producing countries particularly Bangladesh which was offering lower prices in the context of static global demand.

Consumption of jute goods also fell sharply — the major decline in consumption was in carpet backing and in sacking. The decline in consumption of jute textiles has to be viewed against the background of competition from synthetic packaging material. Demand for jute goods is sustained mainly through the Jute Packaging Order i.e. for mandatory packaging of foodgrains, sugar, cement and fertilizers. The heavy loss in export as a result of collapse of the Rupee trade also added to the slump in demand.

The Government of India is implementing a package of revitalisation programme with the help of UNDP to cater to the needs of the jute sector from production to export stage. Major thrust of the programme is on diversification of product range and involvement of entrepreneurs. Besides, the Government of India has enacted Jute Packing Materials (compulsory use in packing commodities) Act, 1997 to protect the interests of the jute sector, and broaden the sector of jute usages. Government has also allowed 'nil' rate of excise duty on all jute products, applicable from financial year 1997-98 and has also provided assistance under the External Market Assistance Scheme. As a consequence exports of jute manufactures increased to ₹ 1,318 crores in 2005-06.

4. THE SUGAR INDUSTRY

India was the fourth major sugar producing country in the world, the first three being Russia, Brazil and Cuba in that order. India has now emerged as the largest sugar producing country in the world, with a 22 per cent share of the world's sugar production. Sugar industry is the second largest agro-based industry in the country. It ranks third largest industry in terms of its contribution to the net value added by manufacture and employs nearly 3.25 lakh workers, besides creating extensive indirect employment for 45 million farmers of sugarcane, the various agencies of distributive trade and through subsidiary industries such as confectionary. Sugarcane cultivation accounts for 3 per cent of total cultivated area and contributes 7.5 per cent of the gross value of agricultural production. It is also an important source of excise duty for the Central Government. There are now 571 sugar factories in India with a total installed capacity of 19.2 million tonnes. Against this, 500 factories were in operation.

Progress in the Post-Independence Period

During the 1950's production of sugar was a little more than one million tonnes. The government provided incentives for higher production and the output progressively increased to nearly 4 million tonnes in 1970-71, it further rose to 27.8 million tonnes in 2007-08. But during the year 2008-09 it declined to a very low level of 14.7 million tonnes but increased to 24.3 million tonnes in 2010-11.

TABLE 9. Production of Sugar in India

(In million tonnes)

Year	*Production*
1950-51	1.1
1970-71	3.7
1990-91	11.8
2000-01	18.5
2007-08	26.3
2008-09	14.7
2009-10	18.8
2010-11	24.3

SOURCE: Economic Survey 2011-12, Hand book on Indian Economy 2010-11.

Because of frequent controls, decontrols and recontrols by the Government and artificial regulation of market supplies by the industry and because of many administrative blunders, sugar prices rose to record heights and shot up to between ₹ 8 to ₹ 16 per kg. in different parts of the country in the Eighties and Nineties. Consequently, the Government reintroduced the dual price mechanism with partial control. Under this system, the Government fixed the ratio of levy and free sale sugar quota. The ratio was 45 : 55; it was revised to 28 : 72. The increase in the free sale sugar quota to 72 per cent was to give boost to sugar production by sugar mills. The levy sugar was sold to consumers through fair price shops at lower prices. The free sale sugar quota was sold by sugar factories at higher prices in the open market.

The production and supply of sugar has been quite comfortable during the last 2 decades.While production of sugar was steadily rising, consumption too had been rising but at a lower rate. Actually, sugar production in India has been generally higher than the rate of growth of sugar consumption. Consequently there are huge inventories or accumulated stock of sugar with industry and trade — 2.2 million tonnes in the beginning of 1990-91, and as much as 6.5 million tonnes in 1997-98. Despite huge surplus stocks, the country

was unable to export much because the price of Indian sugar was much higher than international price. However, it should be mentioned here that sugar exports are gradually rising — from 1,90,000 tonnes in 1990-91 to over 3 million tonnes in 2007-08 (value ₹ 5,654 crores).

Problems of Sugar Industry

The erratic trend in the production of sugar is attributed to the fact that it is an agro-based industry and its output fluctuates with the vagaries of monsoons. Secondly, the output of cane is influenced to a great extent by the prices of sugarcane—industry's main raw material—which, in turn, depends upon the prices of competing food crops on the one hand and the cane prices fixed by the Government on the other.

The output of sugar is also greatly influenced by the relationship between cane prices and gur prices. From the production side sugarcane can be used for the manufacture of sugar or gur. From the consumption side, the substitution of sugar in place of gur arises when the prices of sugar fall in relation to gur prices.

Shift in locational pattern. The sugar industry was initially located in Uttar Pradesh and Bihar which together accounted for about 60 per cent of sugar production in 1960. Analytical studies about production costs revealed the irrational nature of the regional pattern of production. Since the sucrose content of sugarcane begins to deteriorate soon after the stalks have been cut, it is essential that mills must be located in close proximity to the sources of raw material. Consequently, attempts were made to locate new units in the cane producing states. As a result of this, the share of U.P. and Bihar declined from 60 per cent in 1960-61 to 28 per cent in 1980-81, while that of Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu taken together rose from 31 per cent to about 60 per cent in that year. If this trend is continued, there may be a further shift in the locational pattern. The decline in the importance of U.P. and Bihar is, mainly, due to severe competition faced from other States.

Role of the co-operative sector. During recent years co-operative sector has been increasing in importance in sugar industry. There are now 211 co-operative sugar factories producing over 60 per cent of the total output of sugar. Co-operative sugar mills have two positive advantages in their favour. First, they get the maximum supply of sugarcane as almost all the sugarcane farmers are members of the co-operative sugar mills. Secondly, the profits of the co-operative units are distributed among member-farmers instead of going into the hands of a few "sugar barons."

Need for cane development. The factor which is of crucial importance in the growth of sugar industry is the yield of sugarcane. There is a steady increase in yield of sugarcane per hectare from 33 tonnes in 1950-51 to 70 tonnes in 2000-01. It may be mentioned here that average sugarcane prouctivity in other countries range between 134 tonnes per hectare (sub-tropical regions) to 188 tonnes per hectare (tropical regions). Percentage recovery of sucrose is the second factor which determines production. In India, both the yield of sugarcane per acre and percentage recovery of sucrose is low. There is possibility of doubling or even trebling the yield of sugarcane.

Competition from gur production. In India, 10 tonnes of sugar are obtained from 100 tonnes of cane but in case of khandsari only 7 tonnes of sugar are derived. Thus there is a net loss to the country by the use of cane for khandsari and gur. The recovery content of gur is only 5 per cent. But since it is a food of higher nutritive value, the demand for gur is not only motivated by its use as a a sweetening agent but also as an article with specificity in its demand. But the gur factories deprive the community by 25 to 40 per cent of sucrose when they divert the cane required by sugar mills. While the price of sugarcane supplied to the factories is fixed by the Government, there is no price fixation for sugarcane used for gur. The obvious result is that production of gur often increases at the cost of sugar. As a result of the policy of price fixation alone, the distribution of sugarcane among the producers of sugar, gur and khandsari is not done on a fair basis. It is, therefore, necessary that price competition between sugar, gur and khandsari be avoided. It would be much more desirable to chalk out a combined allocation policy of sugarcane for these three close substitutes at the same price. This is being attempted now.

Problem of production of sugar. The low yield of sugarcane, short crushing season, unsatisfactory location of the industry in U.P. and Bihar and inadequate supply of cane—all these create problems of production of sugar in India. Besides, Indian sugar factories have low milling efficiency and recovery of sugar from sugarcane is very low. One reason for that is the uneconomic character of many of the sugar mills. Further, Indian sugar mills do not have sugar plantations of their own (as in the case of West Indies) and hence do not have control over the quantity and quality of sugarcane supplied by the innumerable cane growers.

The problem of high prices of sugar. The inefficiency and uneconomic nature of production in sugar mills, low yield and short crushing season, the high price of sugarcane (fixed by both the Centre and the cane producing states) and the heavy excise duties levied by the Government—these are responsible for the high cost of production of sugar in India. The price of Indian sugar is considerably higher than the world price of sugar. Apart from the manipulations of stocks by sugar factories, hoarding, speculation and blackmarketing of sugar by wholesale dealers are rampant in India.

The problem of by-products. An important problem of sugar industry is the fuller utilisation of by-products specially bagasse and molasses. At one time, bagasse was used as fuel, while sugar factories did not know what to do with the accumulating molasses, a health hazard. At present, small paper plants are coming up to make paper and paper board, packing paper, etc., through using bagasse. Molasses is now being used for the manufacture of power alcohol, fertilisers, cattle feed, etc. A number of sugar mills located in close proximity to each other are joining together to utilise by-products fully and effectively. In this way they help to bring down the cost of production of sugar.

Faulty Government policy. The sugar economy is a highly controlled one. Sugar factories were under compulsory licensing till recent years. There is a Statutory Minimum Price (SMP) for sugarcane fixed by the Central Government and State Advised Prices (SAP) fixed by each State over and above the SMP. There is a levy — normally 40 per cent of the output — on the sugar mills which have to supply the levy quota at prices fixed much lower than the market prices. The levy sugar is allotted to the State/UT Governments for distribution through the Public Distribution System (PDS). Prices of levy sugar are fixed zonewise, on the basis of SMP of sugarcane plus conversion costs as recommended by the Bureau of Industrial Costs and Prices.

There is no price control on the sale of free sugar. However, the market supplies of free sale sugar are regulated by Government by fixing monthly release quota so as to maintain price stability.

There are price and distribution controls on molasses, the major by-product of sugar factories. The Government fixed export quotas and sugar exports have to be handled by designated export agency.

This whole scheme of sugar controls is not in the interest of the industry or the economy. The Government has announced its intention to review this policy regime with the objective of making sugar industry globally competitive and generating export surplus while ensuring adequate supplies for domestic consumption As a part of restructuring sugar industry, a beginning was made when price and distribution controls on molasses were abolished in June 1993. The Government has also announced a number of incentives to encourage sugar mills to maximise sugar production.

The main reasons for sickness in the sugar industry—as many as 70 mills are lying closed—are: the practice of State Advised Prices (SAPs) for sugarcane, low realization from the sale of molasses, fluctuations in sugar production, non-availability of adequate cane and the uneconomic size of the mills and their out-dated machinery and mismanagement.

This implies that adequate relief and concessions would be required from State Governments, banks and financial institutions for the revival of sick and closed sugar mills.

At the same time, with a view to improving the overall viability of the sugar industry, attention is being given to:

(a) utilization of bagasse for generation of electricity—encouragement of bagasse-based power generation.

(b) Utilization of molasses for the production of ethanol—which is now blended with gasoline.

These value additions to the by-products of sugar industry will improve the viability of the sugar mills, which in turn, will benefit the sugarcane growth and also the rural economy in general.

Policy Measures

The Government of India set up the B. B. Mahajan Committee to study the development and growth of sugar industry in India ***vis-a-vis*** other sugar producing countries and suggest modifications, amendments or repeal of existing laws and controls in order to increase production and efficiency. The Mahajan Committee submitted its report in April 1998 and made the following recommendations:

(i) Complete decontrol of sugar in order to provide level playing field to the domestic industry ***vis-a-vis*** imported sugar;

(ii) Discontinuation of sugar through PDS so as to prevent PDS sugar entering the open market;

(iii) Setting up of a board for determining Statutory Minimum Price (SMP) for sugarcane in the month of September every year;

(iv) Prescribed a minimum distance of 15 kms – instead of the existing 25 kms between an existing sugar mill and a new sugar mill.

(v) Continuance of import of sugar under OGL in order to protect the consumers against any unusual rise in prices; and

(vi) Abolition of existing incentives for a new factory.

The Government of India is carefully considering the recommendations of the Mahajan Committee. In the meantime, the Government has announced its decision:

(a) to remove the sugar industry from compulsory licensing under the provisions of Industries (Development and Regulation) Act 1956; and

(b) to maintain a minimum distance of 15 kms between an existing sugar mill and a new mill in order to avoid unhealthy competition among sugar factories to procure sugarcane.

Sugar Development Fund

The Sugar Development Fund was set up in 1982 under the Sugar Cess Act and is funded by transfer of proceeds of sugar cess imposed at the rate of ₹ 14 per quintal on sugar produced by all sugar factories. The Fund is utilised for advancing loans at concessional rate of interest for the rehabilitation and modernisation of sugar industry and for development of sugarcane in the sugar factory area. The Sugar Development Fund makes grants for undertaking research projects for development of sugar industry. The Fund is also used to defray expenditure for the purpose of building up and maintenance of buffer stocks of sugar with a view to stabilising its price.

5. THE CEMENT INDUSTRY

The foundation of a stable Indian cement industry was laid in 1914 when the Indian Cement Company Ltd. manufactured cement at Porbundar in Gujarat. There are 148 large cement units and 365 mini-cement plants with a total installed capacity of 230 million tonnes and actual production of nearly 200.7 million tonnes (for the year 2009-10). Over two lakh persons are employed in the industry. India is the seventh largest cement producer in the world, the first six being Russia, Japan, USA, Italy, West Germany and France. The per capita consumption of cement in India, however, is one of the lowest in the whole world—68 kgs. per capita in India (in 1994-95) as compared to 700 kgs. in Japan, 650 kgs. in West Germany, 600 kgs. in France, 120 kgs. in China and 98 kgs. in Pakistan.

Table 10 : Performance of the Cement Industry

Year	*Installed Capacity (million tonnes)*	*Production (million tonnes)*	*Production as a percentage of capacity*
1950-51	3.3	2.7	82
1970-71	17.3	14.3	83
1990-91	64.0	48.8	76
2003-04	151.7	117.0	77
2007-08	184.2	167.6	91
2008-09	230.27	181.4	79
2009-10	NA	200.7	NA
2010-11	NA	209.7	NA

Source: RBI, *Report on Currency and Finance*, 1997-98, *Economic Survey 2010-11, Hand book of Statistics on Indian Economy 2011-12.*

The cement industry has recorded continuous growth since planning started. The average annual growth rate of production of cement has fluctuated violently due to unimaginative Government policy on control and distribution of cement. But the industry has maintained an upward trend throughout. From 1990-91 to 2010-11 average annual rate of growth of cement industry has been 7.6 percent per annum.

Centralisation of ownership. In no other industry of India is there greater centralization of ownership and control than in the cement industry. The public sector, the A.C.C., the Dalmia Jain and the Birlas control bulk of the cement units. The centralisation of ownership and control has inevitably led to the financial and administrative integration of different cement factories, thus exerting profound influence on the size of individual units.

In recent years, mergers and acquisitions have been quite significant in the cement industry. The leaders in the industry have found it economical to acquire an existing under-utilised/ill-managed company rather than float a new company.

Diversified over the country. The industry is well diversified over all the States of India. Since the manufacture of cement requires weight losing materials like limestone or chalk, clay and gypsum, the industry has a tendency to be attracted at the point of minimum transportational costs in relation to raw materials. Limestone of excellent quality exists in abundance in many parts of the country, and in close proximity of railway lines so that the industry shows a tendency of regional dispersal of productive activity. But as late as 1980, cement factories were largely concentrated in the southern and western regions of the country. For example, the northern and eastern regions produce about 21 per cent of the total output but consume 44 per cent of the total output. On the other hand, southern and western regions produce 79 per cent of the output and consume only 57 per cent of the total output.

Problems Facing the Industry

Inadequate production. The main factors responsible for shortfall in production are: (i) drastic power cuts ranging from 20 to 75 per cent in various cement producing states; (ii) shortage of coal; (iii) inadequate availability of wagons; and (iv) limited availability of furnace oil resulting in partial or complete closure of many units. This explains why capacity utilisation which was as high as 93 per cent at one time came down steadily to 67 per cent in 1980-81; in recent years, it has been 76 per cent.

The demand for cement has been growing at the rate of 8 to 10 per cent per annum. To meet this demand, the Government intended to set up mini-plants on the one hand and giant plants on the other. A mini-plant has a capacity of up to 200 tonnes per day. There are two advantages of mini-plants: Firstly, capital cost of such plants per tonne of output is low; and secondly, they can be located in remote and inaccessible areas. There are 365 mini-cement plants with a total capacity of 11 million tonnes. The share of these plants in total production works out to be about 5 per cent. The mini plants, however, have not played a significant role in augmenting cement production in the country as was originally expected. In fact only 132 mini plants out of a total by 365 plants are in operation.

In addition, the cement plants with a capacity ranging from 1,200 to 3,000 tonnes are also being installed. The Government is adopting a very liberal policy in this regard.

Cost escalation and rigid prices. As in the case of all other industries, there was rise in the cost of production of cement. But the special point in the case of cement industry was that some of the major cost rises were due to government policies—as, for example, price and freight on coal, power, and wages covered by wage awards. The shortfall in coal received by the cement industry against the quota sanctioned had ranged between 17 per cent and 43 per cent in recent years. The shortage of wagons for the movement of cement was always a serious problem. On an average, the cement industry was getting 1 lakh wagons less than the indented quota. The Government is reported to be considering a scheme of allowing the cement factories to purchase and own wagons. Finally, the cement industry has been a victim of power shortages of varying degrees in different states. In order to solve this perpetual problem, the cement industry has been setting up captive diesel generating sets.

When, as a result of all these factors, costs escalated and the Cement Manufacturers Association (CMA) approached the Government for a suitable rise in cement prices to neutralise the rise in costs, the Government did not grant any increase, and if it did, it granted only a partial increase and that too after a long delay. It was common knowledge that in the case of levy cement, the price the consumer paid did not cover the cost of production. It was estimated that only 37 per cent of the levy price of cement went to the manufacturers, and the balance 63 per cent was mopped up by the Government in the form of excise duty, railway freight, sales tax, etc.

Partial control and dual pricing. Another problem of the cement industry related to the system of price control. The ostensible benefits envisaged from the price control system in the cement industry were: (i) fair price to producer, (ii) availability of cement to consumers at fair price throughout the country (and the Government was the single biggest consumer of cement in the country), (iii) self-sufficiency within the shortest possible time, (iv) reduction of regional imbalances, and (v) review of freight pooling system (with particular reference to cost to the consumer and burden on transport system).

These were no doubt laudable objectives and if these benefits had actually materialised, no one would grudge the system. Price regulation was based on the assumption of 85% capacity utilisation. Despite all-out efforts of industry, there was a declining trend due to infrastructural bottlenecks of power, coal and rail movement. The capacity utilization which was 90 per cent in 1978 came down rapidly to 67 per cent in 1981. It rose to 79 per cent in 1986-87 and is around 72 to 75 per cent since then. The industry could not be blamed for this in as much as it was entirely due to factors controlled by the government agencies (such as shortage of coal, load shedding and transport bottlenecks). Price control of cement resulted in unnecessary loss of about ₹ 15 per tonne. Any amount of representation by the industry could not move the Government to change its price control policy. The Government was the greatest beneficiary of price control of cement.

Unrealistic distribution policies. Another problem related to unrealistic regulation of distribution of cement. The Government introduced a permit system of distribution which never worked properly.

After a lot of delay, the Government of India announced a scheme of partial decontrol with effect

from February 1982 and introduced dual pricing in cement—levy cement for Government and small house builders (at ₹ 33 per bag) and free open market cement for general consumers at ₹ 65 per bag. According to this scheme levy quota was fixed at 66.6 per cent of the cement produced by a factory in the case of existing units and 50 per cent in the case of new and sick units and the balance 33.4 per cent of production could be sold in the open market. The levy quota was sold at controlled prices to the Government and other private sectors. The open sales were at higher market prices. The higher free sale prices were meant to cover up the rise in costs and help the cement units to generate additional internal resources; they would also help cement units to increase production to derive maximum benefit from open market sales.

The Government introduced the scheme of partial control of cement in February 1982 and followed it up with progressively reducing price and distribution controls on cement industry. This policy incentive resulted in significant progress both in terms of addition of new capacity and increased production. Since the country has reached self-sufficiency in cement, all price and distribution controls were withdrawn from March 1989. However, the price per bag of cement which was in the range of ₹ 80-85 during 1990-91 has shot up to ₹ 135-153 in 1997-98.

Conclusion

Cement is a key factor in economic development. There has been huge increase in the demand for cement in house construction, road construction, etc. There is great scope for increase in export of cement. The industry has tremendous potential for development as limestone of excellent quality is found almost throughout the country.

The major problems faced by the cement industry in recent years, as indicated already, were inadequate and erratic supply of coal mainly due to poor availability of rail wagons, increase in coal prices following partial deregulation, poor quality of coal and frequent power cuts in major cement producing states like Rajasthan, Andhra Pradesh, Karnataka, Madhya Pradesh, Gujarat and Kerala.

We may also refer, in this connection, to the ambitious modernisation/expansion programmes of the cement industry which include conversion of manufacturing process, energy conservation measures, adoption of latest technologies such as pre-heaters and pre-calcinators, installation of pollution control devices, setting up of captive power units, etc. The Government is also encouraging the setting up of coal washeries and captive power plants to solve the problems of poor quality of coal and power shortage.

In recent years, the Government of India has given both direct and indirect encouragement to the cement industry. The indirect benefits have been in the form of demand push by given priority to infrastructure and housing sectors. Besides, imports of cement are made unviable by the Government and there is no fear of dumping of foreign cement in India.

A very interesting pilot project for transportation of bulk cement is being set up at Kalamboli, New Bombay in order to switch over gradually from the traditional movement of cement in bags to modern and efficient mode of transportation and distribution in bulk.

The Ninth Plan (1997-2002) projected a capacity of 135 million tonnes but the industry had achieved installed capacity of 140.5 million tonnes in 2001-02. The Tenth Plan projects additional capacity of 62 million tonnes at a total investment of ₹ 17,600 crores.

6. THE PAPER INDUSTRY

The first paper mill was set up in India more than 100 years ago. The industry operated under a protective tariff since 1925. Attracted by high profits under the protective tariff umbrella, many new paper mills were set up. During the period of planned development, the paper industry made rapid progress, India's forests providing abundant raw materials for its smooth working. Production rose from 3.5 lakh tonnes in 1960-61 to 49.6 lakh tonnes in 2009-10. The production of newsprint rose from 0.4 lakh tonnes to 10.3 lakh tonnes between 1961 and 2008-09.

Table 11: Growth of Paper Industry in India

(In lakh tonnes)

Year	*Paper and paper board*		*Newsprint*
	Installed Capacity	*Production*	*Production*
1950-51	—	1.1	
1970-71	9	7.6	0.4
1990-91	31	29.0	4.6
2003-04	60	36.8	6.5
2007-08	85	42.6	10.3*
2008-09	85	44.7	10.3*
2009-10		49.6	10.3*

Source: RBI, Report on Currency and Finance, 1997-98, Vol. I, Ministry of Commerce, Department of Industrial Policy and Promotion, 2007-08. Economic Survey 2009-10.

* Figure for newsprint production corresponds to the year 2006-07

There are at present 515 registered paper mills producing paper and paper board in the private sector with installed capacity of 51 lakh tonnes. These units are of diverse size, type and magnitude. There are about 30 large integrated mills, well organised and well equipped and there are about 270 small units, which are too small and too moderately equipped. Actually, the last decade witnessed a phenomenal growth in the small paper sector (a small paper mill has installed capacity of 24,000 tonnes per annum), actively promoted by the Government. As a result, the small sector now accounts for 50 per cent of the installed capacity and of production of paper in the country.

As many as 194 paper mills, particularly small mills are either sick or lying closed.

Rapid Growth of Small Units

In the early 1970s, when the country was faced with a paper famine, the Government came to appreciate the role of small paper units because of the short gestation period, the use of cheap second hand machinery readily available in foreign countries, the use of non-conventional raw materials such as rice-wheat straw, bagasse, jute stalks and waste paper. The small units could be set up in any part of the country and would have an important role to play in backward areas. The Government gave necessary fillip and encouragement to technocrats and entrepreneurs to venture into the paper industry and the investment funds came easily from the public sector financial institutions such as the IDBI, IFCI and the ICI. The small paper units went into production and averted the paper crisis and also the need to import paper and paper board and thus have helped the country to save ₹ 300 crores of foreign exchange annually. To some extent, the small units were uneconomic, their costs were high and their quality was low. In order to ensure that these mills exist along with large paper mills, the Government gave various excise concessions and reliefs from time to time. And, as mentioned earlier, the small paper mills have grown so rapidly that they account for 50 per cent of the installed capacity as well as of annual production.

Basic Problems of the Paper Industry

The sharp rise of prices during 1973-74 created a paper crisis in the country. Since then, the paper industry was engulfed in a crisis due to a variety of reasons, leading to a sub-optimal use of installed capacity. The working of both large and small sectors has been highly unsatisfactory and units in the small and medium sector—representing 20 per cent of the installed capacity remained closed.

High costs of production. The international price of capital equipment needed by the paper industry has been soaring. Other costs too have been rising quite fast—power and coal, both supplied by public sector units have risen by 400 per cent in the last decade. Likewise, chemical raw materials have also risen by a similar percentage. Royalties on bamboo and hardwood have been increased by 600 to 700 per cent in the last 6 years in some states. The acute shortage of local timber, the paper control order of 1978 and the heavy excise duties have all burdened the paper industry which has been struggling all along. For those units situated near the forests, the transport costs are also high, when they have to import waste paper as their raw material. Over all these problems is the serious powercut, specially in South India.

The problem of raw materials. The large paper mills are mainly based on conventional raw materials, *viz.*, bamboo and hard wood. At one time, these forest resources were adequate and the paper mills went on using them without a thought for afforestation. There has been deforestation, and both the Central Government and the State Governments have actively colluded with the large paper mills in destroying forests indiscriminately. It has now been estimated that the forest wealth of the country is only 11 per cent of the land resources and that there would be serious shortage of forest raw materials to meet the needs of the paper industry (Table 12).

It was with a view to conserve forest resources and also to maintain ecological balance, that the Government of India encouraged the setting up of small units using unconventional raw materials, *viz.*, agricultural wastes, such as straw, bagasse, stalks, etc. The availability of these materials is much greater and of repetitive nature. In order to overcome the problem of inadequacy of raw materials, it would be in the long-term interest of the country to encourage units based on unconventional raw materials and to help bigger paper mills to switch over gradually to unconventional raw materials.

TABLE 12. Forest based raw materials needs of the paper industry

(million tonnes)

	1991	*2000*
Production Projection		
Paper and paper board	1.57	2.38
Newsprint	0.43	0.72
Projection Forest raw material requirement	5.27	8.15
Availability of forest raw materials	3.20	3.21
Shortfall in forest raw materials	2.06	4.94

SOURCE: N.B. Poddar, Small Paper Mills, *Economic Times*, April 30, 1987.

Problems of royalties and leases. There has been extreme uncertainty as regards forest leases and the royalties to be paid. At one time, through fair or unfair

methods, the paper mills managed to get favourable leases of forest land and at ridiculously low royalty rates. Many state governments, however, started raising their royalties from forest land leased out to paper mills frequently, as a method of raising resources to meet their current expenditure. As mentioned earlier, some State Governments have raised the royalty rates to 5 to 6 times in a short period of 5 to 6 years. Such policies towards royalties and the terms of lease are extremely unsatisfactory. The policy should be stable and based on long-term basis.

Over-capacity and under-utilisation. The active encouragement by the Government to small paper units to be set up has resulted in over-capacity in the industry. Between 1974 and 1984, as many as 180 small paper mills were set up in the country, thus creating excess capacity.

To produce paper economically, a high level of capacity utilisation is necessary but the over-all industry average has been around 60 per cent during the 1980's. Even when capacity utilisation is high—72 per cent in recent years—some large units and many small paper units have been idle for part of the year.

This state of affairs clearly brings out the fact that the so-called planners and strategists in the Planning Commission and in the concerned ministries had literally "planned chaos" as far as the paper industry was concerned.

Sickness in small paper units. From the very beginning, the small units have suffered from various constraints. They did not have chemical recovery plants, nor did they provide for disposal of effluents. They had installed second hand machinery imported from elsewhere and they made use of unconventional raw materials. As a result, the small paper units found it difficult to operate efficiently, to maintain quality of paper or produce at a low cost. At the same time, the large paper units had many technical advantages because of better equipment. Accordingly, the small units have not been able to compete with large paper units, and many of them fell sick. The sickness in the small-scale paper sector is due to:

(i) high cost of investment and low rate of realisation; (ii) highly competitive market, (iii) continuous cost escalation, but with stagnant prices of paper and paper board; (iv) heavy interest burden towards financial institutions and banks; (v) non-availability of coal in the required quantity and quality; (vi) non-availability of raw materials, and increase in electricity and water charges; and (vii) cluster of mills in particular regions, resulting in problems of procurement of limited raw materials in that region.

Added to these general problems, there were additional problems which were created by the Government through its recent fiscal proposals—introduction of MODVAT to the paper industry which gave an advantage to larger paper mills and the imposition of customs duty on the import of waste paper. On the effluent front, many small units had to close down since they were not able to conform to the standard laid down by the Government for installing effluent treatment plants.

Chronic shortage of newsprint. There is a serious shortage of newsprint and 70 per cent of our requirements are met by imports. Our main suppliers of newsprint are Canada, Finland, Norway, Sweden, Poland and Russia, all of which have rich forest resources. The only public sector undertaking for the production of newsprint in India was NEPA. During 1981-82, the Mysore Paper Mills and the Kerala Newsprint Project were commissioned. The Hindustan Paper Corporation—a Government of India enterprise—and many others are coming up to increase the production of newsprint on the one side and reduce our dependence on imports on the other. On an average, India imports about 200,000 tonnes of newsprint every year.

Future Prospec f the Paper Industry

The industry should be helped to optimise capacity utilisation through renovation and modernisation of existing large mills. In this connection, the prices fixed by the Government for various types of paper were unrealistic and did not provide for reasonable returns on capital. As a result the industry was hard put to plough back funds for expansion and modernisation. With the removal of price and distribution controls on white printing paper in 1988, paper industry (especially large units) was able to get remunerative prices.

One of the most serious problems facing the paper industry is the rapid depletion of fibrous raw materials. Bamboo continues to be the mainstay although some success has been achieved in the use of mixed hardwoods, bagasse and other agricultural residue. As bamboo cultivation is becoming uneconomical, reliance has to be placed on unconventional raw materials such as hardwood. Paper mills may have to undertake plantation forestry in their surrounding areas.

In recent years, the production of paper and paperboard has recorded moderate but steady progress. India is now self-sufficient in the production of most varieties of paper and paperboard. Only certain varieties of paper are being imported. However, a majority of paper mills still use out-dated technology/machinery.

To help the industry, the Government has taken various measures which include: excise rebate to small units, abolition of customs duty on the import of paper grade pulp and wood chips, removal of statutory control over production, price and distribution of white printing paper and providing infrastructural support by way of increased allocation of coal and wagons. In addition, the concept of broad-banding has been extended to paper and pulp products whereby the firms will have the freedom to manufacture any variety of paper within the overall limit of licensed capacity.

7. PETROCHEMICAL INDUSTRY

The development of petrochemical industry in India had its origin in and with petroleum development. The initial efforts were made through the naphtha crackers of National Organic Chemical Industries Ltd. (NOCIL) and Union Carbide of India Ltd. in the sixties. The real thrust came with the setting up of the large size unit of Indian Petrochemicals Corporation Ltd. (IPCL) at Baroda in the late seventies in the public sector. The discovery of crude oil and natural gas in the offshore region in the western coast of India has provided a new dimension to the possibility of petrochemicals expansion from the Sixth Plan onwards.

The petrochemical industry, of which plastics, is a major component, is one of the fastest growing industries of the Indian economy with an annual growth rate of 15 to 20 per cent. The present consumption of plastics in India is only 1.5 million tonnes per annum and even smaller countries like Hongkong, Singapore and Spain have higher per capita consumption. Governmental restrictions on imports of raw materials and machinery coupled with high excise duties and customs duties are to a considerable extent responsible for the stunted growth of the industry.

New Projects

Petrochemical industry consists of three kinds of manufacturers. At the primary stage, there are large manufacturers of base chemicals and resins; at the secondary stage, there are the processing units which process petrochemicals into end-products. Finally, there are equipment manufacturers who bring plastics within the reach of the poor man.

The important petrochemical complexes which are coming up in the public or in the joint sector are: Maharashtra Gas Cracker Complex by IPCL at Nagothane, Haldia Petrochemicals, Salimpur Aromatic Complex, etc. In the private sector there is substantial expansion by NOCIL; new units are Gujarat Petrochemical Complex, Reliance Petrochemical Complex, etc.

Significance of Petrochemical Industry

Petrochemicals permeate every sector of industry and household through their products and have a major role to play in conserving, stretching out and supplementing natural resources. They have a potential in crucial areas like agriculture, clothing, building and construction, transportation, and so on. We can indicate these points as follows:

(a) Use of polymers to bring within reach of the less-affluent items of everyday use such as footwear, buckets and clothing which they cannot afford as the related raw materials are very expensive;

(b) Use of synthetic fibres and blends which are durable and which have wash and wear qualities and can be made as cheap and inexpensive as in other countries;

(c) Increasing use of synthetic rubber in the transportation industry;

(d) Tremendous scope for plastics as building materials as door and window frames, water tanks, tubes etc.—U.S.A. uses annually 4 million tonnes of plastics in the building industry alone as against 50,000 tonnes by India;

(e) Increasing use of plastic packaging instead of conventional packaging materials like jute, paper, glass and wood for such basic items of consumption as foodgrains, edible oils, milk, sugar etc.—the re-usable HDPE crates for packing fruits and vegetables are a good substitute for wooden crates (which destroy forests systematically).

(f) Major role of plastics for improving farm productivity: efficient substitutes for metal and concrete pipes in irrigation, use of LDPE sheets for canal and reservoir lining to prevent seepage, use of plastic pipes and fittings in drip irrigation, etc.

Apart from the uses which polymers and plastics have, the petrochemical industry has some important features which need to be noted:

In the first place, petrochemicals present the highest value addition and resource generation compared to other competitive alternatives in fertilisers, power generation and fuel, gas or oil.

Secondly, petrochemicals have the highest resource generation in terms of investment.

Thirdly, they have a powerful effect on the development of chemical engineering, organic polymers, etc. They directly support the development of associated industries like engineering, instrumentation etc. It is commonly accepted that an indigenous integrated world-scale petrochemical industry will help generate substantial, permanent and far-reaching secondary and tertiary investment opportunities.

Fourthly, petrochemicals, by themselves are capital-intensive but, in an overall perspective, they are labour-intensive. The job potential of petrochemical industries exists mainly in the downstream processing industries. According to M.S. Patwardan of NOCIL, polymers could provide employment to over 3.5 lakh technically qualified persons and a total (technical and

non-technical) of some 1.4 million persons by the year 2000.[3]

Fifthly, petrochemical industry gives a big boost to the small-scale sector. The downstream plastics industries are generally reserved for the small-scale sector. The growth of the petrochemical complexes will give a big stimulus to this segment of the industry. There were over 10,000 small-scale plastic processing units in the country in 1986 and the number is expected to increase to over 30,000 units by the year 2,000. It is this boost to the small sector which will create large employment opportunities in the country.

Export performance and possibilities. In spite of the importance of the petrochemical industry and its rapid growth in recent years, the export performance of the petrochemical industry has been quite disappointing. The present value of annual production of plastic products is between ₹ 1,200, to 1,400 crores. Even if 10 per cent of the annual production is exported, exports of plastics and related commodities should have been ₹ 120 crores a year. But the actual annual exports amount to ₹ 80 crores. The basic reason for this poor performance is the high cost of production.

Two interesting points can be mentioned about naphtha which is the feedstock in the petrochemical industry. The price of naphtha for petrochemical industry is around $ 270 to $ 290 (or ₹ 3,400 to ₹ 3,700) a tonne in India against $ 90 in other countries. Further, the Government of India has fixed a price of ₹ 2,000 per tonne of naphtha used in the fertiliser industry—this is an open and flagrant price discrimination.

Apart from the high prices of inputs, the plastic industry is greatly burdened by heavy doses of taxation, both excise and customs, on essential raw materials and machinery. Dr. S. Ganguly of IPCL states bluntly: "It is, therefore, wrong to say that the Indian petrochemical industry is a high cost one without appreciating these inbuilt causative factors"[4]. If these tax burdens are removed, and if the inputs are available at international price levels, the picture of the industry will change dramatically and the industry would make a major contribution to the achievement of many national goals.

Production and Demand Gaps

At the end of the Sixth Plan, production of petrochemicals was put at nearly 0.9 million tonnes, but the demand for these items came to about 1.5 million tonnes. The demand for petrochemicals is increasing steadily by about 15 per cent per year. The following table gives the actual consumption in 1985-86 and the anticipated demand for a few selected years:

The demand for petrochemicals has touched 3 million tonnes by 1989-90; by the end of this century, the demand would exceed 8 million tonnes. As was the case with all other major industries, neither the Government nor our planners have made adequate preparations to meet this demand. The Seventh Plan outlay on the petrochemical units was about ₹ 5,100 crores and the total capacity was raised to 3 million tonnes. It would be a Herculean task to bridge the huge gap between production and demand in almost all polymers and plastics and chemicals. The Government hopes to bridge the gap through imports. At present, imports of petrochemicals amount to ₹ 600 crores a year and these are bound to increase in the years ahead.

Kapur Committee Recommendations

The Government appointed the National Committee on Perspective Planning for Petrochemicals with D.V. Kapur as Chairman, to identify and support the growth of basic petrochemicals and their end-products. The Committee submitted its report in 1986.

The important recommendations of the Kapur Committee are:

(i) At the present and the anticipated rate of growth of the industry in the country, there will be a big shortage of petrochemical goods in the country.

(ii) There is a quality shift emerging in the usage pattern of plastic products meant for sophisticated industries like automobiles and electronics. It is, therefore, expected that the coming years will witness greater consumption of speciality plastics like nylon, polycarbonate, polyacetal, PTFE and filled plastics. The demand for plastics in packaging, in agriculture etc. is expected to increase in a big way.

(iii) The level of investment required to meet the gap between demand and availability of petrochemicals in India by the year 2000 is projected at ₹ 26,300 crores. To raise this order of finances will indeed be a huge task but it will not be impossible.

(iv) The use of naphtha should be restricted to fertilisers and petrochemicals and the price of the feedstock should be the same in both the industries. This is necessary if the end-products are to be made available to consumers at reasonable prices because they are essential commodities.

(v) If the various inputs are made available to the petrochemical industry at international prices, it will be possible for Indian units to be competitive with international suppliers in terms of technology, efficiency of operation and cost.

(vi) The Government should appoint a Petrochemical Promotion and Development Authority

3. M.S. Patwardan, in Hindu, "*Survey of Indian Industry*", (1988), p. 71.

4. Dr. S. Ganguly in Hindu: *Survey of Indian Industry* (1986), p. 141.

to identify and support the development of basic petrochemicals and their end-products.

Government and the Petrochemical Industry

The Government of India has so far played a major role in establishing a strong base in petrochemicals. It is well-known that, in the formative years, a lukewarm response by the private sector for setting up downstream plants led to the IPCL's taking over the entire responsibility. The IPCL's capacities were larger than the nascent market's demands. In recent years, however, the market demand has grown quite rapidly, much in excess of the capacities.

To meet the rapidly rising demand, it is necessary that the following measures be taken:-

In the first place, the price of naphtha should be reduced to international level and the present irrational discrimination in the price of naphtha between fertilisers and petrochemicals should be given up. The bureaucratic fear that a reduction in the price of naphtha in petrochemicals would lead to a loss of revenue to the Government is unfounded. For, with reduction in polymer price, the demand will increase considerably and will lead to higher revenue generation.

Secondly, the Government should reduce the heavy tax burden in terms of excise duty, customs duty, sales tax etc. so as to bring down the prices of articles of every day consumption. In this connection, there is a very good case for reducing the prevailing high level of customs duty on project imports where equipment and machinery are not locally available.

Thirdly, the Government should help the petrochemical units, both at the basic stage and downstream stage, to grow to minimum economic sizes. This will help them to reap the economies of scale, reduce cost of production and face international competition.

Fourthly, the Government should adopt a liberalised policy on imports of technology and modern equipment for processing plastics into end-products for, this would give the much-needed boost to the small-scale conversion units to modernise their facilities and build up local and export markets.

Fifthly, the Government should not order/plan relocation of petrochemical units in the name of environmental pollution. It is common knowledge that pollution can be contained and controlled by adoption of modern technology. Accordingly, the modernisation and expansion of existing units should be permitted at the present sites to conserve scarce capital and protect the existing employment. The country cannot afford to have petrochemical complexes relocated involving duplication of infrastructure and escalation of capital costs.

Finally, the Government should set up at least one industrial estate for processing of plastics in each state, with the provision for adequate testing and quality control equipment.

Tenth Plan and Petrochemical Industry

India has achieved considerable progress in terms of production and consumption of petrochemicals. To be able to compete in the world market, in the wake of lowering of tariff barriers, the industry is adopting latest technologies and is producing quality petrochemical products of international standards. Petrochemical industry's output is estimated at ₹ 1,20,000 crores which is 15 per cent of the total manufacturing output. Its exports of about ₹ 16,000 crores is 16 per cent of the manufactured products export and it contributes about 20 per cent of the national revenue.

The industry has been growing at the rate of 14-15 per cent per annum which was approximately equal to the projection made in the Ninth Plan. Creation of additional capacities of the order of 3.61 m.mt in repsect of major petrochemicals has reduced dependence on imports.

The capacity utilisation of major petrochemical plants at the beginning of the Ninth Plan was 73 per cent which was based on their capacity and production in 1996-97. It was expected to increase to 93.4 per cent by the terminal year of the Ninth Plan.

Petrochemical projects commissioned during the Ninth Plan are : the gas-based crackar complex of GAIL at Auraiya (Uttar Pradesh) at a cost of ₹ 2,500 crores; expansion of Indian Petroleum Ltd. amd HPDE/LLDPE Swing plant capacity from 0.16 to 0.22 mmt per annum; naphtha-based cracker complex of Haldia Petrochemicals (West Bengal) with an ethylene capacity of 0.42 mmta ; IPCL's second phase of Gandhar (Gujarat) complex with an ethylene capacity of 0.3 mmta and Reliance Group 1.4 mmta p-xylene and 0.6 mmta polypropylene plant at their Jamnagar Refinery complex. According to the Tenth Plan, "Due to uncertainty on price situation impacting profitability and return on investment, fresh investments to the extent required to meet the domestic demand did not materialise."[5]

The Assam Gas Cracker Complex Ltd. (AGCL) was proposed to be set up — as a joint venture of the Assam Industrial Development Corporation with Reliance Industries Ltd. (RIL). The progress of the project is highly satisfactory.

The per capita consumption of plastics in India in 1995-96 was around 2 kg which is far below the world average of 17 kg. The outlook for plastic industry is very bright. With future consumption of polymers expected to grow by 15 per cent and that of fibres and intermediates by 7-8 per cent, the petrochemical industry offers immense opportunity for both Indian and foreign companies. The estimated demand for polymers is to grow at 12-13 per cent and

5. Planning Commission, *Tenth Five Year Plan* (2002-07), Vol. III, p. 700.

TABLE 13. Automobile Production and Exports

In Thousands

Category	*Production*		*Exports*	
	2000-01	*2010-2011*	*2000-01*	*2010-11*
Passenger vehicles (cars)	513	2,987	23	453
Total Commercial vehicles	285	753	14	76
Two Wheelers	3,759	13,376	111	1,540
Three Wheelers	203	800	16	270
Total	*4,759*	*17,916*	*168*	*2,339*

SOURCE: *Ministry of Heavy Industry and Public Enterprises.* (Annual Report 2010-11)

for synthetic fibres to over 6 per cent during the Tenth Plan period.

Despite the many hurdles imposed on the industry, petrochemical industry holds great promise for improving the quality of life of the common man and for meeting his basic needs. It brings within his reach a wide spectrum of products right from the lowly mug and the bucket to a dazzling array of items on the shelves of super markets. The industry can help to achieve national goals such as the creation of employment, growth of the small sector, regional dispersal of industry and energy conservation. Through its extensive use in agriculture, in construction, in packaging, etc., the petrochemical industry can help in the preservation of forests and in the conservation of ecology. Polymers can, thus, play a major role in taking India into the 21st century.

8. AUTOMOBILE INDUSTRY

With the liberalisation of the economy, the automobile sector witnessed robust growth. The established manufacturers were phased out and the sector witnesses the entry of new manufacturers with state-of-the-art technology. This provided confidence to manufacturers to face international competition. Competition in the market along with safety regulations on emissions have led to improvement in standards.

The automobile industry consists of passenger cars, multi-utility vehicles, commercial vehicles, two wheelers and three wheelers. After liberalisation in 1991, there is a progressive growth in the number of manufacturers, thus replacing the earlier monopoly of a few manufacturers. At present, there are 15 manufacturers of passenger cars and multi-utility vehicles, 9 manufacturers of commercial vehicles, 14 manufacturers of two/three wheelers.

During the last five years, the industry experienced a stready growth rate of 15.4 percent per annum which is creditable. Data given in table 13 brings out the rapid growth of automobile industry. The industry witnessed an over-all growth in production of vehicles from 7.8 million in 2000-01 to 17.9 million in 2010-11 — a growth rate of 14.2 per cent per annum. The two-wheeler segment, especially motor cycles, witnessed a sharp increase from 3.76 million to 13.4 million during the last nine years, signifying annual growth by 13.5 per cent. It is also a matter of great satisfaction that the export of automobiles which was just 1.7 lakh vehicles in 2000-01 registered a sharp increase to 23.4 lakhs in 2009-10. India exported 4.5 lakh passenger cars and 15.4 lakh two wheelers in 2010-11. This is an evidence of the competitive strength of automobile industry.

Exports of automobiles increased from 3.5% of total production in 2000-01 to 13.1 % in 2010-11. However, exports of passenger cars increased from 4.5% to 15.2 per cent during the 10-year period. This indicates that besides meeting growing domestic demand, automobile industry is gradually increasing its penetration in the international market.

The major destinations of exports from this sector are USA and Europe, which belong to the category of high accepted quality level. The industry offers direct and indirect employment to 12.5 million people and contributes 5 percent to GDP.

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CHAPTER

39

INFORMATION TECHNOLOGY (IT) INDUSTRY

1. INFORMATION TECHNOLOGY AND KNOWLEDGE ECONOMY

Information Technology (IT) is the industry, which through the use of computers and other supporting equipment helps in the spread of knowledge. The term information technology includes computers and communication technology along with associated software. Hanna N and Dugonjic (1995), therefore, are of the view in IT Industry, "on the supply side are computer hardware and software, telecommunications equipment, and micro-electronics-based industries. On the demand side are applications of IT and all economic sectors."

Information technology for some time was used as synonymous to computers. But with the rapid advancement in various information delivery systems such as Radio, TV, Telephone, Newspapers, Fax and of course Computers and Computer Networks, information technology refers to the entire gamut of media and devices used to transmit and process information for use by various target groups in the society. IT has, therefore, been rightly termed as Information and Communication Revolution.

Emergence of Knowledge Economy

With advancement in information technology information is being regarded as the fourth factor of production, along with the land, labour and capital. Information has, therefore, become an important and distinct input in production. Thus along with three sector model of primary, secondary and tertiary industries, a fourth sector information-related industries has emerged. Information is therefore used as a raw material of knowledge just as iron is a raw material for machinery. Thus, according to Low (2000), "The activities of generating, processing, transmitting, disseminating, storing, archiving and retrieving information constitute information industry." The information industry has thus pervaded a wide range of industries, viz., manufacturing, education, entertainment, defence, trade, communications, etc.

In the knowledge economy, the raw material that matters is intellectual rather than physical. Low, therefore, states: "The knowledge economy implies shift in the geographical centre from raw material and capital equipment to information and knowledge, especially in education and research centres and man-made brain industries. The knowledge economy depicts the automation of labour-

intensive manufacturing and service activities, as well as growth in new service industries such as health care, distance education, software production and multimedia entertainment." The pervasive influence of information technology is so strong that there is no sphere of human life in which it is not able to make a niche for itself.

Information technology has integrated the world by the use of internet. It is now possible to download information from any part of the world after the introduction of World Wide Web (www). Internet economy has become very powerful. In USA. Internet economy accounts for US $ 270 billion in 1998 as against energy (US $ 223 billion) and automobiles (US $ 350 billion). The new knowledge economy is thus creating high quality employment. It is reshaping the job market. Many of these jobs did not exist prior to 1994-95.

2. IT IN INDIA VIEWED IN WORLD CONTEXT

Information technology is of recent origin, but it is spreading fast in India. However, India has a long way to go before it can catch up with the developed countries. Table 1 provides some information regarding the use of various instruments of information technology. Take for instance, TV sets, India accounted for 320 sets per 1,000 population in 2006 as against 990 in Japan, 980 in USA and Russian Federation and 890 in China. Telephones (Mainline) accounted for 32 per 1,000 in India, as against 500 in USA, 540 in UK, 310 in Russian Federation and 230 in China. There is no doubt that people prefer mobile telephones in place of Fixed Line phones, but even then, India is way behind although it has progressed sharply during the last four years. In 2009, India had only 450 mobile phones per 1,000 persons as against 1,300 in UK, 1624 in Russian Federation and 560 in China.

Broad Band connections per 1,000 persons accounted for only 67 in India in 2009, as against 270 in USA, 290 in Canada, 240 in Japan and 78 in China.

Regarding internet, principal agency for acquiring and disseminating information, India had 53 internet users per 1,000 persons in 2009, as against 770 in Japan, 78[illegible] in USA and 280 in China. In other words, although information technology is penetrating in India, it has not accessed the masses and is thus the preserve of only rich and elite in Indian society. As per the data provided by Telecom Regulatory Authority of india, in Dec. 2010, there were 18.7 million internet users in the country. Apart from this telecom mobile companies have reported that 332.4 million mobile users have also subscribed to data services.

3. MAJOR ISSUES IN INFORMATION TECHNOLOGY

It is now being increasingly felt that information technology is a major facilitator and catalyst for accelerating growth of the economy. It is, therefore, necessary to remove impediments on the path of growth of IT industry, businesses and services. The Working Group set by the Ministry of Information Technology has identified four categories of issues:

(i) Infrastructure and Services; (ii) Electronic Governance; (iii) Education; and (iv) Mass Campaign for IT Awareness.

(i) Infrastructure and Services

With the development of various forms of information delivery systems, such as TV, Radio, Newspapers. Telephones, Personal Computers and Internet into one unified system, it is very desirable to improve the reach of the IT services to the common man. In India, nearly 37 per cent of the population lives below the poverty line, 20 per cent belong to the higher and richer classes and 40 per cent form the middle class. The government should, in the first instance, aim at 400 million strong middle class on the one hand who provide a very large potential market for IT products and services, who can in the near future be enabled to make use of the benefits of IT in their day-to-day lives. On the other hand, for 26 per cent

TABLE 1: Communication and information Status in Selected Countries (2009)

Per 1,000 persons

	*Daily Newspapers**	*Television Sets**	*Telephones Main lines*	*Mobile Telephones*	*Broad Band*	*Internet users*
USA	194	990	500	970	270	780
UK	289	980	540	1300	290	830
France	163	940	550	920	300	690
Japan	551	990	340	900	240	770
Canada	175	990	540	680	290	770
Russian Federation	92	980	310	1624	90	420
China	74	890	230	560	778	280
India	71	320	32	450	67	53

SOURCE: Compiled from World Bank, *World Development Indicators (2010)* 2006*

of the people living below the poverty line, government should initiate steps so that IT could provide new opportunities to enable them to move above the poverty line. Presently, the country is highly deficient in enabling access of IT services to the masses.

For providing IT infrastructure and services to the common man the working group set up by the Ministry of Information Technology in May 2000 was of the view that three conditions are necessary:

(i) Availability and affordability of access devices;

(ii) Establishment of communications and networking infrastructure including telecommunication network, Internet enabled cable TV network; and

(iii) Development of IT services.

The major issues to be dealt with are the following:

1. The cost of sophisticated access devices to Internet, such as, PCs, Set-top boxes for connecting TV with Internet, cable modem, etc., is very high and unaffordable for the common man.

2. The cost level of telephone is not affordable to more than 2 to 3 per cent of the users in the country. In the rural areas, the cost of installation continues to be very high.

3. The cost of installation of Internet facilities at the district level in the country is presently of the order of ₹ 85 lakhs for a private service provider. This makes the provision of service in large parts of the country completely unviable.

4. The market share of non-branded (assembled) PCs has become fairly large in recent years. This segment of the market should be recognised and made quality conscious with adequate incentives.

5. The present time-frame taken by the Department of Telecommunications (DoT) to make data circuits available to Internet services providers (ISPs) is too long and has lot of uncertainties in delivery and quality of services.

6. The establishment and operationalisation of international gateways continues to take too long due to involvement of number of agencies in the present process of clearance of such gateways.

7. There is an urgent need to evolve a national policy on Right of Way so that the establishment of Cable TV/Telecom network infrastructure can be achieved in minimum possible time frame.

8. Some of the newer and low cost technologies for establishing telecommunications/networking infrastructure in remote parts, such as, Wireless in Local Loop (WILL), require to be proactively encouraged instead of getting them entangled into procedural issues.

9. The availability of international bandwidth continues to be a major problem in the country. Also the domestic cost of bandwidth is much higher than the international cost.

10. VSAT network continues to be treated as CUG (Closed User Group) in the country. There is a need to allow such networks to be integrated with Internet Services.

11. Most of IT/Internet services in the country use English as the medium of information delivery. For mass spread/use of IT services, it is necessary to develop the use of various regional languages.

(ii) Electronic Governance

Government and its numerous agencies are the major service providers in the country. The use of information technology especially computers is being encouraged in various ministries, departments of the Central Government, State Governments, District Administration, Municipal Services and at Block/Panchayat level. This is a welcome development. But the working group has drawn attention to a major setback in effort. Most of the applications of IT in government services have been confined to back office computerisation. Consequently, the improvement in the quality of service has not taken place in a sufficient measure. This approach should be replaced by front-office applications as against back-office use. This will develop enough pressure on government agencies to improve and sustain IT service so as to raise the level of public satisfaction. This aspect of e-governance needs to be altered and strengthened. A gradual change is taking place. The pace in urban areas is much faster than in rural areas.

At present, the Government sector is the largest consumer of IT services in India. State governments and the Central Government have initiated the process of computerization. Particular mention should be made of the State governments of Karnataka, Andhra Pradesh and Tamil Nadu for making vigorous efforts to computerize government departments with a view to offer better services to the people. Income Tax and other departments of the Central Government have also taken steps to computerize their operations.

(iii) Education

IT education issues may be divided into two categories:

(i) IT education and training; and

(ii) Use of IT for education and literacy.

IT education requires the training of human beings in various skills associated with the wide range of products and processes. Since quite a good number of high quality jobs exist in the IT sector, it is very necessary to train the required number of personnel to take advantage of these

job opportunities. Two kinds of trained personnel are needed: (i) for hardware and (ii) for software.

For hardware training, the country needs development of polytechnics and engineering colleges to impart instruction and training and for software, the country needs educational institutions which can impart training in the operation of computers to suit the needs of different vocations like publishing of books, journals and newspapers, accounting packages for preparing accounts books, for banks for conducting banking operations, for railways in reservations and other associated jobs, etc.

The major problem with the training in IT education is the high costs, whether in polytechnics or in engineering colleges or in institutions such as NIIT or APTECH or even in Universities. Good quality institutions for IT training charge fees which the poor and the lower middle class cannot afford. In India, these institutes charge fees ranging from ₹ 20,000 to ₹ 1 lakh for a one-year course and thus, they price out the poor and the middle classes. Even meritorious students belonging to certain groups, which do not have an economic standing, cannot have access to these courses. At the individual level, the access to Internet, the chief instrument of acquiring information and thus converting it into knowledge is also beyond the reach of the lower classes in the society. There is, therefore, the painful existence of 'skill' and 'access' divide in IT education. This has led to the division of the society in the knowledge economy on the basis of socio-economic classes and regions - rural and urban. Consequently, the inequality in access to IT education has led to widening inequalities in the earnings of those who are trained in IT education and skills and those who remain excluded.

IT professionals are described as skilled knowledge workers. From a low base of 6,800 knowledge professionals in 1985-86, their number has shot up to 6.5 lakh by March 2003. Out of them, about 2.05 lakhs (about 32%) work in software and services export industry; nearly 1.6 lakhs (24.6%) are working in IT enabled services, only 25,000 (4%) are in the domestic software market and over 2.6 lakhs (40%) are in user organizations.

These professionals get their training in engineering colleges and polytechnics and prestigious IITs (Indian Institute of Technology). A large number of universities have also started computer courses. This has resulted in a sharp increase in the output of trained manpower in IT at the degree and diploma level. Their annual output was of the order of 1.2 lakhs in 2002. A very large number of private training institutes who charge exorbitant fees are also providing computer education.

4. GROWTH AND PRESENT STATE OF IT INDUSTRY IN INDIA

IT sector is of recent origin. It picked up in the nineties. In fact, its growth took place only after the international treaty of 1994. Since India has a very big middle class of nearly 400 million, there are high expectations in India about the growth of IT industries. Since the country due to its earlier pre-British connection has a huge stock of English-knowing population, it facilitates the adoption of software, which has been developed in the English language much more easily. There has been a gradual increase in the use of IT in government, public sector, private sector, universities, schools and colleges and technical institutes.

With the setting up of the National Association of Software and Services Companies (NASSCOM), data about growth of computer industry began to be collected. According to NASSCOM study, as on 31st March 2002, the total number of personal computers in India was 7.4 million. The target for 2008 was 20 million. The number of Internet users constituted 16.9 million in 2002. Their number was likely to shoot up to 100 million by 2008. It was estimated that there were likely to be 1.6 million Internet subscribers (5 million users) by March 2001. It was expected that this figure would rise to 8 million subscribers (18 million users) by March 2003. But even by June 2010, as per TRAI, number of internet users could reach only 16.7 million.

Growth of Revenues of IT Industry

IT industry earns revenue from software, hardware, peripherals, maintenance and networking. These revenues are earned either in the domestic market or in the export market. Table 2 provides data about the total revenues earned by the IT market.

TABLE 2 : Total Indian IT Market

	₹ crores (1)	*US $ million (2)*	*As per cent of GDP (3)*
1994-95	6,345	2,041	0.63
1997-98	18,641	5,021	1.22
1998-99	25,307	6,014	1.45
1999-00	36,179	8,357	1.87
2000-01	56,592	12,410	2.66
2001-02	65,768	13,783	2.87
2002-03	79,337	16,494	3.15
2009-10	3,45,761	73,100	6.1
CAGR (1997-98 to 2009-10)	**27.6**	**25.0**	

SOURCE: NASSCOM, *IT Industry in India: Strategic 2003 Review*, IT - BPO secter in india : Strategic Review 2010

During 1994-95, IT revenues were of the order of ₹6,345 crores ($ 2041 million) and they nearly tripled to ₹ 18,641 crores ($ 5,021 million) in 1997-98. As a proportion of GDP, IT revenues grew from 0.63 per cent in 1994-95 to 1.22 per cent in 1997-98. Thereafter, during the next 5 years (1997-98 to 2002-03), IT revenues grew from ₹ 18,641 crores in 1997-98 ($ 5,021 million) in 1997-98 to to ₹ 79,337 crores ($ 16,494 million) in 2002-03. As a proportion of GDP, IT revenues increased from 1.22 per cent in 1997-98 to 3.15 per cent in 2002-03. The annual average growth rate of revenues for the 5-year period (1997-98 to 2002-03) works out to be 33.6 per cent—a remarkable achievement indeed. (Refer table 2). It has now been estimated that IT industry's contribution to GDP has gone up to 6.1% in 2009-10.

TABLE 3 : Broad Components of the IT Market in 2010-11

	₹ Crores	*Per cent of total*
1. Hardware, peripherals and networking	1,21,760	25.9
2. Domestic software services	78,700	16.7
3. Software services exports	2,69,630	57.4
Total	**4,70,090**	**100.0**

SOURCE: Compiled and computed from the data provided by *Economic Survey, 2006–07*.

Break-up of the components of the IT market for 2010-11 reveals that software services exports account for ₹ 2,69,630 crores, i.e. 57.4 per cent of revenue. Besides this, domestic software services account for ₹ 78,700 crores, i.e. 16.7 per cent of revenues. Taking the domestic and export software services market, it becomes clear that nearly ₹ 3,48,330 crores or about 74 per cent of the market depends on software. The sharp increase in software market is a sign of the immense strength of the software sector as a driver of the overall IT industry.

Hardware, peripherals and networking account for ₹ 1,21,760 crores, i.e. 25.9 per cent. The share of hardware sector in relative terms has declined to 25.9 percent and software sector dominates in the IT industry.

Software Exports

Table 4 provides information about software (IT) export from India. We note that contribution of software export was US$ 1,759 only in 1997-98. A fobalous growth was witnessed in these exports, such that their contribution reached US $ 60,591 in 2010-11.

TABLE 4 : IT Software and Service Exports

	IT Exports ₹ crores (1)	*US $ million* (2)
1997-98	6,530	1,759
2000-01	28,350	6,217
2001-02	36,500	7,647
2002-03	46,420	9,600
2003-04	55,990	12,200
2004-05	79,404	17,700
2005-06	1,46,320	23,600
2006-07	1,41,356	31,300
2007-08	1,61,968	40,300
2008-09	2,12,877	46,269
2009-10	2,37,000	49,700
2010-11	2,69,630	60,591

* Provisional Source: Compiled and computed from NASSCOM, Strategic 2003 Review and RBI, **Handbook of Statistics on the Indian Economy**, 2010-11.

IT Software by Destination

A break-up of the IT software exports by destination reveals that North America (USA and Canada) account for about 68 per cent of exports; Europe 21 per cent and Japan by 2.0 per cent. This implies that North America, Europe and Japan taken together account for 91 per cent of our IT software exports. Other buyers of IT exports in Asia Pacific, Latin America and the rest of the world account for barely 9 per cent. (Refer Table 5)

TABLE 5 : Destination of Indian Software Exports (2002-03)

Region	*Per cent*
North America (USA and Canada)	67.7
Europe	21.3
Japan	2.0
Asia Pacific (excluding Japan)	3.2
Latin America and rest of the world	5.9
Total	**100.0**

SOURCE: NASSCOM, *Strategic 2003 Review*.

Although initially, Government introduced IT and was the principal agency for purchase of IT products and it accounted for 34 per cent of market share in 1999-2000, but during 1999-2000 to 2002-03, the prime position has been taken by Telecommunications (22%), followed by banking and finance (21%) since all banking and financial institutions have been rapidly computerizing their operations. The third place was acquired by manufacturing and Government has been relegated to the fourth position

(14%). Even a large number of educational institutions have introduced computers as a part of their syllabi in various courses at all levels. This has pushed up the share of education to 11%. In small offices and homes, computers are being purchased to take advantage of the variety of facilities like e-mail, internet, e-commerce, the share of this sector has gone up to 11 per cent. Energy sector accounts for only 6 per cent. Since IT is penetrating every sector of the Indian economy, the relative position of different sectors is likely to undergo a change during the next decade as well.

Table 6 : Domestic IT Market Constitution (2002-03)

(Percentage share)

Sector	*1999-2000*	*2002-03*
IT/Telecom	10	22
Banking and Finance	18	21
Manufacturing	12	15
Government	34	14
Education	3	11
Small office/Home	11	11
Energy, Transport	12	6
Total	**100**	**100**

Source : NASSCOM.

Table 7 : Electronics & IT Production (Financial Year)

(₹ Crore)

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
1. Consumer Electronics	18,000	20,000	22,600	25,550	29,000	33,400
2. Industrial Electronics	8,800	10,400	11,910	12,740	15,160	18,190
3. Computer	10,800	12,800	15,870	13,490	14,970	14,970
4. Communication & Broadcast Equipment	7,000	9,500	18,700	26,600	31,000	32,550
5. Strategic Electronics	3,200	4,500	5,700	6,840	6,980	7,680
6. Components	8,800	8,800	9,630	12,040	13,360	14,970
Sub Total	**56,600**	**66,000**	**84,410**	**97,260**	**110,720**	**1,21,760**
7. Software for Export	1,04,100	1,41,000	1,64,400	2,16,190	2,37,000	2,69,630
8. Domestic Software	29,600	37,000	47,010	59,000	67,800	78,700
Total	**1,90,300**	**2,44,000**	**2,95,820**	**3,72,450**	**4,15,520**	**4,70,090**

Source : Minister of Information Technology, Annual Report 2010-11

Structure of Indian Software Export Industry

In India, the structure of Indian software companies reveals that out of 2,810 companies in 2001-02, 2,483 (85.4% of total) had an annual revenue of less than ₹ 10 crores. NASSCOM review states: "small players, with revenues less than ₹ 100 crores, account for 10-11 per cent of the market and may have witnessed slow growth due to excessive dependence on staff augmentation." This implies that 98 per cent of companies numbering 2,758 account for only 10-11 per cent of revenues.

Table 8 : Structure of Indian Software Export Industry (2001-02)

Annual Revenues	*No. of companies*	*%*
Above ₹ 1,000 crore	5	0.2
₹ 500 crore-₹ 1,000 crore	5	0.2
₹ 250 crore-₹ 500 crore	15	0.5
₹ 100 crore-₹ 250 crore	27	1.0
₹ 50 crore-₹ 100 crore	55	1.9
₹ 10 crore-₹ 50 crore	220	7.8
Below ₹ 10 crore	2,483	88.4
Total	**2,810**	**100.0**

Note: In 2001-02, companies under ₹ 10 crore revenues also include non-NASSCOM member companies.

Source: NASSCOM.

On the other hand, 10 top companies account for ₹ 14,812 crores which was 40.5 per cent of the total revenues earned by all companies estimated at ₹ 36,500 crores (US $ 7,697 million). This only underlines the hard reality that big companies with a revenue of over ₹ 450 crores appropriated over 40 per cent of total export revenues. If we take the 20 top companies, they account for ₹ 18,050 crores as revenue which is 49.5% of total export revenues. Thus, 20 top companies appropriated nearly half of the total revenues was earned by 2,810 companies. In other words, there was a heavy concentration in terms of revenue in favour of top 20 companies.

It may also be noted that in 2008-09 out of 10 top companies only three companies were MNCs and all others were Indian companies. This underlines the fact that Indian companies have outperformed MNCs in the total revenue and even IT-export market share. However, the MNC segment emerged as an important contributor to the total software and services export revenue with a significant share. This implies that the MNCs may be able to compete with Indian companies in future and may overtake them.

In USA, voices are being raised against outsourcing IT services to cut costs. Some states have passed legislation and others may also follow. This is likely to lead to a decline in the IT exports from India to USA—the principal buyer of IT software services exports. If

such a trend gathers momentum, then export sector may not remain a driver of IT industry in India. The major problem with export-led-growth is the element of uncertainty due to a shift in international policies which are exogenous in nature. NASSCOM *Strategic 2003 Review* emphasises the fact that "Global IT services companies are increasing their presence in India significantly to take advantage of the lower manpower costs." This only underlines the fact that while the IT-export possibilities should be made use of to the fullest extent, yet emphasis on sustainable development of the IT domestic market should not be lost sight of. This shall provide a more enduring strength to the growth of the IT industry. In the long run, Swadeshi promises a more durable IT growth than Videshi (foreign).

Data for 2010-11 reveal that the revenues of 10 top companies further increased to from ₹ 1,54,532 crores in 2009-10 ₹ 1,88,048 crores in 2010-11.

TABLE 9 : Top 10 IT Software and Service Companies to India

Rank	*Company*	*Revenue (₹ Cr.)*		*Growth (%)*
		Fy' 09-10	*Fy' 10-11*	
1	TCS	26576	33112	25
2	Wipro	21949	24899	13
3	Infosys Technologies	21355	25997	22
4	Hewlett-Packard India	17831	23227	30
5	Cognizant Technology Solutions	15646	21393	37
6	IBM India	12388	14132	14
7	HCL Infosystem	11956	14111	2
8	HCL Technologies	10983	12137	28
9	Ingram Micro India	8824	9766	35
10	Redington	7024	9274	32
	Total	**154532**	**188048**	**21.7**

SOURCE: www.rediffmail.com, Aug.3, 2011

It looks surprising that even during recession; there was acceleration in software export revenue of these companies, by doing business in recession affected markets of developed countries. This happened due to outsourcing of most users to keep their costs low to survive during recession.

5. FUTURE PROSPECTS OF IT INDUSTRY

The Information and Technology (IT) industry has a tremendous potential to generate foreign exchange earnings, high quality employment and also contribute to productivity in the rest of the economy. IT sector can benefit from international boom and also use IT in domestic economy to achieve higher level of efficiency.

The penetration of computers, which is at present 7.2 per 1,000 of Indian population in 2002, is expected to grow further.

A major part of the IT industry is in the private sector and it accounts for 76 per cent of its total production in electronics hardware. This share is likely to reach a level of about 86 per cent by 2001-02.

Special Action Plan — An agenda under the Special Action Plan of the Prime Minister is to make India a Global Information Technology Superpower and one of the largest generators and exporters of software in the next ten years. The government appointed a National Task Force on Information Technology and Software Development in 1998. Some of the key recommendations of the task force are as under:

1. Opening of Internet Gateway access to private Internet Service Providers.
2. Encouraging private Software Technology Parks.
3. Zero customs and excise duty on IT Software.
4. Income tax exemption to software and service exports.
5. Setting up ₹ 100 crore Information Technology Venture Capital Fund (VCF) in collaboration with Small Industries Development Bank of India (SIDBI).
6. Promoting e-Commerce: a Centre of Excellence for e-Commerce has been set up at CMC Ltd., Hyderabad.
7. Framing cyber laws.
8. Earmarking 1 per cent to 3 per cent budget for every ministry/department for IT applications.
9. Networking of all universities and Research institutions.
10. Dollar Linked Stock Option to employees of Indian software companies.
11. Sweat Equity.
12. Financial package for buying computer.
13. Amendment of the Information Technology Act 2000 has been approved by the government to provide legal framework for recognition of electronic contracts and prevention of computer crimes.
14. To promote information processing in Indian languages, a project has been taken up at 13 Educational and R & D institutions spread across the country. This shall enable wider access of IT technology to the common man.

NASSCOM-Mc-Kinsey Report (1999) projected that the size of India's IT sector would by 2008 swell to an annual revenue of $ 87 billion (as against $ 8.67 billion in 1999-2000). Out of this, $ 50 billion would come from software exports (as against $ 5.7 billion in 1999-2000). The report indicated that IT sector would account for 35 per cent of the country's total exports, an annual foreign direct investment of $ 5 billion and contributions of 7.5 per cent to GDP by 2008. Besides this, India's IT sector will require 2.2 million globally competitive professionals and roughly 1 million Indians would be employed in various IT industries and they would generate an annual revenue of ₹ 81,000 crores by 2008.

IT-enabled services like back-office operation, data entry jobs, medical transcription, insurance claim processing and content development have a large employment potential. As of December 1999, these ser-

vices employed 41,000 persons who generated US $ 460 million. It has been projected that IT-enabled services will be able to provide employment to 11 million people generating US $ 17-18 billion by the year 2008.

IT industry has a great future. To enable poor students to acquire computer education, the government should make adequate provision in the form of subsidies or charge differential fees. The government has a major role to play in expanding computer education to rural and remote areas in the country.

IT Industry in the Tenth Plan

Reviewing the progress of IT industry during the Ninth Plan, the Tenth Plan states: The IT industry achieved a compound annual growth rate (CAGR) of 25 per cent in production and 46.5 per cent in exports. While software sector registered an impressive CAGR of 50 per cent, the growth in the hardware sector lagged at 10 per cent. In 2001-02, the last year of the Ninth Plan, IT exports accounted for ₹ 42,371 crores, out of which software exports of ₹ 36,500 crores account for 86 per cent of total IT exports and hardware exports of ₹ 5,871 crores account for only 14 per cent.

Table 10 : Production of IT Industry

(₹ crores)

Year	*Hardware*	*Software for Exports*	*Domestic software*	*Total*
1997-98	22,100	6,500	3,470	32,070
1998-99	25,250	10,940	4,950	41,140
1999-00	28,100	17,150	7,200	52,450
2000-01	30,700	28,350	9,400	68,450
2001-02	32,750	36,500	10,874	80,124
2002-03	37,500	46,100	13,400	97,000
2003-04	43,800	58,240	16,250	1,18,290
2004-05	50,500	78,230	19,630	1,48,360
2005-06	56,600	1,03,200	26,460	1,86,260
2006-07	66,000	1,41,000	37,000	2,44,000
2007-08	84,410	1,64,400	47,010	2,95,820
2008-09	97,260	2,16,190	59,000	3,72,450
2009-10	110720	237000	67800	415520
2010-11	121760	269630	78700	470090

Source: Planning Commission, *Tenth Five Year Plan*, Vol. II and *Economic Survey (2006-07)*, Ministry of Information Technology, Annual report 2010-11.

Objectives of the Tenth Plan

To promote the IT sector, the Tenth Plan lays down the following objectives:

(1) Ensuring the sustained growth of software and IT-enabled services and increase India's share in the global IT market as well as expanding the domestic market;

(2) Putting in place a policy framework to make India a major force in hardware manufacturing sector;

(3) Greater use of IT in governance;

(4) Bridging the digital divide;

(5) Promoting the development of software in Indian languages; and

(6) Improving the quality of manpower, skills and research and development in the sector.

So far as the role of the state is concerned, it will confine itself to being a facilitator and a catalyst for accelerated growth of the sector.

Targets for the Tenth Plan

1. To achieve a production of ₹ 282,000 crores by 2006-07, with the software accounting for ₹ 2,13,000 crores (75%) and hardware production ₹ 69,000 crores (25%).

2. Against the current level of $ 8 billion, software and IT services exports are expected to grow to $ 87 billion by 2008. While the software export target is set at $ 50 billion, the target for export of hardware has been kept at $ 10 billion by 2008.

3. Keeping the above growth potential in mind, IT exports are likely to constitute 35 per cent of India's total exports in 2008 against the present level of 14 per cent. The software and IT services industry is likely to contribute 7.7 per cent of GDP in 2008 as against the present level of 1.7 per cent.

4. India's share in the overall global software market is expected to increase from the present 2 per cent to 6 per cent by 2007.

5. The Internet subscribers base is expected to cross 35 million by 2007 from the present level of 4 million.

6. The IT industry is expected to generate 7 million jobs by 2008—4.8 million jobs in the hardware sector and 2.2 million jobs in the software and IT enabled services sector.

7. PC penetration is expected to become 20 per thousand by 2008 as against 7.2 in 2002.

A review of the progress of the IT industry during the Tenth Plan reveals that the hardware production increased from ₹ 32,750 crores in 2001-02 to ₹ 66,000 crores in 2006-07, indicating an annual average growth rate of 15 percent. However, there was a sharp increase in the production of software for exports from ₹ 36,500 crores in 2001-02 to ₹ 1,41,000 crores in 2006-07, giving a CAGR of 31 percent during the five year period. Domestic software production has also moved up to ₹ 37,000 crores in 2006-07 as against ₹ 10,874 crores in 2001-02, indicating a growth rate of 27.7 pecent during the 5 year period. This growth story is continuing unabated and in 2010-11, total IT production jumped to 7,70,090 crore in 2010-11. Table 10).

Strategy for the Tenth Plan

Hardware development—The major reasons for the stagnant growth of the IT hardware production are distorted tariff structure, poor infrastructure, high cost of finance and stiff competition from MNCs. This sector is likely to face stiffer competition after 2005 when the zero duty regime will be implemented as per WTO agreement. This would require a comprehensive package of measures, both short-term and long-term to ensure accelerated development of IT sector. This necessitates the development of world class products to be made available at competitive prices. Existing Indian companies have a major role to play in this regard. This will also require the promotion of HRD and skill development in key technologies.

Hardware prices in India are quite high. It would take about 12 days worth of per capita income in the USA to buy a personal computer (PC), while it would take 4 months in China and about 2 years worth of per capita income to buy a similar PC in India. There is a need to lower duties like customs duty, Central sales tax and local sales tax which at present contribute to 30-40 per cent of assembled hardware prices. This alone can spread IT more widely.

Software development—In the total global IT market of $ 1,200 billion, India's share is only 2 per cent. Tenth Plan draws attention to the fact that the Indian software industry is under threat from emerging competitors like China, the Philippines, countries of the Commonwealth of Independent States (CIS), South Korea, etc. Strategies would, therefore, have to be re-oriented for sustained growth. The domestic market needs to be developed. The experience of countries like China which have a very strong and vibrant domestic market, needs to be studied. Tenth Plan Working Group on IT has recommended the creation of an Electronic Component Development Fund with ₹ 100 crores. Loans should be provided to credible entrepreneurs at subsidized rate of interest.

Moreover, advanced IT skills in the Indian software industry are limited to a few leading companies which contribute about 65 per cent to the total software exports. The Small and Medium Enterprises (SMEs), which are larger in number, contribute about 35 per cent to software exports. The planners conclude that "unless the SMEs are promoted through suitable policies, including fiscal incentives, it may be difficult to achieve the Tenth Plan target of $ 50 billion software export."

E-governance denotes the application of IT to government processes in order to bring about Simple, Moral, Accountable, Responsive and Transparent (SMART) governance. In a major policy initiative, it has been decided that in order to undertake computerization of government departments, 3 per cent of the budgets of the government should be spent on IT development. Several State governments like Andhra Pradesh, Karnataka, Madhya Pradesh, Kerala, Maharashtra and Rajasthan have initiated measures in this regard. Many others like Delhi, Gujarat and Tamil Nadu are also moving ahead. This needs to be strengthened.

There is a need to undertake large investments in building brand equity and thus making Indian brands popular abroad.

Promotion of software in Indian languages is also required to increase IT penetration in domestic markets.

Syllabi of computer engineering, electronics and IT in various technical institutions need updating in keeping with the industry's requirements.

The focus of the Tenth Plan in taking maximum advantage of the export sector and making India internationally competitive is in the right direction. There is also a strong emphasis to enlarge the Indian domestic IT market. These are welcome initiatives. The salvation of the country lies in developing domestic IT market since this is a more dependable alternative.

Progress of the IT Sector in the Tenth Plan

The Tenth Plan has shown remarkable progress in the IT sector. This is the consequence of the joint efforts of the public and private sectors. The private sector was expected to play a greater role in the provision of connectivity through mobile and wireless services. Except for rural telephony including Village Public Telephones (VPTs), the progress with all other targets has been very satisfactory. As on 31st December 2004, the country achieved a teledensity of 8.59 and it is hoped that the target of 9.91 will be exceeded during the remaining years of the 10th Plan. Besides this, the need for providing telecom coverage to 6.07 lakh villages in the country, 5.24 lakh villages (86.3 percent of total) have been covered upto 31st December 2004. This is very encouraging. Moreover, after the announcement of Broad Band Policy (2004) by the Government, MTNL and BSNL have launched broadband services on 14 January 2005 which will provide high speed data and multimedia capability using latest technologies. Similar initiatives are also expected from the private sector telecom operators.

Despite all these achievements, the teledensity in India in December 2007 was much lower than the average for the world. Table 10 provides information in this regard. Data reveals that there appears to be a strong correlation between per capita GDP and teledensity. Countries with higher per capita GDP have a higher teledensity and countries with lower GDP have a lower teledensity. Teledensity in India in December 2009 was only 33, but it was much lower than the levels reached in some developing countries like, Brazil (99), China (74), not to speak of comparing it with high teledensity countries like UK, and USA. India has a long way to go before it will even attain the level reached in China. By June 2010, teledensity increased to 56.8, which is a healthy development.

TABLE 11. International Comparisons of telecom indicators (2009)

Country	*Population (Million)*	*GDP Per Capita (US $)*	*Teledensity (per 100 inhabitants)*	*Internet Users (Million)*
USA	307	46496	140	230.69
UK	62	35184	180	46.68
Japan	128	39726	124	95.98
Brazil	193	8114	99	72.00
Indonesia	229	2349	75	18.00
China	1331	3749	74	298.00
India	**1155**	**1134**	**33**	**51.75**
World	6750	8594	80	1586.27

SOURCE : International Telecommunication Union (ITU). World Development Indicators, 2011,

From the data given in Table 12, the following facts emerge:

1. Total Telecom Network has increased from 45 million phones in 2002 to 671.7 million in 2010 – Indicating 15 times jump in just eight years.

2. Public sector phones indicated a relatively less growth than that of the private sector. Consequently, share of the public sector which was about 85% in total telecom sector in 2002 declined to 34.5% in 2007. As against it, the share of the private sector indicated a sharp increase from 15.1% in 2002 to 65.5% in 2007.This indicates that the private sector is the leading sector in Telecom Network.

3. Fixed line phones accounted for 85.1% in 2002 and this share fell to a level of just 3.5% in 2010.As against this, the share of mobile phones improved from 14.9% in 2002 to 94.6% in 2010. This indicates sharps decline in the preference of telephone users for fixed line phone and sharp increase in preferences for mobile phones due to facility of portability.

TABLE 12 : Growth of Telecom Network (Million)

Year ending 31st March	*Public*	*Private*	*Fixed*	*Mobile*	*Total*	*Percentage*	
						Fixed	*Mobile*
2002	38.17	6.80	38.29	6.68	44.97	85.1	14.9
2003	43.18	11.45	41.33	13.30	54.63	75.7	24.3
2004	46.48	30.05	40.92	35.61	76.53	53.5	46.5
2005	52.08	46.29	41.42	56.95	98.37	42.1	57.9
2006	61.07	81.00	40.22	101.85	142.07	28.3	71.7
2007	71.39	135.44	40.78	166.05	206.83	19.7	80.3
2008	–	–	38.35	315.31	353.66	10.8	89.6
2010 (Dec)			35.09	752.19	787.28	4.6	95.4
2011 (Dec)	–	–	32.68	893.86	926.55	3.5	69.5

Source: *Compiled and computed from Planning Commission,* Eleventh Five Year Plan *(2007-08), Vol III, p. 433* and Ministry of Telecom, Government of India.

Table 13: Teledensity between Rural and Urban areas

Year ending 31st March	*Teledensity (%)*			*In million*	
	Rural	*Urban*	*Total*	*Rural phones*	*Urban phones*
2002	1.21	12.20	4.29	9.04	35.96
2003	1.49	14.32	5.11	11.41	43.22
2004	1.57	20.74	7.02	12.27	64.26
2005	1.73	26.88	8.95	13.57	84.80
2006	1.86	39.45	12.74	14.77	127.30
2007	2.83	55.94	18.31	22.66	184.17
2009 (Dec)	12.74	72.47	30.64	101.71	251.95
2010(Dec)	31.2	147.9	66.2	259.8	527.5
2011 (Dec)	37.5	167.5	76.8	315.4	611.2

Source : Compiled and computed from Planning Commission, *Eleventh Five Year Plan (2007-8)*, Telecom Regulatory Authority of India (TRAI). Indian Telecom Services Performance Indicators (Oct-Dec 2009) April 2010.

Following facts emerge from the data provided in Table 13

1. Total number of phones in rural areas increased from 9 million in 2002 to 315.4 million in 2011 (Dec); as against this, urban telephones increased from 36 million in 2002 to 611.1 million in 2011 (December). This shows a much sharper increase in urban telephones. The share of urban telephone decreased from 80% in 2002 to 66% in Dec. 2011. As against them, the share of rural phones increased from 20% to 34%.But we find a much faster growth in rural teledensity between March, 2007 and Dec, 2010 from 2.83 to 37.5,which is a direct result of increase in rural phones from 22.66 million to 315.4 million.

2. Teledensity for India as a whole improved from 4.3% in 2002 to 76.8 in Dec. 2011. But further break-up in teledensity between urban areas and rural areas showed very sharp and wide differences.

In urban areas, Teledensity improved from 12.2% in 2002 to 167.5 in Dec. 2011. As against this, rural telephone density increased from 1.21% in 2002 to merely 37.5% in 2011.

Several reasons are responsible for very slow increase in rural teledensity. First, only the public sector BSNL and MTNL have promoted rural telephones. The private sector concentrated on urban areas alone. Secondly, inadequate development of rural infrastructure was responsible for relatively much lower reach. Finally, the affordability of telephones was much less in rural areas due to relatively lower per capita income as compared to urban areas with higher per capita income.

There is a need to strengthen rural teledensity further. To increase it, it may be desirable to charge lower rates from telephone users to help them in making this facility affordable.

Another significant development in case of internet and broadband connections. In Dec. 2011, total number of internet subscribers had reached 22.39 million, whereas broad band subscribers' number was 13.35 million (Dec. 2011).

Broad Objectives and Targets during the 11th Plan

The approach during The Eleventh Plan (2007-12) will be to achieve faster, broader and more inclusive growth as also to enhance rural connectivity. For this purpose, the following targets have been laid down.

- To reach a telecom subscriber base of 600 million.
- To reach a target of 20 million broadband connections and 40 million Internet connections by 2010 as envisaged in Broadband Policy 2004.
- To provide telephone connection as well as broadband connection on demand across the country by 2012.
- To facilitate introduction of mobile TV.
- To provide broadband connectivity to every Secondary School, Health Centre, Grampanchayat on demand in two years.
- To make India a hub for telecom equipment manufacturing by establishment of telecom specific Special Economic Zones (SEZs)

6. OUTSOURCING, NATIONALISM AND GLOBALIZATION

Outsourcing implies obtaining goods or services by contract from an outside source. Firms resort to outsourcing within the country as well. Producers of cars do not produce all the parts within the firm, but may outsource some parts from the producers who have specialized in them. This helps firms to cut costs.

In the information technology (IT) sector, outsourcing has acquired an international dimension. US firms find it more profitable to contract IT software and services in developing countries like India and China. The costs for these services in developing countries are much less than in the developed world. A recent study by McKinsey has estimated that every dollar spent on off-shoring (outsourcing) implies a cost reduction of 58 cents to US business. Thus, US firms and those in the European Union regularly carry out contracts with IT firms in India. As per information compiled in the *Reserve Bank of India Bulletin* (August, 2008), during 2007-08, net earnings from software services for India were of the order of US $ 42.5 billion. Since merchandise exports accounted for $ 158.5 billion, software services represented 27 per cent of total exports. This was a big achievement by the Indian IT industry as it proved its competitive strength in the world.

There was an outcry raised in USA that outsourcing resulted in export of US jobs to other countries. One US agency predicted that at least one out of ten technology jobs in the US will move out by the year 2006. Another agency estimated that at least 3.3 million white collar jobs accounting for $ 136 billion in the form of wages will move out of USA to low cost developing countries by 2015. Obviously, the debate over outsourcing got directly linked with loss of jobs in USA in favour of developing countries.

During 2003, several states such as, Maryland, Florida, Indiana, Michigan, New Jersey, New York and New Carolina introduced anti-outsourcing bills, but none of bills could be passed. It was, therefore, felt in the developing world that outsourcing would continue since business firms were opposed to passing any anti-outsourcing bill, because it impinged on their freedom to reduce costs.

But on January 23, 2004, the US Senate approved a legislation that prevented private companies doing subcontracting work for the government departments of treasury and transportation from outsourcing to companies outside America. The law was signed by the US President.

Responding to the impact of the law on Indian software exports, NASSCOM observed that since the law covered only two departments; and the share of the Federal Government contracts in IT software and services is less than 2 per cent, its impact on the IT business would be negligible.

Another point of worry is that the law passed by the Federal Government can act as a pace-setter and thus, prompt various state governments also to pass similar anti-outsourcing legislation. This may set a chain reaction and state after state may be prompted to do so.

The basic question which has been raised in India and in several other developing countries is: whereas the

advocates of globalization emphasize removal of all barriers to trade in goods and services, but whenever their interests appear to be affected by global competition, they protect their interests either through heavy subsidies (as is being done by USA for its farmers) or they create other kinds of barriers such as labour standards, patent rights, etc. In other words, nationalism takes over from globalism. Such being the case, the anti-outsourcing law goes against the spirit of WTO and goals of globalization. Mr. Arun Shourie former, IT Minister, therefore, said: "Anti-outsourcing law was a move against the spirit of global trade... This was not the way for Washington to advance the cause of multi-lateral trade negotiations."

Mr. Kiran Karnik, President, National Association of Software and Service Companies (NASSCOM) said: "The passage of such Bills would shut-off a huge opportunity for Indian companies to get projects from the US Government, which spends billions of dollars on technology every year."

Electronics and Computer Software Export Promotion Council being more forthright in its comment stated: "The new legislation would send wrong signals to the globalization efforts, particularly of countries like India, which have undertaken a number of liberalization measures in a short span of time garnering political will to push ahead the reform process."

Thus, it is obvious that the Republican Senator, Mr. George Voinovich, the major advocate of anti-outsourcing law has very smartly introduced a clause to ban contracts on the basis of Federal Government spending. National interests forced the US government to accord its approval. This move has dangerous consequences for India because as the movement of anti-outsourcing snowballs in USA, it is likely to produce a substantial impact in India. Saving of jobs for US professionals will mean loss of jobs in the IT software and service sector in India. These are gloomy forebodings, but they signal towards the future scenario.

The saving feature at the present moment is that the contagion against outsourcing has not spread to the European Union, the second biggest customer of IT services. Mr. Tony Blair, British Prime Minister indicated that there is no proposal to ban outsourcing. But one cannot predict what is likely to happen in the future. May be, at some stage, democracy may compel the Governments in European Union to follow the path shown by USA. National interests may dictate popular governments to take shelter behind democratic pressure and act in a manner which sacrifices the WTO rules regarding globalization. History provides us ample examples when nations abandoned free trade and embraced protectionist policies to further national interests and stay in power. But as indicated by Indian IT Minister, these policies are bound to hurt the movement for liberalization and globalization. Instead of integrating the world, such blatant anti-outsourcing measures are likely to generate pressures in India and other developing countries to create roadblocks at WTO negotiations and demand the application of a uniform policy for all members — whether from the developed or underdeveloped world. It may lead to prolonging the deadlock in trade negotiations.

Former Commerce Minister Arun Jaitley in response to Mr. Robert Zoellick, United States Trade Representatives plea to reduce Indian tariffs further brought out in a very forthright manner the contradiction in US stand, when he said on February 16, 2004: "It is strange that on the one hand people are talking about opening of markets, and on the other hand, banning Business Process Outsourcing (BPO). Our agriculture is fragile as it is not subsidized like in the US". Mr. Zoellick, however, tried to explain that anti-outsourcing law had its quota of "sensitive politics" especially in an election year. To this, the Indian response was that opening agriculture was a "sensitive" issue for India, since 60 per cent of its population is dependent on agriculture. Indian economists strongly believe that opening up of Indian economy for farm exports may be beneficial to the US interests, but it is bound to have deep adverse structural impact on the farm sector in India. Such a course would be suicidal for India.

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CHAPTER

40

SMALL-SCALE ENTERPRISES

"In view of the meagreness of capital resources there is no possibility, in the short run for creating much employment through the factory industries. Now consider the household or cottage industries. They require very little capital. About six or seven hundred rupees would get an artisan family started. With any given investment, employment possibilities would be ten or fifteen or even twenty times greater in comparison with corresponding factory industries."

—P.C. Mahalanobis

1. DEFINITION OF SMALL-SCALE AND COTTAGE ENTERPRISES

A significant feature of the Indian economy since Independence is the rapid growth of the small industry sector. In the Industrial Policy Resolutions of 1948 and 1956, the small sector was given special role for creating additional employment with low capital investment. A new thrust was given in favour of small units by the Industrial Policy Statement of 1977. In 1950, the government grouped small-scale industrial undertakings into two categories—those using power but employing less than 50 persons and those not using power but employing less than 100 persons. All small-scale enterprises, however, had capital investment of less than ₹ 5 lakhs.

In 1966, the small-scale enterprises were defined as undertakings with a fixed capital investment of less than ₹ 7.5 lakhs and ancillaries with a fixed capital investment of ₹ 10 lakhs. Investment will imply investment in fixed assets in plant and machinery, whether held in ownership term or by lease or by hire purchase. In 1975 this limit was revised to ₹ 10 lakhs for small-scale enterprises and ₹ 20 lakhs in case of ancillaries. Subsequently, under the Industrial Policy Statement of 1980, this limit was further raised to ₹ 20 lakhs in case of small-scale units and ₹ 25 lakhs in case of ancillary units. Simultaneously, in the case of tiny units, the limit of investment has been raised from ₹ 1 lakh to ₹ 2 lakhs. In March 1985, the Government has again revised the investment limit of small-scale industries to ₹ 35 lakhs and for ancillary units to ₹ 45 lakhs.

As per the Industrial Policy Statement of May 1990, the investment ceiling in plant and machinery for small scale industries has been raised from ₹ 35 lakhs to ₹ 60 lakhs and correspondingly for ancillary units from ₹ 45 lakhs to ₹ 75 lakhs. Investment ceiling with respect to tiny units has been increased from ₹ 2 lakhs to ₹ 5 lakhs.

During 1997, on the recommendation of Abid Hussain Committee, the Government has raised the investment

limit on plant and machinery for small units and ancillaries from ₹ 60/75 lakhs to ₹ 3 crores and that for tiny units from ₹ 5 lakhs to ₹ 25 lakhs.

The Government in 2000 has reduced the investment limit on plant and machinery from ₹ 3 crores to ₹ 1 crore, but the limit for investment in tiny units has been retained as ₹ 25 lakhs.

Until now, the Government had defined small scale industries and within the small scale, it provided a definition of tiny enterprises. However, from the small scale, there was direct shift to large scale units and no definition was provided for medium scale enterprises. With effect from October 2, 2006, not only the three categories have been clearly defined (Micro or tiny enterprises would cover all enterprises with investment in plant and machinery of less than ₹ 25 lakhs ; for small enterprises with investment between ₹ 25 lakhs and ₹ 5 crores and for medium enterprises with investment between ₹ 5 crores and ₹ 10 crores), but a comprehensive act, called the Micro, Small and Medium Enterprises Development Act, 2006 came into force. The Act is aimed at facilitating the growth of small enterprises so that they graduate to medium enterprises, thus improving their comopetitive strength.

Classification

A common classification is between traditional small industries and modern small industries. Traditional small industries include khadi and handloom, village industries, handicrafts, sericulture, coir, etc. Modern small-scale industries produce wide range of goods from comparatively simple items to sophisticated products such as television sets, electronics control system, various engineering products, particularly as ancillaries to the large industries. The traditional small industries are highly labour-intensive, while the modern small-scale units make use of highly sophisticated machinery and equipment. For instance, during 1979-80 traditional small industries accounted for only 13 per cent of the total output but their share in total employment was 56 per cent. In that year, total output of traditional small industries came to be ₹ 4,420 crores and this output was produced with the employment of 133 lakh workers, the average output of labour in traditional small industries was roughly ₹ 3,323.

As against this, the share of modern small industries in the total output of this sector was 74 per cent in 1979-80 but their share in employment was only 33 per cent. Obviously, these industrial units would be having higher labour productivity. For instance, in 1979-80 a total output of ₹ 24,885 crores was produced by 78 lakh workers in modern small-scale industries—the average product of labour being ₹ 31,900.

One special characteristic of traditional village industries is that they cannot provide full time employment to workers, but instead can provide only subsidiary or part-term employment to agricultural labourers and artisans. Among traditional village industries, handicrafts possess the highest labour productivity; besides, handicrafts make a significant contribution to earning foreign exchange for the country. Under these circumstances, active encouragement of handicrafts is a must. On the other hand, traditional village and small industries are largely carried on by labourers and artisans living below the poverty line, while modern small industries can provide a good source of livelihood. Hence, if with an expansion of employment, the number of persons living below the poverty line has also to be reduced, then a rapid and much larger expansion of the modern small sector will have to be planned.

2. ROLE OF SMALL-SCALE INDUSTRIES IN INDIAN ECONOMY

The small-scale industrial sector which plays a pivotal role in the Indian economy in terms of employment and growth has recorded a high rate of growth since Independence in spite of stiff competition from the large sector and not so-encouraging support from the Government. This is evidenced by the number of registered units which went up from 16,000 in 1950 to 36,000 units in 1961 and to 33.7 lakh units in 2000-2001. During the last decade alone, the small-scale sector has progressed from the production of simple consumer goods to the manufacture of many sophisticated and precision products like electronics control systems, micro-wave components, electro-medical equipment, T.V. sets, etc.

The Government has been following a policy of reservation of items for exclusive development in the small-scale sector. At the time of the 1972 Census of Small-Scale Industrial Units, there were 177 items in the reserved list. By 1983, the reserved list included 837 items for exclusive production in the small-scale sector. These units produce over 8,000 commodities.

Census 2001-02 reported that 97.2% of the registered SSI units were proprietary, only 1.3 per cent were partnerships and 0.5 per cent were private companies and just 0.1% were co-operative. In other words, the dominant type in the ownership pattern is proprietary with a small fraction operating as partnerships.

TABLE 1: Production , Employment and Exports in Small Scale Sector

Year	*No. of Units (in lakhs)* Registered	Unregistered	Total	*Production (₹ Crores)* At Current Prices	At 1993-94 Prices	*Employment (Lakhs)*	*Export (₹ crores)* At Current prices
1994-95*	19.44	6.27	25.71	2,98,886	2,66,054	146.56	29,068
1994-95	11.61	67.99	79.60	1,22,154	1,08,774	191.40	29,068
1995-96	11.57	71.27	82.84	1,47,712	1,21,175	197.93	36,470
1996-97	11.99	74.22	86.21	1,67,805	1,34,392	205.86	39,248
1997-98	12.04	77.67	89.71	1,87,217	1,46,263	213.16	44,442
1998.99	12.00	81.36	93.36	2,10,454	1,57,525	220..5	48,979
1999-00	12.32	84,83	97.15	2,33,760	1,70,379	229.10	54,200
2000-01	13.10	88.00	101.10	1,61,297	1,34,401	238.73	69,797
2001-02	13.75	91.46	105.21	2,82,270	1,95,613	249.33	71,244
2002-03	14.68	95.42	110.10	3,14,850	30,677	260.21	86,013
2003-04	15.54	98.41	113.95	3,64,547	3,36,344	271.42	97,644
2004-05	16.57	102.02	118.59	4,29,796	3,72,938	282.57	1,24,417
2005-06	18.70	104.70	123.40	4,97,886	4,18,884	294.91	1,50,242
2006-07	—	—	128.44	5,85,112	4,71,663	312.52	1,77,600
2007-08	—	—	133.68	6,95,126	5,32,979	322.28	N.A
Table 1A Production, Employment and Exports in MSME Sector							
2006-07	—	—	261.01	7,09,398	N.A	594.61	1,82,536
2007-08	—	—	272.79	7,90,759	N.A	626.34	2,02,017
2008-09	—	—	285.16	8,80,305	N.A	659.35	N.A
2009-10	—	—	298.08	9,82,919	N.A	695.38	N.A
2010-11	—	—	311.52	10,95,758	N.A.	732.17	N.A.

*These figures relate to data given by Ministry of Small Scale Industries earlier.

SOURCE: Ministry of Small Industries as given in *Economic Survey (2007–08) and Ministry of Micro, Small & Medium Enterprises, Annual Report 2010-11.*

[Please note that figures given in the table above production at constant prices pertain to 1999-2000 prices from 2003-04 onwards.]

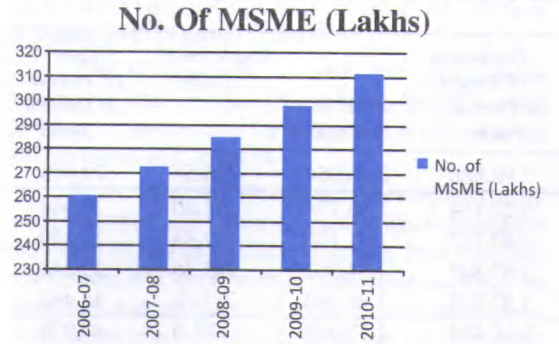
Output and Employment of the Small Industries

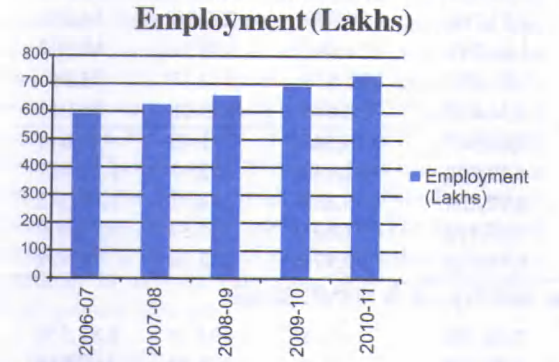
According to the Third Census in 2001-02, there was 13.75 lakh units in the registered sector and 91.46 lakh units in the unregistered sector. Ironically, the census estimated much lower figures of production by SSI sector. Keeping this in view the Ministry of Small Scale Industries revised the data pertaining to SSI sector. (Data for comparison is given in Table 1).

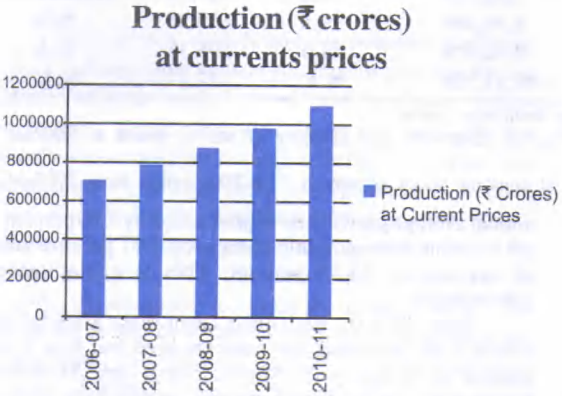
The data reveals that the total number of SSI units has increased from 79.6 lakhs in 1994-95 to 133.68 lakhs in 2007-08, indicating an annual average growth rate of 4.1 per cent, but their production (at 1993-94 prices) increased from ₹ 1,09,116 crores in 1994-95 to ₹ 532979 crores in 2007-08 i.e. an annual average growth of 13.0 percent. As a consequence of the increase in SSI units, more especially in the unregistered sector, employment increased from 191.4 lakhs in 1994-95 to 322.3 lakhs in 2007-08, recording an average growth rate of 4.07 per cent per annum. So far as exports by SSI sector are concerned, they increased from ₹ 29.068 crores in 1994-95 to ₹ 1,77,600 crores in 2006-07, recording a growth rate of 16.26 per cent per annum. The Ministry has not changed the data pertaining to exports. On the whold, it can be stated that during 1994-95 to 2007-08, the SSI sector recorded an annual average growth rate of production by 13.0 percent, (at constant prices) of employment by 4.07 per cent and of exports by 16.26 percent. This is a creditable achievement.

Since 2006-07, the nomenclature of the Ministry of Small Scale Industries has been changed and now it is named as Ministry of Micro, Small and Medium Enterprises. As the name suggests now service sector enterprises working at small scale have also been included in the MSME sector. Latest data published by the Ministry in its Annual Report 2009-10 now gives composite number of enterprises (both manufacturing and service). Likewise production figures also pertain to MSME and not just Small Scale Industries. Therefore figures as shown in the second part of the Table since 2006-07 are not comparable with earlier data. Fourth census of MSME sector estimated that 67 percent of the MSMEs are manufacturing enterprises and 33 per cent are service enterprises. Using this approximation, readers can compare the data pertaining to 2006-07 and later years with the earlier period.

Obviously, the growth rate of the small-scale sector has been faster both in terms of output and employment. In other words, the output employment ratio for the small scale sector is 1: 1.4. The rapid growth of the small-scale industries has a great relevance in our







national economic policies. The growth of the small sector improves the production of the non-durable consumer goods of mass consumption. As such, it acts as an anti-inflationary force. If a big push is given to the small sector, it can become a stabilising factor in a capital-scarce economy like India by providing a higher output capital ratio as well as a higher employment-capital ratio.

In this connection, we may refer to the relatively low capacity utilisation of the small-scale industries. The capacity utilisation in the small sector as a whole was of the order of 53 per cent. There were, however, many units having high capacity utilisation e.g., industries utilising 60 to 80 per cent of the capacity included leather goods, readymade garments, tiles, woollen knitware, etc. Industries like plastic products had very low capacity utilisation (29 per cent).

Exports. Substantial increase in exports were observed in the case of readymade garments, canned and processed fish, leather sandals and chappals, food products, hosiery and marine products, etc. The value of exports increased to ₹ 1,643 crores in 1980-81 and to a record high figure of ₹ 1,50,242 crores in 2005-2006. A very significant feature of exports from the small-scale sector is their share in non-traditional exports. The share of exports from the small-scale sector represents about 32.3 per cent of total exports in 2005-2006.

The obvious conclusion is that the growth of SSIs in terms of number and output is comparatively much higher in reserved items than in unreserved items. The policy of reservation has, therefore, positively helped the growth of this sector.

Despite such positive evidence in favour of reserved items, the Union Budget (1997-98) dereserved 14 items hitherto manufactured by SSI sector. These items included ice-cream, biscuits, synthetic syrups, a variety of automobile parts, corrugated paper and boards, vinegar, poultry feed, rice milling, dal milling etc.

After the announcement of Industrial Policy of 1991, the Government has been dereserving more and more items of the SSI sector. As against 806 reserved items in 1977, the number of reserved items in 2007 is only 239.

3. THIRD CENSUS OF SMALL SCALE INDUSTRIES (2001-02)

Since the data of the Second All-India Survey pertaining to 1987-88 had outlived its utility, it was strongly felt that there was a need for undertaking a third survey of Small Scale Industries (SSI) so that policy formulation for the SSI sector is based on more authentic and recent information. The SSI ministry undertook this survey pertaining to 2001-02.

Data reveal that there were 105.2 lakh SSI units in 2001-02, out of which registered SSI units were 13.75 lakhs or 13 per cent of total, and the unregistered units were 91.5 lakhs or 87 per cent of total. The employment in the SSI sector was of the order of 249 lakhs, out of which registered sector contributed 61.6 lakhs or nearly 25 per cent and the unregistered sector contributed 187.7 lakhs or 75 per cent of total. Per unit employment was 4.5 persons in the registered sector and 2 persons per unit in the unregistered sector. This underlines the fact that

unregistered sector provided employment to three times the number of persons employed by the registered SSI sector (Refer table 2).

Although fixed investment per unit was ₹ 1.5 lakhs for the entire SSI sector, it was of the order of ₹ 6.7 lakhs in the registered sector and barely 0.7 lakh in the unregistered sector. Relatively speaking, fixed investment per unit in the registered sector was nine times that in the unregistered sector. Investment per unit of labour employed (capital-labour ratio) was ₹ 1.49 lakhs for the registered sector as against only 0.33 lakhs for the unregistered sector. This also confirms the relatively lower capital intensity per unit of labour in the unregistered sector. Similarly, labour productivity (i.e. output-employment ratio) of the registered sector was ₹ 3.29 lakhs as against merely 0.42 lakh in the unregistered sector—nearly eight times.

Annual production per unit in the registered sector was ₹ 14.78 lakhs as against that of the unregistered sector only ₹ 0.86 lakhs—17 times.

The reasons for non-registration were elicited in the Third Census. Interestingly, 52.3% of the units informed that they were not aware of provisions for registration, while 40.6% of the units indicated that they were not interested.

Table 2: Final Results of SSI Third Census (Selected Magnitudes of SSI Sector—2001-02)

	Registered SSI	*Unregistered SSI*	*Total*
No. of Units (lakhs)	13.75 (13.1)	91.46 (86.9)	105.21 (100.0)
Fixed Investment (₹ crore)	91,792 (59.5)	62,557 (40.5)	154,349 (100.0)
Production in SSI Sector (₹ crore)	203,255 (72.0)	79,015 (28.0)	282,270 (100.0)
Employment (lakhs)	61.6 (24.7)	187.6 (75.3)	249.3 (100.0)
No. of sick units/Incipient sick units (lakhs)*	1.92 (23.4)	6.30 (76.6)	8.22 (100.0)
No. of sick units as per RBI criteria (Nos.)**	38,400 (45.0)	46,888 (55.0)	85,288 (100.0)
Fixed Investment per unit (lakhs)	6.7	0.7	1.5
Output Investment Ratio	2.2	1.3	1.8
Investment per unit of labour employed (lakhs)	1.49	0.33	0.62
Output employment ratio (₹ lakhs)	3.29	0.42	1.13
Per unit employment	4.5	2.0	2.4
Production per unit (₹ lakhs)	14.78	0.86	0.27

*Criteria adopted: Erosion of net worth or delay in repayment of institutional loan or continuous decline in gross output.

** Criteria adopted: Erosion of net worth or delay in repayment of loan among units having outstanding institutional loan.

Source: Ministry of SSI, Compiled and computed from *Final Results of Third Census of Small Scale Industries.*

Third Census has brought out the hard reality that there is very high concentration of SSI units in seven states, viz., Maharashtra, Uttar Pradesh, Punjab, Haryana, Tamil Nadu, Andhra Pradesh and West Bengal. These states accounted for 55 per cent of total employment, 68 per cent of total fixed investment and about 60 per cent of the total production. (Refer Table 3).

Table 3 provides some important parameters of SSI. It may be noted that fixed investment per unit is the highest in Haryana (₹ 6.76 lakhs), followed by Maharashtra (₹ 3.48 lakhs) and Punjab (₹ 3.15 lakhs). In West Bengal, Investment per unit is the lowest (₹ 0.72 lakhs). This broadly indicates the fixed investment levels of the units in various states.

Table 3: Some Parameters of SSI in 7 States at the Top in SSI Production (2001-02)

	No. of Units (lakhs)	*Employment (lakhs)*	*Fixed Investment (₹ crore)*	*Production (₹ crore)*
Maharahstra	8.03	20.51	27,981	41,019
Uttar Pradesh	17.08	40.02	17,288	27,423
Punjab	3.76	9.08	11,833	26,010
Haryana	2.23	5.53	15,091	19,971
Tamil Nadu	7.88	20.18	10,989	18,274
Andhra Pradesh	8.75	21.39	12,370	18,259
West Bengal	7.71	21.69	5,601	17,679
Sub-total	**55.44 (52.7)**	**138.40 (55.5)**	**101,153 (65.5)**	**168,635 (59.7)**
All India	**105.21 (100.0)**	**249.32 (100.0)**	**154,348 (100.0)**	**282,270 (100.0)**

Note: Arranged in the descending order on the basis of production in SSI sector.

It is really interesting to find that though fixed investment per unit was the lowest in West Bengal, employment per unit was the highest (2.81), followed by Tamil Nadu (2.56), Maharashtra (2.55) and all the other states in the range of 2.34 to 2.47. Obviously, states do not show large variations in terms of per unit employment. Some states are able to equip the small scale units with better fixed capital as compared with other states. The range is 1:9.4 between West Bengal on the one extreme (₹ 0.72 lakhs) to Haryana (₹ 6.76 lakhs) on the other.

Output-investment ratio is the highest for West Bengal (3.16) and lowest for Haryana (1.32). This appears to be in contrast with fixed investment per unit. This implies that Haryana with a higher fixed investment

per unit is not able to obtain a higher output per unit of investment. Capital productivity, i.e. output per unit of investment is highest for West Bengal (3.16), followed by Punjab (2.2), Tamil Nadu (1.66), Uttar Pradesh (1.59), Andhra Pradesh and Maharashtra (1.48 and 1.47).

Output-employment ratio indicates labour productivity. This was the highest for Haryana (3.61), followed by Punjab (2.86) and was the lowest in the case of Tamil Nadu (0.54).

Higher labour productivity was the result of higher capital intensity, i.e. investment *per unit of labour*. Capital intensity was ₹ 2.73 lakhs per unit of labour in Haryana, but as against it, it was merely ₹ 0.26 lakhs in West Bengal. Two other States with higher capital-intensity were Maharashtra (1.36) and Punjab (1.30). However, Uttar Pradesh, Tamil Nadu and Andhra Pradesh indicated very low capital intensity (Range ₹ 0.43 to ₹ 0.58 lakh). There is, therefore, a great need to improve capital intensity in SSI sector in various states.

Two criteria have been used to determine industrial sickness. On the basis of the first criterion (Erosion of net worth or delay in repayment of institutional loan or continuous decline in gross output), 8.22 lakh units were reckoned as sick units. But on the basis of second criterion laid down by the Reserve Bank of India (Erosion of net worth or delay in repayment of loans among units having outstanding institutional loan), only 0.85 lakh units were reckoned as sick units. It appears that the first set of criteria is more comprehensive since it includes continuous decline in gross output as the third criterion, besides the other two i.e. erosion of net worth and delay in repayment of loan. From the growth point of view, this is a better method of judging the performance of SSI units because institutional loans are intended to increase output. Even then, the percentage of sick units in the registered sector (1.92 lakhs out of 13.75 lakhs) is 14 per cent and that in the unregistered sector is (6.30 lakhs out of 91.46 lakhs) 6.9 per cent. The overall percentage of sick units is 7.8 (8.22 lakhs out of 105.2 lakhs).

4. QUICK ESTIMATES OF 4TH ALL INDIA CENSUS OF MSME

So far office of DC (MSME), had completed three censuses of micro and small enterprises. Although full report of 4th All India Census of MSME is not available, quick results have been brought out based on the data received from the States/ UTs for registered part and extracted data-file of EC-2005 for unregistered MSMEs.

(i) Size of the registered MSME sector

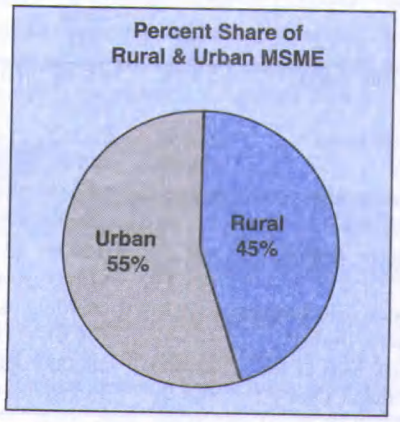
The size of the registered MSME sector was provisionally estimated to be 1552.5 thousand. Of the total working enterprises, the proportions of micro, small and medium enterprises were 95.05%, 4.74% and 0.21% respectively. This comprises of 66.67% manufacturing enterprises and 33.33% services enterprises. The 8.21% (76.7 thousand) of the manufacturing enterprises were ancillary enterprises. About 45.38 % (704.5 thousands) of the units were located in rural areas. 28.23% (431.4 thousands) enterprises were found to be maintaining accounts. Details in respect of micro, small and medium enterprises (As per the provisional estimates in 2009-10) are given in the Table 4.

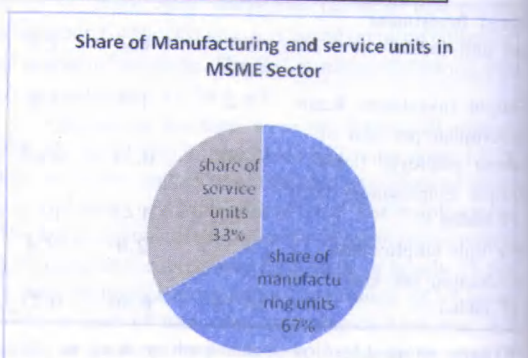
Table 4 : SIZE OF THE REGISTERED MSME SECTOR

(Thousands)

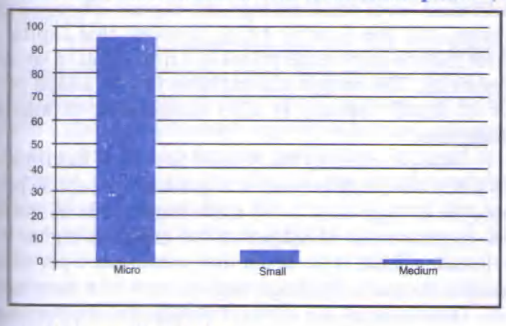
	Micro	*Small*	*Medium*	*Total*
Number of Manufacturing enterprises (thousand)	974.61	57.67	2.83	1035.10
Number of Service enterprises (thousand)	501.07	15.91	.40	517.39
Total Number of MSMEs (thousand)	1475.68	73.58	3.23	1552.49
% age distribution of total units	95.05	4.74	0.21	100.00
%age share of manufacturing units	94.16	5.57	0.27	66.67
%age share of service units	96.85	3.08	0.08	33.33

Source : Government of India Ministry of Micro, Small & Medium Enterprises, Annul Report 2009-10





Share of Micro Small & Medium Enterprises (%)



(ii) Nature of activity

67.10 % of the enterprises in the registered MSME sector were engaged in manufacturing/ assembling/processing, whereas 16.13% of the units were engaged in repair and maintenance as may be seen from the Table 4. The remaining 16.78 % of the enterprises were in the services activities.

Table 5 : NATURE OF ACTIVITY

(Thousands)

Sector	*% age*
Manufacturing / Assembling / Processing (67.10%)	1049
Repairing & Maintenance	252 (16.13%)
Services	262 (16.78%)
Total	**1564.5 (100%)**

Source : Government of India Ministry of Micro, Small & Medium Enterprises, Annul Report 2010-11

(iii) Types of organization

The Table 3.4 shows that 90.08 % of the enterprises in the registered MSME sector were proprietary enterprises. About 4.01 % of the enterprises were run by partnerships and 2.78 % of the enterprises were run by private companies. The rest were owned by public limited companies, cooperatives/trusts or other

Table 6 TYPE OF ORGANIZATION

(Thousand)

Distribution by type of Organization	
Proprietary	1409 (90.08%)
Partnership	63 (4.01%)
Pvt. Company	43 (2.78%)
Pub. Ltd. Company	8 (0.54%)
Cooperatives	5 (0.30%)
Others	36 (2.30%)

Source : Government of India Ministry of Micro, Small & Medium Enterprises, Annul Report 2010-11

(iv) Types of management/ownership

An enterprise (manufacturing or of a services) managed by one or more women entrepreneurs in proprietary concerns, or in which she/ they individually or jointly have a share capital of not less than 51 % as partners/ share holders/ Directors of Private Limited Company/ Members of Co-operative Society is called a 'Woman Enterprise'. It was found that 13.72 % (numbering 215 thousand) of the units in the registered MSME sector were women enterprises.

Table 7 : TYPES OF MANAGEMENT/ OWNERSHIP
No. of enterprises Managed by

Male	1349 (86.28%)
Female	215(13.72%)
Total	1564 (100%)
No. of Women enterprises	215.0 (13.72%)

Source : Government of India Ministry of Micro, Small & Medium Enterprises, Annul Report 2010-11

5. THE CASE FOR SMALL-SCALE ENTERPRISES

Small-scale enterprises have been the subject of controversy in the past and the controversy continues even to this day. Some are ardent supporters of small enterprises, while others vehemently oppose them. It would be worthwhile to examine the arguments favouring the growth of small enterprises. All these arguments have been briefly summarised in the Industrial Policy Resolution of 1956 which states:

"They provide immediate large-scale employment; they offer a method of ensuring a more equitable distribution of the national income and they facilitate an effective mobilisation of resources of capital and skill which might otherwise remain unutilised. Some of the problems that unplanned urbanisation tends to create will be avoided by the establishment of small centres of industrial production all over the country."[1] The Industrial Policy Resolution, therefore, puts forth four arguments in favour of small enterprises.

1. The Employment argument

Emphasizing the employment argument Karve Committee 1955 stated: "The principle of self-employment is at least as important to a successful democracy as that of self-government."[2] The argument is based on the assumption that small enterprises are labour-intensive and thus create more employment per unit of capital employed. It is also assumed that the low cost on overheads in such enterprises partly compensates for the otherwise high cost vis-a-vis large enterprises. Thus, it is argued that, let alone capital goods industries and the building up of social and economic infrastructure where capital-intensive projects are a necessity, in other spheres of production in a developing economy, small enterprises which help to enlarge the volume of employment with scarce capital should be encouraged.

This argument was opposed by Dhar and Lydall who hold that employment should not be created for the

1. Planning Commission, *Second Five-Year Plan*, p. 47.
2. *Report of the Village and Small-Scale Industries Committee*, 1955 (Karve Committee).

sake of employment. There should be an economic justification for it also. Dhar and Lydall argue, "Employment as such can be created by simply adding on extra workers at any point one likes in the productive (or non-productive) process. The important problem, in other words, is not how to absorb surplus resources, but how to make the best use of scarce resources."[3] Thus the employment argument is really an "output-argument." It implies that small enterprises maximise output from scarce capital and entrepreneurship. Employment creation follows as a necessary corollary. Dhar and Lydall on the basis of their enquiry found that whereas in large enterprises working two or three shifts is quite common, it is not so in the case of small enterprises. Thus, though apparently small enterprises appear to employ less capital per unit of output, but "in general, the most capital-intensive type of manufacturing establishments is the small factory using modern machinery and employing up to 50 workers."[4]

Mr. R. Venkataraman challenged the argument of Dhar and Lydall. Table 6 reveals that while the output-employment ratio (which can serve as a measure of productivity) is the lowest in the small-scale sector, employment-generating capacity of small sector is eight times that of the large-scale sector. But what is still more striking and significant is that the net output-capital ratios of the small and medium sectors worked out to 4 and 3.2 times that of the large-scale sector in 1965, despite the low productivity of labour in the small sector. In 1974-75, net capital-output ratio of large enterprises works out to be 3 times that of small enterprises. Professor P.C. Mahalanobis also supports Mr. Venkataraman when he states: "In view of the meagreness of capital resources there is no possibility in the short run, for creating much employment through the factory industries... Now consider the household or cottage industries. They require very little capital. With any given investment, employment possibilities would be ten or fifteen or even twenty times greater in comparison with corresponding factory industries."[5]

Table 8. Capital, Employment and Output in Manufacturing Enterprises

(₹)

	Capital size	*Fixed capital per employee*	*Value added per unit of employment*	*Value added per unit of fixed capital*
1965	Small	2,018	2,359	1.17
	Medium	4,044	3,815	0.94
	Large	17,753	5,217	0.29
1974-75	Small	3,706	4,790	1.29
	Medium	7,935	8,785	1.11
	Large	30,536	13,736	0.43
1978-79	Small	16,582	7,051	0.43
	Medium	27,610	12,512	0.45
	Large	68,166	15,903	0.23

Source: Computed from *Annual Survey of Industries*, 1965, 1974-75 and 1978-79.

3. Dhar and Lydall, *The Role of Small Enterprises in Indian Economic Development*, p. 11. 4. *Ibid.*, p. 19.
5. Quoted by Myrdal in *Asian Drama*, Vol. II. , p. 1219.

Although with an increasing trend of modernization of small enterprises, capital-labour ratio is rising, still the data for 1978-79 reveal that capital-labour ratio in large enterprises is 4 times that in small enterprises. The output-capital ratio (value added per unit of fixed capital) is also favourable to small enterprises.

Data provided by the Annual Survey of Industries (1994-95) also indicate that the productive capital per employee in large units is 5.6 times higher than in small units. But the value added per unit of capital is higher in small units. There is no doubt that value added per unit of employment is 2.5 times in large units than in the small units. The results of the 1994-95 survey also support the case of small units both from the employment and output considerations of a capital-scarce country trying to reconcile the output and employment objectives.

Table 9: Productive Capital, Employment and Value-added in Industries (1994-95)

Gross value of plant and machinery	*Productive capital per employee (K/L) (₹)*	*Value added per unit of employment (O/L)*	*Value added per unit of capital (O/K)*
Tiny units (up to ₹ 5 lakhs)	33,020	25,683	0.78
Small-scale units (up to ₹ 50 lakhs)	1,04,826	64,148	0.61
Large units (50 lakhs and above)	5,89,523	1,61,371	0.27

Source: Computed from *Annual Survey of Industries*, 1994-95.

2. The Equality Argument

The equality argument suggests that the income generated in a large number of small enterprises is dispersed more widely in the community than income generated in a few large enterprises. In other words, the income benefit of small enterprises is derived by a large population while large enterprises encourage more concentration of economic power. In this way, small enterprises bring about greater equality of income distribution. It is also held by some that as most of the small enterprises are either proprietary or partnership concerns, the relations between the workers and the employers are more harmonious in small enterprises than in large enterprises.

Dhar and Lydall consider this argument as fallacious. Statistical evidence suggests "there is a common tendency in all countries, for the average wage (or salary) to be lower in small factories than in large factories." Moreover, the virtual non-existence of trade unions in small factories enables the employers to exploit the worker to the maximum. Thus, it is true that workers in small factories are neither economically better off than in large enterprises, nor do they obtain more benefits under social security schemes. Small enterprises, therefore, by paying low wages, generate

less savings and less taxes and hence result in lower growth potential.

There is no doubt that the argument of Dhar and Lydall does have some force. But on the contrary, it is also true that in under-developed countries the workers have a choice between a low paid job in small enterprises or no job at all. So the low paid job is accepted by the force of circumstances. But in the absence of small enterprises, the workers have to lose even the small wage which they hope to get. Moreover, by a more effective implementation of the factory laws, the difference between the average wage of a worker in small enterprise and large enterprise can be narrowed down. Statistical evidence suggests that whereas small enterprises in India pay on the average only about 50 per cent of the wage earned by a worker in large enterprises, in U.S.A. and Britain, a worker in a small enterprise earns about 80 per cent or even more of the wage earned by his counterpart in a large enterprise. The whole argument advanced by Dhar and Lydall to oppose small enterprises becomes untenable if cognisance is taken of the fact that it is the inefficient and corrupt administration of the factory acts and lack of organisation among labour that help the exploitation of workers by the employers. There is, of course, no denying the fact that small enterprises encourage competitive elements and generate the impulses of self-development.

3. The Latent Resources Argument

This argument suggests that small enterprises are able to tap latent resources like hoarded wealth, entrepreneurial ability, etc. Dhar and Lydall feel that mobilisation of hoarded wealth is only a once-for-all gain. True, it is so, but is it not a fact that the idle hoards set in motion an income stream which moves on and on? To the extent small enterprises encourage dishoarding, there is definite gain to the community. Secondly, small enterprises encourage the growth of a class of small entrepreneurs which introduces a dynamic element in the economy. The growth of an entrepreneurial class requires an environment. Small enterprises provide that environment which encourages a growing network of feeder and complementary relations among plants and firms. It is in this environment that latent talents of individual entrepreneurs find self-expression in localised innovations and cost-saving measures. The growth of a very large number of small firms in the post-independence period only highlights the fact that given the basic conditions such as supply of power and credit facilities, the latent resources of entrepreneurship can be tapped by the growth of small enterprises significantly.

4. The Decentralisation Argument

This argument impresses the necessity of regional dispersal of industries. Large enterprises are mostly concentrated in metropolitan cities. The smaller towns and the countryside in order to benefit from modern industrialism must encourage small enterprises. Industrialisation of the country can become complete only if it penetrates into the remote corners of the country. It may be true that it may not be possible to start small enterprises in every village, but it is quite possible to select a group of villages and start small enterprises to cater to the needs of the small area from the local centre. The International Perspective Planning Team rightly pointed out: "A policy of trying to implant large amount of industry in the most backward areas as directly in villages is doomed to failure and cannot be justified economically. The focus for industrial development under a dispersal policy should be neither the metropolis nor the village, but rather the large range of potentially attractive cities and towns between these two extremes."[6] Decentralisation of industrial enterprises also helps to tap local resources—such as raw materials, idle savings, local talents—and also improves the standard of living in backward regions. Moreover, decentrialisation helps to solve the problems of congestion in the few industrial towns by enlarging the area of employment.

To sum up: Small enterprises need to be developed along with large enterprises. This is also the accepted policy of the government. No doubt that the employment argument has a substantial weight in it, but it would be suicidal to encourage inefficient small enterprises in the long run. From a long period point of view, the capacity of small manufacturers to become technically progressive and efficient and develop competitive strength shall be the only justification for their continuance. In the intervening period, it would be fair to protect them, and the government should help to create conditions which facilitate their growth.

6. POLICIES AND PROGRAMMES TO REMOVE DISABILITIES

Small enterprises are presently seriously handicapped in comparison with larger units by an inequitable allocation system for scarce raw materials and imported components, lack of provision of credit and finance; low technical skill and managerial ability; and lack of marketing contracts. It is, therefore, essential to develop an overall approach to remove these disabilities so as to strengthen their competitive position.

Analysing the reason for sickness of the small scale units, the *Report of the Second All-India Census of Small Scale Industries Units* stated: "Financial Problems" was stated as the reason for closure of 35 per cent of the units. This was more or less the case in every industry. In case of 14.4 per cent of units, "marketing problems" was stated as the reason for closure. Here also, between industries, there was not much of a change in pattern. "Raw material non-availability" was stated as the reason for closure by 5.6 per cent of units. 2.2 per cent were stated to be closed down due to labour problems, while 19 per cent reported to have closed for other reasons.[7]

6. *Report of the International Perspective Planning Team*, 1963, p. 13.
7. *Report of the Second All India Census of Small Scale Industrial Units (1992)*, p. 156.

Obviously, nearly 50 per cent of the closures of SSI units were either the result of scarcity of working capital or their inability to market their products. It would, therefore, be appropriate to initiate measures to reduce sickness among small sector units.

(i) **Credit and Finance.** The financial disability of small enterprises is beyond question. Their internal resources are so small that they have no surplus to live on during the period of business strain. This leads to instability of their profits which deters banks from giving unsecured loans. "Considering the vital role of small industries

TABLE 10: Reasons for Closure of Small Sector Units (Period 1980 to 1988 combined)

Reason	*Per cent*
1. Financial problems	34.7
2. Marketing problems	14.4
3. Raw Material problems	5.6
4. Disputes among owners	3.7
5. Natural calamity	3.4
6. Labour problems	2.2
7. More than one reasons (combined)	16.5
8. Other reasons	19.4
Total	100.0

SOURCE: Compiled and computed from the data provided in *The Report of the Second All-India Census of Small Scale Industrial Units*, p. 159.

within the Indian industrial economy, the total amount of loans granted to small industries forms a very small part of the total loans to Indian industry."[8] The flow of credit to SSI sector from public sector banks has gone up from 38,110 crores in March 1998 to ₹ 49,743 crores in March 2002. However, as a percentage of SSI advances to net bank credit, a declining trend was observed from 15.6 per cent in March 1998 to 12.5 per cent in March 2002. Nevertheless there is still a need for a positive change in the outlook and approach of our financial institutions towards small-scale enterprises. Their credit-worthiness should not be judged in terms of the value of the assets but in terms of the ability of an enterprise to do the job and earn profit. This requires the evolution of a system of integrated credit whereby long-term loan capital and short-term credit are provided adequately, at a reasonable rate of interest.

(ii) **Marketing Assistance.** Small-scale firms suffer from marketing difficulties as their products are often unstandardised and of variable quality. Undoubtedly, the originality of design is their special quality but it leads to imperfection of the market, which tends to confer benefits to branded and advertised commodities. There is, therefore, a clear case for government intervention to eliminate these imperfections by improving information, and bringing producers and dealers into close contact with one another. In order to provide guarantee for sale, the government gives preference up to 15 per cent on some of the products sold by the small firms. The National Small-Scale Industries Corporation assists small firms in obtaining a greater share of government and defence purchases but does not assume marketing responsibility. NSIC which was started in February, 1955, helped the establishment of 21,384 small-scale units. Besides, it was able to secure purchase orders for small industries from the Director-General of Supplies and Disposals.

(iii) **Allocation of Raw Materials, Imported Component and Equipment.** The Second International Team studied the problem of availability of raw materials, imported components for production and selected imported equipment to the small enterprises and emphasised that the small-scale industry has not shared proportionately in the growing supplies of scarce raw materials. In pursuance of this recommendation, the Government started giving priority in raw material allocation to samll-scale sector. The Seventh Plan expressed its deep dissatisfaction in this regard in the following words: "While various measures have been taken for supply of raw materials to the small-scale units through State Small Industries Development Corporations, import quota etc., in actual practice the sector gets more or less a 'residuary' treatment in raw material distribution/allocation."[9]

(iv) **Technical Assistance.** The development of small-scale enterprises is hampered by the present low level of technology and shortage of trained and experienced supervisory personnel. Provision of technical service is, therefore, an important and justified form of aid to stimulate increased productive efficiency and encourage new product lines.

(v) **Industrial Estates.** An industrial estate is an attempt to provide, on a rental basis, good accommodation and other basic common facilities to groups of small entrepreneurs who would otherwise find it difficult to secure these facilities at a reasonable price. However, India's experience proved to be a partial success. Major factors accounting for the poor output and employment performance of many estates include wrong location, unsuitability of sheds and space to the needy, low use of capacity in functioning firms, and occupation of factory sheds by government agencies. According to the Sixth Plan (1980-85), by March 1979, there were 662 completed industrial estates wherein 13,467 small-scale units were functioning, accounting for an annual production of about ₹ 636 crores and providing employment to about 2.2 lakh persons.

Despite the policy of encouragement adopted by the Government, in actual practice it has been observed that still several handicaps persist. Firstly, compared with large sector, the small sector has to wait much longer for the clearance of applications. No wonder, the large sector is able to obtain more government support. Secondly, many small industries, modern as well as traditional, continue to feed the wants of the rich or elite sections in the society. This defeats the very purpose of state support and leads to misdirection of resources. Thus, the policies of state support should be specifically directed to the

8. *The Second Report of the International Team*, p. 10.

9. *Seventh Five Year Plan* (1985-90), Vol. II, p. 102.

production of commodities needed by the lower strata of our society. Thirdly, some of the large enterprises are misusing the concessions available in the category of small enterprises to their advantage. It has been pointed out by economists that because the small sector is not required to obtain licences for investment, this escape route has been used for *de facto* free entry by several industries, such as matches, sewing machines, bicycles, etc. Fourthly, there is a heavy concentration of small enterprises in six states, viz. Maharashtra, Tamil Nadu, West Bengal, U.P., Punjab and Gujarat. The states which have lagged behind are: Rajasthan, Madhya Pradesh and Orissa. For future policy, therefore, the emphasis in state support should shift to greater encouragement in other states. This alone will bring balanced regional development.

Lastly, on the question of grant of financial assistance by commercial banks to small industries, the Ninth Plan concludes : "The (small) sector has matured and is in a position to make a much greater contribution to the national economy as well as to meet the challenge of large industry, including multinationals. The SSI Sector will be provided with necessary incentives and support including making available credit to facilitate its growth and development leading to increased contribution to output, exports and employment generation."[10]

7. SMALL SECTOR INDUSTRIAL POLICY

The Government announced its policy towards the small sector on 6th August 1991. The main features of the Policy were:

The Small-Scale Industrial Sector has emerged as a dynamic and vibrant sector of the economy during the eighties. At the end of the Seventh Plan period, it accounted for nearly 35 per cent of the gross value of output in the manufacturing sector and over 40 per cent of the total exports from the country. It also provided employment opportunities to around 12 million people.

The primary objective of the Small Sector Industrial Policy during the nineties was to impart more vitality and growth impetus to the sector to enable it to contribute its quite fully to the economy, particularly in terms of growth of output, employment and exports.

Tiny Enterprises

Government have already announced increase in the investment limits in plant and machinery of small scale industries, ancillary units and export-oriented units to ₹ 60 lakhs, ₹ 75 lakhs and ₹ 75 lakhs respectively. Such limits in respect of "TINY" enterprises would now be increased from the present ₹ 2 lakhs to ₹ 5 lakhs, irrespective of locations of the unit.

Henceforth, all Industry-related service and business enterprises, irrespective of their location, would be recognised as small -scale industries and their investment ceilings would correspond to those of tiny enterprises.

Financial Support Measures

Inadequate access to credit—both short term and long term—remains a perennial problem facing the small-scale sector. Emphasis would henceforth shift from subsidised/cheap credit, except for specified target groups, and efforts would be made to ensure both adequate flow of credit on a normative basis, and the quality of its delivery, for viable operations of this sector.

To provide access to the capital market and to encourage modernisation and technological upgradation, it was decided to allow equity participation by other industrial undertakings in the SSI, not exceeding 24 per cent of the total shareholding. This would also provide a powerful boost to ancillarisation and sub-contracting, leading to expansion of employment opportunities.

A beginning has been made towards solving the problem of delayed payments to small industries by setting up of 'factoring' services through Small Industries Development Bank of India (SIDBI). Network of such services would be set up throughout the country and operated through commercial banks. Factoring services imply that SIDBI or any commercial bank will buy the manufacturer's invoices from SSI units and take the responsibility for collecting payments due to them by charging a commission.

Infrastructural Facilities

A Technology Development Cell (TDC) would be set up in the Small Industries Development Organisation (SIDO) which would provide technology inputs to improve productivity and competitiveness of the products of the small -scale sector. The TDC would coordinate the activities of the Tool Rooms, Process-cum-Product Development Centres (PPDs), existing as well as to be established under SIDO, and would also interact with the other industrial research and development organisations to achieve its objectives.

Adequacy and equitable distribution of indigenous and imported raw materials would be ensured to the small-scale sector, particularly the tiny sub-sector.

Marketing and Exports

National Small Industries Corporation (NSIC) would concentrate on marketing of mass consumption items under common brand name and organic links between NSIC and SSIDCs would be established.

Though the Small Scale Sector is making significant contribution to total exports, both direct and indirect, a large potential remains untapped. The SIDO has been recognized as the nodal agency to support the small-scale industries in export promotion.

10. Planning Commission, *Ninth Five Year Plan (1997-2002)*, Vol. II, pp. 576-77.

Modernisation, Technological and Quality Upgradation

Industry Associations would be encouraged and supported to establish quality counselling and common testing facilities. Technology and markets would be established.

Promotion of Entrepreneurship

Government will continue to support first generation entrepreneur through training and will support their efforts. Large number of EDP trainers and motivators will be trained to significantly expand the Entrepreneurship Development Programmes (EDP). Industry Associations would also be encouraged to participate in this venture effectively. Women entrepreneurs will receive support through special training programmes.

Village Industries : Handloom Sector

Handloom sector contributes about 30 per cent of the total textile production in the country. It is the policy of Government to promote handloom to sustain employment in rural areas and to improve the quality of life for handloom weavers.

Janata cloth scheme which sustains weavers often on a minimum level of livelihood will be phased out by the terminal year of the VIII Plan and replaced by the omnibus project package scheme under which substantial funds will be provided for modernisation of looms, training, provision of better designs, provision of better dyes and chemicals and marketing assistance.

Handicraft Sector—The key areas in handicrafts that could contribute towards a faster pace of rural industrialisation are production and marketing. Scheme for training and design development and for production and marketing assistance will be given encouragement.

Other Village Industries

The activities of the Khadi and Village Industries Commission and the State Khadi and Village Industries Boards would be expanded and the organisations strengthened to discharge their responsibilities more effectively.

The programmes of intensive development of KVI through area approach with tie-up with DRDA, TRYSEM and ongoing developmental programmes relating to weaker sections like Scheduled Castes, Scheduled Tribes and Women would be extended throughout the country.

An Assessment of Small Industry Policy

The policy statement after describing the small sector as "a dynamic and vibrant sector of the economy" during the eighties, lays down as the objective for the nineties : to impart more vitality and growth-impetus so that it can contribute its mite fully to the economy, particularly in terms of growth of output, employment and exports. For this purpose, instead of protection, the new policy intends to deregulate and debureaucratize the sector so as remove all fetters on its growth potential. The new watchword, therefore, is "competition" and not "reservation."

The question arises : Does the new policy ensure a better economic environment in which the small and tiny sector will be able to realise its growth potential ?

Firstly, let us take the question of supply of credit. Government has been proclaiming the myth of supply of "concessional credit" to the small sector, although the rate of interest on concessional credit was barely 0.5 per cent to 1 per cent lower than on non-concessional credit. But now even this myth is sought to be removed by the proposed shift from subsidized/cheap credit to adequate supply of credit. Even earlier, credit to small units was rarely cheap, considering the corruption that accompanies the grant of loans to the small sector and the long delays in its delivery. But for a pious statement of adequate supply of credit, no concretisation of the volume of credit has been made.

Secondly, the policy statement makes an important recommendation regarding the provision of equity to be held by another undertaking upto 24 per cent in a small unit. This other undertaking may be small or large, Indian or foreign. The basic premises on which this statement is based are : Induction of equity only upto 24% will imply minority participation by outsiders and thus, it would not be possible for the outsiders to dominate small units, and secondly, involvement of large or foreign firms in small units will bring about technology transfer from the large to the small sector. A closer scrutiny of these premises reveals that they are spurious. Ram K. Vepa, former Development Commissioner, Small Scale Industries in this connection writes : Even now, it is contended that a number of small units are controlled by the large units with their nominees acting as *benami* owners. It is feared that, through the new provision, this will be legalised and with a shareholding of 24 per cent, supported by one or two of the family owning shares, the small unit becomes virtually (if not legally) a subsidiary of the large company. This is specially so in the case of an ancillary unit where orders would be given only to such units and the entire ancillary unit can become an appendage of the large sector. The government would describe this development as integration of the small sector with the large sector, but this in fact is the dependency model of the small sector which makes it an underpinning of the large sector and this would be exploited by big business.

Thirdly, several studies about the sickness of small units reveal that the big firms (or the principals) do not make timely payments to the small units even after the delivery of goods by the latter to the former. This obstructs the cash flow of the small firms. Unable to meet the working capital requirements, these units

grow sick and close down, because the principals delay payments sometimes even by six months and in exterme cases by a year as well. It is expected that the new policy would incorporate a law to limit the payment of small sector dues within 45 days.

The Government has promulgated the Delayed Payments Act (1993) to remedy the situation. But the Ninth Five Year Plan reviewing the working of the Act states : "The Delayed Payments Act does not appear to have really helped the small -scale industries. It is highly desirable to review this Act and make appropriate changes to ensure that it achieves its objectives for which it has been enacted."

Fourthly, Government policy does not even take note of the large number of sick units in the small sector. According to the *Economic Survey* (1993-94), there were 2.46 lakh sick units in the small scale sector with outstanding bank credit of the order of ₹ 3,100 crores. The basic question that arises is : Is it possible to prevent this large scale sickness in the SSI units ? For this purpose, it is essential that greater professionalism in management of the small units be inducted. It would be, therefore, necessary that small entrepreneurs are given proper training in the management of enterprises. Such training is essential since the small entrepreneur has to perform several functions—organizing production, arranging finance, procuring orders to market his products and along with it, to maintain public relations etc.

But to save individual small enterprises to fall sick, it would be better to have umbrella type co-operatives of entrepreneurs so that they can guide young entrepreneurs in selecting projects for production, provide information on the supply of inputs, techniques of production and help in the marketing of the products. These co-operatives can also help in the adequate procurement of credit. In other words, the salvation of the small entrepreneurs lies in co-operativisation and not in corporatization of the small and tiny sector.

Lastly, the new small sector policy and the industrial policy do not make any mention of medium sector. So long as the small sector does not cross the limit of ₹ 60 lakhs, it remains in the category of SSI units, but the moment, it crosses this limit, it is transferred to the category of large sector. This is not a scientific approach to classification of industrial units. Since quite a good number of small units, in the process of their growth, naturally pass into the category of medium units, it would be more appropriate to define small, medium and large units. From the point of view of industrial policy, small and medium enterprises should be grouped as one category. In several countries of the world, it is customary to group small and medium units as a continuous sector.

To sum up, the policy statement on small sector does make some headway in the sense that as against the provision of one time benefits to small industry like preference in land allocation, power connection etc. it provides for continuous support to the tiny sector like easier access to institutional finance, preference in government purchase and relaxation of certain labour laws. Since tiny sector is the nursery of traditional skills of the rural areas, the package of incentives proposed for the tiny sector will help it to grow in strength. This is welcome. Since the tiny sector caters to artisans and craftsmen both in the rural and urban areas, such a policy is helpful in the alleviation of poverty.

Despite these bright spots, the thrust of the small sector policy is to make the small sector an appendage of the big sector by introducing the provision of shareholding upto 24 per cent by some other undertaking, may be small or large, Indian or foreign. It is really doubtful whether such a policy will help to transfer technology to the small sector or shall only increase the control of the large sector over the small sector. The omission of the sick small sector units in the policy statement is a serious lacuna and it is necessary that the Government should pay more attention to prevention of sickness in the small sector. Merely pumping in funds without developing a congenial environment in which SSI units can survive will not serve the objectives of policy. The need of the hour, therefore, is to encourage co-operativisation among small entrepreneurs rather than encouraging corporatisation of the small sector in the name of integrating it with the large sector.

8. VILLAGE AND SMALL INDUSTRIES IN THE NINTH AND TENTH PLAN

The Ninth Plan mentions that during the last few years "the growth of SSI Sector in the non-reserved areas has been higher than in the reserved categories which is proof of their inherent strength and resilience of the small scale sector and its ability to respond to the challenge of the market forces."[11]

To increase the flow of credit, the Government has started setting up specialised branches of banks exclusively meant for providing credit to SSIs.

To improve technology of SSIs, SIDBI has already set up a Technology Development and Modernisation Fund with a corpus of ₹ 200 crores. The Government has also set up Technology Trust Funds with contributions from State Governments and industry associations for transfer and acquisition of the latest technologies.

Under the scheme of Integrated Infrastructure Development Centres (IIDCs), infrastructure facilities are being developed in backward rural areas. 50 such IIDCs were to be set up during the Eighth Plan period, out of which 22 have been approved. This scheme was continued during the Ninth Plan with more incentives and financial assistance in hilly areas and North Eastern States.

To provide technological support and training to small scale sector, tool rooms with German, Danish and

11. Planning Commission, *Ninth Five Year Plan (1997-2002)*, Vol. II, p. 576.

Table 11 : Performance of the VSI Sector Production, Employment and Exports

Sub-sector (scheme)	*Unit*	*Ninth Plan Achievement*		*Tenth Plan*	
		*Target** *2001-02**	*(Anticipated Achievement) 2001-02*	*Target 2006-07*	*Anticipated Achievement 2006-07*
A. Production					
1. Small Scale Industries	₹ Crore	7,38,180	6,90,522	14,04,000	5,85,112
2. Coir Fibre	000 tones	375	375	435	430
3. Handloom Cloth	Mill. Sq. m,	12,336	7579	10,000	6541
4. Power loom cloth	Mill. Sq. m,	30,489	25,273	1,32,821	33,159
5. Raw silk	Met. Tonnes	20,540	18,395	26,450	16,800
6. Handicarfts	₹ Crore	52,201	18,677	47,204	38660
B. Employment					
1. Small Scale Industries	Million person	18.4	19.3	23.7	31.2
2. Powerloom	Million person	8	4.2	4.5	5
3. Coir Industies	Million person	0.6	0.54	0.65	0.64
4. Handloom	Million person	17.3	12.4	12	6.5
5. Sericulture	Million person	7.1	5.6	6	6
6. Handicarfts	Million person	8.2	5.8	6.8	6.8
C. Export					
1. Small Scale Industries	₹ Crore	62,457	89,665	1,26,000	1,77,600
2. Coir Industries	₹ Crore	78,900	325	700	605
3. Handloom	₹ Crore	3,175	2,200	4,500	4,650
4. Powerloom	₹ Crore	8,050	11,000	NA	7562
5. Silk	₹ Crore	1,525	2,530	4,050	3,200
6. Handicarfts	₹ Crore	11,950	10,610	17,000	20,963

* Targets have been taken from the ***Ninth Five Year Plan (1997-2002).***
Source: Compiled and computed from Planning Commission, ***Tenth Five Year Plan (2002-07),*** Vol. II.

Italian assistance centres are being set up a Indore, Ahmedabad, Bhubneshwar, Jamshedpur and Aurangabad.

The credit provided to the SSI sector by the financial institutions is considered credit to 'priority sector'. By March 1996, the total credit provided by public sector bank stood at ₹ 29,842 crores. This has risen to ₹ 1,02,500 crores in 2006-07 with change in definition of priority sector, data shows the public sector banks credit to small enterprises stood at 148,651 crores in March 2008.

A review of the targets and achievements of the Ninth Plan reveals that the target of small-scale industries and raw silk production was more or less achieved. However, there was considerable failure to achieve the production targets of handloom cloth, powerloom cloth and handicrafts. Similarly, there was serious slippage of employment target. As against the target of 66 million persons in terms of employment target by 2001-02, actual achievement was only 48.3 million. Here also handlooms, powerlooms and handicrafts were the significant non-achievers. De-reservation of important SSI items was chiefly responsible for this failure. On the export front, the achievement was remarkable. Small Scale industries recorded export growth of ₹ 89,665 crores as against the target of ₹ 62,457 crores – 44 per cent more than the target.

A close perusal of the targets set in the Tenth Plan indicates that some targets had been fixed without taking into account the ground reality. For instance, a target of ₹ 14,04,000 crores by 2006-07 in small-scale industries production was completely unrealistic. An annual average growth rate of 15.2 per cent is doomed to be a failure, more so in view of the state policies of withdrawing incentives from the SSI sector. Similarly, a target of 1,32,821 million sq. metres in powerloom production was also unrealistic in view of the fact that during the Ninth Plan, there was a failure to achieve the target. The Government by de-reserving readymade garments created a situation which has adversely affected this sector. The same situation is prevalent in exports. The Government wanted small industries export to rise from ₹ 65,000 crores in 2001–02 and ₹ 1,26,000 crores in 2006–07 – at an average annual growth rate of 14 per cent but withdrew all concessions and incentives to the small sector. The Government, therefore, has to lay down a clear-cut policy about the small sector. Its entire emphasis of providing more and more incentives to the corporate sector, while raising the expectations from the small sector, is inconsistent and needs an urgent review. It is really distressing to find that the Government allocated ₹ 7,754 crores on the village and the small industries (VSI) sector during the Tenth Plan. This includes ₹ 2,085 crores allocated for Khadi & Village Industries. This work out

be 0.5 per cent of the total public sector outlay in the Tenth Plan. This was too low an allocation keeping in view the target of production set for small and village industries. As a result we find failure in achievement of plan targets during Tenth Plan. Production in Small Scale Industries was recorded at just ₹ 5,85,112 crores at the end of Tenth Plan, just 41 percent of the target. Though production targets were more or less could not be achieved during Tenth Plan, employment targets were almost achieved except handloom sector. Performance of export was more or less better than the targets except coir industries, despite withdrawal of incentives and concessions.

9. S.P. GUPTA STUDY GROUP ON DEVELOPMENT OF SMALL ENTERPRISES

At the instance of the Deputy Chairman of the Planning Commission, a Study Group on Development of Small Enterprises (hereafter referred to as study Group) was constituted in May 1999. The study Group submitted its Report in March 2001.

Main Recommendations of the Study Group are:

(a) Three-tier definition of tiny, small and medium sector:

Tiny units: up to ₹ 10 lakh investment in plant and machinery.

SSI units: ₹ 10 lakhs to ₹ 1 crore investment in plant and machinery.

Medium unit: ₹ 1 crore to ₹ 10 crores investment in plant and machinery.

Industry related service and business enterprises with investment of ₹ 10 lakhs in fixed capital including land and building should also be included in the SSI sector and should be treated at par with tiny industries for priority sector lending except for financing truck operators, cars, heavy vehicles, taxis, autorickshaws and tempos.

The term small scale industry should be replaced by "Small Enterprises" which will consist of the following segments:

(i) Tiny industrial units,

(ii) Small-scale industrial units, and

(iii) Service and business enterprises.

The Study Group has for the first time defined the investment ceiling for plant and machinery for medium scale units. This was felt necessary as this would lay down direction for SSI units to graduate to medium scale units.

(b) Need of bringing awareness in small industries sector about WTO implications and its impact on SSI sector, particularly due to bringing more items under Open General Licence (OGL) as per WTO obligations. Setting up of a new cell in the office of DC(SSI) for matters relating to WTO and its implications on SSI sector.

(c) Need for a single comprehensive law for SSI sector.

(d) This Study Group recommended that presently reservation should be continued for SSE sector. However, to enhance exports, the Study Group recommended that non-SSI units can take up production of reserved items with 30 per cent export obligation to be completed over three years. Presently, this limit is 50 per cent.

(e) The Study Group recommended to raise investment ceiling from ₹ 1 crore to ₹ 5 crore for plant and machinery for export oriented industries like leather products, garments, hosiery, hand tools, toys, packaging material, auto components, pharmaceuticals, food processing, etc.

(f) For infrastructure development, the Study Group recommended a corpus of ₹ 2,000 crores so that adequate infrastructure facilities are available to the SSI sector.

(g) To encourage technocrat entrepreneurs in high-tech industries like electronics, information technology, bio-technology, pharmaceuticals, an Incubation Infrastructure Development Fund with ₹ 1,000 crores has been recommended by the Study Group for setting up of Incubation Centres (ICs) in the Tenth Plan. These ICs would provide all facilities and finance, technical consultancy, etc. to encourage technocrats and first generation entrepreneurs to successfully take up production on recent technologies, not tried so far but having potential. Such incubation centres have given good results in developed countries as well as South East Asian countries.

(h) With a view to encourage large units to make prompt payment to SSI units against the deliveries made by the SSI units as per order, the Study Group has recommended:

- Denial of MODVAT credit to defaulters in respect of payment to SSI units for more than 120 days' delay,
- Amendment of Income Tax Act to disallow unpaid SSI bills from business expenditure, and
- Monitoring of implementation of Delayed Payments Act by Development Commissioner (Small Scale Industries) DC (SSI).

(i) To encourage better linkages between large and medium units, the Study Group has recommended:

- Foreign Direct Investment (FDI) to be encouraged in SSIs for better technology transfer.
- Allowing excise exemption on SSI manufactured goods for other large units under brand name in urban areas also which is presently allowed for rural areas.

(j) The Study Group recommended enactment of Limited Partnership Act to bring in more risk capital in SSI sector and the concept of limited liability. SAMADHAN scheme for one time setlement of dues of sick SSI units so that assets could be reutilised. Sick units should be required to make one time payment including interest not more than double of the credit/loan amount. This would provide an exit route to entrepreneurs of sick units.

(k) To free the SSI sector from rigid and harassing regulatory laws applicable to the SSI sector and to reduce inspectors' visits, the Study Group recommended a number of measures, like (i) need for a single unified Act

for small enterprises, (ii) replacement of inspection by self-certification, (iii) simplification of regulatory laws, etc.

(l) The Study Group made a number of recommendations for human resource development of SSI sector which includes inputs like training, skill upgradation, new management practices, etc.

(m) The Study Group made recommendations on fiscal and financial measures covering:

- Setting up of targets for tiny and SSI units for credit from banks and FIs under priority sector lending.
- Setting up of more specialized bank branches for SSI sector.
- Measures for strengthening resource support to SIDBI and to make available cheaper resources for on-lending at lower interest rates to SSI sector.
- Setting up of a special venture capital type fund of ₹ 500 crore to be named as Laghu Udyog Nirman Nidhi for equity support.
- Standardisation of procedure and simplification of forms by banks.
- Raising of present excise exemption limit from ₹ 50 lakh to ₹ 100 lakh.
- Five per cent notional MODVAT credit to large units buying components, etc, from SSI units.
- Extension of Credit Gurantee Fund Scheme with a corpus of ₹ 2,500 crore.
- To make available credit to SSI sector at a reasonable cost viz, Primelending Rate (PLR) plus three per cent.
- Raising of limit of composite loans from ₹ 10 lakh to ₹ 25 lakh to encourage tiny units.
- A Technology Up-gradation & Modernisation Fund of ₹ 5,000 crore with an interest subsidy of five per cent

(o) To prvide higher marketing support to the SSI sector, the Study Group has recommended:

- Statutory backing and continuation of the Price Preference (up to 15 per cent to SSI products) under Government Purchase Programme and Purchase Preference Scheme in respect of 358 items on purchases made by government departments.
- Up to 33 per cent of government purchases may be done from SSI sector on the lines of USA.
- Timely release of institutional finance for export orders of SSI units.

10. POLICY PERSPECTIVE TO HELP SMALL AND TINY SECTORS ENTERPRISES

In 2001-02, there were 1.77 lakh sick SSI units with locked-up bank credit of the order of ₹ 4,819 crores. However, the number of sick units declined in 2005-06 to 1.04 lakhs, and though there was a decline in locked up bank credit to ₹ 5,380 crores, average bank credit locked-up in SSI units increased from ₹ 2.72 lakhs in 2001-02 to ₹ 3.48 lakhs in 2009.

TABLE 10 : Sick Units and Locked-up Bank Credit

Year	*No. of sick SSI units*	*Loans to sick units (₹ crores)*	*Average per unit (₹ lakhs)*
2001	1,77,000	4,819	2.72
2005	1,38,000	5,380	3.90
2008	85,187	3,083	3.62
2009	1,03,996	3,620	3.48

SOURCE : RBI Handbook of Statistics on Indian Econo 2009-10

Two major problems responsible for the sick of small and tiny sector are lack of availability of adequ credit, especially working capital and problems associ with marketing of products. In this respect, small-sc industry associations have highlighted certain facts:

1. 95 per cent of the S S Units are still below ₹ 5 lakh level of investment in plant and machinery.

2. Ironically, 95 per cent of S S Units accou for nearly 33 per cent of the employment in the fact sector are not getting more than 3 per cent of their cre requirements.

3. Total credit available to SSI units as a percen of production has come down from 7 per cent in 1991- to 6.5 per cent in 1995-96.

4. The SSI units are not able to effectively ma their products, in the absence of brand names and supe advertising power of large units.

To overcome difficulties experienced in cre availability, the Reserve Bank of India appointed December 1991 a Committee under the Chairmanship Shri P. R. Nayak, Deputy Governor, RBI. Later December 1997, Mr. S. L. Kapoor, former Secret Small Scale Industries, Government of India was appoin as Chairman of another Committee to m recommendations pertaining to the persistent proble of untimely and inadequate availability of credit to SS

The major recommendations of *Nayak Commi* are:

1. As against the availability of 8.1 per cent credit available over the turnover, the Nayak Commit recommended 20 per cent credit over the producti turnover of SSIs. This recommendation has also be endorsed by the Abid Hussain Committee. RBI sho monitor the flow of credit to this sector so that the tar is achieved within the time frame of a decade.

2. "Collateral Security" and/or third party guara insisted by the banks should be dispensed with as a r irrespective of the amount of credit involved.

3. As per the recommendation of the Abid Huss Committee, from the total credit of SSI Sector, 40 p cent is to be provided to units with less than ₹ 5 lak investment in plant and machinery, 20 per cent to units with ₹ 5 lakhs to ₹ 20 lakhs investment and balance 40 per cent is to be provided to units w investment of more than ₹ 25 lakhs. This recommenda should be implemented and monitored by the RBI.

4. Village industries, and the smaller tiny industries with credit limit upto 1 lakh should have the first claim on the priority credit to the SSIs.

At present, tiny sector gets credit equivalent to 2.7 per cent of its turnover, which is extremely low. Efforts should be made to raise it to 40 per cent level as recommended by the Abid Hussain Committee.

5. Banks should ensure that there are no delays in sanctioning credit to SSI units.

6. Specialised bank branches for SSI are to be opened by the banks to facilitate operation of large number of SSI loan/credit accounts. Specialised branches are to be set up in clusters having concentration of SSIs.

Other Measures

To help the marketing of SSI products, Price Preference Policy was made a permanent measure to protect the interests of SSI units. A price preference of 10 per cent was accordingly permitted to the products of cottage and SSIs. States have withdrawn this permanent preference measure. This has adversely affected the marketing of SSI products. This was uncalled for and the need of the hour is to revive this measure.

The Government has decided to amend the interest payable on Delayed Payment to SSI & Ancillary Industrial Undertakings Act (1993) to make the provision of the law more stringent by raising it to 1.5 times the prime lending rate charged. Although the law has been given more teeth but its implementation has remained very weak. It is, therefore, held by critics that the Delayed Payments Act is a non-starter and a paper tiger.

Mid-Term Appraisal of the Tenth Plan (2005) has lamented: "However the main grievance of the SMEs is that none of these guidelines is being observed. The Commercial banks demand collateral security for both term loans and working capital. Only 175 of the country's 590 districts have specialised SSI branches. Bank personnel at the branch level are not fully aware of the various schemes and facilities available for the SMEs and branch managers need to be trained in techno-economic appraisal of projects of small enterprises."[12]

Policy Initiatives Recommended by Arjun Sen Gupta Commission (2004)

Keeping all these problems in view, the UPA Government set up in September 2004 a National Commission on Enterprises in the unorganized/ informal sector with Dr. Arjun Sengupta as Chairman. The Commission has made the following recommendations:-

- To facilitate technology upgradation and enhancing competitiveness, the investment limit (in plant and machinery) has been raised in October 2004, from ₹ 1 crore to ₹ 5 crore, in respect of 7 items of sports goods, reserved for manufacture in the small scale sector.
- The Small and Medium Enterprises (SMEs) Fund of Rs 1,000 crores was operationalized by the SIDBI since April 2004. Eight percent of the lending from this fund will be for SSI units, at interest rate of 2 percent below the prevailing PLR of SIDBI.
- For freeing the SSI sector from "Inspector Raj", suitable legislation is being finalized.

It may be noted that Arjun Sengupta Commission has not made any recommendation specific to tiny sector which accounts for 92 percent of employment in SSI sector.

A change of policies from protectionism to liberalisation has helped large Indian industry and multinationals to enter in areas reserved for SSIs. This extreme path should be avoided since this has done more harm than good. The country should move to a middle path and permit selective liberalisation with necessary safeguards.

It is really very disappointing that the Approach Paper of the 11th Five Year Plan suggests the total dereservations of all items in the SSI so as to force them to face competition. This is only a negative recommedation. It would have been much better if the Approach Paper had also suggested some positive measures to strengthen the SSI, which account for 38 per cent of industrial production, 34 per cent of India's exports and 92 per cent of employment in the industrial sector.

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CHAPTER

41

LABOUR PROBLEMS AND LABOUR POLICY

"For the achievement of the goal of progressively speeding up production, it is necessary that workers should completely eschew indiscipline, stoppage of production and indifferent quality of work and for this it is necessary that they should build strong democratic trade unions."

—V.V. Giri in "Labour Problems in Indian Industry."

1. FEATURES OF INDUSTRIAL LABOUR

Correctly speaking, industrial labour should stand for labour engaged in large and small industrial establishments including cottage industries. However, in India, the term is used in a restricted sense, to refer to those workers who are employed in organised industries, that is, in those industrial establishments which are covered by the Factories Act. Those workers who are engaged in cottage industries are excluded. Since our factory industries have been growing very slowly since the middle of the 19th century, factory or industrial labour has also been increasing slowly.

According to *The Annual Survey of Industries,* the total number of factories in 1997-98 was 13.6 lakhs, but in 2003-04 the number of factories declined to 12.9 lakhs. Similarly, the number of workers employed in factories also declined from 7.65million in 1997-98 to 6.09 million in 2003-04. Since the total employment in the economy, both in the organised and unorganised sector, has been estimated at 423 million in 2004-05, according to the NSS 61st Round, it implies that total factory employment of industrial workers was only 1.43 per cent of the estimated workers in the country in 2003-04. This is really a very small proportion and indicates the small size of industrial labour in India. But on account of its organisation and contribution to national income, industrial labour occupies an important place in the economy of the country. A contented industrial labour will be a great asset to India, but a dissatisfied industrial labour acts as a drag on development.

Industrial labour in India has exhibited certain well known features which have affected the trade union organisation. In the first instance, most industrial workers have their roots in villages. Quite a large number of them have left their traditional occupations and have migrated to the cities in search of permanent or temporary employment. Most of them still retain their attachment to land and the periodic migration from the town to the village is a common characteristic of our industrial labour. Only in recent years, a new class of industrial labour without roots in agriculture is emerging in our towns and cities.

Secondly, industrial labour is largely uneducated. As a result, they do not understand the problems which their industries confront and the problems which they themselves are facing. This is also one of the factors for weak trade union organisation.

Thirdly, industrial labour in India is not united but divided and sub-divided on the basis of region, religion, language and caste. It is only in recent years that some of these differences are disappearing gradually and some degree of unity on the basis of economic consideration is taking place.

Finally, Indian workers do not remain in the same job for considerable amount of time. There is high labour turnover. Absenteeism, indiscipline etc. are quite common. This may be because the workers were originally from the rural areas where people were comparatively free; or it may be because of their lack of education and love of leisure.

2. TRADE UNION MOVEMENT

Trade unions are voluntary organisations of workers formed to promote and protect the interests of workers through collective action. The first quarter of the twentieth century saw the birth of the trade union movement in India, though the germs of the movement were to be found in the last quarter of the 19th century. S.S. Bangalee, M. Lokhande and others succeeded in forming trade unions, organising strikes and, in general, in bettering the conditions of the working classes. However, it was not until the close of First World War that the modern trade union movement really took permanent roots in Indian soil.

Development of Trade Union Movement

In the twenties, soon after the First World War the Indian working classes realised the effectiveness of strike as a means of obtaining concessions, higher wages and improvement of working conditions. A series of strikes were declared. The success of most of these strikes led to the organisation of many unions. In 1920, the All-India Trade Union Congress (A.I.T.U.C.) was set up to represent the interests of the workers and also to co-ordinate the activities of all labour organisations in the country and to help in the extension of the movement, where it had not penetrated. The setting up of the A.I.T.U.C. gave a great fillip to the rapid formation of unions throughout the country and in big and small industries. Their number as well as membership increased manifold.

In 1926, the Trade Unions Act was passed, which was a landmark in the history of the trade union movement in the country. The Act gave a legal status to the registered trade unions and conferred on them and their members a measure of immunity from civil suits and criminal prosecution. Registration of trade unions enhanced the status of unions before the general public and the employers.

Towards the end of 1920s there was a split in the trade union movement on account of ideological differences between trade union leaders. The A.I.T.U.C. was captured by the Communists while the moderates started a new central labour organisation known as the All-India Trade Union Federation. The conflict among the leaders confused labour and resulted in the failure of many strikes.

The 1930s started with a climate which was not favourable to the growth of the trade union movement. The prosecution of the Communists involved in the Meerut Conspiracy case and the failure of the Bombay Textile Strike of 1929 brought a lull in trade union activity. The serious economic depression of this period had the same effect. There was widespread retrenchment (due to the economic depression) and the strikes of this period aimed at maintaining wages and preventing retrenchment. During the period there were further splits in the trade union movement but ultimately, just before the Second World War, unity in the movement was brought about.

TUs during the Second World War. The Second World War created an emergency and the trade union leaders again split on the question of participating in the war. The Communists following the Russian Communist Party wanted to help the British to fight out the Nazis, while nationalist leaders wanted to strengthen the national movement to overthrow British rule from India. This led to a sharp ideological rift and the trade union movement was split again. Industrial unrest increased during the war because of the mounting cost of living. The Government used the Defence of India Rules and prohibited strikes and lockouts and referred industrial disputes to conciliation and adjudication. But the deteriorating economic conditions made workers conscious of the need for making organised efforts for securing relief. This gave a fillip to the trade union movement and there was a marked increase both in the number of unions and of organised workers.

TABLE 1. Growth of the Trade Union Movement in India

Year	*Number of Registered trade unions*	*Number of unions furnishing information*	*Membership of the unions submitting returns (in lakhs)*
1951-52	4,623	2,556	20
1961-62	11,614	7,087	40
1971	22,484	9,029	55
1981	35,539	6,082	54
1987	49,329	11,063	79
1990	52,016	8,828	70
1995	57,952	8,162	65
1998	61,592	7,403	72
1999	64,817	8,152	64
2000	66,056	7,231	54

SOURCE: *Indian Labour Yearbook* (1987) and 2004.

After Independence. With independence and partition, the country was plunged into growing unemployment. The high hopes of the workers for securing better wages, service conditions and amenities from the national government were shattered. The workers found it necessary to struggle hard even to retain what they had obtained earlier. A series of strikes swept the country and the number of strikes and man-days lost during the period were the highest ever recorded in the country. The disunity in the trade union ranks was aggravated by the starting of three Central organisations during this period. The Indian National Trade Union Congress (I.N.T.U.C.) was started in 1947 and was controlled by the Congress Party. The Hind Mazdoor Sabha was started in 1948 by the Praja-Socialist Party. The United Trade Union Congress (U.T.U.C.) was formed in 1949 by some radicalists. All these labour organisations have been working for the betterment of labour. Moreover, there is not unity between them nor do they follow common policies or ideologies.

Table 1 gives some idea of the growth of the trade union movement in India. It may be observed that the trade union movement is more widespread and has taken deep roots. It is now better organised and is on a more permanent footing.

It may be noted that there are number of trade unions in India and some have been formed after breaking away from big trade unions. Some have been formed due to the individual influence of trade union leaders, but there are five big trade unions, namely, INTUC, HMS, BMS, AITUC and CITU. In 2000, their combined membership was about 95 per cent of total membership. All these trade unions are associated with main political parties.

TABLE 2 : Membership of Central Trade Unions

Membership (in lakhs)

	On 31-12-2002 as per survey		*On 31-8-1989 as per survey*	
	Total	*%*	*Total*	*%*
1. B.M.S.	62.2	25.0	31.2	26.2
2. INTUC	39.5	15.9	27.1	22.8
3. AITUC	34.4	13.8	9.2	7.8
4. HMS	33.4	13.4	14.8	12.4
5. CITU	26.8	10.8	18.0	15.1
Others	52.0	21.1	18.7	15.7
Total	**248.8**	**100.00**	**119.0**	**100.00**

SOURCE: Order of the Ministry of Labour abd Emplopment, 11th January 2008.

Indian National Trade Union Congress (INTUC), All-India Trade Union Congress (AITUC); Centre of Indian Trade Unions (CITU); Hind Mazdoor Sabha (HMS); Bharatiya Mazdoor Sangh (BMS), United Trade Union Congress (UTUC), United Trade Union Congress—Lenin Sararni (UTUC-LS); National Federation of Independent Trade Unions (NFITU).

As per survey made in December 2002, the Bharatiya Mazdoor Sangh (BMS) associated with Bharatiya Janata Party (BJP), by increasing its membership to 62 lakhs in 2000 has occupied the topmost position. The second place has gone to INTUC associated with the Congress Party. The AITUC associated with the Communist Party of India (CPI) by increasing its membership to 34 lakhs stands at the third place, followed by HMS at the fourth place because its membership has increased to 33.4 lakhs. CITU which is associated with CPI (M) has lost its third place. Since its membership in 2002 is 26.8 lakhs, it has been pushed to the fifth place.

In relative terms, BMS which has manitained its membership from 26 per cent in 1989 to 25 per cent in 2002 and occupies the first place, followed by INTUC whose membership has come down from about 23 per cent in 1989 to 16 per cent in 2002. AITUC has doubled its share of membership from 7.8 per cent to 13.8 per cent during this period. In the same way, Hind Mazdoor Sangh (HMS) has improved its position from 12 per cent to 13.4 per cent. The trade union which has registered the biggest fall in share is CITU from 15 per cent to 10.8 per cent during this period. The Left organisations like CITU and AITUC are baffled by the rise of the BMS—a right wing organisation — to the top position.

Defects of the Trade Union Movement

According to V.V. Giri, there were three major defects in the Indian trade union movement.[1]

These defects were :

(a) predominance of small-sized unions—nearly three-fourths of the unions have a membership of less than 500.

During 1998, there were 7,403 trade unions submitting returns. The total membership of these unions was 72.5 lakhs, with an average membership of 979 per union.

(b) poor finance of the unions on account of the small size and also on account of the small subscriptions; and

Total income of the 7,231 trade unions with a membership of 54.2 lakhs was ₹ 7,464 lakhs in 2000. The per capita income per year works out to be ₹138 which is too low. Total expenditure of these unions was ₹ 5,940 lakhs in 2000 and therefore per member expenditure works out to be only ₹ 110. As a consequence of very small subscription, the trade unions cannot undertake welfare activities.

(c) absence of whole-time paid-officers.

Apart from these basic defects of the movement which have been responsible for the comparative weakness

1. V.V. Giri: ***Labour Problems in Indian Industry***, p. 42.

of the movement, there are some other defects also which should be mentioned.

A serious defect of the movement is that the leadership has been provided by outsiders, specially professional politicians. Whatever may have been the reasons in the past, it is highly important that the working class movement should be guided by persons from the ranks of the workers themselves who know the real problems and difficulties of the working classes. In this connection it is necessary to remember that the Indian trade union movement was dominated by political parties and this has been so till today. Naturally the interests and welfare of the workers are often ignored, while the trade unions are used to promote the interests of the political parties.

Another defect of the movement is that the trade unions have not tried to improve and secure the loyalty of the workers. Most trade unions have concentrated on the organisation of strikes and promoting the welfare of the workers through bargaining with the employers. They have ignored beneficial activities like the provision of medical and sickness relief, help to dependants of deceased members, educational and cultural activities etc. In other words, the trade unions have failed to provide continuous and substantial support to all the activities of the workers.

Finally, the trade union movement was adversely affected by the nature of our working class. For instance, the illiteracy and ignorance of the workers, their migratory character, the differences between workers in the matter of language, caste, creed and customs, low wages and low capacity to pay subscriptions to the trade unions; etc., have also led to inefficiency of the trade unions.

The Second Plan summed up the defects of the trade union movement admirably : "Multiplicity of trade unions, political rivalries, lack of resources, disunity in the ranks of workers are some of the major weaknesses in a number of existing unions."[2]

Measures to Strengthen the Movement

The interests of employees can be best protected and promoted by the creation of a trade union having a bargaining power equal to that possessed by the management. A strong trade union is, therefore, necessary to safeguard the interests of labour and to help in achieving the targets of production. As V.V. Giri states, "If the trade union movement is not united and strong enough to achieve these objectives, the industrial structure to be built in India on the basis of full-fledged socialist democracy would not have firm foundations and the State, in spite of its best ideals and designs, would find it difficult to assure fundamental rights to the working class."[3]

2. Planning Commission, ***Second Five Year Plan***, p. 572.
3. V.V. Giri, *op cit*, p. 44.

(i) Need for Unity. At present political rivalries which often come in the way of settlement of disputes, disunity among the ranks of workers and multiplicity of trade unions are responsible for lack of strength and poor bargaining power of the unions. Unity in the movement is a necessity. All those who believe in the trade union movement should join hands to form a single central organisation to represent all their demands. The alternative will be for trade unions with different affiliations to come together on the basis of a common programme covering methods, objectives and procedure. Unity among trade unions and strength are two essential factors for promoting the interests of workers and for maintaining real industrial peace.

(ii) Eliminating Unhealthy Political Influence. At present trade union leadership is in the hands of politicians, because the movement is controlled by the political parties. The trade union leaders because of their loyalty to the ideology of their parties are prepared to sacrifice the interests of the working classes to serve party ends. It is high time that the workers realise the utter uselessness of party politics in trade unionism.

(iii) One Union, One Industry. Multiplicity of unions in the same industrial establishment leads to inter-union rivalries which ultimately cuts at the root of the movement. It weakens the power of collective bargaining and reduces the effectiveness of workers in securing their legitimate rights. So far, one union for one industry has not yet been achieved in India. This is highly essential to improve the effectiveness of the movement.

(iv) Working Class Leadership. In India, as in other countries, trade unions were formed by the so called 'outsiders'. The workers were poor and illiterate and were in constant dread of being thrown out of employment. The 'outsider' with his influence in the local area was, therefore, requested by the workers to assist in forming trade unions and to represent their grievances to their employers. The outsiders were mostly professional agitators and were often interested in using workers as pawns in their political game. Inter-union rivalries are often the result of this outside leadership. It is essential that trade unions should be taken over by the workers themselves. There is, however, a fear that the working class is not ripe to throw up the necessary leadership. In this respect, the setting up of the Asian Trade Union College at Calcutta is to be welcomed as it is meant to train educated young men, particularly from the working classes, in trade unionism. This would encourage working class leadership to come forward to run our trade unions.

(v) Responsible Trade Union Leadership. Trade union leaders should also acquire full understanding of the constitutional and legal rights available to the unions. They must try to make use of these rights to secure and promote workers' interests. Personal integrity, love of

liberty, patience, understanding, industry and courage are some of the qualities a trade union leader should have.

(vi) Responsibilities of Workers. At present, trade unions confine their attention to the workers' demands only. It is high time that they inculcate in the workers a sense of discipline and responsibility to do full day's work for a fair day's wages. The unions should make every worker understand fully first his duties and responsibilities and then his rights and privileges. Besides, the worker should be made to feel that he is building up in his own humble way a prosperous State.

(vii) Greater Usefulness of Unions. Indian trade unions are more or less like strike committees. If trade unions merely serve the purpose of representing individual or general grievances of the working classes, the moment the redress is obtained, the interests of the workers would sag, such a state of affairs should be avoided. Trade unions should provide certain benefits to the workers, such as compensation for accidents, medical aid, education, thrift and temperance, etc.

Besides, the maintenance of strike funds by the unions is a necessity. On account of poor financial resources, the workers do not have the strength to stay for long. Hence, many prolonged strikes end in failure. The only remedy is to strengthen the unions with funds which would be used to help workers during strikes—as "strike pay." Not only will the trade unions be in a position to bargain with greater strength but they will also get the loyalty of the members.

Trade union movement has a bright future, provided some of the suggestions mentioned above are followed. It is highly satisfying that the Government is attaching great importance to the development of trade unionism on healthy lines.

3. INDUSTRIAL DISPUTES IN INDIA

There are conflicts between employers and workers. These conflicts take various forms of protest. From the side of the workers, the forms of protest are strikes, go-slow, gheraos, demonstrations etc. From the side of employers, these disputes take the form of retrenchment, dismissals, lockouts, etc. But the two most prominent forms of protest are strikes and lockouts. Whether a strike is a success or a failure, tension is created between the employers and the employees. This results in loss of production and decline in national income. It is, therefore, essential to know the nature and trends of industrial disputes, the factors responsible for their occurrence and the methods used to remove them.

Trends in Industrial Disputes and their Nature

Table 3 presents data about industrial disputes in the post-independence period. A close perusal of the data reveals the following :

(i) **Increasing trend of mandays lost.** There has been a growing trend in terms of workers involved and mandays lost in industrial disputes. As against a total loss of 38 lakh mandays in 1951, the loss was of the order of about 70 lakh mandays in 1956. It jumped to 138 lakh mandays in 1966 and further to 206 lakh mandays in 1970. The position deteriorated further during 1973-74 on account of a rapid rise in prices and during 1974, a record 402 lakh mandays were lost. With the declaration of emergency in 1975, the fear of MISA (Maintenance of Internal Security Act) and DIR (Defence of India Rules) were responsible for the reduction in industrial disputes. However, with the lifting of the emergency, labour unrest again manifested itself. As against a loss of 127 lakh mandays during 1976, the total number of mandays lost during 1977 was 253 lakhs. The situation slightly improved during 1978 but deteriorated further in 1979 and nearly 439 lakh mandays were lost during 1979. It appeared as if the trade unions were on the war path. However, soon after the installation of the Congress (I) government in 1980, the employers too started flexing their muscles. The total time loss due to strikes and lock-outs during 1980 was 219 lakh mandays. It stood at 366 lakh mandays during 1981. Strikes accounted for 58 per cent of the total time loss during 1981 and lock-outs accounted for 42 per cent. The number of mandays lost during 1982 (including those due to Bombay Textile Strike) was 748 lakhs. The mandays lost due to Bombay textile strike are estimated to be 548 lakhs—414 lakhs during 1982 and 134 lakhs during 1983. The share of lock-outs for the years 1985 and 1987 was 65 per cent and 60 per cent respectively of the total mandays lost.

It is really amazing that in 2003, the share of mandays lost in strikes was 11 per cent and those by lockouts, 89 per cent. It appears that the employers are on the offensive as a consequence of economic reforms.

In other words, there is a marked increase in the number of mandays lost due to lock-outs. In fact, this trend had started since 1971, particularly since 1976. This is a serious matter and should be probed in greater depth because this reverses the trend of mandays lost due to strikes and lock-outs during fifties and sixties. Obviously, there is a need to probe the factors leading to strikes and lock-outs.

The main factors responsible for the spreading of industrial unrest are: (a) the discredited trade union leaders

TABLE 3. Workers Involved and Man-days Lost in Strikes and Lockouts in India

Year	*No. of Disputes*			*No. of workers involved (in 000's)*			*No. of man-days lost (in Lakhs)*			*Average No. of days a worker was involved in*	
	Strikes (1)	*Lock-outs* (2)	*Total* (3)	*Strikes* (4)	*Lock-outs* (5)	*Total* (6)	*Strikes* (7)	*Lock-outs* (8)	*Total* (9)	*Strikes* (10) (7/4)	*Lock-outs* (11) (8/5)
1951	1,010	61	1,071	n.a.	n.a.	n.a.	28 (74)	10 (26)	38 (100)		
1961	1,240	117	1,357	432 (85)	80 (15)	512 (100)	30 (60)	19 (40)	49 (100)	12	11
1971	2,478	274	2,752	1,476 (91)	139 (9)	1,645 (100)	118 (71)	47 (29)	165 (100)	8	34
1976	1,241	218	1,459	550 (75)	186 (25)	736 (100)	28 (22)	99 (78)	127 (100)	5	53
1977	2,691	426	3,117	1,912 (87)	281 (13)	2,193 (100)	134 (53)	119 (47)	253 (100)	7	42
1981	2,245	344	3,589	1,261 (79)	327 (21)	1,588 (100)	212 (58)	154 (42)	366 (100)	17	47
1982	2,029	454	2,483	1,191	278	1,469	521 (68)	225 (32)	746+ (100)	44	81
1983	1,993	495	2,488	1,167	294	1,461	249 (53)	219 (47)	468+ (100)	21	75
1988	1,304	441	1,745	937	254	1,191	125 (37)	214 (63)	339 (100)	13	84
1989	1,397	389	1,786	1,158	206	1,364	107 (33)	220 (67)	327 (100)	9	107
1993	914	479	1,393	672	282	954	56 (28)	147 (72)	203 (100)	8	52
1994	808	393	1,201	626	220	846	67 (32)	143 (68)	210 (100)	11	65
1996	763	403	1,166	609	330	939	78 (39)	124 (61)	202 (100)	13	38
1997	793	512	1,305	637	344	981	63 (37)	107 (63)	170 (100)	10	31
1999	540	387	927	1,099	212	1311	106 (40)	162 (60)	268 (100)	10	76
2000	426	345	771	1,044	374	1,418	120 (42)	168 (58)	288 (100)	11	45
2001	372	202	574	489	199	688	60 (25)	178 (75)	238 (100)	12	89
2002	295	284	579	900	179	1079	97 (36)	169 (64)	266 (100)	11	95
2004	236	241	477	1,903	169	2,072	48 (20)	190 (80)	238 (100)	3	112
2005	227	229	457	2,111	183	2,294	108 (31)	160 (69)	268 (100)	4	87
2006	243	187	430	NA	187	NA	53 (36)	150 (64)	203 (100.0)	NA	NA
2007	210	179	389	NA	150	NA	121	271	392	NA	NA
2008	250	182	432	NA	70	NA	105	175	380	NA	NA
2009 (Jan-Nov)	NA	NA	69	NA	2267	NA	NA	227	NA	NA	NA

SOURCE : Compiled from data given in CMIE, *Basic Statistics Relating to the Indian Economy*, Vol. I, All-India, August 1993, and Ministry of Labour, Labour Bureau, Simla, Ministry of labour, Government of India, Annual Report 2009-10.

who lost their image during emergency as champions of labour were out to build their image through strikes; (b) political instability in the country had its impact on the attitude of trade union leadership. The rival factions tried to eke out concessions from the Governments which were either unstable or on their way out; (c) growing indiscipline among the workers on account of irresponsible trade union leadership; and (d) more frequent use of lock-outs by the employers to punish the workers emboldened by the New Economic Policy since 1984 in favour of private sector.

(ii) **Rise in the share of lock-outs in mandays lost.** It would be of interest to study the relative share of

strikes and lock-outs in industrial disputes. Table 3 reveals that during recent years, the share of lock-outs in total mandays lost has been on the increase. In 1951, only 26 per cent of the man-days lost was through lock-outs. By 1961, this had risen to 40 per cent and by 1971 it rose up to 47 per cent. The culmination of this trend was witnessed during the emergency. During 1976, 78 per cent of the man-days lost was through lock outs. The authoritarian forces were able to ruthlessly muzzle the voice of the working class. The loss of mandays due to lockouts was of the order of 80 per cent in 2004. Since lock out is a form of punishment that the capitalists inflict on the workers, it would be of interest to study the average number of days a worker was involved in a strike or a lock-out.

From the figures given in table 3, column 10 and 11, it is obvious that during 1961 the average number of days a worker was involved in strikes and lock-outs was 12 days and 11 days respectively; but in 1971 this had changed to 8 days and 34 days respectively. However, during 1976, the average number of days a worker was involved in strike was 5 days, but the involvement of workers in lock outs on the average was for a period of 53 days. A trend analysis from 1961 to 1981 reveals that whereas average life of the strike has remained between 8 and 13 days, the average life of the lock-outs has shown a continuously growing trend. From a low figure of 11 mandays in 1961, the average life of the lock-out went up to 53 in 1976. This figure further shot up to 107 and 92 days in 1989 and further to 112 during 2004 . This clearly points out to the fact that State gave unbridled power to the business and industrial magnates to punish the workers, whenever they tried to raise their head against exploitation, oppression and misery. Mandays lost due to lock-outs were 78 per cent of total mandays lost during 1976—a record achievement against working class. The same situation prevailed in 1994, when lock outs accounted for 68 per cent of total mandays lost. Even during 1997, lock outs accounted for 63% of mandays lost. Even during 2003 , the share of lock outs in total mandays lost was 90 per cent.

The relatively high share of lock-outs in mandays lost suggests that whereas the State has been emphasizing measures for settlement of industrial disputes holding labour responsible for strikes, there is a strong need to make an analysis of the phenomenon of lock-outs so as to control their repeated use against the working class.

4. INDUSTRIAL RELATIONS IN THE PUBLIC AND PRIVATE SECTORS

It would be of interest to study industrial relations between the public and the private sectors by developing certain indices. The following indices have been used for this purpose :

1. Proportion of workers involved in industrial disputes to the total number of workers.
2. The total number of mandays lost and the average number of workers involved per dispute.
3. The average number of mandays lost per worker in an industrial dispute.

Proportion of workers involved in industrial disputes

Data pertaining to the proportion of workers involved in industrial disputes to the total number of persons employed reveal the following :

For the entire period (1973 to 2002), the percentage of workers involved in industrial disputes was much lower in the public sector than in the private sector. In most of the years, the proportion of workers involved in industrial disputes in the private sector was double than that in the public sector. In some years, it was as high was four times or more (1973, 1975, 1985). However, after 1987, this trend seems to be reversed and the proportion of workers involved in industrial disputes in the public sector is much higher than in the private sector. The situation has again reversed during 2002. Again in 2003 and 2004, the share of the public sector is much higher.

Number of mandays lost and the average number of workers involved per dispute

Data given in table 4 reveal that although the total number of workers employed in the public sector has been nearly double the number employed in the private sector, the mandays lost in industrial disputes in the public sector was barely 17 per cent during 1973. The highest figure of the share of mandays lost in the public sector was in the year 1974 when the Railways strike took place and next in order was the year 1981, but in both these years, some major public sector undertaking was involved in industrial dispute. Despite this, the share of the public sector in total mandays lost never exceeded 33 per cent, it was as low as 7 per cent in 1976—the year following the emergency. However, it has been around 14 to 18 per cent in most of the years. In 1986, it was only 8 per cent and declined to 6 per cent in 1994. It again increased to 34 per cent during 1998 but declined to 3 per cent in 2002 and 8 per cent in 2004. From this point of view also, the public sector has an edge over the private sector in the maintenance of better industrial relations.

Though the number of mandays lost in the public sector is less than that in the private sector, the average number of workers involved per dispute is more in the public sector than in the private sector. This is due to the nature of activities carried on in the public sector. Life

TABLE 4: No. of Industrial Disputes resulting in work stoppages in Public and Private Sector in India

Year	No. of Disputes			No. of Workers Involved (000's)			No. of Manday's Lost (000's)			Average no. of workers Involved per dispute		Average no. of mandays lost per worker	
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Public	Private
1973	714	2,656	3,370	789	1,757	2,546	3,392	17,234	20,626	1,105	661	4.2	9.8
	(21)	(79)	(100)	(81)	(69)	(100)	(17)	(83)	(100)				
1980	968	1,888	2,856	799	1,101	1,900	4,134	17,790	21,925	825	583	5.2	16.2
	(34)	(66)	(100)	(42)	(58)	(100)	(19)	(81)	(100)				
1981	707	1,882	2,589	703	885	1,588	10,066	26,517	36,583	994	454	14.3	30.0
	(27)	(73)	(100)	(44)	(56)	(100)	(28)	(72)	(100)				
1982	799	1,684	2,483	726	743	1,469	10,360	64,254	74,614	908	441	14.2	86.5+
	(32)	(68)	(100)	(49)	(51)	(100)	(14)	(86)	(100)				
1983	884	1,604	2,488	757	703	1,460	4,452	42,405	46,858	857	438	5.9	60.8+
	(36)	(64)	(100)	(52)	(48)	(100)	(10)	(90)	(100)				
1984	592	1,502	2,094	931	1,018	1,949	7,871	48,154	56,025	1,572	678	8.5	47.8
	(28)	(82)	(100)	(48)	(52)	(100)	(14)	(86)	(100)				
1985	401	1,354	1,755	385	694	1,079	3,202	26,037	29,239	960	512	8.3	87.5
	(23)	(77)	(100)	(36)	(64)	(100)	(11)	(89)	(100)				
1986	389	1,508	1,892	678	967	1,645	2,572	30,176	32,748	1,743	643	3.8	31.2
	(21)	(79)	(100)	(41)	(59)	(100)	(8)	(92)	(100)				
1987	442	1,357	1,799	1,007	768	1,775	5,240	3,0120	35,360	2,278	566	5.2	39.2
	(24)	(76)	(100)	(57)	(3)	(100)	(15)	(85)	(100)				
1988	564	1,181	1,745	802	389	1,191	6,630	27,310	33,940	1,422	329	8.3	70.2
	(32)	(68)	(100)	(67)	(33)	(100)	(19)	(81)	(100)				
1989	615	1,171	1,786	918	446	1,364	5,740	26,920	32,660	1,493	381	6.2	60.4
	(34)	(66)	(100)	(67)	(33)	(100)	(18)	(82)	(100)				
1990	628	1,197	1,825	884	424	1,308	5,740	18,350	24,090	1,408	354	6.5	43.2
	(34)	(66)	(100)	(68)	(32)	(100)	(24)	(76)	(100)				
1991	653	1,157	1,810	788	554	1,342	4,140	22,280	26,430	1,207	479	5.3	40.2
	(36)	(64)	(100)	(59)	(41)	(100)	(16)	(84)	(100)				
1992	617	1,097	1,714	566	686	1,252	1,920	29,330	31,260	917	625	3.4	42.8
	(36)	(64)	(100)	(45)	(55)	(100)	(6)	(94)	(100)				
1993	359	1,034	1,393	565	389	954	2,290	18,010	20,300	1,574	376	4.1	46.2
	(26)	(74)	(100)	(59)	(41)	(100)	(11)	(89)	(100)				
1994	316	885	1,201	523	323	846	1,320	19,670	20,990	1,655	365	2.5	60.8
							(6)	(94)	(100)				
1995	343	723	1,066	725	265	990	4,790	11,500	16,290	2,114	367	6.6	43.4
							(29)	(71)	(100)				
1996	381	785	1,166	606	333	939	3,150	17,130	20,280	1,591	424	5.2	51.4
							(15)	(85)	(100)				
1997	448	857	1,305	618	363	981	2,180	14,850	17,030	1,379	423	3.5	40.9
							(13)	(88)	(100)				
1998	283	814	1,097	901	388	1,289	7,580	14,490	22,060	3,184	477	8.4	37.3
	(26)	(74)	(100)	(70)	(30)	(100)	(34)	(66)	(100)				
1999	165	762	927	553	758	1,311	1,180	25,610	26,790	3,352	995	2.1	33.8
	(18)	(82)	(100)	(42)	(58)	(100)	(4)	(96)	(100)				
2000	125	646	771	1,147	271	1,418	10,680	18,080	28,760	9,176	420	9.3	66.7
	(16)	(84)	(100)	(81)	(19)	(100)	(42)	(58)	(100)				
2001	139	535	674	428	260	688	2,030	21,740	23,770	3,079	486	4.7	83.6
	(21)	(79)	(100)	(62)	(38)	(100)	(8)	(92)	(100)				
2002	63	516	579	347	733	1,079	800	25,780	26,580	5,508	1,420	2.3	35.2
	(11)	(89)	(100)	(32)	(68)	(100)	(3)	(97)	(100)				
2003	59	493	552	1,099	717	1,816	6,860	23,390	30,250	18,627	14,558	6.2	32.6
	(11)	(89)	(100)	(61)	(39)	(100)	(23)	(77)	(100)				
2004	51	289	340	1,590	482	2,072	1,810	22,060	23,870	31,176	2,550	1.1	45.8
	(15)	(85)	(100)	(77)	(23)	(100)	(8)	(92)	(100)				

+ This includes 41.40 million and 13.38 million mandays lost due to Bombay Textile Strike during 1982 and 1983 respectively.
SOURCE: Compiled and computed from *Indian Labour Year Book* (1982) and (1987) and Ministry of Labour, *Annual Report* (2005-06).

Insurance, railways, post and telegraph, bank employees, iron and steel etc., are all parts of much bigger organisations. Consequently, whenever strikes are organised in the public sector, though after long intervals, they affect large number of workers.

Average number of mandays lost per worker

Average number of mandays lost per worker reveals that in the public sector, there is comparatively much less time required for resolving a dispute, but in the private sector, it has taken much longer. For instance during the 24-year period, but for 1981 average number of mandays lost per worker has remained between 4 to 10 in the public sector, but during the same period, in the private sector, the average loss of mandays per worker has been between 10 to 86. The probable explanations for the situation are : firstly, the Government agrees to the demands of workers since the continuance of a strike affects large segments of the economy as the public sector covers infrastructure industries. Even the private sector prods the government to settle the issue. Secondly, the Government, being a pace-setter in the payment of wages, allowances and perks, agrees to the demands for higher wages, bonus, allowances, medical benefits and other perks keeping in view world social trends and social implications of not agreeing to the demands of workers which may result in alienation of large segments of the population. Thirdly, in the public sector, the workers claim that the part of the surplus emerging in the enterprises rightly belongs to them and the state should give them a legitimate share of the surplus.

As against it, the situation is very different in the private sector. Firstly, in the private sector, the capitalists feel that any increase in wages, bonus or perks is a direct erosion of the profit and thus there is greater resistance to part with it. This results in prolonged negotiations and tiring out the workers. The theory of attrition helps the capitalists yield less concession to the workers. Secondly, the phenomenon of lock-outs which is practically non-existent in the public sector, is a very common phenomenon in the private sector. The average number of days a worker was involved in a lockout was around 95 in 2002 as against 11 in a strike. Thirdly, even the government is very hesitant to annoy the private sector capitalists and get industrial disputes settled quickly. The use of black money for election purposes, for which the fund-suppliers to the political bosses are the capitalists, further blunts the capacity of the state to bring pressure on the capitalists for an early settlement of industrial disputes. The net result of this phenomenon is greater loss of mandays in the private sector due to strikes/lock-outs.

The upshot of the entire analysis is that larger number of industrial disputes, with greater intensity in terms of mandays lost and the average number of days a worker is involved in the disputes, take place in the private sector. The machinery of settlement is brought into action much more swiftly in the public sector than in the private sector. This naturally alienates the worker much more in the private sector than in the public sector. The tug of war between the contending classes for a larger share of the allocable surplus is more severe in the private than in the public sector.

5. CAUSES OF INDUSTRIAL DISPUTES

There are several causes of industrial disputes. The most important cause is the demand for more wages. It is generally known that the Indian industrialists have not been following an enlightened policy in the matter of paying wages. In recent years, particularly, wages have not been rising in proportion to the rise in prices. Most of the industrial disputes were the result of a demand for higher wages.

TABLE 5. Percentage Distribution of Industrial Disputes in India by Causes

Year	*Wages and Allowances*	*Bonus*	*Personnel and Retrenchment*	*Indiscipline and violence*	*Others*
1961	30.4	6.9	29.3	—	33.4
1971	34.3	13.1	23.0	1.4	27.2
1976	23.0	14.0	22.7	3.5	25.8
1981	28.1	8.0	21.3	9.4	33.2
1990	24.2	4.0	15.9	15.6	40.3
1996	24.4	8.2	19.5	18.2	29.7
2001	20.5	8.6	12.5	25.8	32.6
2002	20.4	6.4	15.8	29.6	28.0

SOURCE: *Pocket Book of Labour Statistics* (1979) and (1985) and *Indian Labour Year Book* (1996), (2003 to 2004).

The demand for bonus or for the increase in bonus has been another major cause for industrial disputes. There is an increasing feeling among the workers that they should have a greater share in the profits of the industrial concerns. Non-acceptance of this fact by the employers has been a source of friction among the employers and employees.

The demand for improved working conditions—such as lesser working hours, better safety measures in the factory, canteen facilities, holidays and leave, etc.—are also considered to be responsible for many industrial disputes.

Table 5 reveals that wages and bonus (or the economic demands of the workers) have accounted for between 46 and 50 per cent of the industrial disputes during 1966-71. Thereafter, the disputes resulting from economic demands declined and the figure was as low as 37 per cent during the peak year of emergency era, i.e., 1976. The rise

in disputes arising on account of bonus could be explained by the fact that it was proclaimed that bonus would be linked to productivity. Consequently, the Government abolished the payment of bonus as deferred wage during emergency, involved the workers in the determination of the formula for the distribution of allocable surplus, but no final decision was taken in the matter. The end of the emergency again resulted in emphasis on economic demands by the working class. During 1981 wages and bonus accounted for 29 per cent of industrial disputes. This figure was a little higher at 33 per cent in 1996, but declined slightly to 27 per cent in 2002.

Personnel, retrenchment, leave and hours of work accounted for about 32 per cent of total disputes in 1961. By 1971, this figure went down to about 23 per cent, but again rose to about 33 per cent during 1976. During 1981 and 1996, these causes accounted for 16 to 22 per cent of total disputes, but declined to 16 per cent in 2002.

Other causes include non-implementation of labour acts, awards and agreements, workload, betterment of amenities, non-implementation of standing orders on service conditions and safety. Other causes contributed between 22 and 40 per cent of industrial disputes. There have been fluctuations during the period 1961-72, but more recently, during 1981 and 2001, these factors accounted for 30 to 40 per cent of industrial disputes.

Segregated data providing information about strikes and lockouts is given in table 6 for the period 1987 to 1995. It may be noted that whereas economic causes, viz., wages and allowances, bonus, personnel and retrenchment accounted for between 51 to 70 per cent of the strikes, these contributed between 22 to 29 per cent in lockouts. But as against it, indiscipline and violence were the major factors contributing to lockouts — ranging between 40 to 45 per cent. But so far as strikes are concerned, indiscipline and violence were responsible only between 5 to 9 per cent. It is really very intriguing that the principal factor for lockouts is indiscipline and violence. If "other factors" such as relationship with trade union leadership and introduction of rationalization etc. are also taken into account, then non-economic factors were responsible for 67 to 74 per cent of lockouts. There is no doubt that employers' militancy has grown after the introduction of New Economic Policy, more especially after 1985. Consequently, employers on several occasions provoke the workers to resort to indiscipline and violence and then declare a lockout. Similarly, introduction of hi-tech without providing any safety net, in the name of rationalisation and increasing productivity, is another major factor leading to lockouts. The employers succeed in a number of cases to force workers to accept their terms and this has emboldened them.

Since employers provide information about lockouts to the government, they invariably indicate indiscipline and violence in a majority of cases, even though the ground reality may be entirely different. Consequently, the figures provided by the Labour Ministry pertaining to the causes of lockouts cannot the considered as reliable.

Table 6 : Distribution of Strikes and Lockouts by Causes (Percentage Distribution)

Cause	*1987*		*1989*		*1995**	
	Strike	*Lock out*	*Strike*	*Lock out*	*Strike*	*Lock out*
1. Wages and Allowances	31.4	13.5	28.0	8.7	39.8	18.4
2. Bonus	7.0	9.1	6.6	4.1	7.5	3.7
3. Personnel	15.5	6.0	19.6	6.7	22.1	2.8
4. Retrenchment	4.5	0.7	2.6	0.8	1.1	—
Sub-total	**58.3**	**29.3**	**56.8**	**22.2**	**70.5**	**24.9**
5. Leave & hours of work	1.3	0.9	1.3	0.8	0.9	0.0
6. Indiscipline and violence	4.6	40.8	7.1	45.0	1.8	45.0
7. Others	33.2	27.0	31.9	28.8	26.8	30.1
Total (1 to 8)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Calculated from the data supplied by Labour Bureau, Shimla.

Lockouts—the principal causes

Employers have been resorting to lockouts to counter the militant ways of workers. The rise of militant leaders like Datta Samant who continued the Bombay Textile Workers Strike during 1982 and 1983 for a period of over 18 months by raising impossible demands and then sacrificing worker interests, resulted in a change in the response of workers who realise that leaders have turned trade unions into a business and thus the workers are not prepared to risk prolonged strikes. This has emboldened the employers to act as a cohesive force against trade unionism. During recent years, employers have closed their ranks and become a more cohesive group, but among the workers there is greater proliferation of trade unions. Moreover, the political rivalry at the national level, the breaking of the existing political parties into splinter groups, the rise of independent militant forces like those of Datta Samant and Shiv Sena have all resulted in the failure of the working class to put up a united national front. In the process, the bargaining power of the trade unions has declined and that of the employer has gone up. Even Dr. Datta Samant admitted : "Militant bargaining has gone down". The militant trade union leader R.J. Mehta of Engineering Mazdoor Union also conceded : "Labour has today lost its teeth."

For a number of reasons, lockouts have been used by the managements to bring workers down on their knees.

Firstly, labour productivity has failed to rise

commensurate with the rise in wages. Consequently, managements have realised that it is better to close down than pay inflated wages to an indisciplined labour force. The recent closedown by Hindustan Lever, Mafatlal Engineering, Bata Shoe Factory have all been prompted by this factor.

Secondly, liberalisation policy has opened the flood-gates of competition. A wage squeeze and productivity push were the only way out for the managements to survive the heat of market forces. Consequently, managements have been forced to become militant for their own survival.

Thirdly, the workers are imbibing new life styles of sending their children to better schools, acquiring modern gadgetry in their houses like TV, refrigerators, washing machines, transistors etc. This has resulted in making certain committed expenditures in the family to have a better standard of living. Workers are, therefore, reluctant to involve themselves into long drawn-out strikes since they imply loss of income and thus result in a failure to keep the new-found life-styles and meet their commitments to the family.

Fourthly, another factor that has helped managements to beat back the militant unions is the emergence of low-cost production alternatives in the form of small-scale subsidiary units in smaller towns where wages are low and productivity higher. The big industrialists during the period of prolonged strike can make use of such units and reduce their workforce by retrenchment or force a closure or a lockout.

All these factors have conspired to weaken the bargaining power of the workers and trade union leaders. Lethargic managements which have been operating in captive markets have been shaken out of their slumber in view of the policy of liberalization. New technology has also shifted the power from workers to the managements.

6. EMERGING TRENDS IN TRADE UNION MOVEMENT

Historical Background

Before understanding the emerging trends in Indian Trade Union movement, it would be of interest to understand the historical context in which unions functioned during the first four decades in the post-independence period.

During the freedom movement, trade unions were patronized by political parties and the freedom movement helped trade unions to be recognized as legal labour organizations to promote the interests of the working class, more especially in the organized sector of the economy.

Trade unions during post-independence period preferred state-led planned industrialization. The national government also passed a number of Acts with which they codified the roles of trade unions as instruments of collective bargaining on behalf of the workers. Tripartite structures of consultation were created like the Indian Labour Conference, Wage Boards, Central Industrial Relations Machinery, Joint Management Councils etc. The entire idea was that these institutions should be used to reduce the areas of conflict by dialogue, rather than resort to strikes. In case of failure by dialogue, the Government used the instrument of compulsory adjudications, by appointing state as well as national level tribunals. The result was that trade unions felt that the state has given them a respectable place to voice their concerns and thus, they were able to extract with the help of the State good amount of power to protect and promote the interests of labour. In other words, this period is marked by a social cohesion between the state and the trade unions to improve the miserable conditions of the working class. The arm of the state was in favour of the working class.

Liberalization Model, Change in the Nature of the State and Labour

However, economic reform process initiated by Rajiv Gandhi and later strengthened in 1991, adopted Liberalisation, Privatization and Globalization, popularly referred to as LPG model of development. In other words, the country accepted market-based strategy to accelerate development with least amount of state intervention. This had an impact on the trade unions. The arm of state started strengthening the capitalist class and they were considered as the chief instrument to promote development. Globalisation added strength to the Indian capitalist class. Thus, capital – Indian as well as foreign – argued for labour reform. A new meaning was given to the term 'labour reform' which implied the power to 'hire and fire' workers, freedom to determine wages according to market demand and supply. Although the state did not undertake 'labour reforms' by introducing new legislation to legitimize the demand of the capitalist class, it silently worked to reduce state intervention. Consequently, the employers used different methods to reduce the size of the labour, by decentralizing production and even sub-contracting for various operations to small businesses. This led to reduction in the growth of jobs in the organized sector and increase in the share of the informal sector in industrial employment. Regular workers were replaced by contract workers to reduce wage costs, so that business firms could compete in the market. This started the process of weakening of trade unions. Lockouts were used by the employers to retrench workers and prolonged lockouts were used

as the instruments of pressurizing labour to accept humiliating conditions of work before lifting lockouts. This process gathered momentum in all states – whether ruled by the left or the right or moderates in India. This further weakened the trade unions.

Reduction of Employment in the Public Sector

The state itself started the process of 'shedding the load of surplus workers' by adopting various methods like freeze on fresh recruitment, by offering workers voluntary retirement schemes (VRS). During the last decade, the public sector accounted for 60 percent of reduction in employment in the organized sector. The process of privatization of state enterprises, by the instrument of disinvestment, further led to a decline in employment, dilution of collective bargaining, worsening in working conditions and reduction in wages. This emboldened capital to raise the demand for reduction of workers in the private sector, by using a sophisticated term – the provision of 'labour flexibility'.

Labour Flexibility Permitted by the State in Practice

Capitalist class has been pressurizing the State to permit labour flexibility in business, which implies the right to retrench labour, to permit business firms to replace regular workers with either temporary or contract labour so that the benefits of provident funds, gratuity, paid leave etc. are denied to a part of the working class. All this is being argued with a view to reduce costs so that firms can face competition while earning reasonably good profits. Though the state, due to strong resistance by trade unions, did not amend section VB of the Industrial Disputes Act but in practice, it only winked at downsizing of the labour force as also increasing the percentage of workers employed as contract workers. Data provided by the Annual Survey of Industries indicates that the total number of workers employed by factories declined from 62.8 lakhs in 1999-00 to 60.8 lakhs in 2003-04. However, the proportion of contract workers increased form 19.7 percent in 1999-00 to 24.6 percent in 2003-04. During 1999-00 to 2003-04, total profits increased from ₹ 47,334 crores to ₹ 92,366 crores – an increase by 95 percent. Obviously, the benefits of growth were appropriated by the capitalist class at the cost of labour. Not only that, the Labour Department has been granting permission for closures more liberally in recent years, thus facilitating labour flexibility.

Repression of the Working Class by the State

During the last few years, cases of repression by the state of the working class have further weakened the trade unions. A few instances are being mentioned. The Government of Haryana unleashed ruthless violence by the State police against striking workers in Honda Motorcycle. In this respect, the Left government of West Bengal also used both the Police and CPM cadres to repress people in Singur so that the Tata Motors can establish their small car factory. The Government promised compensation to displaced farmers, but provided pretty little compensation to displaced tenants whose livelihood was destroyed. The UP Government used ESMA (Essential Services Maintenance Act) and the National Security Act (NSA) in UP Electricity Board's strike in January 2000. The Tamil Nadu Government enacted Tamil Nadu ESMA in September 2002 to suppress the State Government employees' strike. It also armed itself with radical powers to deal with another strike by its employees and teachers in 2003.

Role of Judiciary

Whereas during the sixties and the seventies, the Judiciary played a very progressive role in protecting the rights of labour, there is a sea change in its role after the introduction of reforms. The Supreme Court judgment in 2003 declared that the government employees have "no fundamental, legal, moral or equitable right to go on strike." The judiciary had also reversed its own judgment on contract labour absorption in case of SAIL. This was a big blow to trade unions who were opposing flexibility of labour. All these judgments indicate that whereas the workers and trade unions could seek redress of workers' abrogation of labour rights from the judiciary earlier, but in recent years, there appears to be a compact between the State and Judiciary to promote LPG model of development.

Contracting Base of the Trade Unions

With increasing demands for more skilled workers especially in the IT sector, a new class of managers and skilled workers are being recruited by business firms. These workers place individual interest at a higher level than group interest. Business firms offer high wage and perks to these knowledge workers and further promise frequent promotions on performance or merit basis. Consequently, a new class of highly paid workers is emerging which does not like to be members of trade unions, but form their own associations to seek larger benefits.

Closures, retrenchment, increasing proportion of casual/contract workers have further led to contraction of union-base. The unions, in order to increase their penetration are now working to organize the unorganized workers in the informal sector.

Rise of Independent Industry Unions

In recent years, instead of getting affiliated to unions supported by political parties, the employees are organizing independent industry-wise unions e.g., United Forum of Bank Employees, the National Co-ordination Committee of Electricity Employees and Engineers (NCCOEE), unions formed in banks, insurance companies and financial institutions. Rise of independent unions have also weakened the role of politically affiliated unions.

Absence of Co-operation and Consolidations among Major Unions

Politically affiliated unions have shown a change in attitude with the change in the ruling party. For instance, INTUC co-operated with the Congress Government during emergency, but reversed its role towards the Government when Janata Party came into power. Similarly, the CITU, an affiliate of the CPI (M), does not force the West Bengal Government to check the rampant phenomenon of lockouts, but is very vocal in other states as a defender of labour rights. The Left Unions play a different role in states ruled by the Congress or BJP, but connive with the Governments in Left-ruled states.

Moreover, attempts of merger among major politically affiliated unions have not succeeded. CITU and AITUC, while they believe in "workers of all lands unite" as suggested by Marx, have failed to come together. Left unions treat BMS, the biggest trade union, as an untouchable and would not co-operate with it in any struggle. There are occasions when unions have come together "for some struggle" but parted ways as soon as the struggle came to an end.

Trade Unions and Emerging New Sectors

New sectors such as Information Technology (IT), Business Process Outsourcing (BPO) and Retail Sector, with large potential for increasing employment opportunities are emerging. They engage a large number of white-collar workers. The knowledge sector employees get hefty pay packets which gives them a certain kind of arrogance not to be a part of trade unions with other industrial workers. Individual bargaining is the key mode of determining rules of employment relationship. These employees of the IT and BPO sector are called 'cyber coolies' since they have to work for long hours and always suffer from tension arising out of attitude of the employer to 'hire and fire' at any time. They also become victims of emotional stress resulting in nervous and physical disorders. The Governments wants to declare the IT and BPO sector as 'public utilities'. The trade unions are making efforts so that workers in IT and BPO sector are permitted to become members of unions. Other additions to the list are Retail Sector and Special Economic Zones (SEZs). The strategy of the government is to exempt retail sector from the purview of Shops and Establishments Act. In the name of promotion of exports, earlier Free Trade Zones were exempted from the application of labour laws. Now several ministers are in favour of SEZs being also declared 'public utilities' so as to provide them the exemption from labour laws. It is really strange that without providing any social basis of its decisions, the Government intends to use its discretion to declare any activity as public utility. Such an anti-labour attitude must be resisted by trade unions. The unions are faced with two sets of challenges: First, they have to convince white-collar workers to shed their class arrogance and be part of the broad labour movement. Second, the trade unions have to force the government not to go ahead declaring any sector as 'public utility'. Both challenges are quite formidable in the new business environment.

Is the Response of the Trade Unions to New Challenges Adequate?

Liberalization, privatization and globalization model has generated an anti-labour economic environment in the post-reform period as against the pro-labour environment in the pre-reform period. The manifestation of new ideology can be observed in a number of ways: Firstly, collective bargaining power of the unions has been weakened. As against it, employer militancy has increased in the form of lockouts, retrenchments and closures which lead to shrinkage of employment in the organized sector. As things stand today, the share of organized sector has declined to 7 percent and that of unorganised/informal sector has gone up to 93 percent. *The Eleventh Plan Approach Paper* states: "The wage share in our organized industrial sector has halved after the 1980s and is now among the lowest in the world. One reason for this is, increasing capital intensity in organized sector, another is outsourcing." Obviously, the benefits of growth are being appropriated to a much larger extent by the capitalist classes, and the real wages of workers indicate a decline; however, the remuneration of managerial and technical staff has been increasing at the astounding rate of 15% per annum. Capital has made a strong compact with the state. Even judiciary has been pronouncing judgments castigating labour as happened in the Tamil Nadu workers strike and reversal of its own judgment regarding absorption of contract labour.

Labour flexibility measures have either replaced regular jobs with contract labour or have at least created 'bad jobs'. Flexible labour laws are likely to lead to less hiring and more firing. The argument that more jobs might be created in the medium and long-term has not gone down the throat of the working class. It is considered only as a mirage.

Labour penetration by the union in the

unorganised sector is only at the stage of infancy and needs to be fostered at an accelerated pace.

In this grim scenario, it was incumbent on the part of trade unions to close their ranks so as to meet the offensive of the capitalist class working in collusion with the state. But alas! The response of the trade unions is rather disappointing. Unity moves initiated by the CPI were brushed aside by CPM. No effort has been made to foster even a loose federation of trade unions to put up a joint front. INTUC or BMS or the Left unions like CITU and AITUC have been pulling in different directions to suit the interests of political parties. The duplicity exhibited by the Left unions of their behaviour about issues pertaining to labour like SEZ at the state level in favour of the ruling party and diametrically opposite behaviour against the Central Government has confused the working class. Moreover, to extend co-operation to the state when their affiliate political party is in power and have an attitude of confrontation when a rival political party is in power, has created the impression that political affiliations rather than genuine response on labour issues is the touchstone of co-operation or confrontation.

Since the bargaining power of the trade unions has weakened, it is relevant for trade unions to shed the old strategy of confrontation and conflict and shift to co-operation and collaboration. The BMS President, Hansubhai Dave, observed in this connection: "These leftist unions always resort to a 'Bharat Bandh' and call for a strike." But BMS wants to utilize other options of dialogue, negotiations and presentation of convincing analysis of the prevailing situation. INTUC also has come round to the view of Gandhian philosophy of co-operation to secure benefits for the working class.

The independent unions though non-political and strong have not become very effective in labour penetration and do not have a large following.

In this atmosphere of mutual distrust among trade unions and their weakening bargaining power, the capitalist class is able to push through its agenda of economic reforms, knowing fully well the hard reality that unions will only bark and not bite. It is high time that the unions realize the prevailing social and economic scenario buttressed by the forces of globalization so as to bring about a change in their strategy, rather than getting sidelined by the state and capitalist class.

It is heartening to find that Trade unions are gradually moving towards the unorganized sector – a more difficult area for organization of workers than the organized. As per a broad estimate prepared by Ruddar Datt, 103.9 lakh memberships is 41.7% of total membership of Central Trade Unions (CTUs) is in the unorganized sector. It is a matter of great satisfaction.†

† c.f. Ruddar Datt, *Spread of Indian Trade Unions*

Table: Trade Union Membership in the Unorganized Sector

Sector	*Membership*	*% of total membership*
1. Agricultural & Rural Workers	76,45,086	30.7
2. Building and construction	10,70,278	4.3
3. Brick Kiln	4,57,718	1.8
4. Personal Services	4,46,748	1.8
5. Local Bodies	2,99,635	1.2
6. Food & Drinks	2,99,590	1.2
7. Self-employed	1,70,542	0.7
Sub-total (1-7)	**1,03,89,597**	**41.7**
Total membership of all (CTUs)	2,48,84,802	100.0

Source: Ministry of Labour & Employment, as analyzed by Ruddar Datt

7. SETTLEMENT OF INDUSTRIAL DISPUTES

At one time the conflict between the capitalists and labour was looked upon by the Government as a problem of law and order. But this was not a sensible attitude. For, industrial disputes resulting in stoppages of production affect national income badly and it is necessary from the point of view of the economy and of the consumers that the disputes are resolved as early as possible. The Government of India passed the Industrial Disputes Act of 1929 under which disputes between the management and the workers would have to be taken to special industrial courts (which, however, were never established). During the War, the Government forced the parties concerned to go for compulsory conciliation and adjudication.

The Industrial Disputes Act of 1947 as Amended in 1956

In 1947, the Government of India passed the Industrial Disputes Act under which machinery for the prevention and settlement of disputes was outlined. The Act as amended in 1956 has set up machinery for settlement of disputes. The present system of establishing industrial peace and to settle industrial disputes is as under :

(a) **Works Committees.** There are joint committees of employers and employees for the purpose of promoting good relations between the parties. The Committees attempt to remove causes of friction between employers and workers in the day-to-day working of the factory. They provide a forum for negotiations between employers and workers at the factory level. The Government may direct industrial establishments with 100 or more workers to constitute such works committees. On June 30, 1998 works committees were functioning in 870 establishments.

(b) **Conciliation Officers.** The Government appoints conciliation officers for particular regions and

industries. It is the duty of these officers to bring both the parties together and help them to resolve their differences. If the dispute is settled through his good offices and an agreement is reached he should send a report to the effect to the Government. In case he could not succeed in settling the dispute, he should inform the government about his failure, the steps he had taken and the reasons for not being successful.

(c) **Board of Conciliation.** The Government may appoint a Board of Conciliation consisting of a chairman who is an independent person and two or four persons representing the employers and the workers. The Board is appointed to go into any industrial dispute referred to it by the Government. The Board reports to the Government about the success or failure of its efforts including the steps it took and the reasons for its failure to bring about a settlement.

(d) **Court of Enquiry.** Whenever an industrial dispute is not settled by the conciliation officers or by the Board of Conciliation, the matter is referred to a Court of Enquiry. The court may consist of one or more independent persons. The court will investigate the whole dispute and will submit its report to the Government. The case will then be referred to the Industrial Tribunal for adjudication.

(e) **Labour Courts.** State Governments have set up labour courts to go into the disputed orders of the employers, dismissals and suspensions of employees by the management, the legality or otherwise of strikes and lock-outs, etc. The labour courts decide the matters speedily and report to the State Governments.

(f) **Industrial Tribunals.** There are two types of industrial tribunals, viz., State tribunals and national tribunals. The State Government may appoint one or more industrial tribunals for the adjudication of disputes relating to wages, bonus, profit sharing etc. The State Tribunal will consist of a person of the rank of a High Court Judge. The National Tribunal is appointed by the Central Government for the adjudication of industrial disputes which involve questions of national importance or which affect industrial establishments situated in more than one State. The adjudications of the State and National Tribunals are binding on the parties concerned.

Apart from this system of settling disputes the following practices are becoming common in recent years:

Joint Management Councils. These councils enable the workers to participate in management, help them to understand the problems and difficulties of the industry concerned and bring about better relationship between the management and labour. Wherever joint management councils have been set up, there have been better industrial relations, a more satisfied labour force, reduction in waste, increase in productivity, better profits and closer understanding between the parties. Workers are also serving as directors on the boards of all nataionalised banks. The Government has also introduced since October, 1975 the scheme of workers' participation in industry at the shop floor and plant levels. Another scheme of workers' participation in management in commercial and service organisations in the public sector, having large-scale public dealings and employing at least 100 persons, was announced in 1977. The scheme has been introduced at the shop floor/plant level in 236 public sector undertakings by September 1994.

Code of Discipline. In 1958 the Indian Labour Conference evolved a Code of Discipline in industry. The Code was ratified by the national trade union organisations and also by principal organisations of employers. According to the Code of Discipline, employers and workers voluntarily agree to maintain and create an atmosphere of mutual trust and co-operation in the factory and to settle all disputes and grievances by mutual negotiation, conciliation and voluntary arbitration and avoid resort to direct action. According to the Code of Discipline :

(a) strikes and lock-outs cannot be declared without proper notice;

(b) the parties should not take any action without consulting each other;

(c) there should be no go-slow tactics or any resort to deliberate damage to plant or property or resort to acts of violence, intimidation, coercion, etc.; and

(d) the existing machinery for the settlement of disputes should be followed, and the awards and agreements should be implemented speedily.

The Code of Discipline has been accepted by 180 employers and 115 trade unions which are not members of any of the central employees and workers' organisations. The code is also applicable to public sector undertakings run as companies or corporations.

National Arbitration Promotion Board. The Board was set up in July, 1967, by the Government to promote voluntary arbitration to settle industrial disputes. The Board comprises representatives of the employers' and workers' organisations, public undertakings and the Central and State Governments. The National Arbitration Promotion Board attempts to ensure that employers and workers take greater recourse to the voluntary approach to settle industrial disputes. Till March 31, 2004, a total of 252 cases were referred to the Board and the Board disposed of 248 cases.

Central Industrial Relations Machinery (CIRM)

The CIRM is headed by Chief Labour Commissioner

(Central). It has been entrusted with the task of maintaining Industrial Relations, enforcement of Labour Laws and verification of Trade Union Membership in the Central sphere. Its functions consist of:

a. Intervention in situations of threatened strikes and lockouts with a view to avert strikes and lockouts.

b. Implementation of settlements and awards.

c. Enforcement of other provisions in Industrial Disputes Act relating to (1) Works Committees, (2) Recovery of dues, (3) Layoff, (4) Retrenchment, (5) Unfair Labour Practices, etc.

During the year 2005-06, the CIRM intervened in 380 threatened strikes and its conciliation officers were successful in averting 376 strikes, which represents a success rate of 99 per cent. During 2005-06, a total of 9,538 disputes were referred to the CIRM, out of which 2,017 were settled with/without formal conciliation. In 2,743 cases, conciliation proceedings ended in failure. At the close of the year, 3,212 disputes were pending with CIRM. The situation in the settlement of disputes highlights the stark reality that conciliation succeeded only in 21 per cent of the cases and failed in about 29 per cent, and in about 39 per cent, the cases are still pending. This is not a creditable record.

A review of the machinery of settlement of disputes reveals that some success can be claimed in resolving or averting strikes, but intervention in the case of lockouts has been very ineffective. This is borne out by the fact that in 2002, nearly 97 per cent of mandays (a total of 25.78 million) were lost in lockouts. There is a pressing need for paying attention to the phenomenon of lockouts.

8. SOCIAL SECURITY MEASURES IN INDIA

In an industrial economy, the workers are subject to periodic unemployment due to cyclical fluctuations in business, sickness, industrial accidents and old age. There is nothing more serious to a worker and his/her family than unemployment. Sickness suspends earning capacity of a worker temporarily, industrial accidents may disable him/her permanently or partially, and old age may put a stop to his/her ability to earn and support himself/herself and the family. While the capitalist has all the resources to face the risks of modern business, the worker does not have any financial resources to face the risks of sickness, accidents, unemployment and old age; nor has he/she alternative sources of livelihood or accumulated property to help him/her through in period of adversity. Naturally, the State has the obligation to help the workers and provide them security. In Western countries, Governments started various measures to protect the workers in times of sickness and unemployment and provide relief in case of accidents and old age. All these measures are collectively known as social security schemes.

The Need for Social Security in India

Although social security measures had been introduced in many countries decades ago, in India, they were introduced only after Independence. This has been mainly due to lack to official sympathy and interest in the welfare of workers and the comparative weakness of the trade unions in pressing their demand for such measures. But the need for social security in India has always been felt by the wage earning and low-salaried classes.

Before Independence—Workmen's Compensation Act (1923)

In 1923, the Government of India passed the Workmen's Compensation Act in order to provide for compensation to the workers in case of industrial accidents and injury. The Act now covers workers employed in factories, mines, plantations, mechanically propelled vehicles, construction workers and certain other hazardous occupations. Under this Act compensation is payable by the employer and the amount of compensation depends upon the nature of the injury and the salary of the worker concerned. Minimum rates of compensation for permanent total disablement and death have been fixed at ₹ 90,000 and ₹ 80,000 respectively. Maximum amount for death and permanent total disablement can go up to ₹ 4.56 lakh and ₹ 5.48 lakhs respectively depending upon age and wages of workers. In case of partial disablement, compensation at the rate of 50 per cent of wages is payable for a maximum period of 5 years. There is no wage limit to the coverage of the Act. The Act is, however, not applicable to the persons who are covered by Employees State Insurance Act, 1948.

After Independence—The Employees' State Insurance Act, 1948

The Employees' State Insurance Act was passed in 1948 with the objective of providing compulsory and contributory health insurance facilities to workers. The Act provides for medical care and treatment, cash benefit during sickness, maternity and employment injury, pension to the dependants on the death of a worker and payment of funeral expenses in the event of death of an insured person. In the first instance, the scope of the Act was restricted to all perennial factories, i.e., non-seasonal

factories using mechanical power and employing 20 or more persons. The Act covers wage-earners and low-paid clerical and administrative staff whose income is below ₹ 7,500. The scheme is compulsory in the sense that all workers covered under the Act must be insured, and contributory in the sense that its finances consist of contributions from employers as well as employees. In case of death or permanent disablement, 70% of pay is provided as pension.

Administration. The Act of 1948 set up the autonomous Employees' State Insurance Corporation which has the responsibility of administering the scheme. The Corporation is managed by a governing body of 40 persons representing the Union and the State Governments, the Parliament, employees' and employers' organisations and the medical profession.

Finances and Contributions. The Act of 1948 provided for the setting up of a fund known as the Employees' State Insurance Fund. The rate of contribution by the employer which was earlier fixed at 4% has been raised to 4.75% and that of employees raised from 1.5% to 1.75% of the wage. The state governments share the expenditure on the provision of medical care to the extent of 12.5% Besides the employer-employee contribution, the Central and State Governments also provide grants for the working of the scheme.

Benefits to the workers. The scheme provides five types of benefits to the insured workers and their families. These benefits are :

(a) **Sickness benefit** is available to an insured worker in case of certified sickness. It consists of cash payment for a maximum period of 91 days in any continuous period of one year. The daily rate of sickness benefit is calculated as half of average daily wages. The insured worker who is getting sickness benefit should be under medical treatment at a dispensary or other medical institutions maintained by the Corporation.

(b) **Medical benefit** is available to the worker claiming sickness benefit or maternity or disablement benefit. It consists of free medical treatment in case of sickness, injury and maternity. It is available at a dispensary or hospital run by Employees' State Insurance Corporation or at home in case the Corporation doctors are able to visit the sick in their homes. The medical benefit is available for the whole family of the insured worker. In recent years, the Corporation has been providing additional benefits and protection to workers suffering from tuberculosis, cancer, leprosy and mental diseases and also providing artificial limbs and teeth.

Provision of super-specialist facilities to insured persons and their dependants through the country's most advanced medical institutions is a unique feature of ESI Scheme. During 1996-97, 1,000 cases, most of these requiring open heart surgery, kidney transplant or advanced treatment for cancer etc. were referred to these institutions across the country. The reimbursement for treatment varied from ₹ 25,000 to ₹ 7 lakhs per case.

(c) **Maternity benefit** consists of cash payments to the insured woman worker calculated at full average wage for a period of 12 weeks.

(d) **Disablement benefit** is available to the insured worker in case of industrial accidents and injury. The nature of disablement benefit differs with different types of disablement. In case of temporary disablement, the worker is paid 70 per cent of the wages during the period of disablement. In case of permanent partial disablement, the insured individual is entitled to a cash benefit for life to be paid as a percentage of the full rate. In case of permanent total disability, 70 per cent of the wages is paid as monthly pension to the worker for life.

(e) **Dependants' benefit** is available to the dependants of a deceased worker, in case death is due to industrial accident or injury. The rate differs depending upon the relationship between the deceased and the dependants. The widow of the deceased worker will receive, during her lifetime or until remarriage, an amount equivalent to three-fifths of the full rate. Every dependent son gets an amount equivalent to two-fifths of the full rate till he reaches the age of 15 and every dependent daughter gets the same amount till the age of 15 or until marriage whichever is earlier. The benefits to a dependent son or daughter may be continued even beyond 15 years in case of satisfactory progress in education.

Implementation of the Scheme. The Employees' State Insurance Corporation was inaugurated in October, 1984. As on 31st March 2005 there were 143 E.S.I. hospitals with 23,063 beds, 42 E.S.I. annexes and 1,427 dispensaries including mobile dispensaries; 330 lakh employees were receiving benefits. The ESI Scheme is operated in 689 centres situated in 25 States/Union Territories. By 2004, over 79.1 lakh insured persons and about 307 lakh beneficiaries were covered under the scheme. The number of factories and establishments covered by the end of 2004-05 has gone up to about 380,871.

The scheme of insurance meant to help workers was not favourably received by the employers and employees. The employers opposed the scheme on the ground that it increased their costs and the collection of workers' contribution was additional botheration. The workers complained that the benefits were not available to their families. Benefits are, however, now extended to families also. Further, workers have complained about inadequacies of hospital facilities. They have also demanded greater control in the management of the

Corporation. Apart from these complaints and difficulties, the Corporation had difficulty in acquiring the services of qualified medical personnel, in securing accommodation for offices and dispensaries at convenient places, etc.

Despite many difficulties, the Employees' State Insurance Corporation has been gradually but steadily expanding its activities all over the country. At present, it covers only workers in organised industries and has excluded agricultural workers. Nor is it a comprehensive scheme either, since unemployment insurance and old age pensions are excluded. But it should not be forgotten that the insurance scheme is only in the initial stage and that it is laying the foundation for the achievement of a comprehensive scheme of social security for the Indian workers.

Other Kinds of Social Security Schemes

Employees' Provident Funds. Besides the Employees' State Insurance scheme, there are other schemes also in force, particularly the old age provident fund and maternity schemes. In 1952, the Employees' Provident Funds and Miscellaneous Provisions Act was passed covering factories employing 20 or more workers in six major industries, viz., iron and steel, textiles, engineering, cement, paper and cigarettes to provide for the benefit of compulsory provident fund to industrial workers. The Act provides for provident fund, family pension and deposit linked insurance for the employees in factories and other establishments. Presently, the scheme covered 180 industries and was extended to all factories employing 20 or more workers. The pay limit for the purpose of coverage was raised to ₹ 6,500 per month. The scheme is contributory and compulsory. The Central Government has with effect from 1st June 1989 enhanced the rate of provident fund contribution in respect of 98 industries/classes of establishments employing 50 or more employees from 8.33 per cent to 10 per cent and the maximum from 10% to 12% of the monthly wage which includes basic pay and dearness allowance. By end of March 2005, the subscribers numbered 411 lakhs. Though contributory, the Scheme has been made compulsory. Total contributions during 2002-03 amounted to ₹ 4,788 crores, out of which ₹ 4,388 crores was collected from employers share and ₹ 400 crores were received as Central government contribution.

Coal Mines and Provident Fund and Bonus Schemes

The workers in coal mines come under a separate Act known as the Coal Mines Provident Fund and Bonus Schemes Act of 1948. Under the scheme, every worker contributes 8 per cent of his wages and there is a matching contribution from the employers. There is also a bonus scheme for the coal mines known as Coal Mines (Attendance) Bonus to provide an incentive to workers to be regular in attendance. Under the scheme, workers who put in specified days of attendance were paid bonus quarterly at 10 per cent of the basic earnings in addition to wages.

Gratuity Scheme. The Government of India has also passed the Payment of Gratuity Act, 1972, under which employees in factories, mines, oil fields, plantations, ports, railways, companies, shops or other establishments employing 10 or more persons are covered. On the completion of 5 years of service, the employees are entitled to gratuity payable at the rate of 15 days wages for each completed year of service subject to a maximum of ₹ 3.5 lakhs with effect from September 1997. The wage ceiling has been removed with effect from 24th May 1994.

Employees Pension Scheme. The Government has also introduced from March 1, 1971, two family pension schemes known as the Coal Mines Family Pension Scheme 1971 and the Employees' Family Pension Scheme 1971. The object of the two family pension schemes was to provide long-term financial security to the families of industrial employees in the event of their premature death. The family pension schemes apply to all the employees covered by the Coal Mines Provident Fund, Family Pension and Bonus Schemes Act, 1948 and the Employees Provident Fund and Family Pension Fund Act, 1952. The Government, with effect from 16th November 1995 introduced Employees' Pension Scheme (1995). With the introduction of the Pension Scheme, the erstwhile family pension scheme, 1971 has ceased to operate. However, the pensioners who were drawing benefits under the erstwhile Family Pension Scheme, 1971 will continue to draw Family Pension under the new Scheme. All new entrants shall compulsorily become members of the Employees Pension Scheme, 1995.

The Schemes are financed by diverting a portion of the contributions of the employers and employees to their provident funds along with an additional contribution by the Central Government. The operating expenses of the two family pension schemes are, however, borne by the Central Government. As on 31st March 2005, about 11.69 lakh members, 4.87 lakh spouses and 4.1 lakh children, orphans and nominees received benefits under the scheme. A total amount of ₹ 1,718 crores was distributed in the form of benefits during 2004-05.

The Maternity Benefit Act, 1961. As regards maternity benefits, legislation has been enacted in all States. The Maternity Benefit Act, 1961, has been enacted to provide uniform standards for maternity protection. The Act applies to all factories, mines and plantations except those to which the Employees' State Insurance Act

applies. The Act provides for payment of maternity benefit at the rate of average daily wages for a total period of 12 weeks.

With a view to encouraging planned parenthood, the Maternity Benefits Act, 1961 has been amended to provide for the following benefits:

1. Six weeks' leave with wages in cases of medical termination of pregnancy (MTP);

2. Grant of leave with wages for a maximum period of one month in cases of illness arising out of MTP or tubectomy; and

3. Two weeks' leave with wages to women workers who undergo tubectomy operation.

These amendments have been enforced with effect from Ist February 1996.

We have outlined the major social security schemes which are in operation in India to provide adequate cover to the workers against such contingencies as ill-health, accident and old age. Even though India has been a late comer to the system of social security schemes—she introduced them largely after Independence—she has a fairly comprehensive scheme of social security measures. These measures cover workers in almost all enterprises and include sickness, accidents, maternity and old age. There are separate schemes for coal mines. There are, however, certain defects which should be eliminated. The comprehensive Employees State Insurance Scheme is now applicable to perennial factories using power and employing 20 or more persons. This means that all workers in small establishments cannot get the various benefits provided by the scheme. In a welfare State, all workers should be able to get social security benefits.

Secondly, sickness, accidents and old age are covered by the various schemes introduced by the Government. There is, however, no provision for unemployment benefits. Even in western countries, unemployment insurance is said to be the most difficult to implement and in a country like India with high rate of unemployment, it may be almost impossible to introduce unemployment insurance. But then, some such measure may be necessary. The State of Maharashtra has introduced Employment Guarantee Scheme which is being financed out of tax revenues. It is a welcome step and other States should follow. Rural Employment Guarantee Act (2005) is a major initiative undertaken by the Central government. It should be gradually expanded to cover the whole of India. Only after providing for unemployment benefit, can we feel proud of a decent system of social security measures for our workers.

9. RIGHT TO STRIKE AND SUPREME COURT JUDGEMENT

In response to the strike organized by 12 lakh government employees in Tamil Nadu, the Supreme Court delivering its final verdict on August 6, 2003 made it amply clear that Government employees have no fundamental, legal, moral or equitable right to go on strike thus holding the state machinery and citizens to ransom. Reiterating its decision in All-India Bank Employees' Association in 1962 in which it had held that "trade unions had no guaranteed right to an effective collective bargaining or to strike or otherwise, the Court maintained, no political party or organization can claim a right to paralyze the economic and industrial activities of a state or the nation or inconvenience the citizens. In case of strike by a teacher, (the) entire educational system suffers; many students are prevented from appearing in their examinations, which ultimately affect their whole career. In case of strike by doctors, innocent patients suffer, if transport employees go on strike, the entire movement of society comes to a standstill and business is adversely affected." Coming down heavily on the attitude of persons who take it easy after securing employment in a government organization, it added, "As there are long queues for employment in public sector undertakings, there cannot be strike in these organizations on any ground."

Although the Tamil Nadu Government had initially dismissed 170,241 employees, the Government in response to the wishes of the Supreme Court agreed to take back those employees who had not resorted to violence on 'compassionate grounds', still 6,072 employees remained dismissed. The Supreme Court recommended the establishment of an effective grievance-redressal machinery to take care of the grievances and demands of employees.

Attorney-General Soli Sorabjee in his statement dated August 10, 2003, criticized the Supreme Court verdict. He maintained: "The right of collective bargaining and ancillary right to strike was an invaluable right of employees. It was secured after years of toil and effort." Since a court of law is concerned with legal and constitutional matters, the observation of the Apex Court that the employees have no ***moral*** or ***equitable*** right to strike was uncalled for.

Responding to the Supreme Court judgement, the ILO has asked the Union Government to take urgent steps to re-affirm trade union rights in the country and restore industrial relations in Tamil Nadu.

There is no doubt that strikes should not be indiscriminate and resorted to for trivial reasons . . . strikes in essential services, more especially, cause grave

inconvenience to the public and the functioning of the government, but it is equally true that the employers are also insensitive to some of the real grievances of the employees which need redressal. Strike is a powerful weapon of the working class to bring the employers to the negotiating table. Instead of finding a solution to the dilemma of prohibiting strikes for trivial reasons and a way to permitting them for genuine reasons, the Apex Court has thrown its weight entirely in favour of employers.

10. THE PROBLEM OF BONUS IN INDIA

The concept of bonus has four different meanings in India:

(a) Payment as an incentive to regularity of attendance, or to encourage good work, or a payment for some special or additional service rendered by labour;

(b) an ex-gratia payment, depending entirely on the goodwill of the employers and which consequently cannot be claimed as a legal right;

(c) a share in the profits which workers may claim as a right; and

(d) deferred wages payable to the workers.

Of these four different concepts, the first definition refers to what has come to be known as 'incentive bonus'. In this sense, bonus is paid to workers as an incentive to greater effort. This concept of bonus is not the one about which there is such a serious dispute between employers and employees. The second definition of bonus as an ex-gratia payment, depending entirely on the goodwill of the employers is rejected outright both by the trade union leaders and economists and accordingly we are not concerned with it. The relevant concepts of bonus which are generally accepted are the last two definitions. The third definition of profit bonus has come to be generally accepted by even the capitalists, though, however, there are considerable differences of opinion regarding the quantum of bonus and the method of calculation. The workers and their representatives, however, accept only the last definition and claim bonus as deferred wage irrespective of the fact whether the firm is running on profit or loss.

Since Independence, the question of bonus and its quantum has agitated the minds of the workers and has continued to be a major issue of industrial disputes between employers and employees. The Government of India appointed the Bonus Commission under the chairmanship of Mr. M.R. Maher. The basic recommendation of the Commission was that bonus was a share of the employees in the prosperity of the unit in which they were employed; in other words, it was a share of the workers in the profits of the company.

The recommendations of the Bonus Commission were accepted by the Government of India with suitable modifications. The Government enacted the Payment of Bonus Act, 1965 which contained the following fundamental provisions:—

(i) The Act applies to every factory and every other establishment employing 20 or more persons as well as to those public sector undertakings which are not run departmentally and which compete with enterprises in the private sector.

(ii) The Act does not apply to the Reserve Bank of India, Unit Trust of India, L.I.C., Universities and educational institutions, hospitals, social welfare institutions, enterprises run departmentally by the Central and State Governments or a local authority.

(iii) The Act defines an 'employee' as a person drawing a salary or wages up to ₹ 1,600 per month. But the amount of bonus payable to the employees drawing above ₹ 750 per month would be calculated as if their salary was only ₹ 750 per month.

(iv) The minimum bonus is 4 per cent of the salary or wages during an accounting year or ₹ 40 whichever is higher irrespective of the availability of profits. The maximum amount of bonus in any year out of the surplus available for allocation has been fixed at 20 per cent of the basic wage and dearness allowance.

(v) Only those who work for all the working days will be entitled to bonus and a proportionate reduction will be made for those who work for a lesser period of time but one should at least have worked for a period of 30 days in a year to be entitled for bonus.

(vi) For purposes of bonus, the available surplus in respect of any accounting year will be computed by deducting certain prior charges from the gross profits. These prior charges include remuneration for partners or proprietors, depreciation and development rebate admissible under the Income Tax Act, all direct taxes, actual dividends payable on preference share capital, and a return of 8.5 per cent on equity capital and 6 per cent on reserves.

(vii) Sixty per cent of the allocable surplus, as determined above, will be allocable for payment of bonus to the employees in every accounting year. In the case of foreign companies, 67 per cent of the allocable surplus should be devoted for payment of bonus.

The workers and their representatives were not satisfied either with the recommendations of the Bonus Commission or with those of the Payment of Bonus Act, 1965. They have always insisted that bonus is a deferred wage payable to the workers irrespective of the profitability or prosperity of the concerns. If bonus is to be based on the prosperity of the industrial concern it is

possible for the owners of a concern to manipulate the accounts in such a way as to show a prosperous concern as a losing one or a sick unit. One of the basic objections of labour was the minimum bonus of 4 per cent which was considered as too low. They demanded that a minimum of 8.33 per cent or one month's salary should be paid as bonus. It was in deference to the demand of labour for a higher bonus that the Government of India appointed a Bonus Review Committee in early 1972, with Dr. B.K. Madan as chairman.

Findings of the Bonus Review Committee

The Madan Committee on bonus review recommended a minimum bonus to 8.33 per cent instead of the statutory 4 per cent minimum, for all business units whether they were earning profits or making losses. Accordingly, the President promulgated an ordinance amending the Payment of Bonus Act in September, 1972, raising the minimum bonus to 8.33 per cent for all business units. A clear departure from the past practice was that even employees of public sector enterprises, whether competitive or non-competitive units, were to be paid the increased minimum bonus. Formerly, only competitive public sector undertakings paid bonus and non-competitive organisations made ex- gratia payment.

The Bonus Review Committee submitted its final report in September, 1974, in which it recommended minimum and maximum bonus of 8.33 and 20 per cent respectively but extended the benefit of bonus to those drawing up to ₹ 2,500 per month as against ₹ 1,600 per month hitherto. However, the bonus in respect of employees drawing wages or salary between ₹ 1,600 and ₹ 2,500 per month would be calculated as if their salary or wages were ₹ 1,600 per month. But the Committee rejected the demand to widen the scope of the Bonus Act to include Government departmental employees and others covered by the Act.

Government in 1995 raised the eligibility limit for bonus for employees working in factories to ₹ 3,500 p.m. and in other establishments to ₹ 2,500 p.m. with effect from Ist April 1993.

The Government is now again considering proposals for review/abolition of wage ceilings prescribed under the Payment of Bonus Act, 1965. The Government has initially invited the views of the concerned departments of the Central Government, State Governments and Union Territories, employers organisations and trade unions. On receipt of their views, the matter of raising/abolishing the ceiling will be finalised.

The recommendations of the Bonus Review Committee and their implementation by the Government came in for severe criticism at the hands of both employers and employees, while the former were sore at raising the minimum bonus and compulsory payment of bonus by concerns, both losing or making profit, the workers' representatives were unhappy because their demand for a minimum bonus of 10 per cent for 1973 and 12.5 per cent for 1974 was ignored by the Bonus Review Committee.

Emergency and the Bonus Problem

The declaration of emergency in June, 1975, was used by the Government to amend the Payment of Bonus Act and reverse the earlier amendment which had raised the minimum bonus from 4 per cent to 8.33 per cent of the wages. The Government rejected the view that bonus was a deferred wage but made it clear that bonus would henceforth be linked to profitability and productivity. The Government clearly stated that insistence by workers on payment of bonus even by loss-making enterprises in the past, contributed to the growth of "sickness" in industry which, in turn, had affected the growth of employment opportunities in the country. Under the new amendment the units making losses were exempted from the obligation of paying the minimum bonus.

Even though workers were extremely dissatisfied with the above amendment, they could not do anything during the emergency. Soon after the lifting of the emergency in March, 1977, the whole question of bonus was revived and became one of the major points of industrial disputes all over the country. Trade union leaders who were lying low during emergency raised the banner of bonus and every industrial unit was faced with a threat of strike or lock-out. There were two issues involved. One issue related to the concept of bonus. The trade union leaders regarded bonus as a "deferred wage" and insisted on the Government accepting their view. The second issue related to the concept of minimum bonus. The Janata Party Government at the Centre raised the minimum bonus to 8.33 per cent and asked the Boothalingam Study Group to study the bonus question as part of wages and incomes policy.

Boothalingam Study Group on Bonus

The Boothalingam Study Group came to the conclusion that bonus related to profit as prevalent in India for a long time "is suitable only in industries producing for the market in reasonable competitive conditions." It is not suitable in the case of organised industrial or other activities, where profit motive does not operate at all. "Bonus is, therefore, unsuitable in government services and similar activities including the railways, posts and telegraphs, and public utilities, financial and other institutions." The Study Group considered the productivity-linked bonus as more logical and satisfactory but it was difficult, if not impossible, to identify measures of productivity which could be uniformly applied to all sectors.

Even in the industrial sector, both private and public, bonus related to profits of individual undertakings

ends to perpetuate and accentuate disparities in the earnings of workers who do the same work or put in the same effort. It tends to create tensions between workers themselves, between government and workers, between management and workers and even between managements.

In the opinion of the Study Group, bonus should be replaced in the long run by a system which would enable labour to get a fair share of the benefits of productivity without causing such distortions. At the same time it has to be recognised that bonus has become part of the industrial way of life in India. It will not be practicable to give it up until the economy reaches a higher level of productivity and well-being. Till such time, it is replaced by a general agreement, the Study Group recommended the continuance of the payment of bonus.

Present position on the Bonus Issue

Even after the Janata Government had announced its decision to raise the minimum bonus to 8.33 per cent, it had to face a serious problem in the form of bonus demand from employees of departmental undertakings like railways, postal services, etc. In October 1979 the Government conceded the demand for bonus to railwaymen. Soon after, the Government had to concede the demand for bonus of all workers in departmental undertakings such as postal services, ordnance factories, etc. But this step has significant implications :—

(i) Workers would not like to give up their demand for bonus in a year when productivity and profitability might be less. They might hold the management responsible for decline in productivity and would not, therefore, like to give up bonus for any year.

(ii) In course of time, it is highly likely that the concept of productivity-linked bonus would be given up and the concept of bonus as a simple deferred wage would emerge and would generally be accepted.

(iii) Employers in the private sector would attempt to link bonus to productivity. The Government has made all employees whether employed in profit-making or non-profit-making undertakings eligible for bonus. It is a significant development.

Payment of Bonus Act, 1965

The Payment of Bonus Act (1965) provides for payment of bonus to employees as defined under the Act. According to the Act, "employee" means any person (other than an apprentice) employed on a salary or wage not exceeding ₹ 3,500 per month in any industry to do any skilled or unskilled, manual, supervisory, managerial, administrative, technical or clerical work for hire or reward. However, according to section 12 of the Act, the bonus is payable to employees whose salary or wage exceeds ₹ 2,500 per month, has to be calculated as if his salary or wage was ₹ 2,500 per month. The Payment of Bonus Act was amended in 1995 but was made effective from 1st April 1993. The Act was challenged by a number of establishments in the various High Courts. The Government decided to contest all such cases and the position of the Government of India with regard to retrospective application of the Act with effect from 1st April 1993 was upheld by the Hon'ble Court. A proposal to enhance two wage ceilings for reckoning entitlement of bonus from ₹ 3,500 per month to ₹ 7,500 per month and for calculating from ₹ 2,500 per month to ₹ 3,500 per monthly respectively as recommended by the Second National Commission on Labour is under consideration by the Government. The decision of Government is being eagerly awaited.

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CHAPTER

42

UNORGANISED SECTOR AND INFORMALISATION OF THE INDIAN ECONOMY

The National Commission for Enterprises in the Unorganized Sector (2007) states: "There is no doubt that this 'shining India' has expanded in the past and is still expanding at a very high rate. But this picture is spoiled by virtually stagnant consumption expenditure and miserable working and living conditions of the 77 percent of our population who are poor and vulnerable.... This is the other world which can be characterized as the India of the common people... whom the growth process, by and large, bypassed." The Planning Commission Special Group (2002) provided the answer to alleviate the situation: "The only answer to the situation is to increase productivity and job quality of the unorganized sector. It means that all attempts should be made to implement those policies, which will release the basic growth constraints and by ensuring a level playing field for this sector."

1. UNORGANISED SECTOR AND INDIA'S INFORMAL ECONOMY

At the outset, it would be advisable to understand the concept of the unorganised sector. It may also be clarified that the terms organized and unorganised sector in India are used interchangeably with formal and informal sector at the international level as recommended by the ILO.

There has been lack of clarity and uniformity in the use of the term. The Central Statistical Organisation defines unorganised or informal sector consisting of enterprises who producing for the market do not have more than 20 employees (without power) or 10 employees (with power). The workers of these enterprises are not registered under any legal stipulation like the Industrial Disputes Act of 1948, etc. and can, therefore, be included in the household sector (and hence within the informal sector) as per the System of National Accounts (SNA) 1993.

Thus, employment within the unorganised sector has hitherto been derived as a residual of the total workers minus the workers in the organized sector as reported by the Director General of Employment and Training (DGET). It may, however, be mentioned that DGET figures do not include informal/ unorganised employment in the organized sector – a phenomenon which is becoming increasingly significant in the Indian economy. To that extent, there is an element of underestimation in the determination of unorganised sector employment in the economy.

The National Commission for Enterprises in the Unorganised Sector (NCEUS) set up by the Government of India in September 2004 considered various aspects of the matter and defined the unorganised sector in the following manner:

"The unorganised sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers."[1]

1. National Commission for Enterprises in the Unorganised Sector (2007), *Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector*, p.3.

Following this definition, in agriculture, only the plantations and other types of organized agriculture (i.e. corporate or co-operative farming) are excluded. Thus, a very large part of the workers engaged in agriculture are included.

Secondly, the NCEUS defined unorganised or informal employment as follows:

"Unorganised workers consist of those working in the unorganised enterprises or households, excluding regular workers with social security benefits, and the workers in the formal sector without any employment/social security benefits provided by the employers."[2]

This definition excludes casual or contract workers and thus captures unorganized sector employment in a more realistic manner.

2. SIZE OF THE UNORGANISED SECTOR

NCEUS prepared estimates of employment in the unorganised sector. As on January 2005, the total employment (principal and subsidiary) in the Indian economy was 458 million, of which the unorganised sector accounted for 395 million, *i.e.* 86 percent of the total workers in 2004-05.

However, a distinction has been made by the NCEUS in organised sector/unorganised sector employment and organised and unorganised worker. The unorganised sector refers to enterprises which employ less than 10 workers. But the unorganised workers refer to workers who are employed whether in the organized or unorganised sector but are not covered for social security benefits.

From the data given in table 1, it is evident that out of 62.6 million employed in the organized sector, 29.1 million are unorganised workers applying the criterion of social security benefits. Similarly out of 395 million workers employed in the unorganised sector, 1.4 million workers avail of social security benefits and are, therefore, classified as organized workers. After applying the two criteria, out of a total employment of 457.5 million workers, only 34.9 million are entitled for social security benefits *i.e.* 7.6 percent of the total workers in 2004-05 and the remaining 422.6 million (92.4 percent) are treated as unorganised workers. Comparing this, with 1999-00, it is revealed that though during 1999-00 and 2004-05, total employment in the economy increased form 397 million to 458 million, i.e. an increase by 61 million during the 5-year period, the number of organized workers remained stagnant at 35 million and the entire increase of employment was in the category of unorganised workers. NCEUS, therefore, sums up the situation as under:

"What this means in simple terms is that the entire increase in the employment in the organized sector over this period has been informal in nature *i.e.* without any job or social security. This constitutes what can be termed as informalisation of the formal sector, where any employment increase consists of regular workers without social security benefits and casual or contract workers again without the benefits that should accrue to formal workers."[3]

Categories of workers among the unorganised workers

(a) Wage workers: Wage workers are persons employed for remuneration among the unorganised workers, directly by employers or through agencies or contractors. Wage workers include casual and temporary workers or those employed by households including domestic workers. Wage workers also include regular workers in

TABLE 1: Total Employment Sector-wise (million)

	Informal /Uunorganised workers	*Formal/ Organised workers*	*Total*
	1999-2000		
Informal/Unorganised Sector	341.3 (99.6)	1.4 (0.4)	342.7 (100.0)
Formal/Organised Sector	20.5 (37.5)	33.6 (62.2)	54.1 (100.0)
Total	361.8 (91.2)	35.0 (8.8)	396.8 (100.0)
	2004-2005		
Informal/Unorganised Sector	393.5 (99.6)	1.4 (0.4)	394.9 (100.0)
Formal/Organized Sector	29.1 (46.6)	33.45 (53.4)	62.6 (100.0)
Total	422.6 (92.4)	34.9 (7.6)	457.5 (100.0)

Note: Figures in brackets are percentages.

SOURCE : NSS 61st Round (2004-05), and NSS 55th Round (1999-00), Employment-Unemployment Survey: Computed by NCEUS.

2. *Ibid.*, p.3.
3. *Ibid.*, p.4.

Table 2: Number and proportion of workers in the unorganised non-agricultural sector (1999-00)

	No. millions			*Percentage*		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*
Self-Employed						
(a) Independent workers	49.5	11.2	60.7	93.6	70.0	88.0
(b) Home workers	3.4	4.8	8.2	6.4	30.0	12.0
All-self-employed (a+b)	52.9	16.0	68.9	100.0	100.0	100.0
All unorganised non-agricultural workers	87.9	22.5	110.4			

SOURCE: NCEUS report (2007), *Op.Cit,* p.241, Appendix A1.4.

the unorganised sector.

(b) Self-employed in the unorganised sector: These are workers who operate farm or non-farm enterprises or engage in a profession or trade, either on own account, individually or with partners, or as home-based workers. Own account workers include unpaid family workers also.

Both the categories of workers face different kinds of vulnerabilities or risks and thus are referred to as weaker sections of society. They suffer from two types of vulnerabilities – job insecurity or social insecurity or both. Regular workers in the unorganised sector are those working for others and getting in return salary or wages on a regular basis. These workers suffer from social insecurity due to sickness or injury or old age and are not entitled to any social security against these vulnerabilities. They enjoy, however, job security. As against them, temporary, casual or contract workers suffer both from job insecurity as well as social insecurity.

Home workers as a distinct category

The International Labour Organisation (ILO) in 1996 defined a home worker who carried out work for remuneration in the premises of his/her choice, other than the work place of the employer, resulting in a product or service as specified by the employer, irrespective of who provided equipment, materials or inputs used. These workers, therefore, work under the 'putting out system'. Mostly, home workers have to purchase, repair and maintain their own tools or machines, and bear the costs of some inputs (e.g. garment workers often have to buy their own thread), transportation to and from the contractor to obtain work and then handover the finished product, and also provide space within their homes to carry out the tasks of production.

TABLE 3: Size and Distribution of the Organized and Unorganised Sector Workers by Industry and Status 2004-05

	Agriculture			*Non-agriculture*			*All*		
	Organised	*Unorganised*	*Total*	*Organised*	*Unorganised*	*Total*	*Organised*	*Unorganised*	*Total*
				Number of Workers (Million)					
SE	2.3	163.9	166.2	2.9	89.2	92.1	5.2	253.1	258.2
RW	1.3	1.5	2.8	41.9	24.8	66.7	43.2	26.4	69.5
CW	2.5	87.4	89.9	11.7	28.1	39.8	14.2	115.5	129.7
Total	6.1	252.8	258.9	56.5	142.1	198.5	62.6	394.9	457.5
				Percentage Distribution of Workers					
SE	38.1	64.8	64.2	5.1	62.8	46.4	8.3	64.1	56.5
RW	20.1	0.6	1.1	74.3	17.4	3.6	69.0	6.7	15.2
CW	41.8	34.6	34.7	20.7	19.8	20.0	22.7	29.2	28.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage of total	**2.4**	**97.6**	**100.0**	**28.4**	**71.6**	**100.0**	**13.7**	**86.3**	**100.0**

Note: SE=Self-employed; RW=Regular Worker; CW= Casual Worker.

SOURCE: NSS 61st Round 2004-05, *Employment-Unemployment Survey*. Computed.

According to NSS (1999-00), home workers constituted 8.2 million workers out of a total of 69 million self-employed workers, among them, 4.8 million (58.5 percent) are women. Available studies show that in the manufacturing sector in India, product outsourcing from large firms to small firms is on the increase. Homeworkers constituted about 12 percent of all self-employed workers in 1999-00, but they have grown in numbers as or a consequence of greater resort to outsourcing. But no later estimate is yet available.

Out of a total of 110 million unorganised non-agricultural workers, about 69 million i.e. 62 percent are self-employed. Among the self-employed, 88 percent are independent workers and 12 percent are home-based workers.

Data given in Table 3 reveals that out of 458 million workers, the proportion of self-employed workers is 56.5 percent (258 million) and casual workers are 28.3 percent (130 million). Taken together, these two categories which are the most vulnerable among workers constituted about 85 percent. The remaining 69 million workers were regular workers (15 percent).

However, the proportion of self-employed in the unorganised sector was 64% (253 million) out of a total of 395 million workers and that of casual workers was 29 percent (116 million). Taken together, these two most vulnerable groups accounted for 93 percent among the unorganised sector. Regular workers accounted for only 7 percent. This provides a vivid over view of the pathetic state of unorganised workers in which 93 percent of workers suffered from job as well social insecurity. Among the organized workers, the situation was relatively better where 69 percent were regular workers and barely 31 percent were self-employed and casual workers.

The situation in the agricultural sector was applingappalling where 99 percent of the workers were either self-employed and casual workers and only 1 percent were regular workers. However, in the non-agricultural sector, 6 percent were self-employed and casual workers and 34 percent were regular workers.

The unorganised sector in agriculture accounted for 99.4 percent of self-employed and casual workers devoid of security whatsoever. However, in the non-agricultural sector, this proportion was as high as 83 percent.

The overall scenario that emerges is: In the economy, the unorganised sector workers constituting 86 percent of the total workforce suffer from very insecure working conditions. It is this group that deserves maximum support for improving their living conditions.

3. POVERTY, VULNERABILITY AND NON-ORGANISED SECTOR EMPLOYMENT – THE HIGH DEGREE OF CORRELATION

NCEUS has made an attempt to categorise the population of the country into six groups based on consumption expenditure.

"Extremely poor" are those with a per capita per day consumer expenditure of three-fourths of the official poverty line (*i.e.* an average of ₹ 8.9 per capita per day (pcpd). In 2004-05, the second group "poor" are those between the Extremely poor and up to the official poverty line (average expenditure of ₹ 11.6 pcpd); the third is called the "Marginally Poor" with per capita consumer expenditure of only 1.25 times the poverty line (*i.e.* ₹ 14.6 pcpd); and the fourth called "Vulnerable" have per capita consumer expenditure of only two times the poverty line (i.e. ₹ 20.3 pcpd). **In 2004-05, the Extremely Poor constituted 6.4 percent, the Poor 15.4 percent, the Marginally poor 19.0 percent. These three constituted 41 percent of the total population. If the "vulnerable" are added to this group, the total accounts for 77 percent of total population. NCEUS categorised this 77 percent, totaling 836 million people, with an income of roughly below $2 PPP, as the poor and vulnerable sections of the population. (Refer Table 4).**

It may be noted that whereas there is slow decline in the population of the poor and vulnerable from 82 percent in 1993-94 to 77 percent in 2004-05, there is in contrast an increase in total population of the poor from 732 million to 836 million during the same period. This implies that there is no gain in the total burden of the poor and vulnerable.

As against this, there is an increase in the middle and high income groups which stood at 254 million in 2004-05 compared to 162 million in 1993-94.

Making a strong indictment of the growth process, the NCEUS mentions:

"There is no doubt that this Shining India has expanded in the past and is still expanding at a very high rate. But this picture is spoiled by a virtually stagnant consumption expenditure and miserable working and living conditions of the 77 percent of our population who are poor and vulnerable.... This is the other world which can be characterized as the India of the Common People, constituting more than three-fourths of the population and consisting of all those whom the growth process has, by and large, by-passed."[4]

4. *Ibid.*, p.4.

TABLE 4: Population in Different Expenditure Classes

In million

S. No.	Expenditure Class	1993-94	1999-00	2004-05
1.	Extremely Poor (up to 075 PL)	103	87	70
2.	Poor (0.75 PL to PL)	172	174	167
3.	Marginally Poor (PL to 1.25 PL)	168	200	207
4.	Vulnerable (1.25 PL to 2 PL)	290	349	392
5.	Middle Income (2 PL to 4 PL)	139	167	210
6.	High Income (>4 PL)	24	26	44
7.	Extremely Poor and Poor (1+2)	274	262	237
8.	Marginal and Vulnerable (3+4)	458	549	599
9.	Poor and Vulnerable (7+8)	732	811	836
10.	Middle and High Income (5+6)	162	193	254
11.	Total	894	1,004	1,090
	Expenditure Class	*Percentage Share and Average Consumer Expenditure per capita per day in ₹ (pcpd)*		
1.	Extremely Poor (up to 075 PL)	11.5	8.7	6.4 (9)
2.	Poor (0.75 PL to PL)	19.2	17.3	15.4 (12)
3.	Marginally Poor (PL to 1.25 PL)	18.8	19.9	19.0 (15)
4.	Vulnerable (1.25 PL to 2 PL)	32.4	34.8	36.0 (20)
5.	Middle Income (2 PL to 4 PL)	15.5	16.7	19.3 (37)
6.	High Income (>4 PL)	2.7	2.6	4.0 (93)
7.	Extremely Poor and Poor (1+2)	30.7	26.1	21.8 (11)
8.	Marginal and Vulnerable (3+4)	51.2	54.7	55.0 (18)
9.	Poor and Vulnerable (7+8)	81.8	80.7	76.7 (16)
10.	Middle and High Income (5+6)	18.2	19.3	23.3 (46)
11.	Total	100.0	100.0	100.0 (23)

Note:

1. Figures in bracket denote average consumer expenditure per capita per day in ₹
2. PL refers to Poverty Line.

SOURCE: Computed from unit level data of NSS 61st Round 2004-05, NSS 55th Round 1999-00 and NSS 50th Round 1993-94, *Employment-Unemployment Survey*.

By and large, population in the unorganised sector coming for informal work are of the order of 836 million or 77 percent of the population. They constitute 92 percent of workforce employed in the informal or unorganised sector of our economy. Thus, there is a close correlation between the poor and vulnerable groups with the unorganised sector or informal economy.

4. ESTIMATE OF ORGANISED AND UNORGANISED WORKERS

Out of a total of 458 million workers, agricultural workers constituted 259 million (56.6% of total) and non-agricultural workers were about 199 million (43.4% of total). Out of 458 million workers, males constituted 310 million (67.7% of total) and females accounted for 148 million (32.3% of total).

Data provided in table 5 reveals that unorganised workers constituted 92.4% of the total workforce, accounting for about 423 million workers. As against them, the organized sector workers constituted 7.6% of the total workforce and were only of the order of 35 million. This indicates that the development process pursued in India during the last six last decades has not been able to reduce the share of unorganised workers in the economy.

Table 5: Distribution of Organised and Unorganised Workers (2004-05)

	Total (million)	*% of total*
Total Workers	**457.5**	**100.0**
a) Agriculture	258.9	56.6
b) Non-agriculture	198.5	43.4
Organised Workers	**34.9**	**7.6**
a) Agriculture	2.9	0.6
b) Non-agriculture	32.0	7.0
Unorganised Workers	**422.6**	**92.4**
(a) Agriculture	256.0	56.0
(b) Non-agriculture	166.5	36.4

Source: NCEUS (2007), Op.cit., p.200.

Among the 423 million workers in the unorganised sector, agricultural workers constituted 256 million (56.0 percent) and non-agricultural workers were of the order of 167 million (36.4 %). Among 35 million organised workers, merely 3 million were agricultural workers and 32 million were non-agricultural workers.

Poverty ratios among organised and unorganised workers

According to NSS 61st round on the basis of 30-day uniform recall period, the poverty ratio for the country as whole in 2004-05 was 27.5%. However, it was , 28.3% in rural areas and 25.7% in urban areas.

Table 6: Poverty Ratios among Unorganised and Organised Workers (2004-05)

		Unorganised workers	*Organised workers*	*All workers*
Agricultural	**Total**	**20.5**	**13.8**	**20.4**
Non-agricultural	Rural	17.2	3.5	15.7
	Urban	**23.7**	**4.3**	**19.6**
	Total	**20.4**	**4.1**	**17.8**
All	Rural	**19.2**	**5.4**	**18.7**
	Urban	**25.1**	**4.5**	**21.0**
	Total	**20.4**	**4.9**	**19.3**

Source: NCEUS (2007), *Op.cit.*,p.24

Overall poverty ratio among all workers was of the order of 19.3%, but there was sharp difference in the poverty ratio among unorganised standing at 20.4% as against the organised at a low level of 4.9%.

However, in agriculture, the poverty ratio among all workers was 20.4%, and among unorganised workers was 13.8%. This shows that poverty ratio among unorganised workers in agriculture was relatively much higher than poverty even among organised sectorworkers.

In the non-agriculture sector, poverty ratio was 20.4% among unorganised workers in comparison to merely 4.1% among organised workers. This indicates among the non-agricultural workers, unorganised sector poverty ratio was five times more that that of the organised workers.

Poverty ratios by nature of employment

Sharp differences in poverty ratios among casual workers, self-employed and regular workers exist in the non-agricultural sector.

Table 6: Poverty Ratios among Non-agricultural workers by nature of employment (2004-05)

	Rural		*Urban*	
	Organised	*Unorganised*	*Organised*	*Unorganised*
Casual Worker	21.9	23.1	35.0	41.5
All workers	**11.2**	**17.2**	**10.4**	**24.1**
Self-employed	11.2	15.9	11.4	21.4
Regular workers	5.2	11.5	6.8	20.2

Source: NCEUS (2007), *Op.cit.*,p.25

Among the three types of workers, poverty ratios among casual workers were the highest, followed by self-employed workers and they were the lowest among regular workers. However, it may be noted that poverty ratio among unorganised workers were much higher than among their counterparts in the organised sector. But difference in the poverty ratios among regular workers in the urban organised sector at a low of 6.8% as against 20.2% in the unorganised sector was the sharpest – 3 times in comparison. The casual workers were the worst sufferers in the urban areas, as their poverty ratio was 35% among organised workers and 41.5% among unorganised workers.

5. SELF-EMPLOYED WORKERS IN NON-AGRICULTURAL SECTOR

Indian economy is dominated by 'self-employed' workers. On the basis of latest data for 2004-05, self-employed workers account for 56.5 percent of the labour

TABLE 8: Percentage of the Self-employed workers in unorganised Non-Agricultural Sector (2004-05)

Employment Status	*Rural*			*Urban*			*Total*		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*
1. Own Account Worker	50.2	38.6	47.6	47.0	35.4	44.7	48.6	37.1	46.2
2. Unpaid family labour	9.1	37.7	15.4	11.1	26.1	14.0	10.1	32.3	14.7
3. Employer	1.0	0.3	0.8	3.5	0.6	3.0	2.3	0.4	1.9
Total self-employed (1+2+3)	**60.3**	**76.6**	**63.9**	**61.6**	**62.1**	**61.7**	**61.0**	**69.8**	**62.8**
All workers	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Computed from NSS 61st Round 2004-05, *Employment-Unemployment Survey*.

force – the single highest group in the categorization of workers followed by casual workers (28.3%) and regular workers (15.2%). They fall in two categories those employed in agriculture constituting farmers marginal, small and big work in agriculture on their own and obtain a major part of their income from own cultivation and not wage labour. They are included in the unorganised sector and their number has been estimated at 166 million for 2004-05.

On the other hand, there are quite a large number of self-employed in the non-agricultural sector and they were around 92 million in 2004-05. Self-employed workers are grouped into three categories.

(a) ***Own Account Workers***: They work on their own using their labour power. To eke out a better living, they stretch their work for longer hours. This phenomenon is referred to as '*self-exploitation*' by Chayanov, a Russian economist.

(b) Unpaid Family Workers: These persons do contribute their labour but do not get any separate remuneration. Their contribution becomes a part of the family income.

(c) Employers *i.e.* those who hire at least one wage worker, but the total number of hired workers is less than 10, to use the definition provided by the National Commission for Enterprises in the Unorganised Sector.

Table 8 reveals that as a proportion of all workers, self-employed workers account for about 63 percent. The contribution of females being about 70 percent and of males around 61 percent. Share of the self-employed is much higher among women in rural areas, while in urban areas, it is more or less equal for men and women.

On the basis of income, the NCEUS has classified self-employed in two broad categories:

Two types of Enterprises

Majority of the Enterprises (87 percent), are own-account workers (OAEs) in rural areas where they account for nearly 94 percent.

Besides them, establishments with hired workers, about 11 percent had 2-5 workers and less than 2 percent had 6-9 workers.

There is concentration of workers in OAEs, 73% in all areas, and 87% in rural areas. They include both owner operated and family labour. In fact in single owner opera-

Low income self-employed who are closer to or marginally above casual workers	**High income self-employed who are closer to or higher than regular workers**
1. Handloom weavers (mostly women)	1. Independent professionals (such as doctors, lawyers, artists and accountants)
2. Chikan workers (mostly women)	2. Shop owners in urban areas
3. Street vendors	3. Rice mill owners
4. Food processors	4. Workshop owners
5. Rickshaw pullers	5. Commission agents
6. Rag pickers	6. Brokers of real estate, housing etc.
7. Beedi rollers (mostly home workers)	7. Owners of small hotels and restaurants.
8. Agarbati makers (mostly women)	
9. Potters	
10. Bamboo product makers	

Table 9: Percentage of Enterprises and Total Workers by Enterprises Size 1999-00

Establishment Type	*Enterprises*			*Workers*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
1. OAE: Owner Operator	61.8	51.9	57.5	40.1	27.2	33.8
2. All OAEs	94.2	78.4	87.4	87.5	58.7	73.4
3. Establishments 2-5 workers	5.2	18.4	10.9	9.5	29.8	19.4
4. Establishments 6-9 workers	0.7	3.1	1.7	3.0	11.6	7.2
Total (2+3+4)	100.0	100.0	100.0	100.0	100.0	100.0

Note: OAEs are enterprises with no hired worker. Establishments are enterprises with hired workers

Source: Computed from NSS 55th Round 1999-00, Informal Sector Enterprises.

tors account from 34 percent of workers, other OAEs use family labour also. 19 percent workers are in establishments which have at least one hired worker and 2-5 total workers. About 7 percent are in such establishments with at least one hired worker and 6-9 workers.

It may be noted that concentration of workers in own account enterprises (OAEs) is a little much lower in urban areas – 59% as against rural areas accounting for 87%.

On the whole it may be mentioned that OAEs constitute 87 of the informal enterprises with 73 percent of all workers engaged in them.

Value of Assets and Gross Value Addition in OAEs

OAEs have very low average value of assets, about ₹ 39,000 per enterprise. The OAEs mainly use their own fixed assets with 85% and 60% of them reporting not using any hired assets in rural and urban areas respectively.

Gross value addition per worker in OAEs is just ₹ 19,000 per year or merely ₹ 1,583 per month. In urban areas, the gross value addition is ₹ 26,100 per year or ₹ 2,175 per month, while it is about ₹ 14,000 per year or ₹ 1,167 per month in rural areas.

At the prevailing price level in the year 2000, a rural family required ₹ 328 per capita per month to cross the official poverty line. Considering the average size of a family at 5, a rural family requires ₹ 1,640 to cross the poverty line. As against it, in urban areas, ₹ 454 per capita are required to cross the poverty line. An average family requires ₹ 2,270 per month to cross the poverty line. In both cases, gross value addition per worker is less than the required average family expenditure to keep its head above the poverty. NCEUS, therefore, rightly concluded: "*Overall, a large percentage of enterprises were mainly engaged in some form of survival operations rather than carrying on with a business activity in the proper sense of the term.*"[5] (Emphasis added)

The major problems faced by OAEs were shortage of credit, lack of marketing and infrastructural facilities and competition from larger units. However, nearly 30% of OAE operators felt they did not have any serious problem.

Self-employed Establishments with hired workers

Average value in fixed assets in the establishments with hired workers is nearly ₹ 3 lakhs as against ₹ 39,000 in OAEs. Obviously, their scale of operation is much better than that of OAEs. In fact, average fixed assets in larger establishments with 6-9 workers is even higher than ₹ 6 lakhs. The return to assets in these larger units is also higher since they are enabled to use a higher value of fixed assets well.

Table 10: Gross Fixed Assets Per Enterprise and Gross Value Addition per worker in Establishments – 1999-00 (in ₹)

Employment Size	*Fixed assets per enterprise*			*Gross value added per worker*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
2-5 workers	1,18,272	2,86,658	2,41,663	27,414	38,707	35,906
6-9 workers	2,16,603	7,45,336	6,32,165	22,803	54,253	47,854
All establishments	12,934	3,53,209	2,95,013	26,303	43,061	39,068

Source: NSS 55th Round 1999-00, ***Informal Sector Enterprises.***

5. *Ibid.*, p.53.

Similarly, gross value addition in establishments using hired labour is ₹ 39,000 which is nearly double that of the OAEs. Moreover, establishments in urban area have even much higher value addition which only shows that the nature of products manufactured in urban establishment does make a difference.

To sum up, self-employed is a very broad category and thus it conceals a good proportion of workers who are only *'disguised wage workers'*. In the absence of alternative avenues of employment, tiny enterprises operate with the help of family labour or just one or two hired workers. They are, therefore, survival enterprises for a very large number of workers whose share is even larger than the wage workers in the Indian economy. What is of crucial importance is to understand the self-exploiting nature of these family enterprises by lengthening their working hours and working on practically all days in a year.

There is a need to provide access to credit, marketing and infrastructure. In some areas, especially handlooms, there is a need to improve technology.

Although enterprises using 6-9 workers are relatively better since their fixed capital is estimated at ₹ 3 lakhs in 2000, still they are much below the limit of Micro-enterprises who have been defined as having a threshold limit of ₹ 25 lakhs under the Micro, Small and Medium Enterprises Act of 2005.

Consequently, promotional measures should be designed and implemented so that more credit is made available to them to improve their technology and competitive strength. There is a need to strengthen human capital as well by spending more on health and education of these workers so that the poor people working in them can improve their level of living by higher earnings.

6. AGRICULTURAL LABOURERS

Agricultural labourers were estimated at 87 million in 2004-05 constituting about 34 percent of 259 million agricultural workers *i.e.* farmers and agricultural labourers. The agricultural labourers are characterized by poor physical and human capital and also high poverty levels.

Wage level of agricultural labourers was as low as ₹ 43 per manday in 2004-05. The non-agricultural wage rates were about 1.5 times that of agricultural wage. Gender disparity is also high and the ratio of female wages to male agricultural wages has remained unchanged at about 0.70 since 1993-94 up to 2004-05, indicating that male wage are 1.4 times the female wages. There has been a decline in the growth rate of wages of casual agricultural workers during the nineties as compared to eighties.

TABLE 11: Wages and Growth Rates of wages pf Casual Agricultural Workers

Wage Rate (Rs/manday)		*Growth Rates (percent/year)*	
1993-94	33.7		
1999-00	40.0	1993-94	2.9
2004-05	42.6	2000-05	1.3

SOURCE: NSS 50th, 55th and 61st Rounds for 1993-94, 1999-00 and 2004-05

Table 12: Disparities in Agricultural Wages

	Ratio of female wage rate to male wage rate	*Ratio of agricultural to non-agricultural wage*
1993-94	0.70	0.66
1999-00	0.71	0.62
2004-05	0.69	0.65

SOURCE: NSS 50th, 55th and 61st Rounds for 1993-94, 1999-00 and 2004-05.

Minimum wages and agricultural wages – As per the Minimum Wage Act, 1948, the first National Minimum wage was fixed at ₹ 66 irrespective of the rural-urban location. The second is the minimum wage of ₹ 49 for rural areas as proposed by the National Commission for Rural Labour (NCRL). However, the prevailing wage rates were often observed to be much lower than either of these minimum wage norms. *In 2004-05, about 91 percent of agricultural labourers received wage rates below the National Minimum wage and about 64 percent below the NCRL norm of minimum wages fixed for rural areas. This is a very distressing scenario in view of high GDP growth rates observed in recent years in the Indian economy.*

Pattern of employment shows that growth rate of employment stagnated at 0.2 percent per annum during 1994-00. NCEUS analyzing the factors for this stagnation of employment mentions: "Prime among these was a lower investment in irrigation, drought proofing and agricultural research because of which there was no intensification of farming in rain-fed and dry-land areas."[6] As consequence, between 1993-94 and 2004-05, there was a decline in the number of days of wage employment available per year to agricultural labourers from 224 to 209. This further reduced the annual earning of agricultural labourers.

6. *Ibid.*, p.125.

Table 13: Wage Employment Days for Rural Agricultural Labourers in a Year

	1993-94	1999-00	2004-05
Male	244	235	227
Female	196	199	184
Total	224	220	209

Source: NSS 50th, 55th and 61st Rounds for 1993-94, 1999-00 and 2004-05

7. BONDED LABOUR

Bonded labour or forced labour implies compelling a person to accept employment at wages or remuneration which is much less than the legally prescribed minimum wage or at times, even without any payment, in lieu of debt. Even after the enactment of Bonded Labour System (Abolition) Act, 1976, bonded labour has continued according to National Commission on Rural Labour (NCRL) 1991. Nearly 89 percent of the bonded labourers were in agriculture who mainly belonged to Scheduled Castes and Scheduled Tribes who were kept in bondage by rich agricultural landholders. Being poor, they have to borrow at high rates of interest. Since the wages received by them are very low, they are unable to pay the debt. As a result, a vicious circle is created between poverty and bonded labour. NCRL (1991) stated very clearly: "The kernel of bondedness lies in unrepayble debt and loss of freedom to seek alternate employment through the market process."

There are no precise estimates regarding the size of bonded labourers. The researchers and social workers believe a high incidence of bonded labour. But the Annual Report of the Ministry of Labour and Employment (2006-07), reported that incidence of bonded labour in 2005-06 is only 397 cases. According to NCEUS, "While bonded labour was considered a thing of the past, prevalent in a colonial era, it has been found that *new forms of attachment have been rising in developed agriculture, the phenomenon of a 'U' shaped relationship between labour attachment and agricultural development i.e. after an initial decline as agriculture develops, it starts to increase at later stages.*"[7] (Emphasis added)

Despite the law abolishing bonded labour, the work of relief and rehabilitation has been a slow process, mainly because of the inherent difficulties in the identification of bonded labour.

7. *Ibid.*, p.129.

To sum up, agricultural labourers are the most vulnerable section of the agrarian population. In view of the low wages received by agricultural labour and only for about 200 days in a year, his income remains as very low to have basic needs for himself and of his family. The Minimum Wages Act is more often observed in breach, rather than in compliance. Consequently, it has failed to provide the much-needed relief. There is no social security mechanism to help. Agricultural labourers have not succeeded in forming unions except in a few states. In the absence of social security for the informal sector and particularly for agricultural labourers, their condition remains as grim.

8. WORKING CONDITIONS OF FARMERS

Out of 166 million farmers, about 143 million i.e. 86 percent belong to the category of marginal and small farmers (owning les than 2 hectares). Their produce is so low that they are able to maintain only a subsistence level of living. Consequently, many are forced to seek wage employment to supplement their income. These farmers have very little access to credit and mostly depend on medium and large farmers or money lenders, trading agents etc. for credit which is available at very high rates of interest. Not being able to actualize price gains of agricultural produce, they continue to remain poor. During the nineties, the Government support, particularly of investment in irrigation, research and extension facilities has been declining. After the Green Revolution, there has not been any breakthrough in agricultural technology and thus productivity deceleration has been identified as the most important underlying factor responsible for the decline in agricultural output.

Credit, Indebtedness and Suicides

Small and marginal farmers' households need credit to meet both the consumption needs so as to maintain subsistence as well as for production purposes to meet the rising costs of cultivation. But unfortunately, they are able to get a relatively small proportion of credit from institutional sources like Government, co-operative societies and banks, and have to depend on non-institutional sources like moneylenders, traders, relatives and friends. Need it be mentioned that institutional credit is available at relatively lower rates of interest and non-institutional credit is available at higher rates of interest.

Table 14: Percentage Distribution of Loans by Farm Size and Sources, 2003

Source of Loan	*Sub-marginal* *less than 0.4 ha.*	*Marginal* *0.41 to 1.00 ha.*	*Small* *1.01 to 2.00 ha.*	*Medium-large* *Above 2 ha.*
1. Government	3.9	3.8	1.7	1.4
2. Co-operative Society	14.1	17.0	20.5	22.8
3. Bank	24.4	32.0	35.4	42.6
Total Institutional (1+2+3)	**42.2**	**52.8**	**57.6**	**66.8**
4. Agricultural/professional money lender	32.4	30.8	25.9	20.0
5. Trader	4.9	4.6	4.2	6.0
6. Relatives & friends	15.2	9.1	8.8	5.2
7. Doctor, lawyer & other professionals	1.4	0.7	0.8	0.8
8. Others	3.6	2.0	2.6	1.2
Total: Non-institutional (4 to 8)	**57.6**	**47.2**	**42.4**	**33.2**

ha means hectare

Source: NSS 59th Round, *Situation Assessment Survey of Farmers.*

Data given in table 14 shows that with an increase of farm size, the proportionate availability of institutional credit increases. It was 42.4 % for sub-marginal farmers and was about 67 percent for medium and large farmers. Conversely, the proportion of dependence on non-institutional credit was 57.6% for sub-marginal farmers but it declined as the size of the farm increases and was only 33% for medium-large farmers.

Table 15: Percentage of Outstanding Loans by Purpose, 2003

Farm Size	*Consumption Expenditure*	*Productive Purpose Expenditure*	*Total*
Sub-marginal	61	39	100
Marginal	43	57	100
Small	29	71	100
Medium-Large	20	80	100

Note: Productive purpose included both current production expenditure and capital expenditure.

Source: NSS 59th Round, *Situation Assessment Survey of Farmers.*

Purpose of Loans

Table 15 reveals that loans for productive capital expenditure as a percentage of total loans outstanding increase with farm size. The share of loans for consumption on unproductive purposes such as marriages and other consumption expenditure was much higher for sub-marginal farmers at 61% and for marginal farmers was 43%. As against it, the 80% of the loans taken by medium and large farmers were for productive purpose.

Since the loans for sub-marginal and marginal farmers were at very high rates of interest from non-institutional lenders, they increased the burden of debt. These poor farmers with very low capacity found it impossible to repay them and thus, borrowed more for the payment of interest as well. Consequently, the vicious circle of indebtedness and poor repaying capacity pushed quite a large number to commit suicides. A very large number of suicides were committed by farmers in Pubnjab, Andhra Pradesh, Karnataka, Maharashtra and Kerala. In most cases, the suicide victims were small and marginal farmers.

Mr. Bhanuji Rao in his article 'the noose of debt' (*Business Line,* 8th August 2006) has presented data on the rise of suicides during the period 1995 to 2002. "By any standard, it is a sad state of affairs to see several thousand farmers committing suicides, with the number rising too fast – from 10,000 to 25,000 – in just seven years, to be taken lightly."[8] (Refer table 16)

Tata Institute of Social Sciences (TISS) in its study of 644 suicides in Vidarbha (Maharashtra) reported 83 percent of suicides were committed by small and medium landholders. The causes of suicides were common: Repeated crop failure, inability to meet the rising cost of cultivation and indebtedness. The TISS report stated: "The other important points were the mismatch between the cost of production and the low minimum support price or the market price leading to huge losses; debt, from a low of ₹ 10,000 to ₹ 3 lakhs and the inevitability of half the amount borrowed from private lenders who *charge an usurious 5 percent per month.*"[9] (Emphasis added)

8. Bhanoji Rao, The noose of debt, ***Business Line,*** August 8, 2006.

9. *Ibid.*, p.2.

Table 16: Share of farmers suicides in Total suicides in India

	Total number of suicides (1)	*Estimated Number of suicides by farmers* (2)	*Percent by farmers* (3)
1995	89,178	10,719	12.0
1996	88,241	13,730	15.6
1997	95,829	13,617	14.2
1998	1,04,713	16,010	15.3
1999	1,10,587	16,079	14.5
2002	1,54,000	25,071	16.3

Note: Column 2 is from Google Search on suicides and column 2 is from an article by Mr. Sharad Joshi (*Business Line*), May 31, 2006.

Irrigation and Input Use

According to the report of Planning Commission Steering Group (2007), declining public investment in irrigation has been one of the major reasons for the declining agricultural productivity during the nineties. However, larger farmers capitalized on cheaper sources i.e. higher percentage of irrigation from canals which is cheaper irrigation option while small farmers have to rent water. Besides this, the small farmers have to rent out mechanical equipment/implements which adds to the cost of cultivation.

The Tenancy Issue

To augment their holdings, a large number of farmers lease in land. In this respect, it may be stated that tenancy reform had the perverse impact of driving tenancy underground, and making it more difficult for tenants to lease land on secure and reasonable conditions. It is really strange that upper stratum of tenants usually pay cash rents, while the tenants-at-will usually remain share-croppers, paying 50% of the produce as rent. It was really distressing to find that share of recorded tenancy was negligible, 0.74 percent in 2003. This clearly shows that tenant cultivators are highly vulnerable. NCEUS suggests that new law should be framed to protect the rights of both landowners and tenants. Moreover, banks should not insist on copies of land records for credit purposes.

To salvage the working conditions of farmers, especially marginal and small farmers, NCEUS recommends the following initiatives:

(*a*) To expand the network of institutional credit facilities in the rural areas and the credit needs of small and marginal farmers are met through earmaking credit for the group.

(*b*) Introduction of a universal social security system as a support for farmers, more especially the landless and marginal and small farmers. Such a system provides for health expenses, life and unemployment insurance and old age pensions.

(*c*) Land reforms particularly related to tenancy laws, land leasing, distribution of ceiling surplus land is urgently needed.

9. ACTION PROGRAMME FOR THE UNORGANISED SECTOR

The National Commission for Enterprises in the Unorganised Sector (NCEUS) was the first initiative taken by the Central Government to study in-depth the problems of the unorganised sector and recommend measures to improve the state of affairs in this sector which provides employment to 93 percent of workforce. The main task before NCEUS was to suggest:

(*a*) Measures necessary for bringing about improvements in the productivity of enterprises and generation of large scale employment opportunities;

(*b*) Labour laws in the informal sector consistent with labour rights; and

(*c*) Expansion in the security system available for labour in the informal sector.

The Commission has recommended the following action programme for the unorganised sector:

A. PROTECTIVE MEASURES FOR UNORGANISED WORKERS

Two sets of measures have to be are recommended in this regard:

(1) Ensuring Minimum Condition of work which include the following:

Salient Features of Minimum Conditions of Work Proposals

- Eight-hour working day with half-hour break
- One paid day of rest per week
- National minimum wage for all workers in the unorganised sector, not covered by the Minimum Wages Act
- Piece rate wage to equal time rate wage
- Women workers to be paid at par with men
- Deduction in wage rate to attract fines
- Right of unorganised workers to organise
- Safety equipment and compensation for accident
- Protection from sexual harassment
- Provision of child-care and basic amenities at the workplace

(2) **Minimum level of social security-** NCEUS recommends two comprehensive bills separately for agricultural and non-agricultural workers providing the following benefits:

(*a*) **Life Insurance:** ₹ 30,000 for natural death or ₹ 75,000 in the event of accidental death or total disability;

(*b*) **Health insurance:** Hospitalization for each worker and his family members, costing ₹ 15,000 a year with ₹ 10,000 per ailment in designated hospitals.

(*c*) **Old age security:** All BPL (Below the poverty line) workers will get a monthly pension of Rs 200 at the age of 60 plus; all workers other than BPL will be entitled to provident fund.

The proposed scheme is expected to cost ₹ 1,095 per worker per year for 30 crore workers in the unorganised sector. The total cost of the scheme for both agricultural and non-agricultural workers will be ₹ 33,950 crores at 2006-07 prices after full coverage – - (₹19,400 crores for agricultural workers and ₹ 13,950 crores for non-agricultural workers). Workers below the poverty line (BPL) will be exempt from contribution and their share will be borne by the Central Government; and other workers will contribute Re. 1 per day and the Central and State governments each will pay Re. 1 per day. On the assumption that GDP will grow at the rate of 8 percent in the next five years, the cost of the scheme would be 0.20 percent of GDP in the year of its inception. This will rise to 0.48 percent of GDP in 2010-11 when the entire unorganised workers are expected to be covered.

B. PACKAGE OF MEASURES FOR THE MARGINAL AND SMALL FARMERS

The Commission recommends that during the Eleventh Plan period, the Government focuses a targeted programme to help small and marginal farmers. The Government could take as its priority tasks the development of area specific irrigation schemes; crop procurement, measures for reducing risks, formation of self-help groups (SHGs) for farmers with respect to irrigation resources, inputs and marketing arrangements; tenancy reform and group farming. The Government can also undertake technological platforms which could be accessed by such farmers.

1. Emphasis on Accelerated Land and Water Management

The Commission is of the view that in rainfed areas, the watershed development programmes are of crucial importance and have a high benefit cost ratio. About 45 million hectares have been covered under watershed development programme so far, while about 75 million hectares remain to be covered. The Commission recommends accelerated expansion of watershed development programmes and Rainfed Area Programmes to revive agriculture in rainfed agricultural land on which a large number of the rural poor are dependent, as an immediate priority.

2. Credit for Marginal-Small Farmers

The Commission recommends that priority sector lending guidelines of the RBI should be amended and a 10 percent quota, out of the 18 percent presently assigned for agriculture, be fixed for farmers with landholding below 2 hectares.

Besides this, 20-40 percent of marginal and small farmers are excluded from formal financial sector due to lack of *patta* and title deeds. The Commission recommends that such farmers be extended credit on the basis of certificates issued by panchayats. To reduce the risk of default, the Commission is of the view that the Government may set up a Credit Guarantee Fund (CGF) in NABARD, on the lines of the CGF set up by the Ministry

of Micro, Small and Medium enterprises which provides guarantee cover on loans to small units.

3. Farmers' Debt Relief Commission

To alleviate the distress faced by farmers with respect to 31 districts, in four states of Andhra Pradesh, Maharashtra, Karnataka and Kerala, the Government has launched a special package of debt relief. To help other states as well, the Commission recommends the setting up of Farmer Debt Relief Commissions. The Central Government, as a part of the relief package, could extend assistance to State Commissions on a 75:25 basis.

C. MEASURES TO IMPROVE GROWTH OF NON-AGRICULTURAL SECTOR

1.Improve Credit Flow to the Non-agricultural Sector

The Commission recommends in a detailed manner measures to improve access of bank credit for micro and small enterprises. At present, the priority sector targets are as follows:

Agriculture 18 percent, weaker sections 10 percent, and others including micro and small enterprises 12 percent. There is no specific target for small and micro enterprises. The Commission recommends that an explicit target of 10 percent be set for lending to micro and small enterprises. Within this, a 4 percent target be set up for micro-enterprises with capital investment up to ₹ 5 lakhs. Since the priority sector quota for agriculture is 18 percent (of which 10 percent should be reserved for small and marginal farmers), and another 10 percent as recommended for small and micro-enterprises, this would leave a quota of 12 percent from the total priority sector allocation of 40 percent, which in the Commission's view, should be allocated for socio-economically weaker sections, for purposes of housing, education, professions etc. with a loan ceiling of Rs 5 lakhs.

2. Creation of a National Fund for Unorganised Sector (NAFUS)

The Commission recommends an agency be created for the development of unorganised sector which shall be called *National Fund for the Unorganised Sector (NAFUS)* with an initial corpus of ₹ 5,000 crores, contributed by Central Government, public sector banks, financial sector institutions and other government agencies. The target group of the fund would be micro-enterprises, with focus on those below an investment of ₹ 5 lakhs. These constitute 94 percent of small enterprises in the country but they receive only 2 percent of Net Bank Credit despite providing employment to 70 million people and contributing 30 percent of industrial production.

3. Upscaling of Cluster Development through Growth Poles

The Commission recommends the development of 'growth poles' for the unorganised sector, based on concept of a cluster of clusters with public-private partnership. This recommendation involves an upscaling of cluster development efforts through the provision of common infrastructure, service centres etc. designed to take the existing cluster development approach to the next level. The Commission believes that clusters once developed would lead to multiplier effect on production and employment in rural areas.

The Commission also recommends that 'growth poles' should be given the same incentives currently being offered to Special Economic Zones.

D. MEASURES TO EXPAND EMPLOYMENT AND IMPROVE EMPLOYABILITY PROGRAMMES

1. Expand employment through self-employment programmes

The Commission recommends that target of employment under self-employment schemes should be raised to 5 million per year as against 2 million per year proposed by the Eleventh Plan.

2. Universalise and Strengthen (NREGA)

The Commission recommends the extension and universalisation of National Rural Employment Guarantee Programme to all districts in the country. At present, NREGA programme covers 330 districts. The Commission, in this respect, recommends that on the employment front, the cap on employment for 100 days a year to be provided per household should be removed and the programmes should be purely demand based, on the lines of Maharashtra Employment Guarantee Scheme.

3. Improving the Employability through Skill Development

The Commission noted the 'skill development initiatives' (SDI) being provided at present at a total cost of ₹ 550 crores. The objective of the scheme is to provide training to school leavers, existing workers, ITI graduates to improve their employability. On an average, an expenditure of ₹ 5,000 per person is expected to be incurred on training imparted and certification of trainees under SDI Scheme.

The Commission recommends that though DGET scheme is a step in the right direction, it should be expanded through a supplementary on-the job-training cum employment assurance programme for an additional

sum of ₹ 5,000 per person to be provided as one-time payment as an incentive to any employer who is willing to provide on-the job training for skill enhancement to at least one year to the trained worker.

10. ASSESSMENT OF NCEUS RECOMMENDATIONS

The National Commission on Enterprises by the Unorganised Sector (NCEUS) is the first major attempt by the Central Government to address the issues related to unorganised sector. The NCEUS Report studies in-depth the wide ranging issues pertaining to the enterprises in the unorganised sector and also studies in-depth the wide ranging issues pertaining to the enterprises in the unorganised sector and also studies issues related with wages, employment, social security and growth of this sector which employs 93 percent of workers. The Report is a strong indictment of the policies pursued after the introduction of LPG model of development in the Indian economy since 1991. It emphasizes the fact that the development process has failed to reduce the size of the unorganised workers standing at 423 million in 2004-05, i.e. 92.4% of the total labour force. It has merely benefited 35 million i.e. 7.6 percent workers in the organised sector. Moreover, 91% of workers are denied the benefit of National Minimum Wage fixed at Rs 66 under the Act and 64% below the NCRL norm of Rs 49 fixed for the urban rural areas. It has brought out the stark reality of 836 million people i.e. 77% of the population whose income is below $2 PPP, as the poor and vulnerable sections of the population.

The Report is a landmark in making recommendations pertaining to the lot of 423 million workers in the unorganised sector. Since it has also framed two bills – one for agricultural workers and the other for non-agricultural workers, it has done commendable spade work and thus, left very little leeway for the Central Government to delay the measures pertaining to the action programme for the unorganised sector. The Commission needs the appreciations of the neglected sections to take up their cause and make a concerted effort to improve the lot of the workers in the unorganised sector who have been bypassed by the reform process.

However, the Commission is guilty of not acknowledging the *Report of the Special Group on Targeting Ten Million Employment opportunities per year* appointed by the Planning Commission which submitted its Report in May 2002, under the stewardship of Dr. S.P. Gupta, the then member of the Planning Commission. The Special Group stated in a forthright manner : *"The only answer to the situation is to increase productivity and job quality of the unorganised sector. It means that all attempts should be made to implement those policies, which will release the basic growth constraints and by ensuring a level playing field for this sector.... In the attempt to increase labour productivity, more emphasis should be laid on the growth of this sector, rather than for substitution labour with capital. Further, to improve the job quality and its security, major changes in legislation will be needed regarding social security measures, working conditions, minimum wages and protection of labour interests."*[10]

It is really strange that the Commission neglected the earlier attempt to boost the unorganised sector. Whether this is deliberate or unintentional, is only known to Dr. Arjun Sen Gupta and other illustrious members of the Commission. Since the Report was prepared under the NDA government, but could not be implemented, is no reason for ignoring its findings and recommendations.

A close perusal of the NCEUS recommendations reveals that some of the recommendations are distant goals which cannot be realized in the near future. The entire set of minimum conditions or work – eight-hour working day with a weekly holiday, national minimum wage of all workers in the unorganised workers, equal wages for men and women, child-care and basic amenities at workplace – is an attempt to implement the concept of decent work. These conditions do not exist even in the organised sector. Moreover, after the introduction of economic reforms, these conditions are being violated with impunity. The Report itself accepts that casual workers now account for about 23 percent of all workers in the organised sector even, therefore the first priority should be to convert casual workers into regular workers and then take up the question of decent work. 'Regular work for all' should be the primary goal and then gradually the country should move towards 'decent work for all'.

Regarding 'bonded labour', the findings of the Commission are very weak. The Commission should have involved organizations like Gandhi Peace Foundation and Bandhua Mukti Morcha headed by Swami Agnivesh to prepare a plan for the effective abolition of bonded labour which it has failed to do. It only depended on Labour Ministry Annual Reports which is totally unreliable in this area. The Action Programme of the Commission blacks out any recommendation in this regard.

Despite weaknesses here and there, it may be stated that the Report of National Commission on Enterprises in the Unorganised Sector is a unique document which intends to give Reforms a human face and as such, it should be welcomed. The Government should take steps to implement the Report and provide necessary financial support for the purpose. It would be desirable to give this

10. Planning Commission (2002), ***Report of the Special Group on Targeting Ten Million Employment opportunities,*** p.10-11.

task to a separate Ministry so that unorganised enterprises and workers in these are able to attain the goals set by the Commission in its two Bills.

SELECT REFERENCES

National Commission for Enterprises in the Unorganised Sector (2007), *Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector.*

Planning Commission (2002), *Report of the Special Group on Targeting Ten Million Employment opportunities.*

CHAPTER

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SECOND NATIONAL COMMISSION ON LABOUR

1. NATIONAL COMMISSION ON LABOUR AND REVIEW OF LABOUR LAWS

On 15th October 1999, the Government of India decided to set up the National Commission on Labour (NCL) with Mr. Ravindra Varma as the chairperson indicating the following terms of reference :

(a) to suggest rationalisation of existing laws relating to labour in the organised sector; and

(b) to suggest an "umbrella" legislation for ensuring a minimum level of protection to the workers in the unorganised sector.

The Resolution of the government setting up the Commission desired that the Commission should take into account the new environment generated as a consequence of globalisation of the economy and liberalisation of trade and industry. At the same time, it urged upon the National Labour Commission to take into account the need to ensure a minimum level of protection and welfare to labour, to improve the effectiveness of measures relating to social security, safety at places of work, occupational health hazards; to pay special attention to the problems of women workers, minimum wages, evolving a healthy relation between wages and productivity; and to improve the protection and welfare of labour. The Commission submitted its report to the Government on June 1, 2002.

Philosophy of the Commission

An idea of the philosophical attitude of the NCL can be had from the following statements of the Commission:

"Competitiveness depends not merely on technology, credit, inputs and managerial skills, but also on the contribution that labour makes. The commitment of the workforce to quality and productivity must be high. The commitment and the new work culture that it calls for, can be created only when workers feel that they are receiving fair wages, a fair share of profits and incentives, and the respect or consideration due to partners."

In a subsequent paragraph, the Commission states: "The level of wages depends on the economic efficiency of an undertaking. ***Workers have to be interested in productivity as the management is***"[1] (Emphasis added)

1. *Report of the National Commission on Labour (2002) p.3.*

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In its voluminous and comprehensive survey, the Commission did not undertake an study of relative contributions of the components of technology, workers and management in the growth of productivity. This had to be related to the increase in real wages of workers over time. The basic question which needed an answer was : Were the workers compensated for the rise in productivity by getting a better share in value added as an incentive or was the management appropriating in a disproportionate manner the gains from productivity while throwing a few crumbs in the form of a very small increase in wages to the workers? Did the Commission undertake a study of the relative increase in managerial remuneration and the rise in real wages of workers so as the ascertain the 'rationalisation' of the gains of productivity?

TABLE 1: Total Remuneration Received by the Corporate Chieftains in 2007-08

₹ crores

Sl.No.	*Name of Corporate Head and Company*	*Total Remuneration*
1.	Mukesh Ambani Reliance Industries	44.0
2.	Anil Ambani Reliance Capital, Power, Infrastructure	43.4
3.	Kalanidhi Maran Sun TV Network	32.4
4.	Kaveri Kalanidhi Sun TV Network	32.4
5.	PRR Rajha Madras Cement	32.4
6.	Malvinder Singh Ranbaxy Labs	19.6
7.	Sunil Bharati Mittal Bharti Airtel	19.6
8.	Sajjan Jindal ISW Steel	16.7
9.	Onkar S. Kanwar Apollo Tyres	15.5
10.	E. Sudhi Reddy MRCL Infractructure	15.1

Note : Total remuneration includes salary, perquisites, sitting fees as directors and commission paid out of profit.

SOURCE : Based on information provided by *Economic Times Line*, September 1, 2008.

Table 1 provides information pertaining to 2007-08 regarding total remuneration paid to corporate chieftains. It may be noted that Mukesh Ambani of Reliance Industries took become ₹ 44 crores as remuneration. Similarly, Anil Ambani appropriated ₹ 43.4 crores. Top 10 CEOs took remuneration ranging from ₹ 15 crores to ₹ 44 crores. The question is : Are such hefty remuneration of CEOs justified ?

In this connection, Mr. N.R. Narayana Murthy, Chairman of Infosys Technologies in his Keynote address at the 'Leadership Summit' organised by the Confederation of Indian Industry (CII) on September 18, 2002 stated: How much salary should the chief executive of a company earn? At the most, 15 times more than what the lowest employee in the company gets..... I also feel that corporate leaders should not use resources of the company for their personal use. ... Never before have business leaders lost trust like this (as today because of the occurrence of numerous corporate frauds) ... People are asking 'how can you be so greedy, so unfair and so poor in governance''. (Quoted in ***Business Line***, September 19, 2000).

The National Labour Commission should have raised this issue as well while admonishing labour to be more concerned with productivity.

Not only that, companies also reward their top managers with stock option, thus they further increase their hold on as well as compensation from the companies. It appears as if the old Managing Agency System which was severely criticised during the freedom struggle, is back with a vengeance. If the Managing Agency System was an instrument of exploitation of shareholders and workers in the pre-independence period, how can it be an instrument of development and economic justice now, is the moot question ?

The approach of the Commission that "workers have to be interested in productivity as the management is" appears to be value-loaded. The question which several management experts ask is : Are the managements prepared to treat the enterprise or the company as a joint corporate entity of three parties—Shareholders, management and workers? If so, they should introduce more transparency in the company management so that the workers are induced to put in more labour and also claim better rewards.

The Commission sums up its philosophy in the following words :

"It is one thing to hold that the role of the state should be minimal, and quite another to hold that industrial relations should be based only on bilateralism. Bilateralism is an essential ingredient of industrial relations, and both parties should rely on it as for as possible. But it cannot be denied that there is a role that mediation, arbitration, adjudication or third party intervention can play to ensure industrial peace with justice to both side and to society".[2]

The Commission further elaborates : "Attitudes of confrontation must give place to an attitude of genuine partnership. Organisation of workers as well as employers, and the state itself, should identify and create the conditions on which harmonious relations that we need can be created and maintained."[3]

Good words and noble thoughts indeed. But are the employers willing to enter into genuine partnership with the workers? A broad view of industrial relations during the post-reform period reveals that during the 10-year period (1991 to 2000), as per data supplied by the Ministry of Labour, a total of 230 million mandays were

2. *Ibid*, p.2
3. *Ibid, p.3*

lost, out of which strikes accounted for about 92 million (39.8 per cent) and lockouts for about 138 million (60.2 per cent). Obviously, the employers militancy is on the ascendancy and if a change of mindset has to take place, greater initiative should come from the employers who have taken to the path of confrontation in the era of liberalisation, privatisation and globalisation. The state while acting as the mediator or the adjudicator should put greater pressure on the party which has consistently shown much higher militancy.

It would be of relevance in this context to study trends in value added, wages, labour productivity, managerial remuneration and corporate efficiency.

Analysis of value added, wages, labour and capital productivity trends (1980-81 to 1996-97)

A Study of value added, wages, labour productivity and capital productivity for the manufacturing sector in India was undertaken for the period 1980-81 to 1996-97. This period was divided into two sub-periods—pre-reform period (1980-81 to 1989-90) and post-reform period (1990-91 to 1996-97), since final figures from the CSO were available only upto the year 1996-97. The following results were obtained :

1. Labour productivity has positive and significant impact on wage per worker. One unit rise in labour productivity leads to 0.15 unit rise in wage per worker.

2. But capital per worker has negative but insignificant impact on wage per worker. One unit rise in capital per worker leads to 0.053 unit fall in wage per worker.

The upshot of the analysis is that increasing capital intensity of the manufacturing sector in India has a negative impact on wages per worker and it allows the employer to appropriate a greater share in value added. It is only rise in labour productivity, which may be the result of greater effort put in by labour in the process of production or improvement in the quality of labour due to better skill and training which has a positive effect on wages per worker.

Managerial remuneration, corporate efficiency and employees wages

In a study undertaken by Ram Kumar Kakani and Pranabesh Ray [4] of XLRI, Jamshedpur about 16 large firms spanning over a period of 22 years (1979-80 to 2000-01) regarding corporate performance would be of immense relevance in this regard. Sixteen firms included were: ACC, Arwind Mills, Bajaj Auto, Coats Industries, Century Enka, Electrosteel Castings, GEC Asthom, GSFC, Hindustan Motors, ITC, J.K. Corp, Kesoram Industries, Kirloskar Cummins, Larsen & Toubro, Siemens and Tata Steel.

Table 2: Trends in Managerial Remuneration and Corporate Efficiency

Financial year	*MR/PBDIT*	*Welfare*	*ROCE*	*ROE*
1979-80	0.24	33.2	27.9	14.7
1983-84	0.29	27.3	22.3	11.1
1987-88	0.25	25.9	21.7	13.0
1991-92	0.34	22.0	19.7	11.3
1995-96	0.50	22.7	19.9	12.5
1999-2000	0.80	20.2	21.6	4.0
2000-2001	0.58	20.1	21.4	3.2

MR = Managerial remuneration
ROCE = Rate of return on capital employed
ROE = Return on equity.

Welfare measure is the ratio between the sum of the operating profits of the firm, wages to the employees and all other welfare expenses to the firms total assets.

From the figures provided in table 2, it becomes clear that whereas MR/PBDIT has increased, an exactly opposite trend is observed in the corporate efficiency indicators. The decrease is very significant in ROCE (Return on capital employed) and ROE (return on equity). The conclusion arrived at by Kakani and Ray is : "Increase in managerial remuneration has not helped improve the performance of these largely profitable corporations. On the other hand it seems to have decreased their performance parameters with respect to shareholders, the entity and society at large".

The analysis only highlights that the assumptions made by the Second National Labour Commission are essentially based on the arguments made by the proponents of globalisation, liberalisation and privatisation. They do not take into account the ground realities as revealed by research made in industrial relations, corporate efficiency, trends of value added, wages, labour and capital productivity. As such, the Commission, though it mentions that it can take a comprehensive view of the issues, has worked only on a *status-quoist* philosophy.

2. REVIEW OF LABOUR LAWS AND RECOMMENDATIONS OF NCL

The second National Commission on Labour (NCL) in its report on Review of Labour Laws made the following recommendations :

The Government of India have recognised the following rights of workers as inalienable under any system of labour laws and labour policy. These are :

(a) Right to work of one's choice

(b) Right against discrimination

4. *Business Line*, 13th and 14th August 2002

(c) Prohibition of child labour

(d) Just and human conditions of work

(e) Right to social security

(f) Protection of wages including right to guaranteed wages

(g) Right to redress grievances

(h) Right to organise and form trade unions and Right to collective bargaining; and

(i) Right to participation in management.

All the labour laws are with reference to organised labour.

While fixing the threshold limit for organised sector, the Commission did not want workers who are already enjoying the protection of laws forfeit their protection or benefits of provisions for safety and security. Nor did it deem desirable to add to problems of small entrepreneurs financial burdens that affect the viability of their enterprises or compel them to work under irksome conditions. Balancing both these factors, the Commission feels that a limit of 19 workers should be accepted as the socially defensible mean.

Coverage of Labour Laws

The Commission stated that it would prefer the gender neutral expression 'worker' instead of the currently used work 'workman' in the Industrial Disputes Act and some other Acts.

While examining the question of salary limit for coverage of the workers, the Commission found that relatively better off section of employees categorised as workers like Airline Pilots etc. do not merely carry out instructions from superior authority but are also required and empowered to take various kinds of on the spot decisions in various situations and particularly in exigencies. Their functions, therefore, cannot merely be categorised as those of ordinary workers.

The NCL, therefore, recommended that the Government may lay down a list of such highly paid jobs who are presently deemed as workers category as being outside the purview of laws relating to workers and included in the proposed law for the protection of non-workers. Another alternative is that the Government fix a cut-off limit of remuneration which is substantially high enough, in the present context, such as ₹ 25,000 p.m. beyond which employees will not be treated as ordinary workers.

It would be logical to keep all supervisory personnel, irrespective of their wage/salary, outside the rank of worker and keep them out of the purview of the labour laws meant for workers.

The Commission recommended that it is necessary to provide a minimum level of protection to managerial and other (excluded) employees too, against unfair dismissals or removals. This has to be through adjudication by Labour Court or Labour Relations Commission or arbitration.

Central laws relating to Labour Relations are currently the Industrial Disputes Act 1947, the Trade Union Act 1926 and the Industrial Employment (Standing Orders) Act, 1946. In addition, there is Sales Promotion Employees (Conditions of Service) Act 1976 and some other Acts for particular trades or employments. National Commission on Labour recommends that all these laws be judiciously consolidated into a single law called the Labour Management Relations Law or the Law of Labour Management Relations.

For establishments employing less than 19 workers, the Commission recommends the enactment of a special law for small scale units.

Approach of the NCL in drafting Law on Labour Management Relations

1.The law will apply uniformly to all such establishments.

2. Since extent of unionisation is low, wherever agreement and understanding is not possible, recourse to assistance by the third party should be obtained through arbitration or adjudication. ***A settlement entered into with a recognised negotiating must be binding on all wokers[5]. (Emphasis added)***

3. The Commission is of the view that provisions must be made in the law for determining negotiating agents, particularly on behalf of workers.

4. The Commission is of the view that changes in the labour laws be accompanied by a well-defined social security package that will benefit all workers, be they in the 'organised' or 'unorganised' sector and should also cover those in administrative, managerial and other categories which have been excluded from the purview of the term 'worker'.

5. There is a need to define two terms, 'wages' and 'remuneration', the former to include only basic wages and dearness allowance, and no other for the purpose of contribution to social security and calculation of bonus and gratuity and all other payments including other allowances as well as overtime payment together with wages as defined above will be 'remuneration'.

6. The Commission did not feel the necessity of defining industry, since all establishments employing 20 or more persons irrespective of the nature of activity in which the establishment is engaged, are covered.

7. The Commission did not consider it desirable to change the definition of 'strike' as provided in the

Industrial Disputes Act 1947 and it held that "Go slow" and "work to rule" are forms of action which must be regarded as misconduct.

8. Term 'retrenchment' should be defined precisely to cover only termination of employment arising out of reduction of surplus workers in an establishment, such surplus having arisen out of one or more of several reasons.

9. The Commission recommends that in case of socially essential services like water supply, medical services, sanitation, electricity and transport, when a dispute is not settled through mutual negotiations, there may be a strike ballot as in other enterprises, and if the strike ballot shows that 51 per cent workers are in favour of a strike, it should be taken that strike has taken place, and the dispute must forthwith be referred to compulsory arbitration (by arbitrators from the panel of the Labour Relations Commission (LRC) or arbitrators agreed to by both sides).

10. A special provision may be made in the Trade Union Act to enable workers in the unorganised sector to form trade unions, and get then registered even when an employer-employee relationship does not exist or is difficult to establish; and the provision stipulating 10 per cent of membership shall not apply in their case.

11. The Commission strongly believes the role that bilateral interaction, dialogue and negotiations can play in promoting harmonious relations. Since our Trade Union movement is fragmented and the constituents are not willing to give up separate identities, one of the ways to strengthen the incentives for consolidation can be in the field of registration and recognition, where the criteria for eligibility can be upgraded or at least proportionately upgraded.

12. Negotiating agent should be selected on the basis of check off system, with 66 per cent entitling the Union to be accepted as the single negotiating agent, and if no union has 66 per cent support, then Unions that have the support of more than 25 per cent should be given proportionate representation on the college.

13. For ascertaining the bargaining agent, check off system has the advantage to determine the relative strength of trade unions based on continuing loyalty reflected by the regular payment of union subscription.

14. Check off system in an establishment employing 300 or more workers must be made compulsory for members of all registered trade unions.

15. The Commission recommends that recognition once granted, should be valid for a period of four years, to be co-terminus with the period of settlement. No claim by any other trade union/federation/centre for recognition should be entertained till at least 4 years have elapsed from the date of earlier recognition.

16. Any worker who, pending completion of domestic enquiry, is placed under suspension, should be entitled to 50 per cent of his wages as subsistence allowance, and at 75 per cent of wages of the period beyond 90 days, for no fault of the worker, so that however the total period of suspension shall not, in any case, exceed one year.

17. Lay off and Retrenchment

Prior permission is not necessary in respect of layoff and retrenchment in an establishment of any employment size. Workers will, however, be entitled to two month's notice or notice pay in lieu of notice, in case of retrenchment. We also feel that the rate of retrenchment compensation should be higher in a running organisation than in an organisation which is being closed. Again, we are of the view that the scale of compensation may vary for sick units and profit making units even in cases of retrenchment. It would, however, recommend that in the case of establishments employing 300 or more workers where lay off exceeds a period of one month, such establishments should be required to obtain *post facto* approval of the appropriate government. We recommend that the provisions of Chapter VB pertaining to permission for closure should be made applicable to all establishments to protect the interests of workers in establishments which are not covered at present by this provision if they are employing 300 or more workers. Necessary changes in chapter VA in regard to retrenchment and closure will have to be made accordingly. Every employer will have to ensure, before a worker is retrenched or the establishment is closed, irrespective of the employment size of the establishment, that all dues to the workers, be it arrears of wages earned, compensation amount to be paid for retrenchment or closure or any other amount due to the worker, are first settled as a precondition to retrenchment or closure. These provisions will not bar industrial disputes being raised against a layoff or retrenchment or closure. Having regard to the national debate on this issue and the principle outlined above, the Commission would like to recommend the compensation per completed year of service at the rate of 30 days on account of closure in case of sick industry which has continuously run into losses for the last 3 financial years or has filed an application for bankruptcy or winding up, and other non-profit making bodies like charitable institutions etc. and at the rate of 45 days for retrenchment by such sick industry or body where retrenchment is done with a view to becoming viable. It would also recommend higher retrenchment compensation at the rate of 60 days of wages and similarly a higher rate of compensation for closure at the rate of 45 days wages for every completed year of service for profit making organisations. For establishments em-

5. *Report of the National Commission on Labour (2002)*, Vol. II, pp. 38-39.

ploying less than 100 workers half of the compensation mentioned above in terms of number of days wages may be prescribed. However, these establishments will also be required to give similar notice as prescribed for bigger establishments before retrenching the workers or closing down.

Arising out of the above, the Commission recommended that while the layoff compensation could be 50 per cent of the wages as at present, in the case of retrenchment, Chapter VA of the law may be amended to provide for sixty days notice for both retrenchment and closure or pay in lieu thereof. The provision for permission to close down an establishment employing 300 or more workmen should be made a part of Chapter VA, and Chapter VB should be repealed. In case of closure of such establishment which is employing 300 or more workers, the employer will make an application for permission to the appropriate Government 90 days before the intended closure and also serve a copy of the same on the recognised negotiating agent. If permission is not granted by the appropriate Government within 60 days of the receipt of application, the permission will be deemed to have been granted.

18. The Commission is of the view that between arbitration and adjudication, arbitration is better of the two and would like the system of arbitration to become the accepted mode of determining disputes which are not settled by parties themselves.

19. The Commission envisages a system of labour courts, lok adalats and Labour Relations Commissions as the integrated adjudicatory system in labour matters. The system will not only deal with matters arising out of employment relations but also trade disputes in matters such as wages, social security, safety and health, welfare and working conditions and so on. Labour Relations Commissions should be established at the State, Central and National level to settle disputes.

20. A union which does not have at least 10 per cent membership amongst the employees in an establishment should not have any locus standi in that establishment. A union which has at least 10 per cent members amongst the employees should only have the right to represent individual workers in various fora such as conciliation, arbitration or adjudication and a provision in this regard may be made in section 36 of Industrial Disputes Act.

21. System of lok adalats has been recommended by the Commission to be pursued to settle disputes speedily. However, it should be ensured that lok adalats are not used to 'browbeat' workers into accepting payments which may be only a fraction of what they may be entitled to under the law.

22. Jurisdiction of civil courts be banned in respect of all matters for which provision is contained in the relevant labour laws.

23. Illegal Strikes and Lockouts

Strike could be called only by the recognised negotiating agent and that too only after it had conducted a strike ballot amongs all the workers, of whom at least 51 per cent support the strike. Correspondingly, an employer will not be allowed to declare a lock-out except with the approval at the highest level of management except in cases of actual or grave apprehension of physical threat to the management or to the establishment.

The general provisions like giving of notice of not less than 14 days, not declaring a strike or lockout over a dispute which is in conciliation or adjudication and so on will be incorporated in the law.

In this context, National Commission on Labour recommends that "an illegal strike or illegal lockout should attract similar penalties. A worker who goes on an illegal strike should lose three days wages for every day of illegal strike, and the management must pay the worker wages equivalent to three days wages per day of the duration of lockout. The union which leads on illegal strike should be de-recognised and debarred from applying for registration or recognition for a period of two or three years.

24. Workers participation in management

NCL feels that time has come now to legislatively provide for a scheme of workers participation in management. It may be initially applicable for all establishments employing 300 or more persons.

25. In the enforcement of labour laws, there is discrimination between the private sector and the public sector, the latter allegedly being handled leniently. No such discrimination should be permitted either by law or in practice, as the purpose of labour laws will be defeated by such discrimination.

25. Labour Flexibility and Contract Labour

In view of the fast changing economic scenario and changes in technology and management, NCL is conscious of the fact that there cannot be a fixed number of posts in an organisation for all times to come. Organisation must have the flexibility to adjust the number of this workforce based on economic efficiency.

The Commission, therefore, recommends:

a. Contract labour shall not be engaged for core production/service activities. However, for sporadic seasonal demand, the employer may engage temporary

labour for core production / service activities.

b. While off-loading perennial non-core services like canteen, watch & ward, cleaning etc. to other employing agencies, three aspects have to be taken care of:-

(i) there have to be provisions that perennial non-core services are not transferred to other agencies or establishments;

(ii) where such services are being performed by employees on the payrolls of the enterprises, no transfer to other agencies should be done without consulting the bargaining (negotiating) agents; and

(iii) where the transfer of such services do not involve any employee who is currently in service of the enterprise, the management will be free to entrust the service to outside agencies.

The contract labour will, however, be remunerated at the rate of a regular worker engaged in the same organisation doing work of a comparable nature or if such worker does not exist in the organisation, at the lowest salary of a worker in a comparable grade i.e. unskilled, semi-skilled or skilled. The principal employer will also ensure that the prescribed social security and other benefits are extended to the contract worker.

The Commission recommends that no worker should be kept continuously as a casual or temporary worker against a permanent job for more than 2 years.

26. Minimum Wage Fixation

Minimum wage payable to anyone in employment, in whatever occupation, should be such as would satisfy the needs of the worker and his family (consisting in all of 3 consumption units) arrived at on the Need Based formula of the of the 15th Indian Labour Conference supplemented by the recommendations made in the judgement of the Supreme Court in the Raptakos Brett & Co. case. However, before fixing the minimum wage the appropriate government should keep in mind the capacity of the industry to pay as well as the needs of the workers.

The Commission recommends that every employer must pay each worker his one-month's pay as bonus before an appropriate festival, be it Diwali or Onam or Puja or Ramzan or Christmas. Any demand for bonus in excess of this upto a maximum of 20 per cent of the wages will be subject to negotiations. The Commission also recommends that the present system of two wage ceilings for reckoning entitlement should be suitably enhanced to ₹ 7,500 and ₹ 3,500 for entitlements and calculation respectively. (p. 48).

There should be a national minimum wage that the Central Government may notify. It should, in addition, have a component of dearness allowance to be declared six monthly linked to consumer price index and the minimum wage may be revised once in five years. This will be a wage below which no one who is employed anywhere, in whatever occupation, can be paid. Each State/Union Territory should have the authority to fix minimum rates of wages, which shall not be, in any event, less than the national minimum wage. (p.48).

The Commission also recommends that ***all workers in all employments should have the benefit of a minimum wage[6]. (Emphasis added)***

27. Need for a General Law on Working Conditions

The Commission recommends a general law relating to hours of work, leave and working conditions, at the work place. For ensuring safety at the workplace and in different activities, one omnibus law may be enacted, providing for different rules and regulations on safety applicable to different activities.

Special mention has been made about women in this regard.

(i) On the question of night work for women there need not be any restriction on this if the number of women workers in a shift in an establishment is not less than five, and if the management is able to provide satisfactory arrangements for their transport, safety and rest after or before shift hours.

(ii) Creches should not be dependent on the number of women workers or the number of children. Every establishment employing 20 or more workers must run a creche.

At the same time, the Commission is not in favour of any exemptions being granted in respect of establishments in export promotion zones or special economic zones from labour laws.

28. Child Labour

The Commission is shocked at the proviso to the definition of 'an agreement of pledge of the labour of the child' in Children (Pledging of Labour) Act, 1933. This proviso would amount to approving child labour if reasonable wages are paid. The Commission is of the view that given this proviso, the entire purpose of the law is vitiated. Pledging of child labour can be made a crime under the criminal law of the land, and would, therefore, recommend repeal of the law.

29. Migrant Labourers

The Commission is of the view that the Government may not be in a position to legislate separately for interstate migrant workers. However, adequate provisions will be made in the general law recommended by

6. *Ibid*, p.49

the Commission. Employers in the host state be required to inform the state Government as well as the Government of the state to which the worker belongs whenever they engage any worker hailing from another state for work in the unskilled category.

30. Exclusion of categories from application of Labour Laws

The Commission broadly excludes from the coverage of labour laws defence forces, para military forces, fire services and prison services, services connected with law and order, tax levy and tax collection, internal and external security, law making, administration of justice, and external relations.....At the same time, the Commission strongly urged that persons employed in these 'sovereign' tasks are also adequately protected, including protection of their 'right to form associations and unions' as enshrined in Article 19 of the Constitution of India.

31. Labour Judicial Service

The Commission has assigned to the proposed Labour Relations Commissions multiple duties including the important task of identifying collective bargaining/negotiating agents. Similarly, all matters in the labour field needing adjudication, be it labour-management dispute or a workman's compensation claim or disputes arising out of and relating to coverage of labour laws or disputes relating to social security and the like, will have to be determined by the labour courts at the lower level, with appeals to the Labour Relations Commission.

Collective disputes between negotiating agent and employer, if not resolved bilaterally or in conciliation or arbitration should be dealt with by appropriate Labour Relations Commission. This will need considerable increase in the number of labour courts. The setting up of Labour Relation Commissions also increases the demand for high level labour adjudicating functionaries. All these compelled the National Labour Commission to recommend an All-India Labour Judicial Service which in the new dispensation will be viable and necessary.

3. POSITIVE FEATURES OF NCL RECOMMENDATIONS

NCL has made certain important and in some cases, certain path-breaking recommendations in the interests of labour in the context of review of labour laws. Important among them are :

1. NCL recommends a specific provision in the Trade Union Act to enable workers in the unorganised sector to form trade unions and get them registered. It has recommended a waiver of the condition of employer-employee relationship and also of 10 per cent membership in the establishment. This is a path-breaking recommendation which can pave the way for bringing into the fold of the labour movement 92 per cent of the workers in the unorganised sector. This shall change the restrictive character of the labour movement and help in the organisation of the unorganised labour so that efforts can be made to find new methods of upliftment of the conditions of workers in the unorganised sector.

2. The Commission has recommended the use of check off system to determine the negotiating agent in an establishment. Moreover, the Commission by fixing 66 per cent membership for entitlement as negotiating agent has not favoured the principle of simple majority but has opted for two-third majority. If the condition is not satisfied, then a composite negotiating agent from among representatives of Unions with support of more than 25 per cent has been recommended. In other words, there is a genuine desire to select the negotiating agent on the basis of 2/3rd majority or a composite negotiating agent on the basis of major unions is the hallmark of this recommendation. Use of check off system only assures genuine membership on the basis of monthly contribution.

3. The Commission has recommended a three a tier system of Lok Adalats, Labour Courts and Labour Relations Commissions while Lok Adalats and Labour Courts deal with individual grievances and complaints, Labour Relations Commission has been empowered to deal with both individual problems and problems of collective bargaining when bilateral negotiations are unable to reach a settlement. The Commission has recommended that Labour Courts should have final authority in issues pertaining to labour and jurisdiction of civil courts in this area be banned. All this is prompted by the idea of granting relief to labour grievances within a reasonable period. This is intended to bring an end to prolonged litigation to resolve labour disputes. By imposing on the Unions the condition of 10% membership to represent labour in various fora, the Commission has eliminated the role of very small unions parading themselves as the genuine representatives of labour. The idea of establishing All-India Labour Judicial Service is a welcome recommendation.

4. The Commission has also recommended 'strike ballot' as an essential condition before giving the call for a strike. This is intended to infuse greater democratisation in the functioning of the trade union movement with regard to vital decisions. The rank and file should not be taken for granted and they should not be hustled into accepting decisions taken by the leadership. In this sense, strike ballot should form a part of the decision-

making before launching a strike.

5. Another recommendation which is in vital labour interest is : Against permanent jobs, casual or temporary workers should not be employed for more than 2 years.

6. The Commission has guaranteed 8.33% bonus for all employees when it states that every employer should pay each worker one month's bonus before an appropriate festival. Any demand in excess of this up to a maximum of 20 per cent of the wages will be subject to negotiation. The Commission has recommended that the present system of two wage ceilings for reckoning entitlement and for calculation of bonus should be suitably enhanced to ₹ 7,500 and ₹ 3,500 for entitlement and calculation respectively. The Commission has presented the minimum and maximum limits for bonus and permitted freedom to negotiate.

7. The Commission's categorical view that no exemption from labour laws should be allowed to export promotion zones or special economic zone, is another evidence of its sincerity about implementation of labour laws.

4. A CRITIQUE OF NATIONAL LABOUR COMMISSION'S RECOMMENDATIONS

There are certain recommendation which are either vague or which require further debate and deliberation. It would be desirable to take up certain issues:

1. Definition of the term 'worker'–The Commission has recommended that the Government may lay down a list of such highly paid jobs in the high wage islands like those of air pilots who may be declared as non-workers or alternately fix a cut-off limit of remuneration which is substantially high enough, such as ₹ 25,000 p.m. beyond which employees will not be treated as ordinary workers.

Fixing a cut-off of ₹ 25,000 can open a Pandora's box because a very large number of supervisory and managerial personnel are drawing less than ₹ 25,000 per month. All these categories will put pressure on the Government to be included in the category of workers to avail of the benefit of labour laws. At present, during 1998-99, out of a total of 8.59 million persons employed in industry in India, 6.36 million (74 per cent) are classified as workers, 1.0 million (11.6%) belong to supervisory and managerial staff and 1.22 million (14.2 per cent) are other employees. The Commission has left the issue vague. There is a need to arrive at a specific definition of the term 'worker'.

2. Binding nature of settlement with a negotiating agent – The Commission has explicitly stated in its report : "A settlement entered into with a negotiating agent must be binding on all workers". The basic aim of this recommendation is that once the negotiating agent with either over 66 per cent representation or a composite negotiating agent constituted from major trade unions enters into an agreement, such an agreement must be binding on all workers. The intention is to bring an industrial dispute to a close, once the major representatives of workers agree on the negotiating table.

But the Commission does not make the agreement binding on management. It has been observed on several occasions that managements also violate agreements. It would, therefore, be appropriate if the recommendation had been reworded as under :

A settlement entered into with a recognised negotiating agent must be binding on all workers and on management as well.

3. Check off system to be limited to establishments employing 300 or more persons – The Commission has recommended that check off system should be limited to establishments employing 300 or more workers. This seems be inconsistent with the basic philosophy of the Commission to develop harmonious industrial relations. A break-up of the proportion of workers employed in establishments employing less than 300 workers reveals that in the factory sector, out of a total employment of 6.36 million workers in 1997-98, about 3.79 million (59.6 per cent) were in such establishments. The Commission has, however, recommended a different mode for the negotiating agent in establishments of less than 300 persons. The Commission states: "Though the check off system will be preferred in the case of establishments employing less than 300 persons too, the mode of identifying the negotiating agent in these establishments may be determined by the LRCs (Labour Relations Commissions). Any union in such smaller enterprises may approach the LRCs for conducting a secret ballot instead of employing the check off system, and the LRC will decide the issue after consulting other Trade Unions operating in the establishment. We are recommending a slightly different dispensation for units employing less than 300 as we feel that it is in such units that the possibility of victimisation has to be provided against".[7] The argument of the Commission is that holding secret ballot in very large organisations like railways, posts and telegraph, banks, coal mines or Food Corporation of India with a size of workforce which is very large and thus would require huge expenditure in conducting secret ballot is valid, but the argument does not hold good where the workers involved are less than 10,000. Check-off system may be recommended in such establishments to determine the negotiating agent. But the deviation from the check off system has been made on the

plea of "possibilities of victimisation" in smaller enterprises. At the same time, the Commission is of the view that LRCs before deciding the issue will consult Trade Unions in the establishment. Whether the procedure of secret ballot or check off system is adopted, the employers, if they intend to, can victimise the Trade Union leaders. Therefore, this argument of the Commission is untenable. It should, therefore, be deemed desirable to make the check off system applicable to all establishments irrespective of the employment size so that the employer knows the negotiating agent and by a process of bilateral dialogue resolves industrial disputes.

4. Workers Participation in Management to be applicable for establishments employing 300 or more workers – The Commission is of the view that workers participation in management should be made applicable to all establishments employing 300 or more workers. This is welcome. But the question which needs an answer is : Why should establishments employing less than 300 workers be left out? If the functioning of an establishment and its productivity has to be enhanced, then workers participation can be used as an effective instrument for the purpose. Moreover, even with 100 to 300 workers, many establishments are working as joint stock companies. If that is so, workers participation at various levels should be promoted and nearly 60 per cent of the workforce should not be deprived of its beneficial effect.

5. Lockouts and strikes treated at par – The approach of the Commission to treat strikes and lockouts at par is basically unjustified. The Commission, however, recommends "that an illegal strike or illegal lockout should attract similar penalties. A worker who goes on an illegal strike should lose three days wages for every day of illegal strike, and the management must pay the worker wages equivalent to three days wages per day for the duration of an illegal lockout. The union which leads an illegal strike must be derecognised and debarred from applying for registration for a period of two or three years."[8]

The basic question which needs an answer is : What is the proportion of illegal strikes and illegal lockouts in the total mandays lost in each category? Did the Commission make a study in this regard. Just by introducing certain penal clauses, do we really succeed in our aim at developing better industrial relations? Firstly, it may be stated that the impact of illegal lockouts is much higher than that of illegal strikes. That being so, to recommend double punishment on labour as against single punishment against the employer does not appear to be justified. Labour should pay three days wages for every day of illegal strike. Along with it, the labour union which gave a call for such a strike should be derecognised for two or three years. As against it, the employer only pays a penalty of three days wages for every day of illegal lockout. But what happens to the Chief Executive Officer (CEO) ? He can take shelter behind the plea that there was apprehension (real or fancied) of physical threat to the management. It appears that the NCL has not tried to strike at the root of the problem. Moreover, the High Court of Bombay in its judgement in the Maharashtra General Kamgar Union & Other Vs Balkrishna Pen Pvt. Ltd., (1999) has given the ruling.

"A strike or lockout which has commenced before the expiry of 14 days notice period, shall be illegal only for unexpired period of notice and thereafter shall be legal". [9]

In the light of this judgement, the Commission's prescription has a very limited value and thus cannot serve the purpose for which it has been designed. Moreover, the average number of mandays lost per worker in lockouts were 76 in 1999 and 45 in 2000 which again rose to 73 in 2001. Under such circumstances, the limited use of this penalty can hardly promise the much-desired results.

The perfunctory manner in which the Commission has treated the phenomenon of lockouts can be visualised from the following statement :

"A review of industrial relations reveals that as against 402.1 million man-days lost during the decade (1981-90) i.e., the pre-reform period, the number of mandays lost declined to 210 million during 1991 to 2000 i.e. the post-reform period. But more mandays have been lost in lockouts than in strikes"[10].

But for this bland statement, a deeper analysis of individual and social intensity of lockouts has not beem made. Neither has an effort been made to identify the causes of this growing phenomenon. As against about 92 million mandays lost in strikes during 1991 and 2000, lockouts accounted for 138.5 million mandays lost. In relative terms, lockouts accounted for over 60 per cent and strikes only 40 per cent of the total mandays lost during the nineties. Whereas the average number of mandays lost per worker in strikes during 1991-2000 was 11.7, the figure was 39.4 mandays for lockouts.

In other words, the individual intensity of lockouts was nearly 3.4 times as compared to strikes. The situation was alarming during 1999 when lockouts accounted for 76.2 mandays lost per worker as against only 9.7 mandays in strikes i.e. nearly 8 times. In the face of these ground realities, the Commission should have outlined a more effective policy to curb the phenomenon of lockouts.

7. *Report of the National Commission on Labour* (2002), Vol.I, pp. 343-44.

8. Report of NCL, Vol. II, p. 47

9. Quoted by Ajay Kumar, *Nabhi's Labour Laws* (2001)

10. Report of NCL, Vol. II, p.27.

6. Layoffs and Retrenchment : The Commission noted that prior permission is not necessary in respect of lay off and retrenchment of any employment size. Workers, however, be entitled to two months notice or notice pay in lieu of notice, in case of retrenchment. The Commission is of the view that the rate of retrenchment compensation should be higher in a running organisation than in an organisation which is sick. The Commission, therefore, has recommended more rationalised system by granting higher compensation in case of running concerns than in the case of sick units. Prescribing differential rates of compensation is good in itself and the revised rates have been recommended for establishments employing 300 or more persons. In the case of establishments employing less than 100 persons, half the rates of compensation as compared to the other category have been prescribed. However, the Commission has not prescribed any rates for establishments in the employment range 100-300. This shortcoming needs to be rectified.

It is really strange that the Commission recommends that "in the case of establishments employing 300 or more workers where lay off exceeds a period of one month, such establishments should be required to obtain *post facto* approval of the appropriate government. "(p.44). It appears that the Commission presumes that approval of the state government is a routine matter and so 'post facto' approval has been recommended. This is rather unfortunate. In case, the appropriate government denies approval, the Commission has not outlined the policy.

7. The law for closures to be shifted from Chapter VB to Chapter VA—The Commission states : Chapter VA of the law may be amended to provide for sixty days notice for both retrenchment or closure, or pay in lieu thereof. The provision for permission to close down an establishment employing 300 or more workers should be made a part of chapter VA, and chapter VB should be repealed. In case of closure of such establishment which is employing 300 or more workers, the employer will make an application for permission to the appropriate Government 90 days before the intended closure and also serve a copy of the same on the recognised negotiating agent. If permission is not granted by the appropriate Government within 60 days of the receipt application, the permission will be deemed to have been granted.

The Labour Commission has facilitated the process of closure for establishments employing 300 or more persons. It has really permitted establishment employing less than 300 workers accounting for 60 per cent of the total labour employed in the manufacturing sector outside the purview of law. The real issue is : whether closure is used as a device for retrenchment ? It is alleged that in many situations, closure may be resorted to in periods of very low demand to retrench workers. In case, the employer restarts the firm after some time on the plea of change of circumstances with a reduced component of workers employed earlier or recruits new workers, can it be concluded that such action of the employer confirms that he earlier decided to close down the establishment to reduce the liability of labour. The moot question is : What is genuine and bona fide closure? The Gujarat High Court in the case of Associated Cement Companies & another Vs Union of India & others (1989) stated : "If the closure is bona fide or on account of unavoidable circumstances viz. financial or commercial compulsions or serious management problems, then it shall be regarded as genuine and for adequate reasons. ***Prevention of unemployment cannot be regarded as the sole basis or paramount consideration in granting (or refusing) such approval.[11] (Emphasis added)***

While adjudicating, the court considers that prevention of unemployment cannot be regarded as the paramount consideration in granting (or refusing) approval, this may be true for an individual employer, yet the State cannot take this position, because it has also been observed that whereas industries grow sick, the industrialists owning such establishments do not grow sick. Obviously, the objective of the state is to keep the level of unemployment to the irreducible minimum. That being so, the state should intervene in a genuine manner to determine the nature of closure—Whether *bona fide* or not and after proper application of mind, take a decision in the matter. The Labour Commission appears to have tilted the scales in favour of employers by recommending repeal of the clause pertaining to closure from chapter VB of the ID Act and shift it to chapter VA.

5. UNORGANISED SECTOR AND UMBRELLA LEGISLATION

The second term of reference of the National Commission on Labour (2002) was " to suggest an Umbrella Legislation for ensuring a minimum level of protection to the workers in the unorganised sector." Out of a total employment of about 337 million, the unorganised sector accounts for nearly 309 million i.e. 91.7 percent of total employment. Sectorwise share of unorganised sector in total employment reveals that agriculture accounts for 99.3%, manufacturing 83.5%, construction 92.1%, trade, hotels and restaurants 98.7% and community and personal services 62.7%.

The share of agricultural workers in the unorganised sector total is 61.4%, followed by trade, hotels and restaurants 12.0% manufacturing 11.0%.

According to the National Commission on Labour, 60% of the workers in unorganised sector are self-em-

11. Associated Cement Companies Ltd. & another Vs. Union of India & Others (1989), ILLJ 599 (Guj).

ployed or home based and thus remain outside the purview of the Minimum Wages Act.

Purpose and scope of umbrella Legislation

In the proposed umbrella legislation, the basic approach of the legislation is recognition and protection for all types of workers regardless of industry, occupation, work status and personal characteristics. Since these unorganised workers contribute 61% of GDP according to National Accounts Statistics (2001), they are also entitled to recognition and protection. Unorganised sector is not a homogeneous category, but is spread over the entire economy in a variety of forms. Worker in the unorganised sector is an apprentice, casual or contract worker, home-based worker, service provider, or self-employed person engaged in any industry (agriculture/service directly or indirectly through a contractor to do any manual, unskilled, skilled, technical, operational, teaching, sales promotion, clerical, supervisory, administrative or managerial work for hire or reward).

The purpose of proposed umbrella legislation is removal of poverty of the working population through improving their productivity, quality of work, enhancing income earning abilities and increasing bargaining power.

Following the recommendations of the National Commission on Labour, the UPA Government appointed a ***National Commission for Enterprises in the Unorganised Sector*** under the chairmanship of Dr. Arjun Sengupta which submitted its report to the Government in May, 2005. On the basis of its findings pertaining to the unorganised sector, the Commission proposed the draft of Unorganised Sector Social Security Bill, 2006. The Government after making certain amendments has introduced it in the Parliament, but it is awaiting approval to be made an act.

SELECT REFERENCES

Ministry of Labour, ***Report of the National Commission on Labour (2002),*** Vol. 1 and Vol. 2.

PART V

THE TERTIARY SECTOR IN THE INDIAN ECONOMY

- The Foreign Trade of India
- India's Balance of Payments
- Special Economic Zones
- GATT, Uruguay Round of Multilateral Trade and India
- Indian Currency System
- Indian Financial System I : Commercial Banking System
- Indian Financial System II : Money and Capital Markets in India
- Indian Financial System III : Development Finance Institutions
- The Reserve Bank of India and its Monetary Policy
- Indian Public Finance
- Financial Relations between the Centre and the States
- Thirteenth Finance Commission
- Government Subsidies in India.

CHAPTER

44

THE FOREIGN TRADE OF INDIA

"What we might do is not to reduce or destroy the trade connections which we have in the sterling area but to build up new connections in other areas, so that the existing trade connections that we have in the sterling area would not be so large a proportion of our total foreign trade."

—C.D. Deshmukh

1. IMPORTANCE OF FOREIGN TRADE FOR A DEVELOPING ECONOMY

Before 1947 when India was a colony of the British, the pattern of her foreign trade was typically colonial. India was a supplier of foodstuffs and raw materials to the industrialised nations particularly England and an importer of manufactured goods. This dependence on foreign countries for manufactures did not permit industrialisation at home rather as a result of the competition from British manufactures the indigenous handicrafts suffered a severe blow.

With the dawn of independence, the colonial pattern of trade had to be changed to suit the needs of a developing economy. An economy which decides to embark on a programme of development is required to extend its productive capacity at a fast rate. For this, imports of machinery and equipment which cannot be produced in the initial stages at home are essential. Such imports which either help to create new capacity in some lines of production or enlarge capacity in the other lines of production are called ***developmental imports***. For instance, imports required for the setting up of the steel plants, the locomotives factory and the hydro-electric projects are of a developmental nature. Secondly, a developing country which sets in motion the process of industrialisation at home requires the imports of raw materials and intermediate goods so as to properly utilise the capacity created in the country. Imports which are made in order to make a full use of the productive capacity are called ***maintenance imports***. These imports are vital for a developing economy, as many of the industrial projects are also held up for lack of maintenance imports. For a developing economy, the developmental and maintenance imports set limits to the extent of industrialisation which can be carried out in a given period. Besides these imports, a developing economy is also required to import consumer goods which are in short supply at home during the period of industrialisation. Such imports are anti-inflationary because they reduce the scarcity of consumer goods. One example of such imports is the foodgrains imports in India in the post-independence period which helped to arrest the rise of prices at home.

It is, therefore, inevitable that during the early years of development, imports have to be increased at a very fast rate. It is natural that the balance of trade in such a situation will turn heavily against the developing country. This

necessitates the enlargement of exports. External assistance can help to share the burden of growth in the short run, but in the long period the developing country has to bear the burden of development itself. To meet the growing foreign debt in view of inelastic imports, a developing country must increase its exports. Traditionally, underdeveloped countries like India have been the exporters of foodstuffs and raw materials. As economic development proceeds, the raw material exports generally decline because their demand increases at home to meet the requirements of growing domestic industries. With fast growing population, the surplus of foodgrains available for exports either dwindles or is turned into a deficit. Consequently, a developing economy is required to find new commodities and new markets in which it can sell its manufactures. The developed nations can help the process of industrialisation in an under-developed country by reducing trade barriers, and accepting its consumer goods and semi-manufactured goods. Foreign aid is important for an under-developed country, but trade is more significant. Thus, the new slogan which has been raised by the under-developed nations is 'Trade and Aid'.

2. FOREIGN TRADE SINCE INDEPENDENCE

For the study of trends of India's foreign trade during post-independence period, it is convenient to divide the entire period into seven phases.

1948-49 to 1950-51—On the Eve of Planning

On the eve of planning, the foreign trade of India showed an excess of imports over exports. The rise in imports was largely due to (a) pent-up demand of the war and the post-war period as a consequence of various controls and restrictions, (b) the shortage of food and basic raw materials like jute and cotton as a result of partition, (c) the rise in the imports of machinery and equipment—or capital goods—to meet the growing demand for hydro-electric and other projects started during the period.

1951-52 to 1955-56—The First Plan Period

The annual average value of imports during the First Plan period was ₹ 730 crores and that of exports ₹ 622 crores. In this way, the average annual trade deficit worked out to be ₹ 108 crores. Trade deficit was largely due to programmes of industrialisation which gathered momentum and pushed up the imports of capital goods. There was no improvement in exports.

Table 2. Trade Balance during First Plan

(₹ crores)

Year (April-March)	*Exports f.o.b.*	*Imports c.i.f.*	*Balance of Trade*
1950-51	647	650	—3
1951-52	730	963	—233
1952-53	602	633	—31
1953-54	540	592	—52
1954-55	597	690	—93
1955-56	641	773	—133
Annual average (1951-52 to 1955-56)	622	730	—108

Source : *Reserve Bank of India Bulletins.*

1956-57 to 1960-61—The Second Plan Period

During the Second Plan, a massive programme of industrialisation was initiated. This included the setting up of the steel plants, heavy expansion and renovation of railways and modernisation of many industries, and as a result, the quantum of imports reached a very high level. Besides this, the maintenance imports required for a developing economy further increased our imports. Foodgrains imports had to be resorted to overcome internal shortages and rising prices.

Export earnings averaged ₹ 613 crores per annum. (Refer table 3). The figure of average exports earnings for the Second Plan was lower than that under the First Plan which shows that the much needed diversification of exports and export promotion drive did not materialize. Consequently, the trade balance became heavily adverse to the tune of ₹ 467 crores which was in sharp contrast to the moderate trade deficit of the order of ₹ 108 crores per year during the First Plan. Foreign exchange crisis became acute during the Second Plan period.

1961-62 to 1965-66—The Third Plan Period

The record of exports during the Third Plan shows that average export earnings worked out to be ₹ 747 crores. (Refer Table 4). As against it, actual annual average imports worked out to be ₹ 1,224 crores. The increase in the volume of imports during the Third Plan was due to three factors. Firstly, rapid industrialisation necessitated larger imports of machinery, equipment, industrial raw material and technical know-how. Secondly, the defence needs had increased following aggression by China and Pakistan. Finally, large quantity of foodgrains was imported, partly because it was easily available and partly because of the extensive failure of crops in 1965-66.

TABLE 3. Trade Balance during Second Plan

(₹ *crores*)

Year (April-March)	*Exports f.o.b.*	*Imports c.i.f.*	*Balance of Trade*
1956-57	635	1102	—467
1957-58	594	1233	—639
1958-59	576	1029	—453
1959-60	627	932	—305
1960-61	631	1106	—475
Annual Average (1955-56 to 1960-61)	**613**	**1080**	**—467**

SOURCE: *Reserve Bank of India Bulletin*.

Devaluation of 1966 and the period up to 1973-74

Persistent adverse balance of trade since 1951 and consequent adverse balance of payments, acute shortage of foreign exchange, extensive borrowing by India from foreign countries and international institutions like IMF to overcome balance of payments problems—all these factors induced India to devalue the rupee by 36.5 per cent in June, 1966. Devaluation was resorted to essentially (a) to reduce the volume of imports, (b) to boost exports, and (c) create a favourable balance of trade and balance of payments. Since devaluation was announced during a year of drought and the following year again happened to be a bad weather year as was also the year when the government announced its policy of liberalising imports in case of 59 industries, the immediate effect of devaluation was the further aggravation of the trade deficit. Although after devaluation of the rupee, exports increased during 1966-67 and 1967-68, but on account of relative inelasticity of imports, the import bill literally soared—₹ 1,992 crores in 1966-67 and ₹ 2,043 crores in 1967-68. As a consequence, the balance of trade situation worsened during 1966-67 and 1967-68. However, with a better crop during 1968-69, foodgrain imports declined. Moreover,

TABLE 4. Trade Balance during 1961-62 to 1965-66

(₹ *crores*)

Year (April-March)	*Imports c.i.f.*	*Exports f.o.b.*	*Balance of Trade*
Third Plan			
1961-62	1006	668	—338
1962-63	1097	681	—416
1963-64	1245	802	—443
1964-65	1421	801	—620
1965-66	1350	783	—567
Annual Average (1961-62 to 1965-66)	**1224**	**747**	**—477**

SOURCE : *Reserve Bank of India Bulletin*, March 1974

TABLE 5. Trade Balance during Annual Plans, the Fourth Plan

(₹ *crores*)

Year (April-March)	*Exports f.o.b.*	*Imports c.i.f.*	*Balance of Trade*
Annual Plans			
1966-67	1086	1992	—906
1967-68	1255	2043	—788
1968-69	1367	1740	—373
Total 1966-67 to 1968-69	3708	5775	—2067
Annual Average	**1236**	**1925**	**—689**
Fourth Plan			
1969-70	1413	1582	—169
1970-71	1535	1634	—99
1971-72	1608	1824	—216
1972-73	1971	1867	+104
1973-74	2523	2955	—432
Annual Average (1969-70 to 1973-74)	**1810**	**1972**	**—162**

Note : Figures are based on Director General of Commercial Intelligence and Statistics.

SOURCE: *Reserve Bank of India Bulletin*, December 1981 and other issues.

devaluation also produced its healthy effect in stimulating exports. Consequently, balance of trade which was unfavourable to the tune of ₹ 788 crores during 1967-68 declined significantly during the next three years. As a consequence of the policies of import restriction and reduction in foodgrain imports coupled with vigorous measures of export promotion, during 1972-73, the country was able to have a favourable balance of trade for the first time since Independence. This was a healthy development but its impact was soon lost in 1973-74 because of several international factors which pushed up the prices of petroleum products, steel and non-ferrous metals, fertilizers and newsprint. Although the spurt in the prices of exports helped to boost them up to a level of ₹ 2,523 crores, the kick given to imports was much stronger and they reached a high level of ₹ 2,955 crores. Consequently, deficit in the trade balance of the order of ₹ 432 crores appeared again in 1973-74. In an overall sense, trade deficit during the Fourth Plan was of much lower magnitude as compared with the period of the Second Plan, Third Plan and the Annual Plans.

1974-79 : The Fifth Plan Period

The hike in oil prices which started in October 1973 seriously affected the pattern of trade throughout the world and India was no exception. Table 6 shows how the value of imports during the Fifth Plan period reached very

high levels—largely the result of a sharp increase in the cost of India's major imports viz., petroleum, fertilisers and foodgrains. Simultaneously, there was a significant improvement in India's exports as they successively rose every year during the Fifth Plan period. The rise was so fast that by 1976-77, exports at ₹ 5,143 crores exceeded imports by ₹ 69 crores—balance of trade surplus emerged for the second time since 1951. Exports of fish and fish preparations, coffee, tea, groundnuts, cotton fabrics and readymade garments and handicrafts recorded substantial increase in this period.

Another interesting point of this period was that during 1977-78 and in the next two years, the Janata Government followed a policy of haphazard import liberalisation at a time when export boom had almost petered out—the result was the re-emergence of the trade deficit from 1977-78 onwards.

Table 6. Trade Balance during the Fifth Plan

(₹ crores)

Year	*Imports c.i.f.*	*Exports f.o.b.*	*Balance of Trade*
1974-75	4,519	3,329	—1,190
1975-76	5,265	4,036	—1,229
1976-77	5,074	5,143	+69
1977-78	6,020	5,408	—612
1978-79	6,811	5,726	—1,085
Annual Average (1974-75 to 1978-79)	**5,538**	**4,728**	**—810**

Source: *Reserve Bank of India Bulletin, Handbook of Statistics on the Indian Economy,* (2002-03).

1980 onwards : The Sixth and Seventh Plan Period

On account of a further increase in the prices of petroleum products by OPEC, the import bill shot up from ₹ 6,811 crores to over ₹ 9,142 crores in 1979-80 and further to ₹ 12,549 crores in 1980-81 and to ₹ 13,608 crores in 1981-82. Though exports too continued to rise, the value of exports fell much short of imports. The result was unprecedented trade deficits—from nearly ₹ 2,450 crores in 1979-80 to ₹ 5,838 crores in 1980-81. It was this yawning deficit which forced the Government to approach the IMF in November, 1981 for a huge loan.

The same situation continued in 1983-84 and the trade deficit further rose to about ₹ 6,061 crores. A review of the data of imports and exports reveals that despite the fact imports of POL declined from ₹ 5,263 crores in 1980-81 to ₹ 4,832 crores in 1983-84, partly because international prices of oil showed a downward trend and partly because domestic production of crude was jacked up by ONGC, the trade deficit was of the order of ₹ 6,061 crores in 1983-84. This is explained by the fact that decline in POL imports was more than counterbalanced by a big hike in non-PL imports as a consequence of the policy of import liberalisation. The annual average imports during the Sixth Plan (1980-1981 to 1984-85) were of the order of ₹ 14,603 crores as against annual exports of the order of ₹ 8,987 crores. Consequently, a huge annual average trade deficit of the order of about ₹ 5,716 crores was witnessed during the Sixth Plan.

Table 7. Trade Balance during Sixth and Seventh Plans

(₹ crores)

Year	*Imports c.i.f.*	*Exports f.o.b.*	*Trade Balance*
1979-80	9,142	6,418	—2,724
Sixth Plan			
1980-81	12,549	6,711	—5,838
1981-82	13,608	7,806	—5,802
1982-83	14,293	8,803	—5,489
1983-84	15,831	9,770	—6,061
1984-85	17,134	11,744	—5,390
Annual Average (1980-81 to 1984-85)	**14,683**	**8,967**	**—5,716**
Seventh Plan			
1985-86	19,658	10,895	—8,763
1986-87	20,096	12,452	—7,644
1987-88	22,244	15,674	—6,570
1988-89	28,235	20,231	—8,004
1989-90	35,328	27,658	—7,670
Annual Average (1985-86 to 1989-90)	**25,112**	**17,382**	**—7,730**

Source: *Reserve Bank of India Bulletin, Handbook of statistics on the Indian Economy,* (2002-03).

Data about the Seventh Plan period (1985-86 to 1989-90) reveal that on account of the policies of indiscriminate liberalisation being followed by the Congress (I) government and later endorsed by the Janata Dal Government, the average annual imports shot up to ₹ 25,112 crores, but exports averaged ₹ 17,382 crores. Thus an unprecedented annual average trade deficit of the order of Rs 7,730 crores emerged. The huge trade deficit compelled the Government to approach the World Bank/IMF for an unprecedented loan of over $ 6.7 billion. The Government was also forced to apply brakes on the licensing policy of import licences.

India's Foreign Trade—1989-90 and thereafter

During 1990-91, according to DGCI&S figures, there is no doubt that a push was given to our export effort and exports shot up to ₹ 32,558 crores in 1990-91 indicating an increase of increase of 17.7%, but as a

During 2000-01, exports increased from US $ 36,822 million in 1999-2000 to US $ 44,560 million in 2000-01, showing a sharp rise by 21.0 per cent. This was largely due to rupee depreciation along with further trade liberalisation, reduction in tariffs and more openness to foreign investment in export oriented sectors like information technology. However, on the import side, during 1999-2000 and 2000-01, there has been a sharp increase in the international price of crude oil. This has resulted in a sharp escalation of the POL (petroleum, oil and lubricants) imports from US $ 6,399 million in 1998-99 to US $ 9,607 million in 1999-2000 and further jacking it up to US $ 15,650 million in 2000-01, implying an increase of 63 per cent during 2000-01 over the previous year. The sharp increase in POL imports prevented non-POL imports to increase adequately. Non-POL imports just rose by 11.3 per cent during 1999-2000 from US $ 35,990 million in 1998-99 to US $ 40,064 million in 1999-2000, but declined by 14.9 per cent in 2000-01 to US $ 34,450 million. This implies that the increase in POL imports resulted in depressing the rise of non-POL imports so as to keep total imports within manageable limits.

Restriction of imports to a level of 1.7 per cent as against the increase in exports by 21.0 per cent helped the country to reduce the deficit in balance of trade to US $ 5,976 million in 2000-01 as against US $ 12,849 million in 1999-2000.

Table 9: Break-up of Imports and Exports

US $ million

Year	*Imports*			*Exports*
	POL	*Non-POL*	*Total*	
1996-97	10036.2	29096.2	39132.4	33469.7
1997-98	8164.0	33320.5	41484.5	35006.4
1998-99	6398.6	35990.1	42388.7	33218.7
1999-00	12611.4	37059.3	49670.7	36822.4
2000-01	15650.1	34886.4	50536.5	44560.3
2001-02	14000.3	37413.0	51413.3	43826.7
2002-03	17639.5	43772.6	51412.1	52719.4
2003-04	20569.5	57579.6	78149.1	63842.6
2004-05	29844.1	81673.3	111517.4	83535.9
2005-06	43963.1	105202.6	149165.7	103090.5
2006-07	56945.3	128790.0	18,735	126414.1
2007-08	79644.5	171794.6	251439.2	162904.2
2008-09	93671.7	210024.6	30396.3	185295.0
2009-10	86,776	2,01,597	2,88,373	1,78,751
2010-11	1,05,964	2,63,805	3,69,769	2,51,136
2011-12	1,55,639	3,33,001	4,88,640	3,03,719

Note: In brackets represent percent increase/decrease over the previous year.

Source: Economic and Political Weekly, April 28-May 4, 2007 and Press Release on 1st May 2008, RBI Handbook of Statistics on the Indian Economy,2010-11.

RBI Billion June. 2012, Economic Survey 2011-12

Although in 2005-06, exports increased by 23.4 per cent, but rise in imports by 33.8 per cent resulted in the trade deficit to be of the order of $ 46.1 billion - a record trade deficit. The situation became much worse in 2006-07 and imports touched a record level of $ 185.7 billion.

But by 2008-09, the situation worsened still further with the trade deficit reaching a figure of $118.4 billion. This was due to a sharp increase in POL prices. As a result POL imports touched $93.7 billion. With Non-POL imports of the order of $210 billion, total imports reached a level of $303.7 billion. Although the country recorded a 13.6 percent growth in exports in 2008-09 to $185.3 billion, but this big effort was more than neutralized by a high growth of imports to reach $304 billion, thus widening trade deficit. Easing of petroleum prices, resulted in fall in imports, and reduction in trade defict to $ 109.6 billion in 2009-10, before shooting up to $118.7 billion is 2010-11 and further to $ 184.9 billion in 2011-12. India must restrict the relatively higher increase of imports, if the goal is to reduce trade deficit with higher exports.

3. COMPOSITION OF INDIA'S FOREIGN TRADE

In view of the fact that the Directorate General of Commercial Intelligence and Statistics (DGCI&S) has revised the commodity classification of India's foreign trade with reference to 1987-88, trade data before and after 1987-88 are not strictly comparable. We have made an effort to adjust the data for the year 1980-81 as per revised classification so that it provides some basis of comparison.

Pattern of Imports

Imports have been now classified into Bulk Imports and Non-bulk Imports. Bulk imports are further sub-divided into three components – (i) Petroleum, crude and products, (ii) Bulk consumption goods which comprise of cereals and pulses, edible oils and sugar, (iii) other bulk items comprising of fertilizers, non-ferrous metals, paper and paper boards, rubber, pulp and waste paper, metallic ores, iron and steel.

Non-bulk imports are also further classified into three components – (i) Capital goods which include metals, machine tools, electrical and non-electrical machinery, transport equipment and project goods, (ii) Mainly export-related items consist of pearls, precious and semi-precious stones, organic and inorganic chemicals, textile, yarn and fabrics, cashew nuts, (iii) Others include artificial resins and plastic materials, professional and scientific instruments, coal and coke, chemicals – medicinal and pharmaceutical products, non-metallic mineral manufactures etc.

A close perusal of table 10 reveals that there has been a persistently rising trend of imports which is the result of both internal and external factors. During the seventies, as a result of the sharp hike in oil prices by the Organisation of Petroleum Exporting Countries (OPEC)

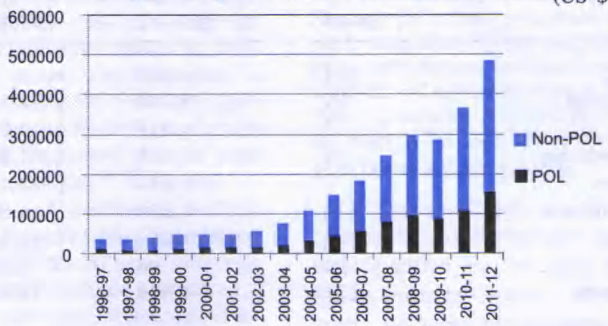
TABLE 10. Structure of Indian Imports

	₹ crores at current prices				Annual Compound Growth Rates (Per cent)		
	1980-81	*1990-91*	*2000-01*	*2010-11*	*1980-81 to 1990-91*	*1990-91 to 2000-01*	*2000-01 to 2010-11*
I. Bulk Imports	**8,739**	**19,464**	**95,095**	**6,85,110**	**8.6**	**17.2**	**21.8**
	(69.6)	(45.1)	(41.2)	(42.7)			
A. Petroleum, Crude and Products	5,267	10,816	71,497	4,82,714	7.4	20.8	21.0
	(42.0)	(25.0)	(31.0)	(30.1)			
B. Bulk Consumption goods	**901**	**999**	**6,593**	**39,732**	**10.7**	**20.5**	**19.6**
	(7.2)	(2.2)	(2.8)	(2.5)			
a. Cereals and Pulses	100	673	586	523	29.3	-1.4	–1.0
b. Edible Oils	704	326	5,977	29,442		33.8	17.3
C. Other Bulk Items	**2,571**	**7,650**	**17,005**	**1,62,664**	**11.5**	**8.3**	**25.3**
	(20.5)	(17.7)	(7.4)	(10.1)			
a. Fertilizers	818	1,766	3,4335	31,818	8.0	6.9	–0.8
b. Non-ferrous Metals	477	1,102	2,439	18,356	8.7	8.3	22.3
c. Paper & Paper Boards	187	456	2,131	9,571	9.3	16.6	16.2
d. Metallic Ores	116	1,528	3,537	42,872	29.4	7.9	28.3
e. Iron & Steel	852	2,113	3,554	46,835	9.5	5.3	29.4
II. Non-Bulk Imports	**3,810**	**23,729**	**135,778**	**9,20,204**	**21.2**	**19.1**	**21.1**
	(30.4)	(54.9)	(58.8)	(57.3)			
A. Capital Goods	**1,910**	**10,471**	**40,847**	**3,26,352**	**18.5**	**14.6**	**23.1**
	(15.2)	(24.2)	(17.7)	(20.3)			
a. Machinery except electrical & electronic	1,089	3,768	12,375	1,06,145	13.2	11.4	23.9
b. Electrical & Electronic goods	260	1,702	18,226	1,17,507	20.7	26.7	20.4
c. Transport equipment	472	1,670	3,199	5,00,716	13.5	6.7	31.6
d. Project goods	--	2.556	3,414	27,737	---	2.9	23.3
B. Mainly Export related items	**1,158**	**6,603**	**36,815**	**2,26,170**	**19.0**	**18.7**	**19.9**
	(9.2)	(15.3)	(15.9)	(14.1)			
a. Pearls, Precious & Semi-Precious stones	417	3,738	21,964	1,42,437	24.5	19.4	20.5
b. Organic and Inorganic Chemicals	673	2,289	11,165	67,167	13.0	17.2	19.6
c. Textiles Yarn and manufacturers	59	443	2,726	14,087	21.5	19.9	17.8
d. Cashew nuts	9	134	431	2,480	--	12.4	19.1
C. Others	**742**	**6,655**	**58,116**	**3,67,682**	**--**	**24.2**	**20.2**
	(5.9)	(15.4)	(25.2)	(22.9)			
Total (I+II)	**12,549**	**43,193**	**2,30,873**	**16,05,314**	**13.1**	**18.2**	**21.4**
	(100.0)	**(100.00)**	**(100.00)**	**(100.00)**			

SOURCE: Compiled and computed from RBI, Handbook of Statistics on the Indian Economy,2005-06 and 2010-11, Economic Survey 2010-11.

Break-up of Imports (1996-97 to 2010-11)

(US $ million)



first during 1973-74 and then again in 1979-80, the value of POL imports rose sharply not only during the seventies, but its impact was felt even during the eighties as well. The economy also suffered a major drought in 1979-80.

During the eighties, a number of factors produced a cumulative effect in pushing up imports. Notable among them were : a higher outflow of foreign exchange consequent

upon the hike in POL prices as a part of the legacy of the preceding decade, severe shortages on account of the unprecedented drought of 1987, the growing pressure of demand accompanied with the stepping up of the real growth of the economy and the policy of liberalisation adopted by the Government. All these factors set in motion a process which led to relatively larger dependence of the economy on imports. Imports which aggregated to ₹ 1,634 crores in 1970-71 rose sharply to ₹ 12,549 crores in 1980-81, the annual growth rate was as high as 19.2 per cent during the decade. During the eighties and more especially after 1984-85 when Prime Minister Rajiv Gandhi followed the policy of liberalisation, imports zoomed forward to ₹ 43,193 crores in 1990-91. During the eighties (1980-81 to 1990-91), the annual rate of growth of imports was as high as 13.1 per cent. During 1990-91 and 2000-01, imports grew at the annual rate of 18.2 per cent. Import growth rate during 2010-01 and 2010-11 rose higher to 21.4 per cent.

It is customary to blame the POL items for the rise in imports, while this was largely true during the seventies, the experience of the eighties reveals that the average annual growth of POL items was barely 7.4% during 1980-81 to 1990-91, but the overall growth of imports was of the order of 13.1 percent per annum. The explanation of a rapid increase in imports has, therefore, to be sought in terms of the policy of liberalisation in the name of technological upgradation pursued by the Congress government between 1990-91 to 2000-01, imports of POL increased by 20.8 percent, while non POL import increased by 15.6 percent.

Bulk imports which comprise basic raw materials, intermediates and foodstuffs are linked to the growth and stability of the economy, grew at an annual average growth rate of 23.2 percent during the seventies. As a result, their share in total imports went up from 50.5 percent in 1970-71 to 69.6 percent in 1980-81. However, their rate of growth significantly declined during the eighties as well as during the nineties and even thereafter.

Among the non-POL bulk items, rate of growth of parts of consumption goods comprising cereals and cereal preparations, edible oils, pulses and sugar which was around 10.7 percent per annum during 1980-81 to 1990-91, shot up to 20.5 percent during 1990-91 and 2000-01. Even during 2000-01 and 2010-11, its growth was 19.6 percent. This was due to a very sharp increase in the import of edible oils, which increased from ₹ 326 crores in 1990-91 to ₹ 29,442 crores in 2010-11. However, the imports of iron and steel recorded a much higher growth rate of 14.4 percent per annum during 1985-86 to 1990-91, but declined thereafter to 5.3 percent between 1990-91 and 2000-01. But it again shooted up by 29.4 percent annually during 2000-01 and 2010-11.

By and large, the growth rate of bulk items decelerated during the Seventh Plan to 7.2 percent as against 10.2 percent during the Sixth Plan. Consequently, the share of bulk items in total imports fell to 69.6 percent in 1980-81 and further declined to 45.7 percent in 2008-09. Among the non-bulk items the share of capital goods imports which had slumped down to 17.7 percent in 2000-01 started picking up and was of the order of about 20.3 percent during 2010-11.

Consumer goods and foodgrains. The imports of consumer goods and foodgrains accounted for 40 per cent of India's imports during the First Plan period, showing the extent of India's under-development and her dependence on foreign countries even for a basic necessity like foodgrains. But the imports of these have gradually declined over the years—35 per cent during Second and Third Plan period, 27 per cent during the Fourth Plan and 24 per cent during the Fifth Plan. These imports accounted for 2.2 per cent of total imports in 1990-91, but their share increased to about 4 per cent during 2002-03. This was largely due to a sharp increase in edible oil imports, although foodgrains (cereals and pulses) imports became negligible by 2000-01.

From 1957 onwards, imports of foodgrains were considerable and these were arranged through PL 480 Aid from USA. Till the beginning of the Fourth Plan, India's imports of foodgrains as a percentage of total imports was

Table 11. Principal Imports

(₹ crores)

	1960-61	1980-81	2000-01	2010-11
Foodgrains	181	100	90	523
Petroleum, Oil and lubricants	69	5,264	71,500	4,82,714
Fertilizers	13	818	3,034	31,818
Chemicals - drugs and medicines	39	358	1,542	23,450
Pearls and Precious stones	-	417	22,100	1,42,437
Metals (Ferrous & Non-ferrous)	170	1,330	6,030	108063
Capital Goods	356	1,910	25,280	3,26,352
a. Manufacture of metals	23	90	1,790	14,713
b. Non-electrical machinery	203	1,089	16,910	1,16,324
c. Electrical machinery, Electronics, Computer	57	260	2,230	1,17,507
d. Transport equipment	72	472	4,350	50,072
Total Imports	1,112	12,550	23,0870	16,05,314

Note : Figures in brackets and percentages of total imports.

Source: Complied from Economy Survey (2009-10), RBI, Handbook of Statistics on the Indian Economy, 2010-11)

increasing. Foodgrain imports increased because of the drought conditions and inability of the domestic supplies to meet domestic demand fully . It was only during the Fourth Plan that imports of foodgrains declined to 10 per cent. In fact, with the accumulation of large reserves of foodgrains, their imports were virtually eliminated in certain years during 1970's and they are minimal in 1990's. Thus, the structural changes in imports since 1951 show :

(a) rapid growth of industrialisation necessitating increasing imports of capital goods and raw materials;

(b) growing imports of raw materials on the basis of liberalisation of imports for export promotion; and

(c) declining imports of foodgrains and consumer goods due to the country becoming self-sufficient in foodgrains and other consumer goods through agricultural and industrial growth.

(d) rapid growth in Petroleum, oil and lubricants due to sharp rise in international prices and fast increase in domestic demand.

Trend of Principal Imports

Foodgrains—The imports of foodgrains were necessitated by the partition of the country and the growing demand for food for the rising population. The average annual imports of foodgrains which were about ₹ 120 crores during the First Plan, rose to ₹ 161 crores during the Second Plan, further increased to an average rate of ₹ 241 crores during the Third Plan. The drought of 1965-66 further worsened the situation and consequently, foodgrains imports worth ₹ 1,201 crores were made during the three years, i.e., 1966-67 to 1968-69. During the Fourth Plan, a declining trend in food imports was observed. Food import bill which was of the order of ₹ 184 crores in 1969-70 went down to as low a figure as ₹ 28 crores only. But these were four good crop years. The trend was reversed in 1973-74 when food imports jumped to ₹ 746 crores. On an average, food imports of the order of ₹ 548 crores were made during the period 1974-75 to 1979-80. With a bumper crop of foodgrain and with a large buffer stock created foodgrain imports have dwindled since then. During the 5-year period (1980-81—1984-85) foodgrains imports averaged about ₹ 374 crores per annum. In 1987-88, foodgrains worth ₹ 66 crores were imported—a negligible figure indeed. But during 1992-93, they again rose to ₹ 1,240 crores. Even during 2006-07, foodgrains worth ₹ 4036 crores were imported. In the year 2010-11, foodgrains imports were just ₹ 523 crores.

Machinery— Imports of machinery include electrical and non-electrical equipment as also locomotives. In a country which is rapidly industrialising her economy, imports of machinery are bound to increase. Compared to the average annual import of machinery which was about ₹200 crores during 1960-61, the annual average during the Third Plan rose to ₹ 472 crores. Machinery imports were nearly ₹ 1,350 crores per annum during 1980-81. Machinery imports further went up to ₹ 2,33,831 crores during 2010-11. The increasing import of machinery is an indicator of our growing industralisation as well as our failure to develop our own technology and indiscriminate liberalisation in import policy.

Petroleum, oil and lubricants (POL)— Imports of POL are also on the increase. India is short in the supply of mineral oils, especially petroleum. On account of the sharp increase in the prices of crude announced by the Organisation of Petroleum Exporting Countries, during 1973-74 and later during, 1980-81 imports of petroleum oil and lubricants rose to very high level of ₹ 5,264 crores. During 2010-11, import of POL reached a record level of ₹ 4,82,714 crores i.e. about 30.1 percent of total imports. In 2009-10 it was slightly lower at ₹ 4,11,649 crores.

Metals— India imports iron and steel and also some non-ferrous metals. The annual average imports of ferrous and non-ferrous metals which were about ₹ 54 crores during the First Plan have gone up steadily with every Plan and were about ₹ 2,450 crores during 1985-86 and 1989-90. Import of metals on such a large scale is necessitated by the vast programmes of industrial expansion, development of railways and hydro-electric projects. With improvement in capacity utilisation of our steel plants, imports of iron and steel should be cut down.During 2010-11, metals worth ₹ 1,08,063 crores were imported accounting for 6.7 percent of total imports.

Chemicals, drugs and medicines—There has been an increase in the imports of chemicals, drugs and medicines. The annual average of these items was about ₹ 55 crores during the Third Plan. Imports of chemicals, drugs and medicines rose to ₹ 113 crores per annum on the average during the Fourth Plan. During 1980-81 and 1984-85 annual average imports of this item rose to ₹ 660 crores. It further rose to ₹ 1,868 crores during 1985-86 and 1989-90. They rose further to ₹ 23,450 crores during 2010-11.

Pearls and precious stones—The import of pearls and precious stones averaged ₹ 417 crores during 1980-81 and they have further increased to ₹ 22,100 crores during 2000-01. Part of these imports is meant to satisfy the demand of the affluent sections and part of these imports serve as raw material for the handicrafts export industry. It may be noted that the exports of pearls and precious stones were of the order of ₹ 1,42,437 crores during 2010-11.

Fertilisers— Following the adoption of the New Strategy in Indian agriculture, the imports of fertilizers were stepped up. With a sharp increase in the international prices of fertilizers, fertilizer imports rose to ₹ 818 crores in 1980-81 and further short up to ₹ 3,234 crores in 2000-01. As a consequence of liberalisation, fertilizer imports were of the order of ₹ 31,818 crores during 2010-11.

Pattern of Exports

Exports of India are broadly classified into four categories : (i) Agriculture and allied products which include coffee, tea, oil cakes, tobacco, cashew kernels, spices, sugar, raw cotton, rice, fish and fish preparations, meat and meat preparations, vegetable oils, fruits, vegetables and pulses; (ii) Ores and minerals include manganese ore, mica and iron ore; (iii) Manufactured goods include textiles and ready-made garments, jute

manufactures, leather and footwear, handicrafts including pearls and precious stones, chemicals, engineering goods and iron steel; and (iv) mineral fuels and lubricants.

Data given in table 12 reveal that traditional exports dependent upon agriculture and mineral wealth accounted for 42 per cent of total exports in 1970-71, their share has, however, declined to 13.6 per cent in 2010-11. As against it, the share of manufactures has gone up from about 50 per cent in 1970-71 to about 66.3 per cent in 2010-11. Obviously, the structure of Indian exports is changing in favour of manufactured goods.

Table 12. Classification of Indian Exports

(₹ crores)

		1970-71	1980-81	2010-11
1.	Agriculture and allied products	487 (31.7)	2,057 (30.6)	1,12,522 (9.7)
2.	Ores and minerals	164 (10.7)	413 (6.2)	45,582 (3.9)
3.	Manufactured goods	772 (50.3)	3,747 (55.8)	7,65,899 (66.3)
4.	Petroleum Products and Mineral fuels	13 (0.8)	28 (0.4)	1,90,781 (16.6)
5.	Others	99 (6.5)	465 (6.9)	39,692 (3.5)
	Total	1,535 (100.0)	6,710 (100.0)	11,57,475 (100.0)

Note : Figures in brackets are percentages of total.

Source: Compiled from RBI, *Handbook of Statistics on the Indian Economy*, 2010-11. Economic Surevey 2010-11

Exports of Principal Commodities

Tea and Coffee - Tea and coffee are important items of Indian exports. Tea had the first position in our exports in certain years. The average annual exports of tea were ₹ 106 crores during the First Plan period. Tea exports further picked up to touch ₹ 195 crores in 1960-61. But later they declined. tea exports earned ₹ 1,132 crores during 1991-92 but its contribution rose to ₹ 3114 crores in 2010-11. Coffee exports have been rising more or less steadily overtime as revealed from table 13.

Cotton Yarn and Manufactures - During the First Plan period, the average annual exports of cotton yarn and manufactures touched ₹ 81 crores, but they declined to a small figure of ₹ 55 crores during the Third Plan. On account of relatively high cost in Indian textile industry, India found it difficult to capture the international market. In fact high costs were due to rising labour costs and use of old and worn-out machinery. In the post-devaluation period exports of cotton textiles have increased on account of their competitiveness in the international market. During 1990-91 and 2010-11 exports of cotton (yarn and manufactures) improved from ₹ 21,00 crores to ₹ 24,745 crores.

Readymade garments - In recent years, the exports of cotton apparel or ready-made garments have shown significant improvement. These exports were just ₹ 9 crores in 1970-71. They jumped ro ₹ 196 crores in 1974-75. During 2010-11 cotton apparel exports were ₹ 51,047 crores. This indicates the increasing importance of this item in our exports.

Leather and leather manufactures - One of the traditional items of Indian export is raw hides and skins. But recently, in the exports of this item, the proportion for leather and leather manufactures to raw hides and skins is on the increase. This is really a healthy development. India touched ₹ 486 crores in 1979-80 and rose further to ₹ 17,265 crores during 2010-11.

Iron Ore - India exports iron ore. India earned about

Table 13. Annual Exports of Principal Commodities

(₹ crores)

	Items	1960-61	1970-71	1980-81	1990-91	2000-01	2009-10	2010-11
1.	Coffee	2	25	214	252	1185	2,032	2,913
2.	Tea	195	148	426	1070	1789	2,944	3,114
3.	Fruits and Vegetables	7	18	116	335	8433	6,370	4,845
4.	Cotton yarn and manufactures	91	75	277	2100	15819	37,479	24,745
5.	Leather and leather manufactures	39	72	337	2566	8883	15,946	17,265
6.	Iron ore	27	117	303	1049	1639	28,366	21,035
7.	Tobacco	25	33	141	263	8672	4,344	3,803
8.	Engineering goods	13	130	727	3877	31150	1,81,073	1,81,575
9.	Cashew kernel	30	52	140	447	2054	2,829	2,630
10.	Readymade garments	n.a.	9	378	4012	25441	50,791	51,047
11.	Handicrafts, (including gems for jewellery)	n.a.	70	894	6167	36756	1,42,076	1,86,915
12.	Fish and fish preparation	7	31	213	960	6367	9,900	11,550
13.	Rice	--	5	224	462	2932	11,255	10,803
14.	Chemicals and allied products	--	--	--	3,558	26889	1,08,687	1,32,038
Total Exports		606	1,535	6711	32558	203571		11,57,475

Source : *India's Balance of Payments*, 1948-49 to 1961-62: Reserve Bank of India, Handbook of Statistics on Indian Economy (2005-06) and Economic Survey (2010-11)

₹ 30 crores per year from iron ore during the First Plan. During 1970-71 exports of iron ore rose to ₹ 117 crores and touched ₹ 21,035 crores during 2010-11. In the recent years export of iron ore has been increasing fast. India should increase the share of steel in exports by utilising iron ore in her own steel plants. Last year iron ore exports declined which is a healthy trend.

Handicrafts - The exports of Indian handicrafts assumed great importance in the 1970's. From a low level of ₹ 70 crores in 1970-71 they increased to ₹ 120 crores in 1972-73 and stood at ₹ 29,330 crores in 1998-99. The most important stones which averaged ₹ 3,177 crores during 1985-86 to 1989-90. At present, the single largest item of exports in handicrafts. During 2010-11, handicrafts exported were of the order or ₹ 1,86,915 crores out which gems and jewellery accounted for a major share.

Engineering Goods - The exports in this category also include iron and steel, electronic goods and computer software. Even upto 1980-81, exports of this group were meagre ₹ 827 crores, but these exports started picking up and by 1990-91, they were of the order of ₹ 3,872 crores. During 2010-11, these exports have shot up to ₹ 1,81,575 crores, accounting for 15.7 per cent of total exports. This is a commendable achievement.

Changing Structure of Exports

The structure of Indian exports is typical of a developing economy. India has traditionally been an exporter of agricultural raw materials and manufactures based on agricultural raw materials. There has been a continuous decline in the share of agricultural raw materials and allied products. One reason for the relative decline of food, beverages and tobacco in the total exports is the increase in population and consequent increase in domestic consumption of these goods. Accordingly, the export surplus in many traditional commodities like tea has not been increasing as much as the Government would have wished. In this connection, the growing importance of certain products in this category should be noted, i.e., fish and fish products, cashew kernels, coffee and rice. Vegetables and fruits are also growing in importance.

Since 1960, under the impact of industrialisation, exports of non-traditional items are gaining in importance. These items consist of engineering goods, handicrafts, which include pearls, precious and semi-precious stones and jewellery, iron and steel, machinery, transport and metal manufactures, iron-ore, chemicals, readymade garments, fish and fish preparations. These goods constitute about 70 per cent of India's exports now. The fact that some of these non-traditional items—such as engineering goods, handicrafts, readymades, etc.—have established themselves in the markets of even the most advanced countries shows that they would continue to be part of India's exports in the years to come.

The sharp increase in the export of electronic goods and software is a really welcome development. The trend needs to be strengthened further.

However, the export of some items is quite disturbing for the country—for instance, the export of iron ore and specially iron and steel show the inability of the economy to use basic development goods. On the other hand, the import of iron and steel is much more significant, showing the under-utilisation of steel capacity created in the country. Thus, the increasing contribution of non-traditional items in India's export effort has been commendable but not consistent enough.

We should not, however, conclude that only non-traditional items are to the fore and the traditional items have suffered a retreat. Exports of traditional items are also expanding, though probably not to the extent desired. Examples are the respectable growth in cotton fabrics, tea, leather and leather manufactures etc.

Thus the pattern of India's exports indicates that (a) the Indian economy is being diversified and (b) non-traditional items of exports are growing in importance.

(b) The large expansion of engineering goods is partly the result of pick-up in demand in industrial countries and also from the Middle East countries which have undertaken infra-structural projects like roads, ports and rail construction, tele-communication and civil construction.

(c) India is now in a position to take advantage of both favourable demand situation and attractive price situation in international markets.

(d) While some commodities have tremendous exports potential (e.g. handicrafts, engineering goods and readymades), others (like sugar, jute, yarn and manufactures, iron and steel) have fluctuated widely.

(e) With the announcement of the new agricultural policy, emphasis is being given to boosting the export of agricultural produce. Rice export is gaining importance. Besides this, fruits and vegetables and processed foods are also becoming significant in our exports.

4. DIRECTION OF INDIA'S FOREIGN TRADE

In order to study the regional direction of India's foreign trade, it would be appropriate to classify the world into four broad groupings; viz., America, Europe, Asia and Oceania and Africa.[1]

So far as the American continent is concerned India had strong trade relations with North America comprising U.S.A. and Canada. Really speaking, USA is the dominant country in America. The countries of Latin America and

other American countries did not develop trade relations of much significance. Table 14 indicates that in 1951-52 India exported over 28 per cent of her goods to America, out of which 21 per cent were sent to North America and 7 per cent to Latin America. The share of Latin American countries declined over the years and they accounted for less than 1 per cent in 1979-80. The share of North America was 19 per cent in 1969-70. But after the Bangladesh war in 1971, relations between India and the U.S.A. were strained and trade between the two countries declined. This explains to a great extent the fall in our exports to U.S.A. in the 1970's. During recent years, the position has slightly improved and exports to U.S.A. were 13.0 per cent of total exports in 2007-08. On the side of imports, USA contributed 36 per cent in 1951-52, its share fell to 32 per cent in 1960-61, rose to 40 per cent in 1965-66 largely due to foodgrain imports, and was about 35 per cent in 1969-70. As a reaction to the hostile attitude of U.S.A. during the Bangladesh war, India decided to reduce her dependence on U.S.A. and thus imports from USA accounted for 10.4 per cent of total imports in 1981-82. The share of USA in our imports has been declining over the years and was only 5.2 per cent during 2010-2011.

Historically, India had close trade relations with U.K. It also had trade relations with other countries of Europe. For purposes of trade, the continent of Europe may be grouped under three broad regions : Western Europe, Eastern Europe and other European countries. Western Europe got divided into two broad categories—the European Common Market (ECM) and European Free Trade Area (EFTA).

In 1950-51, out of 31.5 per cent of the total Indian imports from Europe, 30.5 per cent came from Western Europe. The share of Western Europe increased to 49 per cent in 1955-56. Two factors were responsible for this : firstly, imports from U.K. increased because she had to pay her sterling debt to India and secondly, the share of ECM countries, more especially, West Germany increased sharply in our imports. Since U.K. decided to join ECM

Table 14. Percentage Distribution of India's Exports and Imports

	Exports			*Imports*		
	1951-52	*1960-61*	*1969-70*	*1951-52*	*1960-61*	*1969-70*
By Regions						
I. America	**28.2**	**21.6**	**19.1**	**36.3**	**31.5**	**34.8**
(*i*) North America	20.9	18.6	18.7	35.8	31.0	34.1
(*ii*) Latin America	6.4	2.7	0.3	0.5	0.2	0.7
(*iii*) Other American countries	0.9	0.3	0.1	—	0.3	—
II. Europe	**36.8**	**45.1**	**42.7**	**31.5**	**43.9**	**37.2**
a. Western Europe	33.9	35.7	20.1	30.5	39.6	19.1
(*i*) E.F.T.A.	28.0	27.9	13.0	21.5	22.1	8.2
(*ii*) E.C.M.	5.9	7.8	7.1	9.0	17.5	10.9
b. East European Countries	1.2	7.8	21.8	0.6	3.9	18.0
III. Asia & Oceania	**27.8**	**26.0**	**32.0**	**22.7**	**18.6**	**19.0**
A. ECAFE/ESCAP Countries	24.6	22.3	26.7	19.1	16.2	16.6
B. Other Asian Countries	3.2	3.7	5.3	3.6	2.4	2.4
IV. Africa	**7.2**	**7.3**	**6.3**	**9.5**	**6.0**	**9.0**
All Countries	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
By Countries						
U.S.A.	18.6	15.8	16.8	33.6	29.2	29.4
U.K.	26.8	26.9	11.7	18.5	19.3	6.4
W. Germany	1.2	3.1	2.1	3.2	10.9	5.3
USSR	1.0	4.5	12.5	0.2	1.4	10.9
Japan	2.2	5.5	12.7	2.9	5.5	4.3
Australia	6.6	3.4	1.7	2.0	1.6	2.0
Canada	2.3	2.8	1.9	2.8	1.8	4.7
Iran	0.6	0.9	1.7	3.3	2.7	5.3
Total	**59.3**	**62.9**	**61.1**	**65.9**	**72.4**	**68.3**

Note : ECM countries are France, West Germany, Italy, Belgium, Luxemburg and the Netherlands. In 1973, it was decided to extend membership to Denmark, Ireland and the U.K.
EFTA Countries include Austria, Norway, Portugal, Sweden and Switzerland.

Source : *Commerce*, Annual 1971.

in 1973, the importance of EFTA countries dwindled to barely 1.6 per cent in our total imports. The share of ECM countries declined from 18.2 per cent in 1955-56 to 10.9 per cent in 1969-70. However, part of the increase is a mere shift from the EFTA region. But if we take EFTA and ECM together, the share of European Economic Community (EEC) has been on the decline since 1955-56 and came down to 21 per cent in 1976-77. However, it improved to

TABLE 15 : Direction of India's Foreign Trade *$ US MILLION*

Region/ Country	*1987-88*				*2010-2011 †*			
	Exports	*%*	*Imports*	*%*	*Exports*	*%*	*Imports*	*%*
I. OECD	**7,122**	**58.9**	**10,266**	**59.8**	**84,600**	**33.2**	**1,05,302**	**29.8**
(A) European Union	**3,034**	**25.1**	**5,707**	**33.3**	**46,818**	**18.4**	**42,409**	**12.0**
(i) France	292	2.4	615	3.6	5,048	1.9	3,591	1.0
(ii) Belgium	374	3.1	1,057	6.2	6,413	2.5	8,314	2.3
(iii) Germany	817	6.8	1,665	9.7	6,730	2.6	11,437	3.2
(iv) UK	783	6.5	1,410	8.2	7,181	2.8	5,109	1.4
(V) Italy	384	3.2	373	2.2	4,538	1.8	4,076	1.1
(B) North America	**2.380**	**19.7**	**1,774**	**10.3**	**26,949**	**10.6**	**20,463**	**5.8**
(i) Canada	128	1.1	230	1.3	1,353	0.5	1,932	0.5
(ii) USA	2,252	18.6	1,544	9.0	25,596	10.0	18,531	5.2
(C) Other OECD	**1.708**	**14.1**	**2.784**	**16.2**	**10,834**	**4.2**	**42,430**	**12.0**
(i) Australia	138	1.1	388	2.3	1,711	0.6	10,246	2.9
(ii) Japan	1,245	10.3	1,640	9.5	5,216	2.0	8,146	2.3
(iii) Switzerland	157	1.3	182	1.1	744	0.2	21,694	6.1
II. OPEC	**742**	**6.1**	**2,277**	**13.3**	**54,733**	**21.5**	**1,19,117**	**33.8**
(i) Iran	107	0.9	111	0.6	2,730	1.1	10,712	3.0
(ii) Indonesia	21	0.2	54	0.3	63,04	2.4	9,485	2.6
(iii) Saudi Arabia	214	1.8	590	3.4	5,198	2.1	20,111	5.7
(iv) UAE	239	2.0	588	3.4	33,135	13.0	28,269	8.0
III. Eastern Europe	**2,001**	**1.7**	**1,640**	**9.6**	**2,973**	**1.2**	**5,607**	**1.4**
(i) Russia	1,514	1.3	1,240	7.2	15,176	6.0	3,455	0.9
IV. Developing Countries of which	**1,719**	**14.2**	**2,967**	**17.3**	**1,05,693**	**41.5**	**1,15,239**	**32.7**
(a) Asia of which	**1,443**	**11.9**	**2,077**	**12.1**	78,545	**30.9**	**94,187**	**26.7**
1. People Republic of China	15	0.1	119	0.7	19,247	7.5	40,218	11.4
2. Hong-Kong	344	2.8	93	0.5	11,420	4.5	8,505	2.4
3. South Korea	112	0.9	257	1.5	4,105	1.6	10,055	2.8
4. Malaysia	70	0.6	648	3.8	3,986	1.5	6,294	1.8
5. Singapore	210	1.7	323	1.9	10,601	4.2	6,694	1.9
SAARC	**313**	**2.6**	**75**	**0.4**	**12,706**	**5.0**	**2,018**	**0.6**
(b) Africa	**9**	-	-	-	**16,636**	**6.5**	**12,501**	**3.5**
(c) Latin America	**33**	**0.3**	**387**	**2.3**	**10,512**	**4.1**	8,551	**2.4**
V. Others	505	4.2	6	-	6,402	2.5	73,10	2.1
Total (I+II+III+IV+V)	**12.088**	**100.0**	**17,156**	**100.0**	**2,54,402**	**100.0**	**3,52,575**	**100.0**

* Data for German Democratic Republic are included in the Germany † Provisional

Note : Figures in brackets are percentage of total in the corresponding column.

OECD : Organisation for Economic Co-operation and Development.

EU : European Union includes Belgium, France, Germany, Italy, Netherlands and U.K.

OPEC : Organisation of Petroleum Exporting Countries which includes Indonesia, Iran, Iraq, Kuwait, Saudi Arabia and UAE.

SAARC : South Asian Association for Regional Co-operation which includes India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka and Maldives.

Source : RBI, *Handbook of Statistics on the Indian Economy* (Varrius issues) Economic Survey, (2009-10). RBI Bulletine June 2011.

25 per cent in 1998-99 but again declined to 12.0 per cent in 2010-11.

Our trade with East European Socialist Countries viz., U.S.S.R. Poland, Romania, Bulgaria, Hungary, East Germany, Czechoslovakia and Yugoslavia developed in during the sixties. In 1960-61, India imported 4 per cent of her total imports from this region and exported about 8 per cent of her total exports to this region. But soon after the Indo-Chinese conflict in 1962 and Indo-Pak war in 1965, our trade relations with the East European Socialist countries improved remarkably. In 1969-70 this group of countries accounted for 18 per cent of total imports and about 22 per cent of our exports. U.S.S.R. as the chief contributor accounted for nearly 84 per cent of trade with this region. But again we find a significant fall in share of Eastern Europe after decline of USSR.

Our trade with the countries in Asia and Oceania (other OECD countries) has been of great significance. Our exports to these countries which were about 28 per cent of total imports in 1951-52 increased to 32 per cent in 1969-70. As against it, imports from these countries declined from about 23 per cent in 1951-52 to 19 per cent in 1969-70 (Refer table 14). The ECAFE* region was of great significance and two countries, viz., Japan and Australia were very important.

The share of Japan and Australia in our exports which was about 15 percent in 1970-71 has come down to 2.6 percent in 2010-11. As against it, the share in our imports from these two countries has declined from 9.2 percent to 5.2 percent during the same period.

However, due to increasing importance acquired by the imports of crude oil, OPEC countries have assumed very great significance in our imports. These countries accounted for barely 8 percent in our total imports in 1970-71, but as against it their share in 1984-85 jumped to about 19 percent. Much of the increase was due to the sharp hike in the price of oil and did not indicate a corresponding increase in the quantity index of imports. On the export front also our exports to OPEC countries increased from 6.4 percent in 1971-72 to 21.1 percent in 2009-10. With a fall in the international price of oil, the share of OPEC countries in our imports declined to 8.6 percent in 1986-87 and still further to 6.8 percent in 2003-04 but the recent hike in the price of petroleum has again pushed up the share of OPEC to 33.8 percent in 2010-11.

India had a great potential for increasing her foreign trade with Asian countries, because the Indian manufactures are readily acceptable in these countries. Similarly, India can import raw materials for her growing industries from these relatively less-developed regions. This is evidenced by the fact that during 2009-10, imports from this region accounted for 26.7 percent of our total imports whereas they were in the range of 3.3 percent in 1970-71. On the export side, there has been a gradual and steady improvement and exports to this region increased from 10.8 percent during 1970-71 to 30.9 percent in 2009-10.

With Africa, our exports have remained, more or less constant to a level of about 6.7 percent during 1951-52 to 1970-71, but declined thereafter and stood at 6.1 percent in 2008-09. However, on the import front, the share of African countries has been fluctuating from 9 percent since 1951-52 but it has declined to a low level of 6.5 percent in 2010-11.

Taking an overall view, it can be stated that India developed by the eighties a more spatially dispersed pattern of foreign trade. Its excessive dependence on Western Europe and North America witnessed a gradual decline during the period 1951-52 to 1969-70 and there was shift in favour of East European Socialist countries and Asian countries, especially OPEC countries. But during the eighties and the period of 1990-91 to 2008-09 which witnessed the disintegration of Soviet Union into Commonwealth of Independent States, the importance of Western Europe and North America has increased sharply. They together account for 31.8 percent of our exports and 19.9 percent of our imports in 2009-10. The share of Eastern Europe has dwindled to a mere trickle and that developing countries of Asia and Africa is increasing.

During 1987-88 and 2010-11, significant changes in the direction of India's foreign trade have been witnessed (Refer table 15). The major changes are:

(i) Exports to OECD countries which were of the order of about 59 percent in 1987-88 have declined sharply to 33.2 percent in 2010-11. Similarly, there has been a still sharper decline in imports from OECD countries from about 60 percent in 1987-88 to 29.8 percent in 2010-11. The decline is universally observed in European Union, North America (including USA) and other OECD countries like Australia, Japan and Switzerland.

(ii) India's trade with developing countries of Asia, Africa and Latin America has shown an upward trend. The exports to developing countries which were only 14.2 percent in 1987-88 shot up to 41.5 percent in 2010-11. In this, there is marked improvement in exports to countries of Asia whose share improved significantly from 12 percent to about 30.9 percent during this period. In this China and Hong Kong shared about 12.0 percent of our exports, followed by SAARC region 4.2 percent. So far as imports are concerned, our imports from

developing countries have risen from 17.3 percent in 1987-88 to 32.7 percent in 2010-11. Asia alone accounted for 26.7 percent in 2010-11. However, imports from SAARC region were barely 0.6 percent. The share of China and Hong Kong alone was 13.8 percent in 2010-11. It may be noted that China including Hong Kong has emerged in 2010-11 as India's largest trading partner.

(iii) Our trade with OPEC region has also improved significantly - exports increasing from 6.1 percent in 1987-88 to 21.5 percent in 2010-11. However, imports from OPEC have shot up to 33.8 percent in 2010-11. This is due to the increasing international price of oil and also the growing demand in India. Among the OPEC countries, UAE is most important, followed by Indonesia and Saudi Arablia.

(iv) With Africa, India's foreign trade has also begun, though the share of Africa in exports was 6.5 percent in 2010-11 and the share in imports was 3.5 percent. However, Africa is emerging as a small partner with greater potential in future.

(v) USA occupies the first place among individual countries with a share of about 10.0 percent in our exports and second largest in terms of imports with 5.2 percent in our imports. UK, however, has lost its position of pre-eminence mence and accounts for barely 2.8 to 1.4 percent of our exports and imports respectively.

(vi) Eastern Europe, more especially, Russia which occupied a very significant position in our foreign trade in the seventies has lost considerably and in 2010-11, it just accounted for less than 1 percent of our foreign trade. This has happened, more especially after the disintegration of USSR and the establishment of Common Wealth of Independent States (CIS) in 1992-93.

(vii) Australia, Japan and Switzerland together had 2.8 percent share in our exports and 11.3 percent in our imports in 2010-11,whereas they accounted for 14.1 percent of our exports and 16.2 percent of our imports in 1987-88

(viii) Latin America which accounted for barely 0.3% in exports has improved its position to 4.1% in 2010-11. Similarly, in our imports also, its share is 2.4% in 2010-11. However, there is good scope for expanding trade with Latin America.

(ix) In 2010-11, six countries viz., USA, Hong Kong and China, UAE, Germany, UK and Japan accounted for 31.5 percent of our exports and 33.9 percent of our imports.

To sum up, it may be concluded that India's foreign trade has become much more diversified and excessive dependence on OECD countries has declined. However, with developing countries, more especially with Asian countries, there is an improving uptrend both in exports and imports. These are welcome signals in the direction of India's foreign trade.

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CHAPTER

45

INDIA'S BALANCE OF PAYMENTS

"The balance of payments of a country is a systematic record of all economic transactions between the 'residents' of a country and the rest of the world. It presents a classified record of all receipts on account of goods exported, services rendered and capital received by 'residents' and payments made by them on account of goods imported and services received from the capital transferred to 'non-residents' or 'foreigners'."

—Reserve Bank of India

In the previous chapter we have discussed the balance of trade, but the trade balance gives only a partial picture of a country's international obligations. In order to have a complete enumeration of international transactions, it is necessary to add to the net trade balance all other payments and receipts—this is the comprehensive balance of payments of a country in relation to the rest of the world.

The balance of payments of India is classified into (a) balance of payments on current account, and (b) balance of payments on capital account. The current account of the balance of payments of India includes three items : (a) visible trade relating to imports and exports; (b) invisible items, viz., receipts and payments for such services as shipping, banking, insurance, travel, etc., and (c) unilateral transfers such as donations. The current account shows whether India has a favourable balance or deficit balance of payments in any given year. The balance of payments on capital account shows the implications of current transactions for the country's international financial position. For instance, the surplus and the deficit of the current account are reflected in the capital account, through changes in the foreign exchange reserves of country, which are an index of the current strength or weakness of a country's international payments position, are also included in the capital account.

1. INDIA'S BALANCE OF PAYMENTS ON CURRENT ACCOUNT

1951-52 to 1955-56—The First Plan Period

During the First Plan period, the balance of payments was affected by the Korean War boom, American recession of 1953 and favourable monsoon at home which helped to boost agricultural and industrial production. (Refer table 1).

While India had been experiencing persistent trade deficit, she had generally a surplus in net invisibles; accordingly India's adverse balance of payment during the First Plan was only ₹ 42 crores. The overall picture during the First Plan was, however, quite satisfactory.

1956-57 to 1960-61—The Second Plan Period

An important feature of the Second Plan period was the heavy deficit in the balance of trade which aggregated to ₹ 2,339 crores. Earnings on account of invisibles and donations from friendly countries totalled ₹ 614 crores. Making an allowance

For these, the unfavourableness in the balance of payments during the Second Plan period was of the order of ₹ 1,725 crores. The highly unfavourable balance of payments in the Second Plan was the result of (a) heavy imports of capital goods to develop heavy and basic industries, (b) the failure of agricultural production to rise to meet the growing demand for food and raw materials from a rapidly growing population and expanding industry; (c) the inability of the economy to increase exports; and (d) the necessity of making minimum 'maintenance imports' for a developing economy. As a result, the foreign exchange reserves sharply declined and the country was left with no choice but to think of ways and means to restrict imports and expand exports.

Third Plan and Annual Plans and BOP

From table 1 it is clear that the balance on current account was unfavourable during the Third Plan. This was mainly because (a) imports were expanding faster under the impact of defence and development and to overcome domestic shortages (import of foodgrains, for example) and (b) exports were extremely sluggish and failed to match imports. The imbalance in the current account of over ₹ 1,951 crores was financed by loans from foreign countries, PL 480 and PL 665 funds, loans from the World Bank and withdrawals from I.M.F. In spite of all these loans, assistance and withdrawals, there was also some depletion of foreign exchange reserves of the country.

The serious adverse balance of payments which started with the Second Plan continued relentlessly during the Third and the Annual Plans.

It will be observed that the trade deficit during the Annual Plans was quite large. This was because of the heavy imports of foodgrains to overcome famine conditions and internal shortage of foodgrains on the one side and inadequate exports due to economic recession on the other. Besides, devaluation of the rupee was a failure and instead of reducing the trade balance deficit, it further aggravated it. A very interesting development in this period was that net invisibles which used to be positive and which used to reduce the trade deficit, either dwindled or even became negative (for the first time). During this period, heavy amount had to be paid by India in the form of interest payments on loans contracted earlier. This wiped out the surplus on invisible account. Consequently, the influence of net invisibles in reducing the balance of payments deficit was negligible.

1969-70 to 1973-74 : The Fourth Plan Period

One of the objectives of the Fourth Plan was self-reliance—i.e., import substitution of certain critical commodities (which are of key importance for the Indian economy) on the one side and export promotion so as to match the rising import bill, on the other. Accordingly, the Government managed to restrict imports and succeeded in expanding exports. On the import side, restriction of imports was made possible through good crops in 1968-69 and 1970-71, and consequent significant reduction of imports of foodgrains. On the export side, vigorous export promotion measures succeeded in boosting exports of traditional as well as non-traditional items.

The abnormal favourableness in the invisibles account in 1973-74 was due to the receipt of ₹ 1,680 crores from U.S.A. on the disposition of PL 480 and other rupee funds. The trade deficit during the Fourth Plan was ₹ 1,564 crores and the surplus in net invisibles accounted for ₹ 1,664 crores. The net result was a surplus in the balance of payments, for the first time, though the surplus was only a nominal amount of ₹ 100 crores.

1975-76 to 1978-79 : The Fifth Plan Period

During the Fifth Plan, trade balance was affected by two factors : (a) the value of imports was rapidly mounting due to the hike in oil prices, and (b) the value of exports was also rising under the impact of promotional measures. These two factors explained the gradual decline in the deficit in the trade balance and the appearance of a surplus in the trade balance in 1976-77. But the persistent upward rise in imports and the inadequate increase in exports due to the relative decline in export prices were responsible for the revival of deficit trade balance in the last two years of the Fifth Plan period. Another outstanding feature of this period was the sharp increase in net invisibles receipts during 1975-76 to 1978-79. The main factors responsible for the increase in invisible receipts were : (i) stringent measures taken against smuggling and illegal payment transactions; (ii) the relative stability in the external value of the rupee at a time when major international currencies were experiencing sizeable fluctuations; (iii) increase in earnings from tourists; (iv) the growth of earnings from technical, consultancy and contracting services; and (v) increase in the number of Indian nationals going abroad for employment and larger remittances sent by them to India. Table 1 shows that net invisibles amounting to ₹ 6,261 crores more than made up the trade balance deficit of ₹ 3,179 crores and thus India was able to have huge surplus balance of payments of ₹ 3,082 crores. For the first time since planning started, India was in a comfortable position in its external account.

The Sixth and the Seventh Plan Period

There has been a sea change in the balance of payments position since 1979-80. As against the surplus balance of payments experienced by the country during the whole of the Fifth Plan, India started experiencing adverse balance of payments from 1979-80 onwards. For one thing, trade deficit began to widen from 1978-79. Table 1 shows the tremendous gap between India's imports and exports of merchandise. The disquieting picture was due

to the tremendous rate of growth of imports on the one side and a much lower rate of growth of exports since 1979-80 on the other. The trade deficit which was more than offset by the flow of funds under net invisibles during the Fifth Plan period, could not be so offset since 1979-80. The current balance of payments became adverse to the tune of ₹ 11,384 crores during the Sixth Plan. Apart from net external assistance, India had to meet this colossal deficit in the current account through withdrawals of SDRs and borrowing from IMF under the extended facility arrangement. Besides, India used part of its accumulated foreign exchange reserves to meet its deficit in the balance of payments.

During 1985-86 and 1989-90, the total trade deficit amounted to ₹ 54,204 crores for the Seventh Plan. Making an adjustment for the positive balance on invisible account, the deficit in balance of payment on current account was ₹ 41,047 crores. The highly adverse balance of payments position was the cause for serious concern.

1990-91 and Thereafter

For the first time during the last 40 years, net invisibles became negative to the tune of ₹ 435 crores in 1990-91. This was largely the consequence of a net outflow of investment income of the order of ₹ 6,732 crores in 1990-91 as against ₹ 4,875 crores in 1989-90 — as increase by 38 per cent. Thus, the cushion available through net invisibles to partly neutralise the trade deficit was removed.

During the Eighth Plan (1992-93 to 1996-97), trade deficit has been mounting, by 1996-97, it has reached a record level of ₹ 52,561 crores from that of ₹ 16,934 crores in 1990-91 — a threefold increase. For the Eighth Plan period, invisibles neutralised the trade deficit to the extent of about 58 per cent — a really commendable achievement. Despite this, the balance of payments has shown continuously a deficit in all the years.

During 1997-98, the current account deficit reached a record level of ₹ 20,883 crores and during 1998-99, it declined to ₹ 16,789 crores. In 1999-2000, it again increased to ₹ 20,331 croes. This was largely due to a much greater trade deficit of the order of ₹ 77,359 crores which could not be neutralised through net invisibles earned a surplus of ₹ 57,028 crores. The situation improved in 2000-01 and the current account deficit declined to ₹ 16,426 crores.

During 2001-02, although trade deficit was 54,955 crores, but the heavy receipts on account of invisibles amounting to ₹ 71,381 crores not only wiped out the trade deficit, they also created a surplus in current account balance of the order of ₹ 16,926 crores. Taking the entire Ninth Plan period (1997-98 to 2001-02), trade deficit was wiped out to the extent of 82 per cent by invisible account surplus. Consequently, the total deficit in current account balance was of the order of the ₹ 53,175 crores for the Ninth Plan.

Table 1. India's Balance of Payments on Current Account (1950-51 to 2010-11)

(₹ crores)

Year	*Trade Deficit*	*Net Invisibles*	*Balance of Payments*	*3 as % of 2*
(1)	(2)	(3)	(4)	(5)
First Plan	-542	+500	-42	92.2
Second Plan	-2,339	+614	-1,725	26.5
Third Plan	-2,382	+431	-1,951	81.1
Annual Plans	-2,067	+52	-2,015	2.5
Fourth Plan	-1,564	+1,664	+100	106.4
Fifth Plan	-3,179	+6,221	+3,082	195.7
1979-80	-3,374	+3,140	-234	93.1
Sixth Plan				
Total (1980-85)	**-30,456**	**+19,072**	**-11,384**	**62.6**
Seventh Plan				
Total (1985-90)	**-54,204**	**+13,157**	**-41,047**	**24.3**
1990-91	-16,934	-433	-17,367	-2.6
1991-92	-6,494	+4,259	-2,235	65.6
Eighth Plan				
1992-93	-17,239	+4,475	-12,764	26.0
1993-94	-12,723	+9,089	-3,634	71.4
1994-95	-28,420	+17,835	-10,585	62.8
1995-96	-38,061	+18,415	-19,646	48.5
1996-97	-52,561	+36,279	-16,283	69.0
Total 1992-97	**149,004**	**+86,090**	**-62,914**	**57.7**
Ninth Plan				
1997-98	-57,805	+36,922	-20,883	63.9
1998-99	-55,478	+38,689	-16,789	69.7
1999-2000	-77,359	+57,028	-20,331	73.7
2000-01	-56,737	+ 45,139	-11,598	79.5
2001-02	-54,955	+71,381	+16,426	129.9
Total 1997-02	**302,334**	**+249,159**	**-53,175**	**82.4**
2002-03	-51,697	+ 82,357	+30,660	159.3
2003-04	-63,386	+127,369	+63,983	220.9
2004-05	- 151,765	+139,591	- 12,174	92.0
2005-06	-229,664	+185,927	- 43,737	80.9
2006-07	- 279962	+ 235579	- 44383	87.1
Total 2002-07	**-776474**	**+770823**	**-5651**	**99.3**
2007-08	-3,67,664	+3,04,185	-63,479	82.7
2008-09	-5,47,452	+4,19,821	-1,27,631	76.7
2009-10	-5,59,900	3,80,200	-1,79,700	67.9
2010-11	-5,95,600	3,85,500	-2,10,100	64.7

Source: *Economic Survey (2011-12) and earlier issues*

During the first two years of the Tenth Plan, in 2002-03 again our current account balance was positive to the extent of ₹ 30,660 covers and during 2003-04, it was of the order of ₹ 63,983 crores. But this was the consequence of a heavy surplus on invisibles account which not only wiped out the trade deficit, but yieled a net positive balance an current account. India has the unique distiction that though during the 3-year period 2001-02 to 2003-04, our trade balance showed a massive deficit, a big inflow of net invisibles, resulted in a positive balance on current account

However, during 2004-05, there was a huge trade

deficit of the order of ₹ 1,51,765 crores on account of an unprecedented increase in our imports, although our exports also showed a big jump. There is no doubt that our invisibles showed a record positive balance of ₹ 1,39,591 crores in 2004-05, but this could wipe out the trade deficit only to the extent of 92 percent, Consequently, a current account deficit of ₹ 12,174 crores was witnessed in 2004-05. This is an unhealthy development, but since the same reckless policy of import liberalisation is being pursued later also, the situation worsened further and current account deficit increased to the extent of ₹ 43,737 crores in 2004-05 and ₹ 1,31,614 crores in 2008-09. However, taking the Tenth Plan period (2002-03 to 2006-07) as whole, the total current account deficit was of the order of ₹ 5,651 crores. The trade deficit in the Tenth Plan was wiped out by the surplus from invisibles to the extent of 99.3%.

However situation worsened after 2006-07 as we find net invisibles fell short of trade deficit, resulting in heavy deficit of balance of payment to the tune of ₹ 6,34,79 crores in 2007-08, ₹ 1,27,631 crores in 2008-09 ₹ 1,79,700 crore in 2009-10 and ₹ 2,10,100 in 2010-11.

2. BALANCE OF PAYMENTS CRISIS

Basic aim of the 1985 Export – Import Policy was

(a) to facilitate production through easier and quicker access to imported inputs;

(b) to strengthen export production base; and

(c) to facilitate technological upgradation.

Although the Government has been maintaining that the policy is neither liberal nor restrictive, but the fact of the matter is that the policy led to a wave of indiscriminate liberalisation of imports.

On the other hand import of quite a large number of capital goods were brought under OGL. These 208 items included micro-processor based equipment, machine tools, spinning machines, jute machinery. In this wave of liberalisation, even in areas where indigenous machinery was produced by BHEL, imports were allowed. While the MMTC and Department of Electronics were not in favour of this indiscriminate liberalisation of imports, the powerful local and multi-national lobbies were able to persuade the government to permit liberalisation even in areas where an independent self-reliant indigenous sector was emerging. All this was done in the name of hi-tech and upgration of technology. But as the then Prime Minister Mr. Rajiv Gandhi himself conceded in one of his interviews, this triggered off what may be described as "screw driver industrialisation."

Obviously, import liberalisation measures resulted in the emergence of the huge deficit in the balance of trade. The finance ministry, therefore, started working out proposals to curtail imports of machinery and equipment. Similarly, the introduction of MODVAT was also aimed at weaning away Indian industry from dependence on imported components to increased use of indigenous products. In other words, the policy was imperceptibly reversed toward self-reliance and the Government tacitly accepted its mistake in opening the import-window rather too wide.

In the name of technological upgradation, there was, therefore, an unfettered drive for import of capital goods, designs and drawings. All studies on technology transfer by multi-nationals indicate that in the name of technological upgradation, the multinationals carry on 'technological dumping' of such technologies which have been superseded in developed countries. Consequently, second-hand machinery is dumped in the name of import of capital goods. It is really this area which led to the growth of foreign dominance in collusion with Indian big business playing the role of the underpinning of the world economy.

The upshot of the entire analysis is that the crisis in the balance of trade and consequently its adverse impact on the balance of payments was the result of the policy of indiscriminate import liberalisation pursued under pressure from World Bank/IMF lobbies. Another disturbing feature of the situation was that export promotion has not been commensurate with the increase of imports.

Balance of Payments in the Seventh Plan and thereafter

During the Seventh Plan (1985-86 to 1989-90), trade deficit of the order of ₹ 54,204 crores emerged. Net favourable balance in the invisible account was of the order of ₹ 13,157 crores and thus net balance of payment on current account was ₹ 41,047 crores. Economists identified the following factors:

Firstly, despite an encouraging rate of growth of exports, the pressure on the balance of payments has increased. During the Seventh Plan, the annual rate of growth of exports was of the order of 18.7 per cent per annum, but the rate of growth of imports was of the order of 16.8 per cent per annum. Since we started with a large volume of imports, even a smaller percentage growth of imports was able to offset a larger growth rate of exports and thus the deficit in balance of trade in absolute terms became higher.

Secondly, a major factor responsible for larger inflow of imports was the policy of import liberalisation.

Thirdly, there has been an increase in import-intensity due to the patterrn of industrial development promoted during the Seventh Plan which catered to the demands thrown up by the upper income groups of the population. The shifts in income distribution in favour of the neo-rich classes resulted in higher demand for consumer durables, mention may be made of colour TVs, VCRs, air conditioners, refrigerators, motor cycles, cars, and other

gadgetry. All these items of elitist consumption required assembly of kits, machinery and components imported from abroad. Thus luxury-consumption-led growth during the eighties could be appropriately described as import-intensive industrialisation. During 1980's as against the overall industrial growth of 7.7 per cent per annum, the growth rate of consumer durables segment was of the order of 12.4 per cent per annum.

Lastly, the relative steep depreciation of the rupee vis-a-vis other currencies also led to an increase in the value of imports. From ₹ 12.82 per dollar at the end of 1987, the rate of exchange depreciated to ₹ 18.05 at the end of 1989 and was around ₹ 31.36 per dollar in April 1993.

At the outset, it should be realised that the problem of adverse balance of payments of India is essentially due to the huge trade deficit which, in turn, is partly the result of persistently rising imports and partly due to slowly rising exports. The ultimate solution has to be found in restricting imports to the unavoidable minimum and promoting exports to the maximum.

Professor Sukhmoy Chakravarty in his work ***"Development Planning—the Indian Experience (1987)"*** questioning the policy of liberal imports wrote : "In my judgement, India's balance of payments is likely to come under pressure unless we carry out a policy of import substitution in certain crucial sectors. These sectors include energy, edible oils and nitrogenous fertilizers. In all these sectors, except fertilizers, India is getting increasingly dependent on imports resulting in a volatile balance of payments situation."

Rangarajan Panel for Correcting BOP

Dr. C. Rangarajan, former Governor, Reserve Bank of India who headed the high level committee on balance of payments submitted its report on June 4, 1993. The Committee made the following findings and recommendations:

1. The Committee stressed the fact that a realistic exchange rate and a gradual relaxation of restrictions on current account transactions have to go hand in hand.

2. The Committee suggested that the current account deficit of 1.6 per cent of GDP should be treated as ceiling rather than as target.

3. A number of recommendations were made regarding foreign borrowings, foreign investment and external debt management. Very important among them were:

(a) The Government must exercise caution against extending concessions or facilities to foreign investors, which are more favourable than what are offered to domestic investors and also against enhancing external debt to supplement equity.

(b) A deliberate policy of prioritizing the use to which external debt is to be put should be pursued and no approval should be accorded for any commercial loan with a maturity of less than five years for the present.

(c) The Committee was of the view that efforts should be made to replace debt flows with equity flows. However, it recognised that direct foreign investment would contain both debt and equity, and the system of approvals is applicable to all external debt. Therefore, as an operational guideline, the approval of debt linked to equity should be limited to ratio of 1:2.

4. The minimum foreign exchange reserves target should be fixed in such a way that the reserves are generally in a position to accommodate imports of three months.

A careful perusal of the recommendations of Rangarajan Panel on balance of payments reveals that it aimed to halt the process of indiscriminate permissions in the name of foreign investments in any branch of economic activity. The Committee, therefore, cautioned against extending concessions or facilities to foreign investors which are more favourable than what are offered to domestic investors. Similarly, the Committee has insisted that there should be a policy of prioritizing the use to which external debt should be put. The Report of Rangarajan Committee was a timely warning to manage our external debt and thus salvage our economy.

3. BALANCE OF PAYMENTS SINCE THE NEW ECONOMIC REFORMS OF 1991

New economic reforms were initiated in 1991 and an effort was made to step up exports so that a major part of the import bill is paid for by exports. Secondly, with a view to bring about technological upgrdation, imports were liberalised. Along with this, in place of debt-creating inflows of capital, non-debt creating inflows such as foreign direct investment as well as portfolio investment were encouraged. The result of all these measures has been summarized in table 2.

Data provided in table 2 rveal that the most notable feature of the changing scenario in the balance of payments situation is that there has been a sharp increase in the coverage of imports by export earnings. In 1990-91, export earnings accounted for merely 66.2% of import bill, and this ratio sharply improved to 84.8% in 1993-94. ***Economic Survey (1994-95)***, therefore, asserted: "The recent developments in India's external sector reflect a shift from a foreign-exchange constrained control regime to a more open market driven and liberalised economy. This has been facilitated by the structural change in the country's balance of payments which has occured during the last few years. The most notable feature of this change has been the sharp increase in the coverage of imports by export earnings ...

during the last 3 years export earnings have, on an average, accounted for nearly 90 per cent of the value of imports". This marked improvement in the export-import ratio combined with an improvement in the invisibles account, has resulted in a sharp reduction in the current account deficit, which had come down from unsustainable levels of more than 3.2 percent of GDP to less than half a percent by 2003-04, but by the year 2007-08 it again surged to 1.5 percent GDP. In the meanwhile in few years even current account deficit turned to be surplus. This has been made possible due to rising export-import ratio till 2002-03 and later it started dipping again and came down as low as 60.6 percent in 2009-10. In 2010-11 it improved to 65.7 percent.

Table 2 also indicates that dependence on external assistance and external commercial borrowing has come down markedly. The ratio of external assistance to total capital inflow which had risen to about 27 per cent in 1990-91 came down to 19 per cent in 1993-94, but has risen again to 30 per cent in 1995-96 but continuously declined thereafter to reach a low level of 3.8 per cent in 2006-07. Similarly, external commercial borrowing which accounted for about 26 per cent of the total capital inflows in 1990-91 has again increased to 42 per cent in 1995-96 and further risen to 50.6 in 2000-01. But since rates of interest in the world markets have sharply gone down, this has resulted in a decline in debt service ratio. Table 2 reveals that debt service ratio which was 35.3 per cent in 1990-91 has also declined to 13.6 per cent in 2001-02. It has further declined to 6.1 per cent in 2004-05 but was 8.3 percent in 2010-11. The Government has, therefore, claimed that the economy has thus moved to a more stable and sustainable balance of payments in the nineties.

Another healthy feature of the changing scenario is that foreign reserves have more than doubled during 1993-94, from US $6.4 billion at the end of March 1993 to US $15.1 billion at the end of March 1994. The large build-up in foreign exchange assets has been made possible by large inflows of private foreign investments and Non-resident deposits. The foreign currency reserves have been further augmented to reach a level of $24.9 billion at the end of June 1997 and still further to $76.1 billion during 2002-03, and they shot up to $302.34 billion in June 2008. In the year 2008-09, however we witness a decline in foreign exchange reserves to $241.42 billion due to large scale outflow of foreign exchange by foreign institutional investors (FIIs). We again find an improved situation, as foreign exchange reserves reached $ 305 billion in 2010-11. The continued strength of these reserves has saved the country from the impending balance of payments crisis which was looming large in 1991.

A point which needs serious consideration is: Is the escalation in these reserves a consequence of an improvement in the current account or the result of excessive borrowing or external assistance by bilateral or multilateral donors? The answer obviously is: The sharp increase in foreign exchange reserves is the consequence of excessive borrowing and large inflows of external assistance. The Government has been trying to camouflage the situation by saying the non-debt creating assistance has been used to tide over the current crisis. But the distinction between debt and non-debt inflows does not reduce the burden of foreign exchange outflows. In case of debt, interest and amoritization payments constitute outflows and in the case of non-debt creating assistance, it is royalties and dividend outflows that lead to foreign exchange outgo. Both situations impose burdens on the country. The difference is only in form and not in substance.

There is no doubt that both international and domestic factors have contributed to the deterioration in the balance of payments in 1997-98 and this is reflected by

Table 2: Changing Scenario of Balance of Payments (Ratio of Selected Items)

	1990-91	1995-96	1997-98	2000-01	2001-02	2002-03	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
1. Exports as % of imports	66.2	74.0	69.7	78.5	79.5	83.4	67.0	67.0	66.35	61.4	60.6	65.7
2. Current account balance as % of GDP	-3.2	-1.8	–1.4	–0.6	0.7	1.2	–1.2	–1.1	–1.3	–2.5	–3.1	–2.9
3. ECB/TC (%)	26.8	42.0	42.6	50.6	–19.0	–15.9	10.1	34.8	20.2	92.8	5.7	3.1
4. NRI deposits/TC (%)	18.3	37.1	12.0	27.2	33.0	28.0	11.2	9.3	0.16	59.2	5.5	5.4
5. External assistance/ TC (%)	26.2	29.7	9.7	4.8	13.4	–29.4	6.8	3.8	1.9	36.5	4.5	8.3
6. Import cover of FER (No. of months)	2.5	6.0	6.9	8.8	11.5	14.2	11.6	12.5	15.0	9.8	11.2	9.6

Notes:
1. TC: Total Capital flows (net)
2. FER: Foreign exchange reserves
3. FCB: External Commercial Borrowings
4. As total capital outflows are netted after taking into account some capital outflows, the ratio against items 3, 4 and 5, in some years, add up to more than 100 per cent.

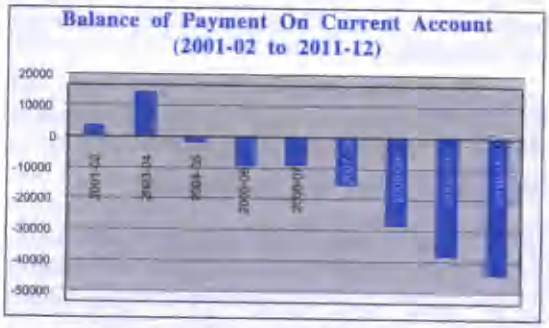
Source: Government of India, Economic Survey (2009-2010), RBI,Handbook of Statistics on the Indian Economy (2010-11).

TABLE 3 : Balance of Payments 2001-02 to 2010-11 : Key Indicators

(US $ million

		2001 -02	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11
1.	Exports (f.o.b)	44,703	66,285	85,206	105,152	1,28,888	1,66,162	1,89,001	1,82,235	2,50,468
2.	Imports (c.i.f)	56,277	80,003	118,908	157,056	1,90,670	2,57,629	3,07,651	3,00,609	3,30,935
3.	**Trade Balance**	**-11,574**	**-13,718**	**-33,718**	**-51,904**	**-61,782**	**-91,467**	**-1,18,650**	**-1,18,374**	**-130467**
4.	Invisibles (net)	14,974	27,801	31,232	42,002	52,217	75,731	89,923	79,991	86,186
	a. Services	3,324	10,144	15,426	23,170	29,469	38,853	49,631	35726	47,664
	b. Income	-4,206	-4,505	-4,979	-5,855	-7331	-5,068	-4,507	-8040	-14863
	c. Private transfers	15,398	21,608	20,525	24,687	30,079	41,995	44,798	52305	53,368
5.	**Current Account Balance**	**3,400**	**14,083**	**-2,470**	**-9,902**	**-9,565**	**-15,757**	**-28,728**	**-38383**	**-44,281**
6.	Capital Account	8,551	16,736	28,022	25,470	45,203	1,06,585	67,685	53,397	59,747
	A. Foreign Investment	6,686	13,744	13,000	15,528	14,753	43,326	3,467	51167	37,434
	B. External assistance, net	1,204	-2,754	2,027	1,766	1,787	2,119	2,639	2893	4,941
	C. Commercial borrowings, Net	-1,588	-2,928	5,426	2,759	16,443	22,640	6,648	3,339	11,599
	D. Rupee debt service	-519	-376	-417	-572	-162	-122	-100	-97	-69
	E. NRI deposits, net	**2,654**	**3,642**	**-964**	**2,789**	**4,321**	**178**	**4,289**	**+3792**	**3239**
	F. Other Capital	**-1,640**	**4,076**	**7,259**	**-3,183**	**-5,961**	**10,969**	**-3,990**	**-13016**	**-10440**
7.	**Overall Balance**	**11,757**	**31,421**	**26,159**	**15,052**	**36,606**	**92,164**	**-20,080**	**-13441**	**13,050**
8.	**F.E. Reserve Use (Increase - /Decrease)**									
	As percent of GDP	**-11,757**	**-31,421**	**-26,159**	**-15,052**	**-36,606**	**-92,164**	**20,080**	**+13441**	**13,050**
	Exports	9.4	11.0	12.2	13.0	13.84	13.5	15.6	14.4	15.9
	Imports	11.8	13.3	17.1	19.4	20.05	21.0	25.4	23.1	24.2
	Trade Balance	-2.4	-2.3	-4.8	-6.4	-6.8	-7.4	-9.8	8.7	8.3
	Invisible Balance	3.1	4.6	4.5	5.2	5.7	6.2	7.4	7.0	5.5
	Current Account Balance	0.7	2.3	-0.4	-1.2	-1.1	-1.3	-2.4	-3.1	-2.8

Source : RBI, Handbook of Statistics on Indian Economy (2010-11).



the increase in current account deficit to 1.4 per cent of GDP and trade deficit rising to 4.9 per cent of GDP in 2004-05. The situation has deteriorated further and the trade deficit as per data available form DGCI&S is of the order of US $ 9.2 billion in 1998-99. This is because export (in US dollar terms) declined to US $ 34.3 billion in 1998-99 as against US $ 35.6 billion in 1997-98. The trade deficit has reached an unprecedented level of US $ 7.9 billion in 1998-99. Obviously, this is likely to be 3.2 per cent of GDP. To describe the "BOP situation as manageable" as the *Economic Survey (1998-99)* does, is to conceal the hard reality that the fundamentals of the economy are not sound and that all measures of export promotion have not produced the desired effect. To meet this deficit by a larger inflow from Resurgent India Bonds of the order of US $4.2 billion during 1998-99 from NRIs or larger inflow of foreign direct investment and external commercial borrowing only indicates the adoption of the dependency syndrome by international players. The internal resilience of the economy is still weak and the economy has to be strengthened. This is evident from the fact that the Rupee depreciated against the US dollar by about 7.1 per cent from ₹ 38.50 per US dollar in March 1998 to ₹ 45.68 per US dollar in 2000-01. The situation has further worsened to ₹ 47.49 per US dollar in April 2000. It would be, therefore, more prudent to adopt a cautious approach in admitting large inflows of external commercial borrowing, portfolio investment by foreigners and also larger contributions from NRIs in the form of bonds.

During 2006-07 and 2007-08, there was an appreciation in the exchange rate of the Rupee vis-à-vis the US dollar. The exchange rate has declined from ₹ 44.27 in 2005-06 to ₹ 42.25 in 2006-07 and has further declined to ₹ 39.44 per US dollar in November 2007. This was also one of the reasons causing increasing trade deficit during 2007-08. However even depreciation of Indian rupees could not bring any relief in trade deficit during the year 2008-09. Year 2009-10 saw marginal fall in trade defict. But in 2010-11 again trade deficit increased to $130.5 billion.

The exports of the country must grow faster if the country wants to save itself from the balance of payments crisis. At the same time, a policy of selective import

liberalisation in priority areas would help to strengthen the fundamentals of the economy.

Highlighting the changed situation in the current account balance, *Economic Survey (2005-06)* opined : "The year 2004-05 marked a significant departure in the structural composition of India's balance of payments (BOP), with the current account, after three consecutive years of surplus, turning into a deficit. (Refer table 4). In a significant transformation, the current account deficit, observed for 24 years since 1977-78, had started shrinking from 1999-00. The contraction gave way to a surplus in 2001-02, which continued until 2003-04. However, from a surplus of US $ 14.1 billion in 2003-04, the current account turned into a deficit of US $ 1.47 billion in 2004-05 and further to a deficit of US $ 9.2 billion in 2005-06. The deficit was caused by a burgeoning excess of merchandise imports over exports, which was left uncompensated by the net surplus in invisibles. While the magnitude of deficit is one of highest in recent times, it underscored the rising investment demand in the economy. As a proportion of GDP, the turnaround in the current balance was from a surplus equivalent of 2.3 per cent in 2003-04 to a deficit of 0.4 per cent in 2004-05. For 2005-06 the current account deficit has shot up to US $ 9.9 billion. The situation in 2006-07 also indicates a current account deficit of the order of $ 9.766 billion. Situation worsened and current account deficit reached at $ 15.7 billion in 2007-08. Situation worsened even more during 2008-09, when current account deficit shooted up to $ 28.7 billion, as even much larger invisibles (net) receipt of $ 89.9 billion was not able to fill the huge trade deficit of $ 118.6 billion. Defict in current account further shooted up to $38.4 billion in 2009-10 and $ 44.3 in 2010-11. Since it is customary to look upon the Chinese experience as a role model, it may be pointed out that China had a current account surplus of 3.8 per cent of GDP in 1997 and has further improved this surplus to 6.1 per cent of GDP in 2005.

INVISIBLES AND BALANCE OF PAYMENTS

India has achieved commendable success in its receipts from invisibles. As a consequence, surplus from invisibles not only wiped out deficit in balance of trade, but also created a positive balance on current account. For instance, in 2003-04, trade deficit was of the order $ 13.7 billion, but the surplus from invisibles shot up to $27.8 billion. As a result, the balance of payment on current account became positive to the extent of $ 14.1 billion.

It would be appropriate to study the components of invisible items so as to understand the importance of various items. Table 4 provides data from 2000-01 to 2010-11. It may be observed that on the side of receipts, among the services, the most important contribution is that of software services. But transfers in form of remittance from Indians abroad provide the highest contribution to receipts. Besides these two items, moderate contribution is also made by travel, transportation, investment income and miscellaneous items. *Economic Survey (2004-05)* in this connection mentions: "The main driver behind the current account surpluses, buoyant invisible flows, particularly private transfers comprising remittances, along with software services exports, have been instrumental in creating and sustaining current account surpluses for India."[2] As a consequence, invibles balance as a proportion of GDP increased from 3.1 percent 2001-02 to 4.5 percent in 2004-05. This situation further improved to 5.3 % of GDP in 2005-06 and 7.0 percent in 2009-10 but it declined to only 5.5 per cent in 2010-11. This is a healthy development.

On the payments side, two items are prominent – Miscellaneous services and investment income. These items accounted for over 73 percent of payments in 2003-04. In these two items, India shows a net deficit in invisibles. There is a need for exercising caution in this regard, more especially in continuous, unrestricted and sharp increase in foreign investment which generates a reverse flow in the form of investment income.

If we study the net balance on invisibles in 2010-11, services accounted for 55.3 percent, transfers accounted for 61.9 percent and investment income showed a net deficit of 17.2 percent.

It is vitally necessary to exercise caution regarding the warning signals in 2004-05. During 2004-05, the trade deficit has shot up to $ 36.63 billion, while the invisibles surplus was $31.23 billion, thus a deficit in current account has appeared again in 2004-05. The jubilation about the emergence of surplus in current account surplus during 2002-03 and 2003-04 dried up and India was once again back to its proverbial current account deficit. While the Commerce and Industry Minister has been feeling proud of the achievement in high growth rates in exports, there was a total negligence on his part to realize that the ground under his feet was being cut by a much sharper increase in imports. The situation has worsened between 2005-06 and 2010-11 and current account defict shooted up to $44.3 billion by 2010-11.

Much of the relief in current account of balance of payment has been brought by net software exports, which has increase from mere $ 355 million in 1997-98 to $ 43,224 million in 2010-11, but this trend may taper off as China makes an inroad in the world software market. Similarly, remittances from Indians may also grow at a lesser rate in future since they are reaching peak levels.

The purpose is not to paint a gloomy picture, but draw attention to the emerging dangers in the external sector. The country has, therefore, to be vigilant about foreign payments account, as it has been having only a one-legged policy in this area of boosting exports.

2. Government of India, *Economic Survey (2004-05)*, P.110

Table 4: Analysis of invisibles Account

Net Balance on Various Items *US$ million*

	2000-01	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
A. Services	1,692	10,144	15,426	23,170	29,469	38,853	49,631	35,726	47,664
	(17.3)	(36.5)	(49.4)	(55.2)	(56.4)	(51.3)	(55.2)	(44.7)	(55.3)
1. Travel	693	1,435	1,417	1,215	2,439	2,091	1,469	2,517	4,043
	(7.08)	(5.16)	(4.54)	(2.89)	(4.67)	(2.76)	(1.6)	(3.1)	(4.7)
2. Transportation	-512	879	144	-2,120	-94	-1,500	-1,534	–757	397
	(-5.2)	(3.2)	(0.5)	(-5.0)	(-0.2)	(-2.0)	(-1.7)	(–1.0)	(.5)
3. Software Services	5,750	12,324	16,900	22,262	26,721	37,712	49,812	33,966*	43,224*
	(58.7)	(44.3)	(54.1)	(53.0)	(51.2)	(49.8)	(55.4)	(42.5)	(50.1)
4. Miscellaneous	-3,239	-4,491	-3,035	1,707	403	550	-115		
	(-33.1)	(-16.2)	(-9.7)	(4.1)	(0.8)	(0.7)	(-0.1)	(–18.1)	
B. Transfers	13,106	22,162	20,785	24,687	30,079	51,945	44,799	52,305	53,385
	(133.8)	(79.7)	(66.6)	(58.8)	(57.6)	(68.6)	(49.8)	(65.4)	(61.9)
C. Income	-5,004	-4,505	-4,979	-5,855	-7,331	-5,067	-4,507	–8,040	–14,862
	(-51.1)	(-16.2)	(-15.9)	(-13.9)	(-14.0)	(-6.7)	(-5.0)	(–10.0)	(–17.2)
Total (A+B+C)	9,794	27,801	31,232	42,002	52,217	75,731	89,923	79,991	86,186
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Source: Compiled and computed from RBI Handbook of Statistics on the Indian Economy (2010-11), *Economic Survey 2010-11*.

Note : *includes miscellaneous

4. INDIA'S TRADE POLICY

Advanced countries like Germany, U.S.A., Japan and others used their trade policy to (a) restrict their imports and provide a sheltered market for their own industries so that they could develop rapidly, and, (b) promote their exports so that their expanding industries could secure foreign markets. In other words, trade policy played a significant role in the development of the advanced countries. India, however, did not have a clear trade policy before Independence, though some type of import restriction—known as discriminating protection—was adopted since 1923 to protect a few domestic industries against foreign competition. It was only after Independence that a trade policy as part of the general economic policy of development was formulated by India.

Main features of India's trade policy

On the import side, India has been in a disadvantageous position vis-a-vis advanced countries which are capable of producing and selling almost every commodity at low prices. This meant that India could not develop any industry without protecting it from foreign competition. Import restriction—commonly known as protection—was thus essential to protect domestic industries and to promote industrial development. Since Independence, the Government of India has broadly restricted foreign competition through a judicious use of import licensing, import quotas, import duties and, in extreme cases, even banning import of specific goods. The Mahalanobis strategy of economic development through heavy industries, which India adopted since the Second Plan, called for (a) banning or keeping to the minimum the import of non-essential consumer goods, (b) comprehensive control of various items of imports, (c) liberal import of machinery, equipment and other developmental goods to support heavy-industries based economic growth, and (d) favourable climate for the policy of import substitution.

On the export side. To pay for its essential imports and to minimise dependence on foreign countries, expansion of exports was very essential. It was also realised that the market for many goods within India may not be adequate to absorb that entire domestic production and hence a search for markets elsewhere was a necessity. The Indian Government had to play an important role to promote exports through setting up trading institutions, and through fiscal and other incentives. Vigorous export promotion was emphasised after the Second Plan to earn foreign exchange to overcome the acute foreign exchange crisis. In the 1970's, importance of export promotion was again emphasised because of mounting debt service obligations and the goal of self-reliance (with zero net aid).

Phases of India's trade policy

Five distinct phases in India's trade policy can be noted : the first phase pertains to the period 1947-48 to 1951-52, the second phase covering the period 1952-53 to 1956-57 and the third phase after 1956-57 to June, 1966; the fourth phase started after devaluation of the Rupee in June 1966 and the last phase after 1975-76.

During the first phase up to 1951-52, India could have liberalised imports but on account of the restrictions placed by the U.K. on the utilisation of the sterling balances, she had to continue wartime controls. Since our balance of payments with the dollar area was heavily adverse, an effort was made to screen imports from hard currency areas and boost up exports to this area so as to bridge the gap. This also necessitated India to devalue her currency in 1949. By and large, the Import policy continued to be restrictive during this period. Besides this, restrictions were also placed on exports in view of the domestic shortages.

During the second phase (1952-53 to 1956-57) liberalisation of foreign trade was adopted as the goal of trade policy. Import licences were granted in a liberal manner. An effort was also made to encourage exports by relaxing export controls, reducing export duties, abolishing export-quotas and providing incentives to exports. Liberalisation led to a tremendous increase in our imports but exports did not rise appreciably. Consequently, there was fast deterioration in our foreign exchange reserves. This necessitated a reversal of trade policy.

During the third phase which began in 1956-57, the trade policy was re-oriented to meet the requirements of planned economic development. A very restrictive import policy was adopted and the import controls further screened the list of imported goods. On the other hand, a vigorous export promotion drive was launched. The trade policy assumed that a lasting solution to the balance of payments problem lies in the promotion and diversification of our export trade. Not only should the export of traditional items be expanded, but export of newer items should also be encouraged. Similarly, import substitution industries should also be encouraged so that dependence on foreign countries be lessened. It was in this period that India's trade policy was thoroughly reviewed by the Mudaliar Committee (1962).

The fourth phase started after the devaluation of the rupee in June, 1966. During this period trade policy attempted to expand exports and strangely liberalised imports too. Actually, export promotion was given a big boost through the acceptance and implementation of the recommendations of the Mudaliar Committee (1962). The major recommendations included increased allocation of raw materials to export-oriented industries, income tax relief on export earnings, export promotion through import entitlement, removal of disincentives, and setting up of Export Promotion Advisory Council, a Ministry of International Trade, etc. When these export promotion measures did not succeed and adverse balance of payments persisted, the Government of India undertook devaluation of the rupee in 1966 as a major step to check imports and boost exports. Initially devaluation was not successful and the adverse balance of payments worsened during the Annual Plans. But during the Fourth Plan, the trade policy was quite successful in restricting imports and promoting exports. This period continued till 1975-76.

During the last phase (1975-76 onwards), the Government adopted a policy of import liberalisation, with a view to encourage export promotion. During Janata rule (1977-79) import liberalisation was also adopted to augment domestic supply of essential goods and to check rise in price level. Import-export policy of the Indian Government attempted to achieve such objectives as : (i) to provide further impetus to exports; (ii) to provide support to the growth of indigenous industry; (iii) to provide for optimum utilisation of the country's resource endowments, especially in man-power and agriculture; (iv) to facilitate technology up-gradation with special emphasis on export promotion and energy conservation; (v) to provide a stimulus to those engaged in exports and in particular, to manufacturing units contributing substantially to the export efforts; and (vi) to effect all possible savings in imports. Thus, it is clear that the purpose of trade policy has been to stimulate economic growth and export promotion via import liberalisation.

While framing the export-import policy (1985), the Government was guided by the recommendations of Abid Hussain Committee. Whereas the Committee emphasized the need for striking a balance between export promotion and import substitution, the Government in its wave of import liberalisation permitted a much greater quantum of imports in the name of export promotion and capital goods imports for technological upgradation. Thus, grave distortions appeared in the process of implementation of the recommendations of the Committee.

The first major attempt at liberalisation was made by the Rajiv Gandhi Government. As a result, in the four years from 1985-86 to 1989-90, exports surged forward and the period witnessed a record average annual growth of 17 per cent in dollar terms. Unfortunately exports declined by 9 per cent in 1990-91.

5. INDIA'S FOREIGN TRADE POLICY (1991)

The then Commerce Minister, Mr. P. Chidambaram, announced a major overhaul of trade policy on July 4, 1991.

Giving the rationale for the new policy, the Commerce Minister noted : For several decades, trade policy in India has been formulated in a system of administrative controls and licenses. As a result, we have a bewildering number and variety of lists, appendices and licences. This system has led to delays, waste, inefficiency and corruption. Human

intervention—described as discretion—at every stage, has stifled enterprise and spawned arbitrariness.

The Government, therefore, decided that while all essential imports like POL, fertilizer and edible oil should be protected, all other imports should be linked to exports by enlarging and liberalizing the replenishment licence system. For this purpose, the following major reforms were announced :

Major Trade Reforms

1. Rep will become the principal instrument for export-related imports.

2. All exports will now have a uniform Rep rate of 30 per cent of the f.o.b. value. This was a substantial increase from the present Rep rates which vary between five per cent and 20 per cent of f.o.b. value.

3. The new Rep scheme gave maximum incentive to exporters whose import intensity was low. For example, agricultural exports which earlier had very low replenishment rates of five per cent or 10 per cent will now gain considerably.

4. All supplementary licences shall stand abolished except in the case of the small scale sector and for producers of life-saving drugs/equipment.

5. All additional licences granted to export houses shall stand abolished.

6. All items now listed in the Limited Permissible List OGL items would hereafter be imported through the Rep route.

7. The Exim policy contained a category known as Unlisted OGL. This category stands abolished and all items falling under this category may be imported only through the Rep scheme.

8. Advance licensing had been an alternative to the Rep route for obtaining imports for exporters. It was expected that many exporters would find the Rep route more attractive now. However, for exporters who wish to go through advance licensing, this route would remain open.

9. The goal of the government was to decanalise all items except those that are essential.

10. In the light of the substantial liberalisation of the trade regime, and also the recent changes in exchange rates (after devaluation), Cash Compensatory Scheme (CCS) was abolished from July 3, 1991.

Assessment of the Trade Policy

Trade Policy (1991) aimed to cut down administrative controls and barriers which acted as obstacles to the free flow of exports and imports. The basic instrument developed by the Policy was the Exim scrip in place of Rep licences. The purpose of this instrument was to permit imports to the extent of 30% on 100 per cent realisation of export proceeds. Obviously, the purpose was to bridge the BOP gap. Trade policy has streamlined various procedures for the grant of advance licences as also permit imports through exim scrips routes.

Since the time of Mudaliar Committee in 1962, the country has been fed on the slogan of export-promotion through import entitlement. Various instruments have been forged thereafter, but a long term view only underlined the fact that the country failed to check the faster growth of imports than that of exports during the last three decades. Under one pretext or another, the import widow was opened much wider and this continued. There was a strong need to exercise extreme caution in liberalising imports, more so inessential imports.

To conclude, India's trade policy since Independence has been used as part of general economic policy to develop the country and to diversify the economy. Initially it took the form of restricting imports and boosting exports. It also took the form of organising international trade and bilateral and multi-lateral trade agreements. In the later years, trade policy took the form of export promotion through import liberalisation. Formulated by bureaucrats under the influence and guidance of Indian business houses and multinational giants, India's trade policy did have an important influence on the rapid development of the country, but it was basically responsible for leading the country into the classical debt trap.

Let us now analyse the two aspects of India's trade policy—import policy and export policy.

6. EXPORT-IMPORT POLICY

The import policy in the post-independence period was guided by considerations of a growth-oriented policy which should ultimately lead us to the objective of self-reliance :

Export-Import Policy during First Decade of Planning

The needs of massive programme of industrialisation contemplated in the Second Plan led to the adoption of a liberal import policy in mid-50's. Imports went up sharply both in the private and public sectors. The schemes of modernisation, replacement and expansion undertaken in the private sector and the programmes of the building up of heavy and basic industries in the public sector led to an

unprecedented rise in imports. Exports did not expand as planned. Accordingly, India lost all its accumulated sterling balances to pay off its adverse balance. The country also suffered from a serious shortage of foreign exchange—a veritable foreign exchange crisis. This necessitated a reversal of import policy and drastic restrictions were placed on imports.

During the Second Plan period, it was felt that export earnings could not be significantly increased unless industrialisation gathered momentum. This fact was given expression in Second Plan in the following words : "India's export earnings are derived from a few commodities. Three of them, namely, tea, jute and cotton textiles, account for nearly one-half of the quota. These major exports are meeting increasing competition from abroad. This limits the scope for any substantial increase in exports in the short run. While every effort has to be made to promote exports of new items and to develop and diversify the markets for country's major exports, it has to be recognised that it is only after industrialisation has proceeded some way that increased production at home will be reflected in large export earning."[3]

Mudaliar Committee Recommendations

The Government appointed the Import and Export Policy Committee headed by Mr. Mudaliar in 1962 to review Government's trade policy. The Committee felt that developmental and maintenance imports were both essential for a growing economy and therefore, urged upon the government to provide facilities for the import of raw materials, components, etc., for all existing industries subject to higher priorities to new industries in (i) power and transport which had proved a serious bottleneck; (ii) 'export-oriented' industries; and (iii) industries producing raw materials and components now imported. Industries depending almost entirely on indigenous raw materials could arrange their own foreign exchange for the import of plant and machinery. The recommendations of the Committee were accepted by the Government.

The import policy of restriction of non-essential goods on the one side and liberalisation of imports of essential goods on the other was successful to a large extent—imports were controlled and exports were pushed up. This policy helped to reverse the persistent trade deficit.

Export-oriented Export-Import Policy

Since 1975-76, the Government of India has been following a liberalised import policy with the objective of increasing production, especially export production. There has been an increased emphasis on enhancing maintenance imports in order to promote capacity utilisation. Since the principal purpose of the import policy was to encourage exports, it is characterised as export-oriented import policy.

Export-Import (EXIM) Policy (1985)

Mr. Vishwanath Pratap Singh, the then Commerce Minister, announced the Export-import Policy on the 12th April 1985. For the first time, the Government announced the policy on a three-year basis. The basic aim of the new policy was to facilitate production through easier and quicker access to imported inputs, impart continuity and stability of Exim Policy, strengthen the export production base, facilitate technological upgradation and effect all possible savings in imports.

Import-Export Policy (1990)

The government announced on April 30, 1990 a new Import-Export Policy for a 3-year period. The Policy statement made it clear : "Improvement in our Balance of payments position can be achieved not so much through import curtailment as through promotion of exports." The new policy has, therefore, provided further momentum to the ongoing process of liberalisation with emphasis on strengthening the impulses of industrial and export growth. The salient features of the new policy were :

1. List of items imported under Open General Licence (OGL) were expanded to facilitate easy access to import of items that are not available within the country.

2. The number of capital goods items permitted under OGL was increased from 1,261 to 1,343. This has been the major thrust of liberalisation.

3. Imports of certain raw materials such as petroleum products, fertilizers, oils/oilseeds, feature/video films, newsprint, cereals, phosphoric acid, ammonia etc. were canalised through public sector agencies in view of the essential character of these imports from the point of view of bulk consumption and the requirements of small Actual Users. However, trading houses/star trading houses were also permitted to import canalised items in order to promote exports.

4. A scheme of automatic licensing was introduced under which upto 10 per cent of the value of the previous year's licence can be imported.

5. For Registred Exporters, the concept of net foreign exchange earnings was made a guiding criterion for issue of licences thereunder.

(a) REP (Replenishment) licensing scheme was expanded and simplified.

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[3] Planning Commission, *Second Five-Year Plan*, pp. 91-92.

(b) Export services like computer software, overseas management and consultancy service contracts as well as advertising jobs would qualify for import replenishments.

(c) Under the scheme of registration of Export Houses and Trading Houses, for determining eligibility, the annual average of net foreign exchange earnings in the base period should not be less than ₹ 5 crores for an Export House and ₹ 20 crores for a Trading House. These houses would be eligible for additional licences for import of raw materials, components, consumables and tools and capital goods allowed under OGL, besides other limited permissible items and canalisd items.

(d) A scheme of Star Trading Houses was introduced for exporters with an average annual net foreign exchange earnings of ₹ 75 crores in the preceding three licensing years of the base period.

(e) Under the Duty Exemption Scheme, Blanket Advance Licensing was introduced for manufacturer-exporters having a minimum net foreign exchange earnings of ₹ 10 crores during the preceding 3 years.

(f) The Import-Export Passbook Scheme introduced in January 1986 was withdrawn.

Evaluation of India's Export-Import Policy

The 1985 import policy was broadly welcomed by various Chambers of Commerce and Industry, business and industrial houses and leading industrialists. The policy aimed at restricting unnecessary imports, but permitted imports for encouraging indigenous production and promoting exports. The policy also intended to pursue technological upgradation through imports. The policy was aware of the need to check dumping of goods by multinationals and, therefore, gave support to the indigenous industries by selective restrictions on imports. Another welcome feature of the import policy was the fillip it gave to the small-scale and cottage industries as well as to agricultural exports, all this would help to maximise utilisation of our manpower and agricultural resources. As regards promotion of exports, the import policy contained clear cut measures to expand India's exports. The various measures were direct and positive and a general feeling was that India's import policy was clearly export-oriented.

However, critics noted some developments of a serious nature which would adversely affect our economy. They are :

(i) **Adverse effect on the growth of capital goods industry in India**—The most serious liberalisation has been attempted in the Exim Policy 1985-86 in the Capital Goods List bringing 208 items under the OGL list. Among the additions was microprocessor based equipment, machine tools, spinning machines, jute machinery etc. The impact of this wave of liberalisation is bound to be adverse. Given the limited size of the market and the problems of technology transfer and the procedural bottlenecks created by licensing, the development of capital goods industry which was never a very lucrative proposition for Indian industrialists, was made much more frightening in the wake of liberal imports of customs duty concessions.

(ii) **Import Policy likely to hit small-scale industries.** Although the statement of objectives specifically mentioned encouragement of the small-scale sector, but the measures suggested do not match with the professed aims. Rather the Government in the name of modernisation was helping big business to import labour-saving machinery. *Economic and Political Weekly* exposing double talk of the Government mentioned : "the government's pretensions of encouraging the handloom sector by controlling the textile industry are exposed by the fact that the latest in the labour-saving textile machinery, air jet and water jet looms (including shuttle-less looms) have been placed under OGL on the plea of modernisation."[4]

(iii) **Adverse effect on indigenous industry.** The new import policy was trying to over-reach its objectives of liberalisation and under pressure from multi-nationals opened areas in which indigenous industry had adequate capacity. There was certainly far reaching implications of such sweeping relaxations in imports. The Gujarat State Fertilizer Corporation (GSFC) and the Soda Ash Industry have been continuously pleading before the Government to restrict imports of caprolactum and soda ash since it would hit their interests adversely but the powerful multi-nationals forced the Government to dump these raw materials in India. This posed a problem of survival for the indigenous industry.

(iv) **Technological dumping in the name of technology upgrading**—According to RBI *Report on Currency and Finance (1989-90)*, capital goods imports increased from ₹ 3,168 crores in 1984-85 to ₹ 8,831 crores in 1989-90 i.e., they have grown at an annual growth rate of 22.8 per cent during the 5 year period. There is, therefore, a relentless drive for unfettered import of capital goods, design and drawings and technology. This is a dangerous trend from the country's point of view. Criticising this approach, the *Economic and Political Weekly* mentioned: "What is missed in this line of reasoning is that production capacities once built on imported technologies and imported capital goods have to be sustained by imported raw materials, spares and parts. The so-called "inflexible imports" are, therefore, destined to grow constantly and relentlessly." Secondly, experience has also shown that the multinationals are hardly interested in technology transfer. Rather they in the name of technological upgradation, carry on 'technological dumping' of such technologies which have been superseded in the developed countries. This, the critics argue, is far more deleterious than dumping of goods—including capital goods.

4. *Economic and Political Weekly* Vol. XVII No. 21, May 22, 1982, p. 85.

From the foregoing analysis, it becomes evident that opening the door of imports much wider would result in increasing the trade gap. Such indiscriminate liberalisation would create more dependence in terms of foreign exchange and widen the trade gap.

7. EXPORT-IMPORT POLICY (2002-2007)

Union Commerce and Industry Minister Mr. Murasoli Maran announced the EXIM policy for the 5 year period (2002-07) on March 31, 2002. The main thrust of the policy was to push India's exports aggressively by *undertaking several measures* aimed at augmenting exports of farm goods, the small scale sector, textiles, gems and jewellery, electronic hardware etc. Besides these, the policy aimed to reduce transaction cost to trade through a number of measures to bring about procedural simplifications.

The salient features of Exim policy were as under :

I. Special Economic Zones—Indian banks were allowed to set up offshore banking units (OBUs) in special Economic zones. These units would act as magnets to attract foreign direct investments. These offshore banking units would be virtually foreign branches of Indian banks, but located in India. OBUs would be exempt from cash reserve ratio (CRR), statutory liquidity ratio (SLR) and would give access to SEZ units and SEZ developers to international finance at international rates. This measure was aimed to make special Economic Zones internationally competitive.

II. Employment Oriented Measures—EXIM (2002-07) policy initiated a number of measures which would help employment orientation. Among them were the following :

(a) Agriculture—Exim policy removed all quantitative restrictions on all agricultural products except a few sensitive items like jute and onions.

(b) Cottage Sector and handicrafts—(i) An amount of ₹ 5 crores under market access initiative (MAI) were earmarked for promoting cottage sector exports coming under KVIC. The units under handicrafts could also access funds under MAI.

(ii) Under export promotion capital goods (EPCG) scheme, these units would not be required to maintain an average level of exports, while calculating export obligation.

(iii) These units would be entitled to the benefit of Export House status on achieving lower average export performance of ₹ 5 crore as against ₹ 15 crores for others; and

(iv) The units in handicraft sector would be entitled to duty-free imports of an enlarged list of items up to 3 per cent of f.o.b value of their exports.

(c) Small Scale Industry—With a view to encouraging further development of centres of economic and export excellence such as Tirpur for hosiery, woollen blankets in Panipat, woollen knitwear in Ludhiana, following benefits would be available to small-scale sector.

1. Common service providers in these areas would be entitled to the facility of Export Promotion Capital Goods (EPCG) Scheme.

2. Entitlement for Export House status at ₹ 5 crores instead of ₹ 15 crores for others.

(d) Textiles—Duty entitlement passbook (DEPB) rates for all kinds of blended fabrics permitted. Such blended fabrics were to have lower rate as applicable to different constituent fabrics.

(e) Gems and jewellery—Rough diamonds import allowed on zero custom duty basis.

III. Growth-Oriented

(a) Strategic package for status holders—The status holders would be eligible for the following facilities:

(i) 100 per cent retention of foreign exchange in exchange earners foreign currency (EEFC) account.

(b) Neutralising high fuel cost—Fuel costs to be rebated for all export products. This would enhance the cost competitiveness of our export products.

(c) Diversification of markets—The following initiatives have been taken:

Focus LAC (Latin American Countries) was launched in November 1997 in order to accelerate trade with these countries. Our exports to these countries have increased by 40 per cent. To consolidate the gains of these programmes, this was extended upto March 2003.

Focus Africa was launched in April 2002. There is a tremendous potential for trade with sub-Saharan African region. During 2000-01, Indian exports to this region accounted for US$1.8 billion and imports were $1.5 billion.

IV. Duty neutralisation instruments

(a) *Advance licence*—Duty Exemption Entitlement Certificate (DEEC) book was abolished. Redemption on the basis of shipping bills and bank realisation certificates.

Withdrawal of advance licence for annual requirement

(AAL) as problems were encountered in closure of AAL. The exporters could avail of advance licence for any value.

(b) *Duty entitlement pass book* (DEPB)—value cap exemption granted on 429 items to continue.

(c) *Export promotion capital goods* (EPCG) licences of ₹ 100 crore or more to have 12 year export obligation period with 5 year moratorium period.

Assessment of EXIM Policy (2002-07)

Mr. Murasoli Maran, the then Minister for Commerce and Industry took a number of initiatives by providing tax concessions, streamlining certain procedures and removing quantitative restrictions.

Another positive feature of the policy was have 'Focus Africa' so that Indian exports to African countries can be developed. This initiative would help Indian exporters to explore this fast growing market which has been neglected earlier.

A big initiative to permit offshore banking units (OBUs) would help to develop foreign branches of Indian banks. The move was intended to provide international finance at international rates. This would lower the cost of credit to our exporters and thus make them more competitive. This initiative, specially directed at Special Economic Zones was another healthy feature of the Exim Policy.

However, critics raised several issues which need consideration. EXIM policy intended to boost the export of agriculture. In this effort, it intended to export wheat and thus reduce the mounting bufferstocks of foodgrains reaching the astonishingly high figure of 58 million tonnes in on January 1, 2002. There are two options before the government—(i) to export these foodgrains and earn foreign exchange and (ii) to use these foodgrains in 'food for work' programme and thus create employment in public works programme. It is really very disappointing that the Food Corporation of India is selling wheat in the international market as cattle feed at throw away prices. The question arises: Why is the quality of wheat procured by FCI poor when the Government continues to raise the support price of wheat for the farmers year after year? It only speaks volumes about rampant corruption in FCI. The failure of the Central Government to persuade state governments to lift foodgrains from FCI is evident from the fact that as against an allocation of 28.55 million tonnes in 2000-01 in case of rice and wheat, the offtake was merely 11.72 million tonnes which is only 41 per cent of the allocation. This was mainly the consequence of an irrational policy fixing the issue price of foodgrains quite high. The result was that the public preferred to buy foodgrains from the open market. The Government, if it wants to increase the exports of agricultural products, should pay more attention toward improving the quality of rice and wheat procured so that it can fetch a good price in the international market.

EXIM Policy has laid great emphasis on Special Economic Zones (SEZs) which is a new incarnation of the Export Promotion Zones (EPZ) and Export-oriented Units (EOUs) promoted earlier. But the experience of the EPZ and EOUs has not been very happy. Together they account for only 12% of total exports. Too many procedural hurdles have prevented them from performing better. It would be very wise if the Special Economic Zones are not saddled with such excessive bureaucratic hurdles and are enabled to capture export markets. It may be noted the Special Economic Zones in China account for over 40 per cent of Chinese exports. India should learn to improve the performance of SEZs.

EXIM Policy made some concessions to help cottage and handicraft sector and small scale units which account for nearly 35 per cent of the country's exports. But ironically, the policy did not pay adequate attention to the most important aspect of increasing bank credit to this sector.

Table 5: Exports and Imports of Gems and Jewellery: India

US$ million

	Gross Exports (1)	*Imports (2)*	*Net Exports 3=1-2*	*3 as % of 1*
1995-96	5,275	2106	3169	60.1
1999-00	7,550	5346	2114	28.0
2000-01	7384	4838	2546	34.9
2001-02	7306	4623	2683	36.7
2002-03	9030	6063	2967	32.9
2003-04	10,573	7129	3444	32.6
2004-05	13,761	9422	4339	31.5
2005-06	15529	9134	6395	41.2
2006-07	15977	7487	8490	53.1
2007-08	19657	7975	11682	59.4
2008-09	27,955	16,554	11,401	40.8
2009-10	29,000	16,164	13,836	47.7
2010-11	40,791	31,262	9,529	23.4

Source: Computed from the data provided in Economic survey (2003-04) and (2005-06), RBI, Handbook of Statistics on the Indian Economy 2010-11. Economic Survey 2009-10.

The policy allowed import of rough diamond duty free. But if we examine the proportion of net exports of diamonds in total exports of gems and jewellery, it becomes evident that this share has declined from 60.1 percent in 1995-96 and 28 percent 1999-2000, but later on it improved again to 59.4 percent in 2007-08. In 2009-10 it was 47.7 per cent, which again fell to 23.4 percent is 2010-11. We note a decline in this proportion of net export of gems and jewellary which may be attributed to global slowdown. This underlines the fact that mere reduction of import-duty does not provide the much needed elasticity to exports.

To sum up, it may be mentioned that Commerce and Industry Ministry alone cannot create an environment to boost exports. For this purpose, it has to co-ordinate with the Ministry of Power and Transport so that the delays in handling of goods for export can be taken care of . Similarly, the Commerce Ministry has to pursuade the Ministry of Finance to allocate more resources for infrastructure development. Not only that, the Centre and State Governments must co-ordinate to fulfil the objective of increasing exports. This can be done by making our exports more competitive. This requires an improvement of technology in the export sector and the development of an efficient infrastructure.

8. FOREIGN TRADE POLICY (2004-09)

Union Commerce and Industry Minister Mr. Kamal Nath announced the Foreign Trade Policy for the 5-year period (2004-09) on 31st August 2004 which aimed at doubling India's percentage share in global merchandise trade from 0.7 per cent in 2003 to 1.5 per cent 2009. During 2003-04, India's merchandise exports were valued at $ 61.8 billion accounting for about 0.7 per cent of world's exports. If this share was to be doubled, it would imply that the country's exports would have to reach $ 195 billion by 2009, assuming a 10 per cent compound annual growth rate in world trade. For this purpose, India's exports should grow at the annual average growth rate of 26 per cent. Besides this, the service sector is also expected to increase its share in export of invisibles to over $ 100 billion. Together, the two sectors are expected to reach the target of $ 300 billion by 2009.

The objective of the Foreign Trade Policy is two-fold :

(i) To double India's percentage share of global merchandise trade from 0.7 per cent in 2003 to 1.5 per cent in 2009; and

(ii) To act as an effective instrument of economic growth by giving a thrust to employment generation, especially in semi-urban and rural areas.

Key strategies to achieve the these objectives are :

1. Unshackling of controls ;

2. Creating an atmosphere of trust and transparency;

3. Simplifying procedures and bringing down transaction costs;

4. Adopting fundamental principle that duties and levies should not be exported; and

5. Identifying and nurturing special focus areas to facilitate development of India as a global hub for manufacturing, trading and services.

Special Focus Initiatives—Sectors with significant export prospects coupled with potential for employment generation in semi-urban and rural areas have been identified as thrust sectors. These include agriculture, handicrafts, handlooms, gems and jewellery and leather and footwear sectors.

The threshold limit of designated "Towns of Export Excellence" is reduced from ₹ 1,000 crores to ₹ 250 crores in these thrust sectors.

Package for Agriculture—A new scheme called Vishesh Krishi Upaj Yojana (Special Agricultural Produce Scheme) was introduced to boost the exports of fruits, vegetables, flowers, minor forest produce and their value added products. Export of these products shall qualify for duty free credit entitlement equivalent to 5% of FOB value of exports.

Handlooms and Handicrafts—Duty free import of handlooms and handicrafts sector was increased to 5% of FOB value of exports.

Gems and Jewellery— Imports of gold of 18 carat and above shall be allowed under the replenishment scheme.

Export Promotion Scheme—A new scheme to accelerate growth of exports called "Target Plus" has been introduced. Exporters would be entitled to duty free credit based on incremental exports substantially higher than the general export target. For incremental growths of over 20 per cent, 25 per cent and 100 per cent, the duty free credit would be 5 per cent, 10 per cent and 15 per cent respectively, of FOB value of incremental exports.

Service Exports—For services export, a "Served from India" scheme as a brand instantly recognized abroad, under which individual service providers earning foreign exchange of ₹ 10 lakh would be eligible for duty free credit entitlement of 10 per cent of total foreign exchange earned by them.

Duty free Import under EPCG—Duty free import of capital goods under EPCG (Export Promotion Capital Goods) Scheme. Capital good imported under EPCG for agriculture would be permitted to be installed any where in agri export zone.

EOUs—Export Oriented Units (EOUs) shall be exempted

from service tax in proportion to their exported goods and services.

New Status Holder Categorization—A new rationalized scheme of categorization of status holders in Star Export houses has been introduced:

One Star Export House	₹ 25 crores
Two Star Export House	₹ 100 crores
Three Star Export House	₹ 500 crores
Four Star Export House	₹ 1,500 crores
Five Star Export House	₹ 5, 000 crores

Star Export Houses would be entitled to a number of privileges including fast-track clearance procedures, exemption from furnishing bank guarantees, eligibility for consideration under target plus scheme etc.

Free Trade and Warehousing Zone

(i) A new scheme to establish Free Trade and Warehousing Zone (FTWZs) was introduced to create trade related infrastructure to facilitate the import and export of goods and services with freedom to carry out trade transaction in free currency. This was aimed at making India into a global trading hub.

(ii) FDI would be permitted up to 100% in the development and establishment of the zones and their infrastructure facilities.

(iii) Each zone would have minimum outlay of ₹ 100 crores and five lakh sq.mt. built up area.

(iv) Units in FTWZs would qualify for all other benefits as applicable for SEZ units.

Import of Second-hand Capital Goods

Import of second-hand capital goods would be permitted without any age restriction.

Bio-technology Parks—Bio-technology parks to be set up which would be granted all facilities of 100 % EOUs.

Assessment of Foreign Trade Policy (2004-09)

Commerce Minsiter Kamal Nath by announcing the new Foreign Trade Policy (2004-09) intended to achieve two objectives simultaneously, that is, to double India's share in world exports from 0.7 per cent in 2003-04 to 1.5 per in 2008-09 as also to give a big thrust to employment generation, especially in semi-urban and rural areas. In that sense, the Foreign Trade Policy is in tune with the objectives laid down in the Common Minimum Programme. A basic feature of the FTP is that instead of emphasizing only removal of quantitative restrictions, it moved away from it and concentrated on initiating measures to promote exports in thrust areas identified by it. The main thrust areas were: Agriculture, handicrafts, handlooms, gems and jewellery and leather and footwear sectors. Since these areas were dominated by small and medium enterprises (SMEs), the thrust provided to SMEs was likely to boost exports as well as generate more employment. In this sense, the policy direction was very meaningful since it reached out to a much larger number of smaller business units and smaller business houses rather than merely concentrating on large five star export houses.

By rationalizing star export houses from one star to five star export houses, it aimed to "bestow status on a large number of hitherto unrecognized small exporters." Moreover, it shall provide an incentive for the small exporter to graduate from low category of star export house to the position of a higher star export house. The incentives will help the smaller entities to rise up on the ladder. The diversification and extension of outreach to a larger number of units is a welcome initiative.

Similarly, the lower threshold of designated towns of excellence from ₹ 1,000 crores should also be seen as part of this noble effort to include a larger number of towns in export promotion. Mr. Gopal K. Pillai, Director General of Foreign Trade in this connection rightly stated: "Reduction in the cost of developing towns of excellence from ₹ 1,000 crores to ₹ 250 crores, as proposed in the policy, is sufficient for improving the amenities in a town engaged exclusively in exports such as knitwear in Tirpur." The main purpose is to enlarge the spread of export centres.

Since the FTP intends to treble service exports, a number of welcome initiatives have been proposed. To build a brand equity "Served from India" is a unique step to push forward India's image in foreign markets. Secondly, the setting up of Services Export Promotion Council to deal with the problems of services in developing market access as also brand building can go a long way, if pushed forward with zeal and vigour.

The 'Target Plus Scheme' provides incentives on the basis of the performance of the exporter. The simple principle followed is: Higher the performance, higher is the duty-free credit entitlement. Such incentivization does bring about a competitive spirit to improve performance in the export sector by Indian players.

Another vital initiative was to exempt all goods and services exported from service tax. This is in line with the fundamental principle that duties and levies should not be exported. In other words, it improves the competitive strength of the Indian exporter in the international market.

Another initiative taken was to establish Free Trade and Warehousing Zone (FTWZ) to improve infrastructure in the foreign trade sector. The policy permited 100% FDI (Foreign Direct Investment) in the development and establishment of zones and their infrastructural facilities. Some critics have argued that in China, FDI accounts for nearly 50 per cent of China's manufacturing export, whereas in India, it is only 8 per cent. It may be pointed out that FDI can help us to develop world class infrastructure, but if adequate FDI flows are not forthcoming, India should undertake investment in infrastructure on its own strength. Once India is able to prove its credentials in foreign trade, more FDI inflows will start.

Another issue which needed to be paid attention was to reduce the transaction cost, more so when the aim is to enthuse SMEs whose margins are not very high. The exemption from furnishing bank guarantee by exporters with minimum turnover of ₹ 5 crores, raising the validity of all licences and entitlements to a uniform 24 months and removal of service tax on all goods and services exports are all intended to reduce transaction cost.

Last, but not the least, it may be said that while the policy initiatives are designed with good intentions and are steps in the right direction, the pace of success of FTP will depend on the quality of implementation. Bureaucracy is known for putting spokes in the wheel of implementation and the major task of the government is to facilitate the SMEs and other major exporters to achieve the challenging goal set by the new FTP to achieve merchandise export target of $ 195 billion and together with service sector, to earn $ 300 billion in terms of foreign exchange by 2009. It is really very courageous of the Commerce and Industry Minister to fix such a high target which requires more than 25 per cent annual average growth rate in exports. Since export growth is also conditioned by exogenous factors operating in the world trade, the achievement of the target may be made more difficult despite our best intentions. But all honour to those who try.

During 2007-08, out exports reached a level of US $ 155 billion which is a creditable achievement. However, correspondingly our imports reached a level of $ 236 billion, widening the trade deficit to an improcedented high level of $ 81 billion which cannot be wiped out by surplus on the invisibles. Consequently, current account balance will become negative with a larger magnitude. Obviously, our foreign trade policy is one-legged since it emphasizes expansion of exports only, but remains oblivious of the need of imports. Ultimately, India must, reach the stage of positive trade balance, rather than develop an economy with burgeoning trade deficit.

9. AN ANALYSIS OF TRENDS IN EXPORTS AND IMPORTS

Impact of Unit Value Index/Quantum Index

It would be of interest to examine the effect of unit value index and/or unit quantity index in boosting up imports. To the extent, the value of imports increases due to an increase in the unit value, it implies only a monetary burden without any corresponding increase in quantity of goods received.

Table 6 gives the Unit Value Index and Quantum Index for imports and exports for the period 1980-81 to 2007-08. We have selected the period 1980-81 to 1990-91 as the pre-reform decade and the 17 year period 1990-91 to 2007-08 as the post-reform period for the purpose of our analysis.

On the export front, unit value index increased from 109 to 293 during 1980-81 to 1990-91 signifying a growth of 10.4% per annum and the quantum index showed on annual growth rate of 6%. This implies that gross realizations from exports were influenced more by increase of international prices as compared with the growth rate of volume. The situation changed in the post-reform period (1990-91 to 2006-07), during which average annual growth of unit value showed a growth rate of 6.6 percent, but the quantum index increased from 194 to 1227 signifying an annual growth of 11.2 percent. This implies that total earnings from exports were dominated more by growth in volume as compared to rise in Unit Value in the post-reform period.

On the import front, during1980-81 to 1990-91, unit value index increased from 134 to 268 signifying an annual growth rate of 7.2 percent, but Quantum index rose from 138 to 238 indicating an annual average growth rate of 5.6 percent. This implies that relatively speaking, total earning from imports during the pre-reform period were influenced less by increase in volume and more by rise in unit value realizations. However, during the 17-year period (1990-91 to 2007-08) in the post-reform period, unit value index of imports increased from 268 to 575, indicating an annual average growth rate of 4.6 percent, but as against it, there was a relatively sharper increase in quantum index from 238 to 2603, indicating annual average increase of 15.1 percent in volume. This implies that the burden of imports was more due to increase in volume and less due to increase in unit value.

The situation, however, varied among the sub-sectors. For instance, in Mineral fuel imports both in unit value and volume, the burden was quite high in the post-reform period. Despite rising international prices, at an annual growth rate of unit value by 12.1 percent, imports of mineral oils in volume increased at an annual average of 7.8 percent, due to rising demand for petroleum.

On the export front, during the post-reform period mineral fuels, especially coal and cokes, experienced a very high increase in average unit value by 14.5 as well as in volume by 15.8 percent per annum. In its effort to increase export, the country recklessly exported coke and coal - an exhaustible natural resource.

The country increased its import of Machinery and Transport Equipment in the post-reform to step up the industrialization of economy by nearly 1903 percent in the 17 year period (1990-91 to 2007-08) - average annual increase by 18.9 percent. On the export side, the country was able to increase the export of machinery and transport equipment by about 1063 percent during the 17 year period indicating annual average increase by 14.9 percent.

A commendable achievement on the export front was the 'increase' in the quantum export chemicals by 102 percent in the post-reform period - an average annual increase by 14.6 percent.

Table 7 gives three indices of terms of trade. The table indicates that the net terms of trade were unfavourable to India during 1975-76 to 1980-81, the income terms of trade index showed that the capacity of the economy to import was relatively less since the index of net terms of trade was less than 100, but after 1980-81, the income terms of trade showed a distinctly favourable trend and its index reached the high mark 2003 in 2007-08.

Table 6: Index Numbers of Exports and Imports (1978-79=100)

	Unit Value Index				*Quantum Index*			
	1980-81	*1990-91*	*2000-01*	*2007-08*	*1980-81*	*1990-91*	*2000-01*	*2007-08*
IMPORTS								
Total General	134	268	487	575	138	238	698	2603
a. Food	115	141	483	609	478	297	277	905
b. Raw materials	135	308	588	1200	1073	228	383	575
c. Mineral fuels	240	383	1077	2684	693	182	442	706
d. Manufactured goods	90	311	727	989	734	187	366	737
e. Machinery & Transport Equipment	96	188	289	254	6261	441	1076	8395
f. Chemicals	145	280	560	852	1082	240	446	1161
EXPORTS								
Total General	109	293	624	939	1064	194	571	1227
a. Food	103	226	524	614	515	138	304	605
b. Raw Materials	108	261	642	1620	652	236	229	605
c. Mineral fuels	183	246	1063	2442	18801	1,988	4277	23941
d. Manufactured goods	118	378	700	1019	699	138	484	754
e. Machinery & Transport Equipment	102	201	425	585	2789	311	960	3309
f. Chemical	119	232	534	579	7436	681	2608	6947
TERMS OF TRADE*	81	109	140	163				

Source: Reserve Bank of India, Handbook of Statistics on Indian Economy (2008-09)

*Terms of Trade = Unit value of Exports/Unit Value of Imports *100

Table 6A: Index Numbers of Exports and Imports (1999-2000=100)

	Unit Value Index		*Quantum Index*	
	2000-01	*2009-10*	*2000-01*	*2009-10*
IMPORT				
Total General	109	215	99	288
a. Food	99	267	64	213
b. Raw materials	100	200	103	262
c. Mineral fuels	127	381	103	196
d. Manufactured goods	102	185	96	234
e. Machinery & Transport Equipment	101	148	113	549
f. Chemicals	103	161	79	336
EXPORT				
Total General	102	196	125	264
a. Food	108	191	107	157
b. Raw materials	103	411	123	241
c. Mineral fuels	121	358	1856	9820
d. Manufactured goods	100	157	117	204
e. Machinery & Transport Equipment	99	209	148	463
f. Chemicals	101	163	123	329

Source: Reserve Bank of India, Handbook of Statistics on Indian Economy (2010-11)

TABLE 7. Index Numbers of Foreign Trade
(Base 1978-79 = 100)

Year	Unit Value Index		Volume Index		Terms of Trade		
	Exports	Imports	Exports	Imports	Gross	Net	Income
1	2	3	4	5	6	7	8
1970-71	45	35.3	59	67.2	113.9	127.5	75.2
1980-81	108.5	134.2	108.1	137.9	127.6	80.8	87.4
1990-91	292.5	267.7	194.1	237.7	122.5	109.3	212.1
2000-01	624	487	571	698	122.2	128.1	731.6
2001-02	618	493	593	733	123.6	125.4	743.4
2002-03	620	546	722	802	111.1	113.6	819.9
2003-04	672	545	765	970	126.8	123.3	943.3
2004-05	732	663	899	1113	123.8	110.4	992.6
2005-06	798	592	1005	1649	164.1	134.8	1354.7
2006-07	863	608	1164	2047	175.9	141.9	1652.2
2007-08	939	575	1227	2603	212.1	163.3	2003.7
2008-09*	194.0	239.0	267.0	262.0	98.0	81.0	216.7
2009-10*	196	215	264	288	109	91	240

Note :

1. Gross Terms of Trade $= \frac{\text{Volume Index of Imports}}{\text{Volume Index of Exports}} \times 100$ (qm/qx × 100)

2. Net Terms of Traade $= \frac{\text{Unit value index of exports}}{\text{Unit value index of Imports}} \times 100$ (px/pm × 100)

3. Income Terms of Trade = Net Terms of Trade × Volume Index of Exports

$$= \frac{px}{pm} \times qx \times 100$$

Source: Directorate General of Commercial Intelligence and Statistics, Government of India.

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* Base 1999-2000

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CHAPTER

46

SPECIAL ECONOMIC ZONES

"There are concerns that SEZs primarily focus on real estate, that there is a lack of a level playing field between manufacturing units within SEZs and those in the Domestic Tariff Area, and that there can be large loss of revenue on account of tax concessions for exports of goods and services that are already being exported without such concessions. These concerns would need to be addressed and where necessary adequate safeguards put in place."

—Planning Commission, An *Approach to the 11th Five Year Plan* (2006)

1. SPECIAL ECONOMIC ZONES (SEZs) — AN OVERVIEW

Special Economic Zones (SEZs) denote geographic areas which enjoy special privileges as compared with non-SEZ areas in the country. The main motivating force for setting up SEZs came from the Ministry of Commerce with a view to boost exports by attracting both Indian and foreign corporates to undertake investment in these areas. Earlier Export Processing Zones are now also being converted into Special Economic Zones. Accordingly, the Government has converted Export Processing Zones (EPZ) located at Kandla and Surat (Gujarat), Santa Cruz Mumbai (Maharashtra), Falta (West Bengal), Chennai (Tamil Nadu), Vishakhapatnam (Andhra Pradesh) and NOIDA (Uttar Pradesh) into SEZs.

Objectives of Setting up SEZ

The main argument to establish SEZ is to promote exports by concentrating resources in some pockets (designated as SEZs). The policy was introduced in April 2000 to provide internationally competitive and hassle-free environment for exports. The units may be set up to manufacture goods or render services. The unit in the SEZ area has to be a net foreign exchange earner, but no conditionality has been imposed to export a specified proportion of the output.

SEZ can be set up in the public sector, private sector or joint sector or even by state governments in collaboration with any corporate.

Special Privileges for SEZs

SEZs are duty-free enclaves of development and are deemed as foreign territories for purpose of trade, duties and tariffs. The policy offers several fiscal and regulatory incentives to developers of the SEZ as well as to the units within these zones.

Corporations in SEZ will not have to pay any income tax on their profits for the first 5 years and only 50% of the tax for two years thereafter. The concession of paying only 50% of the tax can be extended for another three years if half of the profit is reinvested in the corporation. Besides income tax benefit

units in SEZ shall be exempted from a host of other taxes and duties like customs duty, excise duty, service tax, Value Added Tax (VAT), dividend tax etc.

For SEZ developers, all raw materials from cement to steel to electrical parts shall be exempt from any tax/duty. All imports for developing SEZs shall be exempt from any customs duties.

For SEZs, the Government will acquire vast tracts of land and provide it to the corporations or developers. A basic condition is that 25% of the area of SEZ must be used for export related activities and the remaining 75% of the area can be used for economic and social infrastructure. All the benefits and concessions of SEZ can be availed of for the whole area.

The list of authorized operations includes roads, housing apartments, convention centres, cafeterias and restaurants, airconditioning, telecom and other communication facilities and recreational facilities.

Sector-specific SEZs will be allowed to have additional operations including hotels, schools and educational & technical institutes. Multi-product SEZs will also be allowed to have ports, airports and golf-courses.

Sector-specific developers of SEZs will be allowed to have 7,500 houses, hotels with a total of 100 rooms, a 25-bed hospital and schools and other educational institutions and a multiplex up to 50,000 sq. meters. Multi-product SEZs will be allowed to build 25,000 houses, a 250 room hotel and a hospital with 100 beds and a multiplex of 2,00,000 sq. metres.

For sector specific SEZs, the applicant's net worth has to be a minimum of Rs 50 crores while the minimum investment criterion is Rs 250 crores. To qualify for developing a multi-product SEZ, the net worth has to be at least ' 250 crores and the minimum investment in the project ' 1,000 crores. For applying for IT SEZs, net worth of applicant has to be Rs 100 crores.

SEZs would be exempt from the application of labour laws so that they can attract entrepreneurs to set up industrial units. Thus, Labour Commissioners will have no jurisdiction to inspect SEZs, even to implement safety and environmental norms in these units. All industrial units and other establishments in SEZ shall be declared "Public Utility Service" in which any strike shall be illegal. This implies that SEZs will not comply with the provisions of the Industrial Disputes Act, 1947. They will, however, have the freedom to employ contract labour to any extent. The Contract Labour (Regulation & Abolition) Act is also proposed to be amended to include certain peripheral activities.

SEZ Policy Motivated by the Chinese Experience

China established in 1980 special economic zones (SEZ) in 14 coastal cities. The main purpose was to provide a dual role for SEZs to act as "Windows" in developing the foreign-oriented economy, thus, generating foreign exchange by boosting exports and importing advanced technologies. Consequently, SEZs became "radiators" in accelerating economic development. In these zones, to attract foreign investment, custom duties and income tax were eliminated. This helped China to improve the coastal regions and thus accelerate the development of these regions. The policy helped to attract foreign-funded enterprises to invest over $30 billion in China and over 5,000 domestic enterprises from all over the country to invest about 20 billion Yuan in SEZ regions. As a result, six pillar industries took firm roots in China. They are: automobiles and spare parts and components, micro-electronics and computers, household electrical appliances, bio-medicines and optical, mechanical and electrical products.

However, the rapid growth of coastal regions of China did not get transmitted to the provinces of hinterland. As a consequence, a divide has emerged between the rich and affluent coastal regions and the poor regions of the hinterland in China. In other words, instead of developing growth with equity, China promoted growth with inequity and disparities between the rich and the backward region widened. Neither did the benefits of urban development percolate to the rural areas. The Government of China has realized its mistake of promoting exclusive growth of coastal areas and thus, the Eleventh Five Year Plan of China beginning from 2006 has set as its major goal: balancing urban and rural development and development among regions. On March 5, 2006, Wen Jiabao, Premier of the State Council, set forth the following major tasks of the 11th Plan: to implement a policy of getting industry to support agriculture and cities to the countryside so as to bring about a rapid and significant change in the overall appearance of the countryside. Secondly, while carrying forward the development of western region, China will implement the strategy of rejuvenating north-east China and the Central region. In nutshell, developed regions should assist and stimulate the development of under-developed regions. This is an admission of the weaknesses of following the policies of exclusive development with special economic zones.

Present State of SEZ and Future Programmes

The Government has so far approved a total 584 SEZs. Statewise and sector wise number special Economic zones approved and notified are depicted in Table 1A or 1B.

During 2004-05, the total exports from the Special Economic Zones were of the order of ` 17,729 crores. This works out to be 4.9% of the country's total exports (` 3,61,879 crores). By 2009-10 they increased to ` 2,20,711 crores, which constitutes about 26.1 percent of total exports

Lured by the heavy incentives, a large number of industrial houses and developers – Indian as well as foreign – are pushing their applications to the state governments to approve new proposals, but the sharp apprehensions and the critique of SEZ policy has forced government to do some rethinking on the issue.

Table: 1A SEZ State Wise Distribution

State	*Formal approval*	*In-principle approvals*	*Notified SEZs*
Andhra Pradesh	109	5	75
Chandigarh	2	0	2
Chattisgarh	2	1	0
Delhi	3	0	0
Dadra & Nagar Haveli	3	0	1
Goa	7	0	3
Gujarat	45	5	29
Haryana	46	3	35
Himachal Pradesh	0	0	0
Jharkhand	1	0	1
Karnataka	57	1	36
Kerala	28	0	20
Madhya Pradesh	15	2	6
Maharashtra	104	14	63
Nagaland	2	0	1
Orissa	11	0	6
Pondicherry	1	1	1
Punjab	8	0	2
Rajasthan	10	1	9
Tamil Nadu	71	5	57
Uttar Pradesh	34	1	21
Uttarakhand	2	0	2
West Bengal	23	3	12
Grand Total	**584**	**42**	**381**

Table : 1B SEZ Sector Wise Distribution

Sectors	*Formal approvals*	*In-principal approvals*	*Notified SEZs*
Agro	6	2	4
Airport based multiproduct	3	0	0
Auto and related	3	1	1
Aviation/Aerospace	3	1	2
Beach & mineral/metals	2	0	2
Bio-tech	33	0	19
Building product/material	1	2	1
Electronic prod/ind	3	0	3
Engineering	21	1	16
Food Processing	5	0	4
Footwear/Leather	7	0	5
FTWZ	11	4	6
Gems and Jewellery	13	3	7
Granite processing Industries and other allied machinery/manufacturing	1	0	1
Handicrafts	4	0	2
IT/ITES/Electronic Hardware/Semiconductor	353	1	236
Metal/Stain. Steel/Alum/Foundary	10	2	5
Metallurgical Engineering	1	0	0
Multi-Product	24	14	15
Multi-Services/Services	16	3	8
Non-Conventional Energy	5	0	5
Petrochemicals & petro.	4	0	2
Pharma/chemicals	23	3	20
Plastic processing	0	2	0
Port-based multi-product	8	0	2
Power/alternate energy/solar	3	1	1
Strategic Manufacturing	0	1	0
Textiles/Apparel/Wool	19	1	12
Writing and printing paper mills	2	0	1
GRAND TOTAL	**584**	**42**	**381**

Wise Distribution

In-principle approvals	*Notified SEZs.*
5	75
0	2
1	0
0	0
0	1
0	3
5	29
3	35
0	0
0	1
1	36
0	20
2	6
14	63
0	1
0	6
1	0
0	2
1	9
5	57
1	21
0	2
3	12
42	**381**

rincipal pprovals	*Notified SEZs*
2	[illegible]
0	0
1	1
1	2
0	2
0	19
2	1
0	3
1	16
0	4
0	5
4	6
3	7
0	1
0	2
1	23
2	5
0	1
14	15
3	8
0	5
0	2
3	20
2	0
0	2
1	1
1	[illegible]
1	12
0	[illegible]
42	**381**

Critique of SEZ Policy

The critique of SEZ policy has emerged from within the UPA government as well as from the left parties and even independent sources. It would be relevant to review the debate going on.

Firstly, the Finance Minister Mr. P. Chidambaram, disagreed with the Commerce Minister on issues of key concessions, land use and the future of existing export-oriented units. A study made by the National Institute of Public Finance and Policy (NIPFP) found that the government will lose Rs 97,000 crores in tax revenues during 2005-10 as a consequence of the tax concessions to SEZ units. This works out to be an annual average loss of Rs 19,400 crores to the state exchequer. The IMF Chief economist estimates that the loss of revenue to the public exchequer will be of the order of Rs 1,75,000 crores. These figures are being quoted by the Left that the SEZ policy needs a review because it is bound to add to fiscal deficit whereas the Finance Minister was making efforts to reduce the budget deficit every year. The Reserve Bank of India has also expressed its reservations about it. The basic question is: shall these tax concessions bring about any dramatic change in giving an impetus to the export growth? The fact that the SEZ projects in 2004-05 were able to provide exports barely to the tune of Rs 17,729 crores (4.9 percent of the total exports) indicates the capacity of these units to accelerate exports. In contrast, the small scale sector provided exports of the order of ` 1,24,416 crores during 2004-05 or 34.4 percent of the total exports. The question which the nation must decide is: should it promote the SME sector which has much greater potential or the SEZ units which contribute relatively much less in terms of foreign exchange earnings? Although Mr. Chidambaram is being dubbed as a conservative vis-à-vis the reformist but there is much more sense in his point of view. Mr. Narendar Pani observes in this connection: "The FM knows that he will be in trouble if the economy as a whole does not do well, while the Commerce Minister concerns are only with export-oriented industries that are expected to benefit from SEZs." (Narender Pani, SEZs as a Chinese Puzzle, *Economic Times*, September 22, 2006). The basic issue is that the assumption of closer links between sectors benefiting from globalisation and the rest of the economy has not been validated by international experience.

The second issue pertains to acquiring huge tracts of prime agricultural land for SEZ units. For instance, the UP Government had given a corporate house 2,500 acres of land in Dadri to set up a power plant which required only [illegible] acres. Similarly, West Bengal Chief Minister has handed over prime agricultural land for the Tata Small Car manufacturing unit at Singur. This land was capable of producing three crops a year. Moreover, acquisition of land is done at prices determined by the Government and not market prices which is the legitimate right of the farmers. Obviously, this was being done to feed rich industrial houses and developers at the cost of poor farmers. Congress President Mrs. Sonia Gandhi felt seriously disturbed about the way things were going on. She laid down the following guidelines for Congress-ruled states on 23rd September 2006.

"Prime agricultural land should not normally be diverted to non-agricultural uses. Industry requires land. But this must be done without jeopardizing agricultural prospects."

She added "farmers must be compensated well for their land, rehabilitation policies must be strengthened to reassure displaced people, and farmers could perhaps be given a stake in projects set up on land acquired from them."

Following, the indictment of SEZ policy by the Congress President, whereas the Left felt that its stand was vindicated, ministers within the UPA were keen to do a U-turn and declare that they were already following these guidelines. On September 25, 2006, Commerce Minister Mr. Kamal Nath announced that "the Board of Approval for SEZ has made it mandatory that no proposal for setting up SEZs on prime agricultural land be cleared." The Agriculture Minister, Mr. Sharad Pawar, said: "The government's idea of acquiring land at government rates was not good. The concept of economic development by putting the farmers out on the streets is not welcome." Pawar expressed his unhappiness about the policy of state governments deciding the price at which farmers sell land to private companies. "Actually it should be between the industrialists and the farmers. If at all the government is involved, then it should ensure that the farmers get the rightful compensations and also some share (at least 12.5 percent) of the developed land."

Mrs. Sonia Gandhi's guidelines produced an electrifying effect and the UPA ministers started singing a different tune on the policy of protecting the interests of farmers.

Thirdly, a related question is about the land use. To stipulate only 25 percent land for export-related industrial purpose and the rest for infrastructure, housing, parks, golf-courses appears to be totally unjustified. Moreover, to suggest the construction of 25,000 housing units in a multi-product SEZ implies that instead of boosting manufacturing and rendering services for exports, the developers will be given total freedom to make enormous profits from housing. It would, therefore, be proper to lay down norms of land use and insist that at least 50% land in a SEZ will be used for industrial production, 25% for related infrastructure and only 25% is made available for other facilities like schools, a hospital, a housing complex

for workers employed in SEZ and recreational facilities.

Fourthly, the question of exemption from labour laws is another vital issue. In order to attract industrialists – Indian as well as foreign, state governments are overbending to promise SEZs from exemption of labour laws. What does this imply?

This implies that state Labour Commissioners have no jurisdiction over factories in SEZs. The power of the Labour Commissioner will be transferred to the Development Commissioner and the Labour Commissioner will be required to take permission from the Development Commissioner to enter SEZ, even for inspection of 'safety and environmental norms within the factory.'

Mr. Mahesh C. Agarwal, Chairman – Managing Director of Brijbasi Hi-tech Group, in his article states in a very forthright manner: "So workers are completely at the mercy of the factory owners in the SEZs, and they either have to accept the inhuman and fascist conditions prevailing therein or lose their livelihood. The working conditions in the units set up in the SEZs are appalling, as expected , and there is often no restriction even on the length of the working day." (*Sar Economist*, September 2006, p.40)

But the irony is that the Left parties, which earlier had an uncompromising stand on the application of labour laws vis-à-vis the Government, are also having second thoughts on this question. Indications to this effect were noted in an article titled "Marxism and Left Front government's efforts of Industrialization" published recently in the party organ *Desh Hitaishai* by Benoy Kumar, a member of the CPM Central Committee, where he argues: Bengal alone cannot afford to refuse the abolition of labour laws. If it does so, industries will come up in other states, thereby adversely affecting the interests of the working class. "If states like Maharashtra, Gujarat, Karnataka and Tamil Nadu announce that they will abolish labour laws as desired by the Centre and if the working class there fails to resist such a move, what will our state government do? If we insist on maintaining labour laws in our SEZs, there will be no industries here." (*Hindustan Times*, September 19, 2006).

The attitude of both the Centre and the State Governments on the application of labour laws is very questionable. The blame game is no use, the states putting the responsibility on the Centre and vice versa. The real issue is: When SEZs are provided land by the Government at below the market rate, they are provided exemption from a host of taxes, customs duty, excise duty, service tax, VAT etc., are these not sufficient incentives for them as against non-SEZ industrial units, then what is the justification of providing exemption from labour laws. Giving the industrialists power to exploit the workers and force them to work in inhuman conditions shall be violation of Article 38(1) of our Constitution which states: "The State shall strive to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life." Should the state forget its duties to provide citizens the 'right to work' and ensuring a 'decent standard of life' and full enjoyment of leisure?

Lastly, the country will be divided into two separate groups – SEZ and non-SEZ areas. Experience of locational preference with huge relative reduction in taxes and duties as also cost reduction on account of exemption of labour laws shall prompt industrial units to shift from non-SEZ to SEZ areas. This implies that net additions to total investment will be less than the projected level by the advocates of SEZ.

To conclude: There is a need to have a reconsideration of SEZ approach to industrialization and export promotion. The Finance Minister and the Reserve Bank of India do not see any justification in having a system of differential taxation in SEZ and non-SEZ areas causing an erosion of tax revenues ranging from Rs 1,00,000 crores to Rs 1,75,000 crores according to different estimates. Moreover, the earlier policy of exempting tax revenues if new industrial units in the hinterland are set up to mitigate the additional costs required was justified. But most of the SEZ units are planned around the metropolitan towns. For instance, Reliance wants to set up Mahi Mumbai SEZ, the second largest SEZ in the world – after Shenzhen in China – spread over an area of 35,000 acres. Nearly 100 villages covering 1.5 lakh families face eviction in view of the notices served by the Maharashtra Government. A government official admitted: "The entire region is the states' rice bowl. Almost every family in these villages cultivates paddy though majority of them are small and marginal farmers making land acquiring process more complicated." (Report in *Economic Times*, 2nd October 2006). Reliance has also proposed another multi-product SEZ in Haryana spread over 25,000 acres. Similar proposals of setting up SEZs in the vicinity of major metropolitan towns are also under consideration of state governments. Why should the government subsidise the big business houses – both Indian and foreign – at the cost of the farmers is the moot question.

Earlier the poor villagers have been suffering due to big power dams and Narbada Bachao Andolan (NBA) took up the cause of their rehabilitation. Social reformers have now taken up the cause of displacement of poor farmers by providing very low rates of compensation for acquiring their land. For instance, Jagatsinghpur steel project by POSCO has already been allotted 1,100 acres of agricultural land for Rs 25,000 per acre falling within the fertile delta

of Mahanadi by the Government of Orissa. This is a very low rate of compensation for the ousted farmers.

Moreover, the experience of China suggests that the Chinese hinterland is still lagging, now even more so against the glamorous coastal regions. The Chinese have, therefore, decided to have a course correction in Eleventh Five Year Plan.

While in the Approach Paper of the 11th Five Year Plan, India set up as its primary goal "Towards Faster and More Inclusive Growth," in practice through the policy on SEZ we are setting up "iniquitous enclaves" of development which will result in "exclusive growth." Bringing out the flaws in SEZ Policy, *Business Line* in its editorial states: "The history of discrete or locational tax exemptions suggests a shift in investments not an addition; firms tend to move productive capacities to low-tax regions instead of adding fresh investments.... But even if that were not the case, the SEZ concept is still faulty because it creates opportunities for the few.... Historically, the export processing zones have been poor exporters and even poorer foreign exchange earners compared to domestic tariff area; now, the SEZs are required to perform even less in terms of forex earning while being given more, precisely at a time when the overall economy with all its constraints and bottlenecks is performing excellently." (*Business Line* editorial, September 26, 2006 titled Iniquitous Enclaves). On the one hand, India intends to emerge as a first-rate super-economic power by 2020, but on the other hand, it will have third-rate labour with deteriorating economic conditions with no income security or employment security or social security in SEZs which are destined to become industrial enclaves with super-profits. Does this all match with our concept of so-called inclusive growth? Whereas the ILO has set 'decent work' as their goal, we are generating forces which lead to 'indecent work' as their goal. It may be noted that the Second National Commission on Labour in its Report (2002) clearly stated that it was not in favour of granting any exemption from labour laws in respect of establishments in export promotion zones or special economic zones.

Mr. Rahul Bajaj, Chairman, Bajaj Auto Ltd. criticizing the SEZ policy mentions: "I believe that on the balance the SEZ Act and rules currently in force may not ensure that the nation would gain significantly. As they stand, they are possibly providing incentives to units in SEZs disproportionate to the incremental benefits that may accrue to the nation." (Some straight talk on SEZs, *Economic Times*, October 4, 2006). There is a need to impose stiffer obligations on SEZs so as to justify the incentives. "with a stiffer export obligation of 60-75% of production, 60-75% reservation of land for production units and logical and fairer land acquisition process, SEZs may serve the ends that they should serve."

2. SOME RECENT DEVELOPMENT IN THE EVOLUTION OF SEZ POLICY

Following clashes in Nandigram and Singur in West Bengal, the issue of developing a new SEZ Policy was referred to the Central Government. On the recommendations of a Group of Ministers, the Government has, as a first initiative laid down two conditions:

Firstly, the Government has prescribed a ceiling of 5,000 hectare for any SEZ proposal. State Governments may, however, prescribe lower ceiling.

Secondly, a minimum of 50 percent of the land has been set as minimum processing area.

But other issues have not yet been resolved. In the meanwhile, opposition to acquire land spread to Orissa, where a giant project like the POSCO mines and steel is under implementation. Even resistance by farmers developed in the Mukesh Ambani's Navi Mumbai SEZ. Not only that, in Haryana, the farmers are demanding higher compensation for acquiring land and also a strong and meaningful Resettlement and Rehabilitation Policy for those whose livelihood would be affected.

In India, so far 257 SEZ proposals have been formally approved by the Department. Of these, 63 have been notified . Decision on Mukesh Ambani's Navi Mumbai Zone has been deferred.

The major charges levelled by the resistance movement to SEZ are :

First, driven by private investment decision, it has no limits other than profit perception. It is, therefore, necessary to reconsider the meaning of public purpose so as to expand the notion of "public purpose" to include infrastructure and public facilities.

The State must evolve new norms of compensation for an expanded list of affected persons, which should include owners of land and also tenant cultivators who are the principal producers in agriculture.

The basic issue is to further the interests of the society by promoting the process of industrialization, and also ensure fairplay to the seller (the farmers) and other stakeholders like tenants whose livelihood would be threatened. Mr. Ashok Upadhyay poses the problem in the right perspective when he asserts: In India, the economic miracle has engendered a dramatic reversal of factor supply, "capital is available on tap; land is not, in any case not for the requirements of the next wave of economic

growth. Unless it can reconcile conflicting interests over land acquisition consensually and transparently, New Delhi must expect more clashes such as those at Nandigram and Kalinganagar and Pune.: (*Business Line*, Has development landed India in a crisis?, May 18, 2007)

The Government is working on a proposal under which people giving up their land could get 20 percent of rehabilitation grant in the form of shares of companies for which land has been acquired. Besides this, preference in handing out the contracts from the units, in shops and wage employment will be given to affected persons.

Secondly, the applicability of Resettlement and Rehabilitation (R&R) Policy is to be enlarged to include all cases of involuntary displacement – not merely those hit by projects displacement but also those losing houses, livelihood and adversely affected otherwise.

Thirdly, the proposed Land Acquisition Amendment Bill should redefine public purpose to include strategic purposes relating to navy, military and airforce and any other work vital to the State. This would cover public infrastructure such as electricity, communication, mining, water supply and public facilities.

Fourthly, it also proposed to have public purpose include cases of "persons" (meaning any company or association or body of individuals, whether incorporated or not) where land is required for purposes "useful for the general public."

There can be controversy over the last category "useful for the general public," because the Government has lot of discretion and it can declare any undertaking to qualify for SEZ under IT. However, there is no final word on it as yet as the debate is going on and the Government has to make up its mind about the various criteria for determining public purpose.

There are some basic differences between China and India on the development of SEZs. Firstly, China set up its first SEZs in 1980 and thereafter developed a total of only 5 SEZs and all were promoted by the Government. In India, out of 234 SEZ, none of those who have been formally approved is to be developed by the Government. This has given a strong feeling that Government is pandering to the interests of big private sector companies and developers by announcing a very large number of tax concessions and also declaring SEZs as foreign territory for non-applicability of labour laws, it is not advisable to give foreign territory status to SEZ units.

Secondly, the SEZs were established at strategic locations in China where they were close to ports or major industrial locations, so that they could fulfil the objective of promoting exports. But in India, SEZs have been sanctioned in a very large number of locations and without a focused purpose. Consequently, people have doubts over the real intent behind SEZ.

Thirdly, over-enthusiasm shown by the Government to permit SEZ in a variety of products and forced large acquisition of land to be transferred to big business, Indian as well as foreign, resulted n the creation of mistrust about the intentions of the Government. People were not convinced that there would be large scale employment generation in SEZ area. Rather the perception that got strengthened was that the creation of SEZ units will imply greater loss of jobs and livelihood for the poor and relatively much smaller increase of jobs. In other words, the net employment effect of SEZ was perceived as negative.

To sum up: India has been carrying forward the process of industrialization since the Second Five Year Plan started in 1956. Big industrial units were established in steel, fertilizers, shipbuilding, aircraft manufacture and several other basic and heavy industries related to infrastructure, and large tracts of land were acquired. But Government had established a relation of trust and thus the process moved on smoothly, because it was motivated by 'public purpose'. Moreover, for industrial units to be established in backward areas, Government provided incentives and tax concessions. Consequently, there was enthusiasm about industrialization of the country. Private sector also got strengthened to set up units, once basic infrastructure was made available.

The Government has failed to create a sense of enthusiasm and motivation among the people about SEZs as the major vehicles of industrialization. Rather they are seen as promoting 'crony capitalism' in the country, as symbols of generating inequalities and totally inclined towards MNCs and big Business Houses to earn huge profits. There is, therefore, a need for course correction. SEZ alone cannot be the answer for rapid growth. They can only be supplements in the process of growth. If this view is acceptable, there is a need to bring about a balance between SEZ and non-SEZ units and thus, rationalization of incentives and tax concessions has to be undertaken rather than tilting the balance only in favour of SEZ units. The basic difference between China and India is that whereas China operates under a single party rule, India has a vibrant multi-party democracy. In this political structure, the Government cannot ignore the perception of the people towards 'welfare' and 'public purpose'. Consequently, it would be prudent to develop a unique SEZ model within the socio-political framework of the country, rather than blindly imitating China.

3. PARLIAMENTARY STANDING COMMITTEE REPORT ON SPECIAL ECONOMIC ZONES

Parliamentary Standing Committee on Special Economic Zones (SEZs) consisting of 31 members submitted its Report in June 2007. The Committee had representatives from the Congress, RJD, CPI-M, CPI, Trinamool Congress, Samajwadi Party and BJP. Besides the political parties, representatives from various major ministries, trade unions, corporate houses like WIPRO, INFOSYS, Reliance and some NGOs deposed before the Committee, chaired by senior BJP leader Murli Manohar Joshi. The unique feature of the Report is that it was able to reconcile the views of divergent groups and thus develop a unanimous report which is considered as exhaustive, democratic and fair to all stakeholders taking into view their concerns and those of the country.

FINDINGS AND RECOMMENDATIONS OF THE STANDING COMMITTEE

It would be of interest to study the findings and recommendations of the Report.

The concept of Special Economic Zones (SEZs) is not new since they were considered as growth catalysts with the philosophy of export-led growth in several countries like China, Indonesia, Philippines, Iran, Jordan, Poland, Pakistan, South Korea, Thailand, Russia, Kazakhstan, Ukraine etc. Even USA had around 285 Free Trade zones. The total number of SEZs in the world is around 3,000, though China had only 6 of them along the coastal region, being operated by the Government.

In India, while passing the SEZ Act in May 2005, the following objectives of SEZs were laid down:

- Generation of additional economic activity;
- Promotion of exports of goods and services;
- Promotion of investment from domestic and foreign sources;
- Creation of employment opportunities ; and
- Development of infrastructure facilities.

After the promulgation of the SEZ Act, the government cleared 401 proposals (237 "formal approvals" and 164 "in-principle" approvals).

But, as the Committee notes, "the reception to SEZs among various Indian stakeholders has not been on the expected lines. There have been voices of dissent, and in some places violent protests. A section of the farmer community, whose lands are being acquired for setting up SEZs, is particularly agitated and aggrieved with the policy. *There is an imperative need to understand the cause of the farmers' agitation and grievance.*" (p.117)

Undue haste in approving SEZ proposals

The Government, more especially the Commerce Ministry has been guilty of approving SEZ proposals in haste, without examining the proposals in detail and taking care of the comments of State governments. The Committee, therefore, feels that *no further SEZs should be notified till the SEZs Act and the Rules made thereunder have been amended in such a manner that would make it people-friendly, besides the objective of export-led industrial growth.* (p.118)

Concerns of the Ministry of Agriculture

The Ministry of Agriculture stated that total cultivated land in the country decreased from 185 million hectares in 1980, to 183 million hectares in 2003. The per capita availability of land declined from 0.27 hectare to 0.18 hectare, and non-agricultural use of land increased from 19.66 million hectares to 24.48 million hectares during the same period.

During 1980-81 and 1990-91, the average annual increase in non-agricultural use of land was 1.68 lakh hectares, whereas during the 5-year period 1999-2000 to 2003-04, the average annual increase in non-agricultural use became 2.25 lakh hectares.

During the last few years, the average overall productivity of land, especially cereals, coarse cereals and pulses etc., has been stagnant. But 127 million cultivators and 107 million agricultural labourers are dependent on land for their livelihood. Diversion of agricultural land to non-agricultural purposes would be detrimental to the food security of the country. Moreover, it is estimated that diversion of 1,000 hectares of cultivated land to non-agricultural use can deprive 900 cultivators and 760 agricultural labourers of their livelihood.

The National Commission on Farmers headed by Dr. M S Swaminathan, the world renowned agricultural scientist also emphasized the importance of conserving agriculture land in the following terms:

"Prime farm land must be conserved and should not be diverted for non-agricultural purposes like the Special Economic Zones. Such special programmes should be assigned on waste and/or land affected by salinity and other abiotic stresses..... It is in our national interest that agriculture and industry both prosper in a mutually reinforcing manner." (p.35)

In view of the over-whelming weight of the evidence, the Standing Committee recommended:

(*i*) There should preferably be a ban on the use of irrigated double crop or multi-crop land for

setting up SEZs.

(*ii*) Normally, only waste and barren lands should be used for setting up SEZs.

(*iii*) If it becomes unavoidable to make use of cultivated land, only single-crop, rain-fed land should be used. The percentage of such land should not exceed 20% the total area of a multi-product SEZ. In respect of SEZs other than multi-product ones, the ceiling could be 40%.

(*iv*) It should be mandatory for the Developer to obtain permission of the State Government for purchasing single crop cultivable land for SEZ use.

"With regard to availability of uncultivable land, as per land use classification of the country, barren and uncultivable land is available to the extent of 18 mil hectares. In many of the coastal states, land near the co is saline, which is not good for cultivation. This is the where SEZs or any other industrial enterprise can be up. This will not affect our food security. China developed SEZs in the coastal areas." (p.39)

The Standing Committee was surprised to note the Ministry of Agriculture is not represented on the Bo of Approval for SEZ. Being an important stakeholder Ministry of Agriculture must be represented on the Bo

Release of land locked in closed industrial units

The Committee noted the fact that recommend tions for liquidation of 1,254 private sector units

Table 2: Minimum Area for Various Types of SEZs.

Type	*Minimum Area*	*Minimum Area for Special States/UTs*
1. Multi-product	1,000 hectares	200 hectares
2. Multi-services	100 hectares	100 hectares
3. Sector Specific	100 hectares	50 hectares
4. IT	10 hectares and minimum built up area of 1 lakh sq. metres.	10 hectares and minimum built up area of 1 lakh sq. metres.
5. Gems and Jewellery	10 hectares and minimum built up area of 50,000 sq. metres.	10 hectares and minimum built up area of 50,000 sq. metres.
6. Bio-tech and Non-conventional energy*	10 hectares and minimum built up area of 40,000 sq. metres.	10 hectares and minimum built up area of 40,000 sq. metres.
7. Free Trade and Warehousing Zone (FTWZ)	40 hectares and minimum built up area of 1 lakh sq. metres.	40 hectares and minimum built up area of 1 lakh sq. metres.

* Includes solar energy equipment/cell, but excluding SEZs for non-conventional energy production and manufacturing

Source: Parliamentary Standing Committee on Commerce, 83rd Report on the *Functioning of Special Economic Zones (2007)*, p.126.

Table 3: Proposed Maximum Area Limits for Various Types of Special Economic Zones

Type	*Maximum Area*		*Maximum Area for Special States/UTs*
	with an element of cultivable land	*Only waste land*	
1. Multi-product	2,000 ha.	5,000 ha.	500 ha.
2. Multi-services	200 ha.	500 ha.	200 ha.
3. Sector Specific	200 ha.	500 ha.	200 ha.
4. IT	20 ha.	50 ha.	20 ha.
5. Gems and Jewellery	20 ha.	50 ha.	20 ha.
6. Bio-tech and Non-conventional energy*	20 ha.	50 ha.	20 ha.
7. Free Trade and Warehousing Zone (FTWZ)	100 ha.	200 ha.	100 ha.

Note: ha stands for hectares

Source: Op.cit., (2007), pp.126-27.

Central PSUs and 41 State PSUs were pending in various High Courts. The Government may consider unlocking and recycling of land and assets of closed industrial units under liquidation. This available unlocked land of the closed units can be used for setting up SEZs by a suitable mechanism. Similarly, land acquired for Growth Centres and other schemes, which have not been found sustainable, may be diverted for SEZs.

Minimum and maximum area for various types of SEZ

The SEZ Act prescribes a minimum area for various types of SEZs but does not prescribe any maximum area for them. The Standing Committee has laid down a maximum area limit as well.

The Standing Committee held the view that under the present system, the Developers may be tempted to acquire more area than is necessary, particularly for developing profitable support activities in the non-processing area. It is, therefore, necessary to prescribe a maximum area also for various types of SEZs, with the condition that at least 50% of the area will be used as "processing area." This condition should not be relaxable.

Checking the mad rush for IT SEZs

The Committee noted that 148 out of 237 SEZs so far were IT SEZs. This mad rush of IT SEZs was due to the attempt by the IT units to avail of the benefit of tax holidays for 10 years under the SEZ Act, which otherwise cannot be availed by the IT companies beyond 2009. The Committee is of the view that if the existing tax benefits to the IT sector are extended for ten years, this mad rush for SEZs in the IT Sector would automatically stop. The *Committee recommended that the Government should take a decision on extending the tax holiday to IT sector for a further period of 10 years to control this situation.*

Putting a cap on SEZs region-wise

The state-wise distribution of 237 approved SEZ proposals reveals that only four states taken together, namely Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu, account for 146 SEZs, i.e. over 60% of total SEZ approvals. On the other hand, the states like Bihar or North Eastern States have not received any such proposals.

The Committee noted the tendency of concentration of SEZs in already developed states and regions. This is not in consonance with our accepted goal of balanced regional development. The Committee, therefore, recommended that *there is a need for putting over-all and region-wise caps on the SEZs. These caps can be revised after a few years, considering the experience of the functioning of SEZ.*

Need for replacement of Land Acquisition Act, 1894, by a modern legislation

The Committee was of the view that '*public purpose*' as defined under the Land Acquisition Act of 1894 did not address the problems of displacement of farmers who are paid notoriously low rate of compensation for their land. Not only the land-owners, but the sharecroppers and agricultural labourers who are actually engaged in cultivation also lose their livelihoods. It is, therefore, necessary that Land Acquisition Act of 1894 be replaced by a modern legislation which should be more transparent and people-friendly and take care of the problems of the affected persons due to land acquisition.

Moreover, 'public purpose' needs to be redefined. Unless the public purpose for which the land is being acquired involves an overriding interest like defence/national security, the acquisition should take place with the consent of affected parties. Further, a National Relief and Rehabilitation Act should be enacted to provide a comprehensive package to those deprived of their lands.

The Committee, therefore, recommended that the new policy and legislation should be finalized expeditiously. The Committee outlined the dimensions which may be kept in view while deciding new reliefs and compensation.

1. Monetary compensation should be only a part of the compensation package and should be calculated on the prevailing market rates. To ensure this, the State Governments should prescribe minimum prices for land in various areas, which should reflect the market rate, and review/revise these periodically. Thereupon, whether the land is acquired by the Government or the SEZ developers, the acquisition/purchase price should be higher than the minimum price fixed by the Government.
2. It should be ascertained from the land-owner and his co-workers, including sharecroppers and agricultural labourers, as to how they propose to resettle/rehabilitate themselves. The Government should provide assistance to the affected persons accordingly, by way of an adequate resettlement allowance, employment, training, bank loan etc.
3. Where the impact of acquisition is felt beyond the pale of land-owners and their co-workers, provision should be made to rehabilitate the affected community as a whole.

Multi-product SEZ and the need for involving the displaced persons in the development process of SEZ

Multi-product SEZ, to be viable, would be in the nature of industrial townships and thus may result in

massive displacement of people. It would be, therefore, more desirable if these people, instead of being compensated, become a part of the development process of SEZ. The Standing Committee recommended that this may be done in the following manner:

1. Land should be taken from the land-owners on lease so that they get a one-time lump sum premium, followed by periodic rentals for sustenance. If the land is on lease, it reverts to the lesser in case SEZ fails or is dissolved for any reason.
2. At least one family member of the land-owner should be offered employment in the SEZ venture. It should be the responsibility of the developer to arrange necessary training of that person in skill acquisition.
3. Similarly, the whole range of agricultural workers, rural artisans etc. depending on farming activities and connected with the acquired land should be given suitable employment in the "processing" or "non-processing" areas in keeping with their skills. They should also be imparted training as necessary.
4. The feasibility of allotting equity shares to the land-owners in the Developer's Company should also be considered.

Master Plan for SEZs

The Committee has suggested that the SEZs should have a Master Plan for civic amenities, which would determine the areas for residential space, the commercial areas, the green area, roads and pathways etc. for an integrated development of an SEZ. In this regard, Indian planners must take note of the fact that one of the earliest Chinese SEZs at Shenzhen used to be a small village and it grew to a city of 10 million within a short span of 20 years. The Government should, therefore, enunciate a clear policy with regard to governance issues pertaining to areas surrounding SEZs.

Housing for SEZ Workers

Apprehensions have been expressed that large SEZs are being planned by various developers for real estate exploitation, particularly when the location of SEZs is in the vicinity of cities like Delhi and Mumbai. The Committee recommended that provisions may be made in the SEZ Act/Rules that assets, including housing, created in the non-processing area would meet and subserve the requirements of those working in the processing area only and not for anyone else.

The Committee further elaborates that in the giant SEZs, the residential complexes should be built, not only for the management and office staff, but also for workers. If the workers are forced to stay outside the SEZ area, it would lead to proliferation of shanty towns in the neighbouring areas.

Tax exemptions need rationalization

The SEZ Act provides for exemptions, drawbacks and concessions for the entrepreneurs as well as developers of the SEZs. Private developers would be able to derive tax exemptions from direct taxes for a period of 10 years for their operations in non-processing area. Since the developer's activities do not result in enhancement of exports, such tax concessions are not justified. The Committee, therefore, recommended that fiscal incentive, unrelated to exports, should not be granted. Tax benefits should be granted only for export activities and infrastructure development.

The Finance Ministry estimated, based upon first 70 SEZ proposals, a total loss of tax revenue worth ~ 1,02,621 crores from 2006-07 to 2009-10. Out of this, loss of direct tax revenue was estimated to be ~ 53,740 crores and loss of indirect taxes ~ 48,881 crores. For 237 formally approved SEZs, the revenue loss would be of much greater magnitude. The *Committee recommended a review of tax concessions for this purpose and SEZ entrepreneurs and developers should be separated for tax concessions. By withdrawing tax concessions to developers would reduce the loss to a significant extent as also meet the purpose of export promotion for which SEZ have been designed.*

Level Playing field for domestic industry vis-à-vis SEZ

Fears have been expressed that providing large number of tax concessions to SEZs results in reducing costs to SEZ entrepreneurs by 40% to 50% and this would have negative impact on domestic industry. The SEZs could act as a disincentive and dampener for Domestic Tariff Area (DTA) business. *The Committee is of the view that a level playing field should be provided to the domestic industry vis-à-vis SEZs.*

No dilution of implementation of Labour Laws in SEZs

Section 49 sub-section (1) of the SEZ Act empowers the Central Government to decide if any of the provisions of the SEZ Act (other than Sub-section 54 and 56), or any other Central Act or any rules or regulations made therefore or any notification or order issued or direction given there-under shall or shall not apply to SEZs. However, this proviso restricts the power of the Central Government to laws, rules, regulations, notifications, orders and directions relating to matters other than those relating to trade unions, industrial and labour disputes, welfare of labour, including conditions of work, provident funds, employers liability, workmen's compensation, invalidity and old age pensions, and maternity

benefits applicable in any Special Economic Zone. However, SEZ Act permits the State Governments to delegate powers under the Industrial Disputes Act to Development Commissioner and to declare SEZs as Public Utility Services. Moreover, the Model SEZ Act for the State Governments, framed by the Centre, contains a list of exemption clauses in labour laws, including the Minimum Wages Act and the Contract Labour (Regulation and Abolition) Act.

The Standing Committee recommended that *deviation from the SEZ Act and SEZ Rules, as well as the Model Act for State Governments should be corrected, to ensure that no dilution of labour laws occurs.*" (p.139)

Moreover, it was pointed out that the functions of Grievance Redressal Officer (GRO) in a SEZ should not be performed by the Development Commissioner or any officer under him. It was suggested that the GRO should be an independent person or body, having the confidence of all the parties. The Committee opined that "*nobody should be allowed to be a judge in his own cause, and, therefore, the functions of the GRO should be taken away from the Development Commissionerate by making suitable changes in the SEZ Act.*" (p.140)

"The Labour Conciliation Machinery should be separate, the Development Commissioner should not take on the role of the Labour Commissioner. He may be assisted by an officer of the State Government, who has the experience in dealing with labour issues. *The idea should be to make applicable the labour laws of the land in each SEZ.*" (p.140)

Widening the composition of the Special Economic Zone Authority

SEZ Act provides for the constitution of a Special Economic Zone Authority (SEZA) which has the following functions: (a) the development of infrastructure in the SEZ, (b) promoting exports from the SEZ, (c) reviewing the functioning and performance of the SEZ, (d) levy user or service charges or fees or rent for the use of properties belonging to the authority, and (e) performing such other functions as may be prescribed.

Presently, SEZA comprises six members with the Development Commissioner as its Chairperson. Other five members include three officers of the Central Government and two entrepreneurs or their nominees, all to be nominated by the Central Government. The Standing Committee observes: "The composition of the Special Economic Zone Authority seems to be narrow, in as much as it does not appropriately represent different constituents involved in the functions of SEZs. Moreover, the provision of 1/3rd members, i.e. two including the Chairman, also seems to be inadequate.

The Standing Committee recommends that "the composition of the authority should be expanded to represent some more stakeholders. At least one nominee of the Developer, two nominees of the concerned State Government, one nominee of resident workers, one financial expert and one security expert may be included in the composition of the Authority. One half of the total members may form the quorum for its meetings." (p.141.)

Appraisal of the report on sez functioning

Parliamentary Standing Committee Report on the *Functioning of Special Economic Zones* is a very comprehensive and sensitive document. It is comprehensive because it takes into account consideration of food security, defence, loss of massive tax revenue due to a plethora of exemptions indiscriminately granted both to entrepreneurs and developers, composition of Board of Approvals for SEZ projects, need for replacement of Land Acquisition Act (1894) by a more modern legislation for SEZ, and providing level playing field for industry in Domestic Tariff Area (DTA) and SEZs. It is a sensitive document because it voices the concerns of the farmers, sharecroppers and other co-workers who are the stakeholders in the implementation of SEZ policy. It endeavours to build democratic structure of the Special Economic Zones Au-

Table 4: Nature of Employment in SEZ

State	Permanent	Temporary	Casual/Contract	Total
Gujarat	3,213	11,143	4,752	19,101
	(16.8)	(58.4)	(24.9)	(100.0)
Madhya Pradesh	998	562	257	1,817
	(54.9)	(30.9)	(14.2)	(100.0)
Tamil Nadu	12,906	3,650	3,389	19,945
	(64.7)	(18.3)	(17.0)	(100.0)
Kerala	5,445	1,552	825	7,822
	(69.6)	(19.8)	(10.6)	(100.0)

Note: Figures in brackets are percentages of total.

Source: Compiled from 83rd Report of the Parliamentary Standing Committee (2007) on the *Functioning of Special Economic Zones*.

thority (SEZs) by widening its composition to include various stakeholders, in place of the bureaucratic structure of six nominees of the Central Government, without even including any representative of the State Government, developers and workers. The Report is likely to come up for discussion in the Parliament. There are certain issues which require further consideration by the Government and the people of the country, more especially the issues pertaining to labour rights, welfare and representation on the authorities of Special Economic Zone.

First issue pertains to the attitude of the State Governments towards the Standing Committee itself. It was highly distressing to note following observations of the Committee:

"The role of the State Government or the local administration should have been to facilitate the Sub-committee to meet the affected people, especially the farmers, who had come to express their grievances before the Sub-committee. However, they were prevented from meeting the Sub-committee by the administration staff itself. It created the impression that the local administration at those places did not want the Sub-committee to meet the farmers and to go into the question of land use, land sale and rehabilitation. The Committee expects the State Governments to ensure that in such cases co-operation from their local administration is forthcoming." (p.124, emphasis added)

It is really distressing to read such a straight indictment of the local administration and the State Governments. It appears that the Committee showed decorum in this regard and did not precipitate the issue then and there. In case of their search for truth, the Committee should have devised its own procedure and used some extraordinary measures to meet the affected farmers, by planning a visit to the villages from which the farmers had come to meet the Sub-committee.

Secondly, there are two issues which require immediate action. It has been argued that Land Acquisition Act (1894) has become outdated because it was designed by the imperialist power to facilitate acquisition of land to suit their objectives. The situation has dramatically changed after independence. Most politicians believe, and rightly so that this Act needs replacements by a modern legislation. The Government also concedes the need for doing so, but has not initiated any concrete steps to prepare a draft for the consideration of the Parliament. In this context, the Standing Committee should have done a great service, had it applied its energies in preparing draft legislation. Similar is the case of framing the National Relief and Rehabilitation Act. It is now accepted by all political parties that besides the landowners, there are other stakeholders like sharecroppers, landless labourers and co-workers whose livelihood is seriously affected by displacement. It would have been in the fitness of things that the representatives of all political parties should have applied their mind to prepare the draft of Relief and Rehabilitation Act and with this *fait accompli*, forced the government to address this issue in the interests of providing sustenance to those during the interim period of their rehabilitation. Such a step would have gone a long way to resolve this important issue which has become a hindrance to progress on industrial front.

Thirdly, the question of declaring SEZ as a 'public utility service' and thus abrogating the application of Labour Laws also needed serious consideration. It is very easy for the Commerce Minister to say that export activity and thus SEZs should be declared as 'public utility' but to defend it with convincing arguments has been its shortcoming. In post-independent India, public utilities have acquired a connotation, and expanding its frontiers to declare any activity as public utility cannot be justified, though Mr. Kamal Nath may use this term to overcome a hurdle in a very irresponsible manner. To take garb under this clause, and prevent the application of Minimum Wages Act and Contract Labour (Regulation & Abolition) Act would not stand the test of public scrutiny.

Fourthly, we present table 3 prepared on the basis of data provided by the State Governments regarding the relative proportions of permanent, temporary, casual contract labourers employed in SEZs in various states.

A close perusal of the data given in Table 3 reveals that Kerala had the lowest proportion of Temporary and Casual/Contract labour of the order of 30.6%, Tamil Nadu 35.3%, Madhya Pradesh 45.1% and Gujarat as high as 84.3% in this category. The basic question is: what should be the maximum permissible limit of temporary and casual/contract labourers? If labour is needed, why should security of employment be denied to it, so as to enhance the profits of entrepreneurs and developers? Does labour have a right to a reasonable share in value added? Or should we permit the entrepreneurs and developers to amass huge wealth, while denying labour its legitimate right? The Supreme Court has already laid down guidelines that if a temporary/casual employee has worked for 240 days in a year, he/she shall have to be made permanent because it proves the continuous need of the person concerned. India, as a democratic welfare state, has to pay due attention to the problems of the oppressed and exploited, failing which democracy will cease to have any meaning for *aam admi* (common man).

PROPOSED COMPOSITION OF THE SPECIAL ECONOMIC ZONES AUTHORITY

Development Commissioner (Chairman)	1
Central Government nominees	3
Nominees of Entrepreneurs	2
Nominee of Developer	1
Nominees of State Government	2
Nominee of Resident Workers	1
Financial Expert	1
Security Expert	1
Total	12

Fifthly, the Standing Committee mentions in one of its recommendations: "Development Commissioner should not take on the role of Labour Commissioner." (p.14.) But the question is: Who gave the Development Commissioner the role of the Labour Commissioner? Obviously, it is the SEZ Act. Instead, it would have been

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be better to recommend that SEZ Act should be amended to separate the powers of the Development Commissioner and empower the Labour Commissioner to ensure the application of Labour Laws in SEZ. This would have been more in consonance with the noble spirit with which the Report has been written.

Lastly, the composition of Special Economic Zones Authority is very undemocratic. The Committee have taken note of it and recommended its expansion from six members to twelve members. However, in the proposed composition given below, entrepreneurs and developers have been provided 3 nominees, but resident workers only 1 nominee. This token representation will not ensure better labour participation. The accepted principle in Labour Economics is equality of membership between employers and labour. Following this, there should be three representatives of labour. Moreover, the history of trade unionism reveals that nominated internal members never exhibited the zeal to pursue the cause of labour in an effective manner. It is the external members who have shown better bargaining power. It is, therefore, necessary that the share of workers in SEZA be reconsidered, and it should be raised to three, one from among the workers and two representatives of trade unions. Once the principle is accepted, the modalities of representation can be worked out.

To conclude, it may be stated that the Standing Committee Report on SEZ is a path breaking document which indicates the direction in which the country must move if it wants to pursue industrialization with a human face. It is an attempt to take care of problems that are likely to arise if industrialization is pushed ruthlessly without taking care of concerns of the displaced families. In that sense, the Report does commendable service to the nation. To advance the path outlined in the Report, there are some areas in which gaps have to be filled up. In our appraisal, we have drawn attention of the policy makers to urgently take up the question of designing a modern legislation on Land Acquisition and also framing a Relief and Resettlement Policy which helps those who are displaced, leading to a smooth transition to new sources of livelihoods.

There is also a great need to usher in policies in the functioning of SEZ so that workers are assured a fair deal in the value added in SEZ. They cannot be treated as foreign enclaves in which entrepreneurs and developers shall have unlimited freedom to exploit labour and maximize profits.

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CHAPTER

47

GATT, WTO AND INDIA'S FOREIGN TRADE

"The major economic powers have succeeded in creating a new international regime where the profits and the dominance of their transnational corporations will be the decisive considerations. This regime will legitimise the process of progressive erosion of the sovereign economic space of the third world countries. What is more, the new system will provide a built-in, coercive mechanism of cross-retaliation through which the major powers will be able to intrude into and occupy such economic space in the third world."

— S.P. Shukla

We cannot live in a world of butter mountains and rivers of milk funded liberally by subsidies, when the poor starve in the villages of the Third World. We must find ways in which trade aids development.

— Manmohan Singh
Prime Minister

The General Agreement on Tariff and Trade (GATT) was established in 1948 in Geneva to pursue the objective of free trade in order to encourage growth and development of all member countries. The principal purpose of GATT was to ensure competition in commodity trade through the removal or reduction of trade barriers. The first seven rounds of negotiations conducted under GATT were aimed at stimulating international trade through reductions in tariff barriers and also by reduction in non-tariff restrictions on imports imposed by member countries. GATT did provide a useful forum for discussion and negotiations on international trade issues.

1. THE URUGUAY ROUND OF NEGOTIATIONS—8TH ROUND OF GATT

The 8th round of Multi-lateral Trade Negotiations, popularly known as Uruguay Round (since it was launched at Punta del Este in Uruguay) was started in September 1986 at a special session of GATT Contracting Parties held at Ministerial level. World trade had undergone a structural change during the four decades since the establishment of GATT in 1948. The share of agriculture in world merchandise trade which was 46 per cent in 1950 had declined to 13 per cent in 1987. Simultaneously, the structure of employment and the contribution of various sectors in GDP of developed countries had undergone a qualitative change. The share of the service sector in the GDP of developed countries was rapidly increasing. It ranged between 50 to 70 per cent of the GDP by 1986. The share of employment in the service sector was also increasing. For instance, in USA, services represented two-thirds of GDP and employed over 70 per cent of work force. In 1980, US exports of services amounted to $ 35 billion. In the commodity sector the comparative cost advantages had moved in favour of Japan and several other newly industrialised nations. These factors impelled developed countries, under the leadership of USA to take the initiative of bringing service sector into trade negotiations.

Thus, the Uruguay Round (UR) contained the mandate to have negotiations in 15 areas. In Part I, negotiations on Trade in Goods were to be conducted in 14 areas and in Part II negotiations on Trade in services were to be carried out.

Part I (Trade in Goods) declaration in UR contained the following:

(1) Tariffs, (2) Non-tariff measures, (3) Tropical products, (4) Natural resource-based products, (5) Textiles and clothing, (6) Agriculture, (7) GATT articles, (8) Safeguards, (9) MTN (Multilateral Trade Negotiations) agreements and arrangements, (10) Subsidies and countervailing measures, (11) Dispute settlement, (12) Trade Related Aspects of Intellectual Property Rights (TRIPs), (13) Trade Related Investment Measures (TRIMs) (14) Functioning of the GATT systems (FOGS).

Thus, besides the traditional GATT subjects such as tariff and non-tariff barriers and improvement in GATT rules and disciplines on subsidies and countervailing measures, anti-dumping measures etc., certain new areas such as Trade Related Aspects of Intellectual Property Rights (TRIPs), Trade Related Investment Measures (TRIMs) and Trade in Services were included for the first time for negotiations.

These negotiations were expected to be concluded in four years, but on account of differences in participating countries on certain critical areas, such as agriculture, textiles, TRIPs and anti-dumping measures, agreement could not be reached. To break this deadlock, Mr. Arthur Dunkel, Director General of GATT compiled a very detailed document, popularly known as Dunkel Proposals and presented it before the member-countries as a compromise document. The Dunkel Proposals culminated into the Final Act on December 15, 1993 and India signed the agreement along with 117 nations on April 15, 1994.

2. URUGUAY ROUND FINAL ACT AND ITS IMPLICATIONS FOR INDIA

A big offensive was launched by the Left Parties, the Janata Dal and the Bharatiya Janata Party against the acceptance of Dunkel Proposals. The basic thrust of the attack was that the Government has surrendered its sovereignty under pressure from the US Government and the multinationals. There is no doubt that some of the criticisms were politically motivated and value-loaded, and it would be correct to say that to some extent, they were misleading. On the other hand, there is no doubt that the claim of the Government of India, that as a consequence of UR agreement, Indian exports would rise at the rate of $ 2 billion per year is exaggerated.

It would be appropriate to study the implications of GATT agreement in various areas:

A. Reduction in basic duty and export subsidies

On tariffs, India has promised to reduce the basic duty by 30%. This duty reduction was to be effected over a period of 6 years and was to cover raw materials, intermediates and capital goods. This, however, did not include agricultural products, petroleum products, fertilizers and some non-ferrous metals like zinc and copper. These tariff reductions were also a part of the package of economic reforms undertaken in India and had had been recommended by the Chelliah Committee.

The GATT agreement stipulates that anti-dumping proceedings will be terminated if the volume of dumped imports from a particular country is less than 1% of the domestic market. The only exception is instances where dumping countries collectively account for more than 2.5 per cent of the domestic market. Anti-dumping proceedings will be terminated if the margin of dumping is less than 2%. These clauses do help India to protect its exports from anti-dumping investigations. It would have been much better for India, had the figure of dumped imports as a share of domestic market been more than 1%.

Regarding the prohibition of export subsidies, GATT agreement stipulates that countries like India with per capita income less than $ 1,000 are exempt from the removal of such subsidies for products where their share in world trade is less than 3.25 per cent.

TABLE 1: Indian Exports in 2001 Covered by GATT agreement

US $ million

	World	*India*	*India's Share (%)*
Rice	7,530	631	8.4
Tea and Mate	2,978	415	13.9
Spices	2,440	252	10.3
Iron Ore	8,758	321	3.7
Leather manufactures	24,082	779	3.2
Gems and Jewellery	56,135	6,242	11.1
Total	**5,555,028**	**36,258**	**0.66**

SOURCE: Compiled from *Economic Survey (2003-04)*

Using this criterion, India's share exceeds in rice, tea, iron ore, leather manufactures, gems and jewellery. (Refer table 1). All these items taken together account for only 22.8 per cent of India's exports. This implies that 77 per cent of exports are not covered by GATT Agreement. Thus, reduction of export subsidies or their removal is not likely to produce any disastrous effect on our exports, as alleged by many critics.

Effect of TRIPS on the Indian Economy

Some critics are of the view that Trade-Related Intellectual Property Rights (TRIPs) as embodied in the GATT agreement will have disastrous effects on our economy, more especially in two vital areas i.e., pharmaceuticals and agriculture. Both these areas affect the well-being of the people.

TRIPs requires an understanding about the scope of the new patent regime. Under TRIPs patents shall be available for any invention whether product or process in all fields of industrial technologies.

Patent protection will be extended to micro-organisms, non-biological and micro-biological processes and plant varieties. This implies that the entire industrial and agricultural sectors and to an extent bio-technology sector will be covered under the patent provisions.

A very dangerous provision has been introduced in patent protection and this relates to changing the philosophy of the patent regime whereby products, imported or locally produced, will be covered under patent protection without any discrimination. This implies that the patent regime not only tries to establish manufacturing monopoly but it also intends to establish import monopoly. In this situation, the patent-holder would resort to imports only and the national government would not be able to exercise any price control on the imported products. This provision will help the patent-holder to defy all price control measures.

Patent Regime and Pharmaceuticals and drugs

Patent regime, the critics are of the view, will affect the drug prices seriously. Currently, these prices are very low in India — thanks to the Indian Patent Act, 1970. Since the enforcement of this Act, Indian pharmaceutical and drug industry progressed rapidly and was able to provide life saving drugs very cheaply. Besides this, it was able to earn foreign exchange to the tune of ₹ 2,386 crore in 1996-97.

Under the new patent regime, according to Mr. B.K. Keayla, Convener, National Working Group on Patent Laws, about 70% of the drugs will be covered under the new patent laws. Consequently, under TRIPs heavy payments will have to be made to patent holders and consequently, it is feared that this would result in the prices of drugs going up 5 to 10 times. At present, only 30 per cent of the population can afford modern drugs and if the GATT agreement is accepted, another 20 per cent of the population will lose health cover, leaving only 10 per cent population access to modern drugs. Such a policy has dangerous implications for the health of our population.

Mr. B.K. Keayla gives two specific examples about drugs marketed by the same MNC in different countries. In India, there is a process patent of these drugs, but in other countries, they are covered under product patent. The price differential is so large that it compels one to rethink whether the introduction of product patent in India, would not push the prices of drugs in India as well to very high levels.

Table 2 provides information about the drug prices of two specific basic drugs. They are being marketed by two MNCs in four countries. These drugs are under process patent in India, but are under product patent in Pakistan, Britain and the USA. As a consequence of product patent regime, the price differential is about 9 to 10 times in Pakistan and 15 to 16 times in Britain. In case the same story is repeated in India, there is likelihood of the drug prices shooting up. The Government, however has taken the position that as a result of the Dunkel Final Act, Drug prices would increase by 10 to 15 per cent only. In support of the Government's claim, Mr. Pranab Mukherjee, former Minister of Commerce stated: "A country like India which does not recognise product patents in the field of drugs, food products and chemicals has been allowed a transition period of 10 years for establishing a product patent regime for such items. ... The fears regarding inordinate rise in the price of patent drugs after the introduction of product patents are also not quite justified because under the agreement, government would be able to undertake compulsory licensing for non-commercial public use as well as to prevent situations of either inadequate availability or exorbitant pricing. Besides, government retains the right to institute price control on drugs."[1]

1. Mukherjee, Pranab, India and the Uruguay Round, *Economic Growth and Social Change*, March 1994, p. 59.

Table 2: Comparative Statement of Price of Two Basic Drugs

(Prices converted into Indian Rupees)

Drug	*Brand*	*Company*	*India*	*Pakistan*	*Britain*	*USA*
Ranitidine	Zantac 300mg x 10's	Glaxo	29.03 (1.0)	260.40 (9.3)	481.31 (16.5)	744.65 (25.6)
Diclofenac	Voveran 50 mg x 10's	Ciba Geigy	5.67 (1.0)	55.80 (9.8)	95.84 (15.2)	239.47 (42.2)

Note: Figures in brackets denote the order of difference with prices in India

Source: B.K. Kealya, Final Dunkel Act — New Patent Regime, *Janata*, March 6, 1994

There is a large body of opinion which does not subscribe to the Government view. In a country, which is plagued by mass poverty, it is very essential that life saving drugs and other basic medicines should be available at affordable and low price. This can be achieved only through control over the prices of drugs. The GATT agreement tends to alter it. There is a genuine fear that drug prices will rise, more so in view of the fact that the Multinationals are able to corner excessive profits in other countries, but are not able to penetrate in India so far as price control on drugs is concerned. The Government has to be very cautious. There is no doubt that the government has a period of 10 years to shift to product patent regime in drugs, but the multinationals can create situations even before that so as to force the government to amend the Patents Act earlier or create conditions of artificial scarcity. The drug market is even now facing this phenomenon of the disappearance of a particular drug for sometime in the market and its reappearance later at a higher price. During 1994-95 and 2000-2001 taken together, price index of drugs and medicines increased by 87.1 per cent as against the overall increase in price index by 35.9 per cent. This rise is taking place despite drug price control, but in case freedom is given to multinationals, there is a fear that drug prices would rise at a much sharper rate, hitting the health cover of the common man. In a very angry comment, Mr. B.K. Keayla writes: "The argument that the new patent regime would affect only 10-15 per cent of turnover is totally wrong and silly."[2]

Mr. Bibek Debroy does not share the pessimism of Mr. B.K. Keayla. He believes that there is a lot of exaggeration about the supposed increase in drug prices. Arguments based on cross-country comparisons should not be taken seriously. The Essential Drugs List published by the World Health Organization (WHO) has a little over 250 entries. Less than 10 per cent of these are covered by patents world-wide. The rest have all become generic and there is no need to grant a fresh round of patent protection to these. Mr. Bibek Debroy, therefore, concludes: "The price rise will be pertinent for these existing drugs, but not for the new drugs that arrive on the international market every year. If the patent protection is not changed, these new drugs may not be marketed in India at all."[3]

However, the critics do not agree to the defence given by the Government or certain economists. Multinationals do have the capacity to create scarcities or withdraw the existing drugs and get them registered under new product patents. The Government has, therefore, to continue with the Drug Price Control Order so far as essential drugs are concerned. It has also to regulate the prices of other drugs, failing which medical treatment in many ailments will be beyond the reach of the poor and middle classes. Already, the situation has been changing in this direction with the growing trend of privatization in health.

Patent or Patent-like Protection in Agriculture

Dunkel Final Act has made important changes concerning patenting or granting patent-like protection in agriculture. The principal feature of the TRIPs text demands that protection be extended to micro-organisms, non-biological and micro-biological processes and plant varieties. Article 27 of TRIPs Text states that India may provide for protection of plant varieties either by patent or by an effective *sui generis* system or by a combination thereof. This system shall be enforced at the end of the transitional period of 10 years.

It may be emphasized that traditionally, under GATT, most patent systems have excluded sectors such as agriculture, food and health outside its orbit. Some developed countries created a separate *sui generis* system which granted intellectual property rights to plant breeders. This was codified in 1961 under the International Union for the Protection of New Varieties of Plants (UPOV). In 1978, USA was allowed to join UPOV members union without changing its laws. However, UPOV has continued to be an organisation mainly of the developed countries.

Under the UPOV convention of 1978, the plant breeder of a new variety had an almost total monopoly of producing and marketing his variety of seeds through trade channels. His right under TRIPs was subject to only two exceptions: (1) The Breeder's exemption, which permitted any other breeder to use the protected variety for breeding purposes; and (2) the Farmer's Exemption which gave the farmer the right to retain protected seeds from his harvest to plant the next crop. This convention was limited to 24 plants and the period of protection ranged from 15 to 18 years.

This convention was modified in 1991 and the revised UPOV treaty empowers higher standards of protection to plant breeders, thereby strengthening the monopoly rights of the breeder of a new variety. Under the revised UPOV treaty (1991), the breeder had to pay royalty to the Plant Breeder Right (PBR) holder, if his new variety resembled the protected variety in any trait. Similarly, the farmer was not automatically permitted to use farm-saved-seeds of protected variety to sow the next crop. He had either to pay compensation for use of seeds or obtain the approval of the breeder. Most of the Plant

2. Keayla, B.K., Final Dunkel Act — New Patent Regime, *Janata*, March 6, 1994.
3. Bibek Debroy, India and the GATT, *Economic Growth and Social Change*, March 1994, p. 56.

Breeders were giant MNCs who work with the sole intention of profit maximization. They would be reluctant to grant approvals to farmers, who would otherwise be forced to purchase seeds from MNCs. Under UPOV (1991), all plant genes and species would be provided protection for a period ranging from 20 to 25 years.

The ***sui generis*** system under which PBR-holders are granted rights is just a change in nomenclature in place of the patent system. Moreover, UPOV (1991) stipulates that ***sui generis*** system to be created should be "effective" so that it provides real protection to PBR-holders. But who will judge the effectivity of the law framed by India for the purpose. The answer is: The Council of TRIPs under article IV.5 of the agreement establishing Multilateral Trade Organisation (MTO).

The Government of India has been under constant attack that the ***sui generis*** (Plant Breeder Rights) system is against the interests of the farmers and would act as an impediment to the development of new plant varieties. Mr. Pranab Mukherjee, former Minister of Commerce, stated in this connection: "While reasonable protection should be provided to plant breeders who develop new varieties under the Agreement, the right of farmers and researchers will also be fully protected. In the ***sui generis*** legislation which is being drafted for the purpose, the interests of the farmers will be safeguarded."

There is a lot of divergence between what the Government says and what it is doing in this regard. This is evident from the draft Plant Varieties Act, 1993 circulated by the Government in February 1994.

Patent (Amendments) Bill and Seeds Act (2004)

The Government introduced the Patent (Third Amendment) and Seeds Act (2004). In the name of quality of seeds, the Government has stipulated that seed growers should get their seeds patented. In case, this is not done, the farmers will not be allowed to exchange their seeds with other farmers. Compulsory registration of seed combined with the power to seed inspectors to enter and search premises (which implies in the case of Indian farmers farmers' fields and huts) is the hallmark of this legislation.

It would be worthwhile to examine the implications of this policy for Indian farmers.

Firstly, for hundreds of years, farmers have sown seeds, harvested crops and exchange seeds with farmers in the neighbouring areas. These indigenous varieties are the basis of our ecological and food security. For instance, coastal farmers evolved salt resistant varieties. Bihar and Bengal farmers have evolved food resistant varieties. Drought resistant varieties were developed by farmers of Rajasthan. Similarly, farmers in the Himalayas have developed frost resistance varieties. Indian farmers, being not highly educated do not understand the complications involved in getting their seeds registered. The Multinational agents can buy these seeds and get them registered prior to our farmers. They will then be in a position to file cases against these farmers for bartering these seeds with their neighbours.

International experience also strengthens this fear. Dr. Vandana Shiva has examined this question in depth. She quotes a case filed by the British Society for Plant Breeders in 1995 which decided to proceed with a high profile court case against a farmer to make selling of potato seeds by farmers to other farmers as illegal in Scotland. The farmer was forced to pay a fine of £ 30,000 as compensation to cover royalties lost to the seed industry by direct farmer-to–farmer exchange. Existing United Kingdom and European Union laws thus prohibit farmer from exchanging uncertified seeds.

The same experience is repeated in U.S. to prevent farmer-to-farmer exchange as illegal. As grow, a commercial company filed a suit against winterboers on the ground that their intellectual property rights (IPRs) were violated by the Winterboer farmers who in their 500-acre farm in Iowa were growing seeds. The Winterboers pleaded that under the Plant Variety Act of US, farmers had the right to sell seed, provided both the farmer and the seller were farmers. They won the case. Subsequently, under pressure from seeds industry, the Plant Variety Act was amended and the farmer's right to save and exchange seeds was declared illegal.

Dr. Vandana Shiva on the basis of these experiences concludes: 'The Seed Act in designed to 'enclose' the free economy of farmers' seed varieties. Once farmers' seed supply is destroyed through compulsory registration by making it illegal to plant unlicensed varieties, farmers are pushed into dependency on corporate monopoly of patented seeds. The Seed Act is therefore the hand maiden of the Patent Amendment Acts, which have introduced patent on seed." [5]

Secondly, it may be noted that prior to this Act as a result of globalization, 80 per cent of the seeds were farmers' own varieties which have been saved, produced

5. Vandana Shiva, Sowing the seeds of Dictatorship, **Swadeshi Patrika**, April 2005.

and exchanged freely. The balance of 20 percent was supplied by the public sector seed companies. Under pressure from World Bank, the Seed Policy of 1988 started to dismantle the robust public sector in favour of private sector companies and multinationals. This is made clear in the objectives of the Seed Act 2004 which is aimed at replacing farmers' saved seeds with seeds from private sector seed industries.

Thirdly, the Seed Act introduces Inspector Raj and gives the inspectors the power to enter and search premises, even to break open any container and any door. This is tantamount to the creation of a 'Seed Police'. The fine for seed exchange and barter of unregistered seed is up to ₹ 25,000.

In a very angry comment, Dr. Vandana Shiva states: "The 2004 Seed Act has nothing positive to offer to farmers in India but offer a promise of a monopoly to private seed industries, which has already pushed thousands of our farmers to suicide through dependency and debt caused by unreliable, high dependency and non-renewable seeds."[6] The 1996 Act used to serve the country well and should have been continued "It is the MNC seed industry that need regulation and not the small farmers of our country without whose seed freedom the country will have no food sovereignty and food security."[7]

Fourthly, methods of agriculture were excluded from patentability in the Indian Patent Act, 1970 to ensure that the seed, the first link in the food chain, was held as a common property resource in the public domain. The farmers were guaranteed the inalienable right to save, exchange and improve upon the seed. But subsequent amendments of 1970 Act have opened the floodgates for patenting of genetically engineered seeds. It needs to be emphasized that patents are monopolies and they grant exclusive rights which prevent farmers from producing, saving and exchange of seeds from farmer-to-farmer. In other words, patents on seed convert seed saving into an intellectual property right."

The entire controversy veers round corporate rights versus farmers' rights. The US Government in collusion with WTO has been demanding monopoly protection for Transnational Corporation (TNCs) which control seed industry. It implies that under the garb of globalisation, whereas greater emphasis should be given to liberalization and competition should have been promoted, the Plant genetic resources (PGR) legislation aims to create monopoly through the agency of IPRs. In other words, PGR legislation is a conflict between farmers and seed industry and between the public domain and private profits, between an agriculture that produces and reproduces diversity and that consumes diversity and produces uniformity.

Norman Borlaug, the scientist who pioneered the Green Revolution and was the recipient of Nobel Peace Prize at a press conference held on 8th February 1996 expressed his concern against private companies and TNCs gaining control of the plant genetic resources seeds and patenting plants. Prof. Borlaug stated in a very forth–right manner: "We battled against patenting. Late Glen Anderson (of International Wheat and Maize Research Institute) and I went on record in India as well as other places against patenting and always stood for free exchange of germ plasm."[8]

The new Seed Act proposed in 2004 could for ever destroy farmers rights and thus destroy biodiversity of our seeds and crops. It robs the farmers of their freedom and establishes a seeds dictatorship. Such a dangerous legislation is anti-farmer as it establishes TNC totalitarianism. It should, therefore, be scrapped.

TRIPS, Haldi and Neem

India's ancient use of Haldi (Turmeric) was sought to be patented under the American Law in 1995. Luckily for India, Dr. R. A. Mashelkar, Director General of Council of Scientific and Industrial Research challenged it. The US patent office acknowledged its mistake and cancelled the patent on 'Haldi'.

An American company has been granted a patent right for Neem as a pesticide. Basmati rice, which was a universal variety in India, has been patented as Kasmati and Texmati. Danger lurks with regard to Tulsi (Basil) plant. These are a few cases of biopiracy of India's herbal wealth and to prevent huge losses, India will have to undertake huge documentation about the use of its herbal wealth.

TRIMS and its Impact on India

Trade Related Investment Measures (TRIMs) were initiated by the US in 1980 since it was losing ground in competition in goods to Japan and other newly industrialised nations of East Asia and intended to recover its lost ground through trade in services. Although GATT had never discussed the idea of trading in services as part

6. Ibid.
7. Ibid.
8. quoted by Vandana Shiva, op. cit.

of the earlier seven rounds of negotiations, the USA tried to sell this idea in the 8th Round of GATT negotiations. The principal objective was to benefit the Multinational Corporations (MNCs) so that they could undertake investment in financial services, telecommunications, marketing so as to boost world trade.

The main provisions provided in the TRIMs text ensure that Governments shall not discriminate against foreign capital. In other words, the TRIMs text compels member countries to give national treatment to foreign capital. The main features of the TRIMs text are:

(i) All restrictions on foreign capital/investors/ companies should be scrapped.

(ii) The foreign investor shall be given the same rights in the matter of investment as a national investor.

(iii) No restrictions will be imposed on any area of investment.

(iv) Nor will there be any limitation on the extent of foreign investment — even 100 per cent foreign equity will be permitted.

(v) Imports of raw materials and components will be allowed freely.

(vi) Foreign investor will not be obliged to use local products and materials.

(vii) Export of part of the output will no longer be mandatory.

(viii) Restrictions on repatriation of dividend, interest and royalty will be eliminated.

(ix) There will be a complete exclusion of provisions like phased manufacturing programme which is intended to increase the indigenous content in manufacture.

Already under the New Economic Policy and the Structural Adjustment Programme initiated since 1991, Government of India has been overbending to woo foreign direct investment and consequently, several changes in Foreign Exchange Regulations Act and Industrial Policy have been undertaken. The difference under the GATT treaty is that these changes will become a part of the multilateral trade treaty and WTO will in future be able to impose discipline. In that sense, TRIMs treaty abrogates our freedom to become selective in the areas of foreign investment. This militates against our goal of self-reliance. It would have been better if such a proviso had been inserted in the TRIMs clause. In this context N.K. Chowdhury and J.C. Aggarwal clearly state: "Foreign investment like Pepsi Foods was encouraged with the hope and proviso that the company would export its products to earn foreign exchange for India and also progressively utilise indigenous material in its production programme. These polciies will however be not possible to follow once the country becomes one of the signatories to the GATT 1994."[5] This clearly shows that once a decision is taken to allow foreign investment in a certain area, the country loses much of its freedom to restrict its harmful effects on our local industry and economy. In that sense, unrestricted freedom to foreign investment, the critics feel, is a compromise on our economic sovereignty.

Textiles and Clothings

GATT agreement has made certain proposals to liberalise the trade of textiles and clothings. These proposals are very important for developing countries since textile exports constitute the single most important item of their export. Ironically, developed countries who claim to be the greatest champions of free trade have imposed most comprehensive quota restrictions under the multi-fibre agreement (MFA). The Act proposes to phase out MFA quotas over a ten year period (1993 to 2003) and to fully liberalise the textile sector at the end of the ten year period.

The Act has divided the 10-year period into three phases of three, four and three years. In the first phase 16 per cent of the textile exports to the developed countries will be liberalised, to be followed by 17 per cent in the second phase and another 18 per cent in the third phase. Thus at the end of the 10-year period, only 51 per cent of textile market will be liberalised. Thus, a substantial portion (49 per cent) shall have to wait for the second wave of liberalisation after 2003 AD. What is intriguing is that textiles are defined in such a way that textile sector includes items that are not currently under quota restrictions in developed countries. Thus, instead of creating real liberalisation and withdrawing non-tariff restrictions, the myth of liberalisation has been created. The Ministry of Commerce has made this point clear: "It is a fact that the textile agreement is not evenly balanced in the sense in the initial years, there is minimal liberalisation and significant steps for liberalisation are left only to the last three years. This is one of the points of dissatisfaction for India and we are strongly urging the importing countries to bring forward the liberalisation process."

5. Chowdhury, N.K. and Aggarwal, J.C. (1994), *The Uruguay Round and the Dunkel Draft*, ed. Malcolm S. Adiseshiah (1994), p. 8.

3. SOCIAL CLAUSE IN GATT

A very startling proposal was made in the context of the finalisation of the GATT agreement towards the end of March 1994. This proposal, commonly referred to as "social clause" was moved by US to be incorporated in the Marakkesh Declaration. The US representative proposed under the social clause to levy a countervailing duty on imports from developing countries aimed at offsetting the low labour costs prevailing there. In plain language, the *proposal implied the following:* If a shirt in India cost ₹ 50, while it cost ₹ 200 in the US, then this differential was largely a consequence of the difference in labour costs. To remove this differential advantage, Indian exports to the USA would have to pay a duty aimed at neutralising the cost advantage. The social clause, it was stated, is motivated by humanitarian concern, so that the developing countries adopt proper standards of living for the workers and pay their labour better wages.

Experts in developing countries were shocked by this proposal since it aimed at blunting the only competitive edge of the Third World countries. Experts described the humanitarian argument no more than a moth-eaten fig leaf. The only purpose of getting suddenly concerned about the plight of labour in the Third World was their deep desire to deprive developing countries of their only competitive advantage. They know that as far as technology is concerned, developing countries are at a historical disadvantage. Developing countries have now to pay high price for getting technology from the developed countries. If this clause is introduced, Indian products will become unsaleable in the USA and the other countries of the European Community. Ironically, it would imply that the poorer nations will be forced to pay for the fact that they are poor.

Critics are of the view that this move is a continuation of the Harkin Bill which calls upon the US Department of Labour to annually identify goods made with the use of child labour and the countries exporting them. If this Bill is passed, US Government will ban the import of these items, severely affecting India's export of carpets, gems and jewellery, textiles and garments etc. The social clause is, therefore, aimed at countries like India so that the advantage to the developing world is destroyed and their capacity to export manufactured goods is seriously crippled. In the end, these countries should be allowed to export raw materials like cotton and iron ore and import garments and steel. It would really revive the days of colonialism. Mr. Pranab Mukherjee, former Minister of Commerce, stoutly opposing the linkage between social policy concerns, like labour standards, and trade clearly stated at Marakkesh on April 13, 1994: "I would like to state categorically that while we are strongly committed to internationally recognised labour standards, we see no merit whatsoever in the attempt to force linkages where they do not exist. Trade policy cannot be made the arbiter of all concerns."

The social clause proposal became the rallying point of G-15 states and the Malaysian Prime Minister Mahathir Mohammed launched a diatribe against the provision. The unanimous opinion of the G-15 countries was that the social clause proposal would hit their economies adversely and thus aggravate the problem of balance of payments, rather than help them to bridge the BOP gap. Due to the combined strength of G-15 countries, the US government had to face a retreat and the issue was deferred.

The Fifth Conference of the Labour Ministers of Non-aligned and other developing countries held in Delhi from January 19-23, 1995 dismissed the "social clause" as "totally unacceptable". It asserted: The proposed linkage would negate the benefits of trade liberalisation and aggravate problems of unemployment and distress. Delhi Declaration came down heavily on the coercive aspect of proposed linkage and stated: Any form of coercion on the labour standards issue is violative of the constitution of International Labour Organisation (ILO). The declaration further emphasised that "the application of unilateral coercive economic measures by the developed countries aimed at the Third World countries with a view to obtaining economic or political advantage is unacceptable".

There is another proposal to introduce an environmental protection clause with the intention of forcing the developing countries to pay for the alleged destruction of environment. Experts are of the view that a more discriminatory provision than this is hard to imagine since three-fourth of the damage to world ecological environment has been caused by the developed world over the last two centuries. It is really ironical, the developed countries have the cheek to ask the developing countries in the face of these facts to pay for the sins of the developed world.

There is no end to the innovative machinations which the developed countries initiate to force the developing countries into submission to their proposals. The temporary withdrawal of the social clause should not be seen as a victory of the developing countries, it is quite possible that USA may revive it. The question that need

to be posed as a counterpoint is: Should developing countries, on the basis of human considerations, impose countervailing duties on US goods till such time that the Blacks in America are assured equality of treatment? Are not labour standards with reference to Blacks important, if the linking of social concerns to trade policy, is pushed to its logical conclusions. Thus, there is a need for vigilance and combined resistance by Third World countries so that the enlarged scope of GATT is not used to their disadvantage.

Conclusion

There is no doubt that in a world of unequal partners, multilateratism is superior to bilateralism and if some concessions are to be extracted from strong partners belonging to US and European Community, then the combined strength of the developing countries can exercise a stronger pull in their favour. One redeeming feature of the GATT is that there is the principle of one country, one vote. However, the developed countries are able to pressurise the developing countries by various new devices, more especially through intellectual property rights and TRIMs. Although the Government of India is claiming that very substantial benefits are likely to accrue as a consequence of GATT agreement, but it is premature to reach any definite conclusion. The Final Act is such a big document that it has wheels-within-wheels and the thrust of the Act is to toe the line of developed nations. Mr. R.K. Khurana of the India International Centre has rightly summed up the position: "The consensus, however, is that the Uruguay Round has been a game in which the more powerful nations lay down the rules. Unfortunately, India is not one among the powerful trading nations and it is, therefore, doubtful if the country could have achieved anything significantly more than what our negotiations have managed."[6]

The history of GATT reveals that whenever newly industrialised nations have challenged the competitive strength of the developed Countries, they have immediately retaliated by imposing both tariff and non-tariff barriers. They have now enlarged these in the form of TRIPs and TRIMs. The innovation of the social clause was also conceived with the same intention of blunting the competitive advantage of developing nations. This game will continue. The solution lies in the fact that the developing nations should take advantage of the multi-lateral trade organisations and show their combined strength by closing their ranks, rather than surrender their sovereignty one after another. To say that there is no alternative is a defeatist solution. Now that China has also been admitted to WTO, both China and India should work together to assert a fair and just treaty among the trading partners of WTO, rather than pushing down the throat of the weak, the will of the strong partner(s).

Uruguay Round of GATT and Later Developments

The World Trade Organisation (WTO) as contained in the Final Act was established on 1st of January 1995 and India became a founder member of WTO by ratifying the WTO agreement on 30 December 1994. According to the Estimates prepared by the World Bank, OECD and GATT Secretariat, the overall trade impact as a consequence of Uruguay Round Package will be addition to the mechandise good by $745 billion by the year 2005. The GATT Secretariat further projects that the largest increases will be in the area of clothing (60%), agriculture, forestry and fishery products (20%) and procesed food and beverages (19%). But the Economic Survey (1994-95) has underlined the stark reality that whereas the developed countries want that under the pressure of the super-statal organisation (WTO), the developing countries should reduce trade barriers and permit free flow of goods, they themselves want to pursue protectionit policies to save their interest by erecting trade barriers. *The Economic Survey*, therefore, categorically states: "Unemployment in industrial countries is at highest level since the 1990s. This has created problems not only in these countries, but could translate into a clamour for protectionism, threatening multi-lateral trade.... Although several developing countries have substantially liberalised trade as part of economic reforms, developed countries have raised barriers, threatening marketing access to items of interest to developing countries".[7] It is due to the existence of this kind of situation which exhibits contradiction between rhetoric and reality, that the Indian Parliament has not given its seal of approval to the Patents (Amendment) Ordinnce of 1994 promulgated on 31 December 1994. Similarly, a Bill to amend the Trade and Merchandise Marks Act of 1958 so as to provide for the protection of service marks, introduced in Parliament in 1993 has not yet been passed. The fact that the Government is not able to get the approval of the Parliament for the various legislations introduced by it following the Uruguay Round Final Act, only confirms the

6. Khurana, R.K., Some Synthesising Thoughts, *Op. cit.*, p. 51.

7. Government of India, *Economic Survey* (1994-95), p.98

fact that the majority opinion is apprehensive of the intentions of the developed countries who want to use WTO to appropriate major portion of the gains of trade and leave some crumbs for the developing countries.

4. IMPACT OF WTO ON VARIOUS ASPECTS OF INDIAN ECONOMY

India, being a founder member of the WTO, has been following the WTO decisions, but as a consequence, certain effects on the Indian economy have become evident.

1. Effects on Indian Industry

WTO has been urging India to lower import duties, remove controls on consumer goods imports, reduce quantitative restrictions, etc. Under the Uruguay Round Agreement, India offered to reduce tariffs on capital goods, components, intermediate goods and industrial raw materials to 40% in case our tariffs were above that percentage; to 25% in case our tariffs were between 25 to 40 per cent and to bind the tariff ceiling at 25 per cent in case our tariffs were below that percentage. This reduction in tariffs was to be achieved by the year ending 2000.

Since India scrupulously followed the agreement, the tariffs have been reduced year after year to conform with the WTO provisions. As the protection afforded by import duties gradually disappeared, Indian industry had to face increasing competition from foreign goods. Confederation of Indian Industry (CII), the apex body expressed its disapproval against duty-free status of capital goods sector. As a result, CII estimated that indigenous capital goods industry on a conservative estimate lost orders worth ₹ 5,000 crores from foreign countries. Instead of ensuring level playing field, indigenous industry has to pay excise, sales tax, octroi, turnover tax while imported goods are allowed duty-free access to our market. Not only the entire manufacturing industry is faced with a crisis, even machine tools industry, gensets and boiler producers are put at a serious disadvantage. Consequently, imports of finished products are displacing indigenously produced products. As a result, many industrial units are being closed and cheap imports have become an important cause of recession in Indian industry.

India was maintaining quantitative restrictions in the form of quotas, import and export licences on 2,700 agricultural commodities, textile and industrial products. United States along with Australia, New Zealand, Switzerland, European Economic Community and Canada complained to the WTO Dispute Settlement Machinery that these QRS were inconsistent with WTO norms. The dispute settlement panel gave its verdict against India. India went in appeal, but the WTO panel on 23rd August 1999 rejected India's appeal against QRs.

As a result, although India could continue QRRs till March 2003, the process was hastened and QRS on all items were removed. This has opened the floodgates for foreign consumer goods to enter the Indian market, thereby seriously damaging Indian industry.

Impact of import of Second Hand Cars in India: The Government of India allowed the import of second hand cars into India. This policy has seriously hit Indian automobile industry. Mr. Rahul Bajaj described this as "anti-national and anti-India Act". In fact, experience the world over has shown that wherever second hand imported cars are allowed, they seriously damage domestic industry. Japanese used cars virtually destroyed New Zealand car industry. Even Mr. Phil Spender, Managing Director, Ford India reacting to the policy of permitting used cars said: "If the government asks us what to do (about the used cars), I'll be the first to volunteer ways to keep used cars imports out of India"[9]. Even other CEOs of MNCs who have invested in the Indian automobile market expressed similar sentiments. Mr. Richard Swano, M.D. General Motors is of the opinion that the import tariff on used cars should be 100% and not 40-50 per cent.

Similarly, if India allowed the import of used machine tools, it is likely to have serious repercussions on capital equipment manufactures.

Import of Chinese Goods—In recent years, Chinese goods are flooding the Indian markets. They include battery cells, cigarette lighters, locks, car stereos, energy saving lamps, VCD players, wrist watches, toys, fans, electric ovens and a large variety of consumer articles. Since China has become a member of the WTO, this is going to create another problem because action against Chinese dumping of goods can be taken only within WTO provisions. Not only that, Chinese goods are coming through normal channels of trade, they are also being smuggled via Nepal at zero duty. A very porous border from Nepal has increased clandestine imports from China. Both regular and clandestine imports from China are making serious forays into the Indian markets, thus hurting quite a large range of consumer goods industries. It is very

9. Sabade BR (2001). *WTO—A Threat or An Opportunity*, p.39.

difficult to prepare an anti-dumping case against China, since it is virtually impossible to obtain information required from Chinese sources due to non-transparent nature of Chinese economy. Dr. B.R. Sabade is of the view, "It is extremely difficult to make a case about dumping of Chinese goods. Government can impose a preliminary duty, introduce a trigger price mechanism or declare China as a non-market economy".[10]

2. Impact of WTO on SSI Units

WTO agreements do not discriminate on the basis of size of industries or enterprises. In the WTO regime, reservations may have to be withdrawn, preferential purchase and other support measures may not be available and thus SSIs have to compete not only with the large units within the country, but also with cheap imported products. SSIs are thus losing their markets to cheap imported products. Consequently, a very large number of SSI units are becoming sick or have closed down. Thus, the SSI sector which accounts for 40 per cent of manufacturing output, 50 per cent of employment and over 33 per cent of exports is in jeopardy. Next to agriculture, this sector is the principal source of employment accommodating 18 million persons. The rule of survival of the fittest is being applied to this sector and in their game, only a few able ones will be able to survive. Dumping of Chinese goods has seriously affected SSI sector. The real difficultly with the SSI sector is that it does not have adequate resources to prepare the case for anti-dumping duties in view of the prohibitive costs of anti-dumping investigation. The SSIs cannot collect detailed information on individual products required by the anti-dumping directorate to establish a complete case. Consequently, small industries continue to suffer due to such dumping policy.

Not only that, the entry of multinationals in ordinary consumer goods like ice cream, *agarbatti* manufacture, food processing, mineral water etc. is also adversely affecting the SSI sector since these were the traditional areas of this sector. In soft drinks, the entry of powerful Coca Cola and Pepsi have eliminated practically all small units engaged in the manufacture of aerated water. MNCs are not interested in hi-tech products. Rather they prefer low technology, quick profit yielding and large volume products with regular demand throughout the year. In the name of consumer interests, MNCs continue to swallow SSIs and eliminate them from the market.

10. *Ibid.*, p.41.

3. Double Standards of Developed Countries

The basic question is: Developed countries demand so many concessions and reduction of tariffs from the developing countries, but are they encouraging free flow of trade, capital and technology across states; or are they using globalisation to their advantage? It would be of interest to consider certain issues: -

Unfair Game in Agreements on Textiles—India is quite competitive in textiles. But developed countries through various protectionist measures deny access to cost efficient textile producers. These measures take the form of anti-dumping duties, unilateral change in the rule of origin and unjustifiable foisting of environmental issues. All these measures are taken to protect domestic industry in developed countries and thus, these measures hamper free flow of Indian textile exports.

Developed countries have proposed ten long years to reduce quotas in their domestic textile industries, but they pressurise the developing countries to reduece their tariffs, remove quantitative restrictions, introduce Intellectual Property Rights (IPRs) etc. immediately. Obvious developed countries play an unfair game so far as textile agreements are concerned.

The United States has signed WTO agreements with the proviso that all such agreements will have to be passed by the US Congress, being a sovereign body. There is another assurance given by the US President to the Congress. In case, the decisions of Dispute Settlement Machinery of WTO go against the United States, they will be reviewed by US justices. If they find the decisions unfair, the US has unilaterally reserved for itself right to walk out of the WTO.

Criticising this big brother like attitude, some commentators believe that the rule makers are not going to tolerate being over-ruled. Many of the US laws like Section 301 of US Trade Act is clearly a violation of WTO agreement. This matter was considered by the Dispute Settlement Panel of WTO which gave its verdict that those laws are WTO compliant. This has emboldened the US to continue to use unilateral action against countries that are not considered by US administration as compliant with US trading interests. It passes one's comprehension how the US Congress should be considered as a super-body over the WTO, while the parliaments of other members of the WTO, especially the developing countries, are denied this right. Although sixteen countries petitioned against the US, but since WTO has supported the US position, all

these countries which include besides India, Argentina, Egypt, Greece, Poland, Korea, Russia can do very little against the US unilateral action since it has the WTO in its pocket. Though patently unjustified, yet Secton 107 of Uruguay Round Agreement "provides that nothing in the Uruguay Round Agreement shall be construed to limit any authority conferred under any law of the United States including sections 301-310 of the Trade Act of 1974".[11]

Child Labour—When imports from developing countries hurt the interests of United States, a number of environmental and human rights issues were raised with the objective of imposing a ban on the import of Indian carpets, chemicals, handicrafts, ready made garments on the plea that in their manufacture child labour was involved. The United States banned imports of several products from India on the plea of child labour. But the hypocrisy of the US attitude has been blown up by Mr. B R Sabade when he writes: "Many American Companies have shifted their factories to remote areas in Mexico, Indonesia and some other countries. Children are employed in these factories in large numbers and they have to work for more than 12 hours. Recently, a study conducted by Rugar University has revealed that 290,200 child workers are sweating in shopping malls, factories and farms in the United States"[12]. With such double standards, the US uses the child labour stick to punish India.

US Antidumping Act and Copy Right Act against WTO Principles—Recently, Japan complained against the US Anti-dumping Act as a violation of WTO principles. A series of investigations carried out regarding Japan's steel exports to United States revealed that the US Anti-dumping Act was inconsistent with WTO principles. The decision of the WTO favouring Japan was delivered on 29th May 2000.

Similarly, European Economic Community complained against the US Copy Right Act since it militated against the WTO principles as provided for under Berne Convention for the protection of literacy and artistic works. The WTO decision delivered on 15th June 2000 also went against the United States.

5. WTO, SUBSIDIES AND AGRICULTURE

WTO Agreement on Agriculture stipulated that developed countries would reduce their subsidies by 20 per cent in six years and developing countries by 13 per cent in 10 years. But as facts stand today, developed countries tried to circumvent this agreement by providing Green Box and Blue Box subsidies to support agriculture.

Green Box Subsidies include amounts spent on Government services such as research, disease control, infrastructure and food security. They also include payments made directly to farmers that do not stimulate production, such as certain forms of direct income support assistance to help farmers restructure agriculture, and direct payments under environmental and regular assistance programmes. This definition is very wide and includes all types of Government subsidies.

Blue Box Subsidies are certain direct payments made to farmers where the farmers are to limit production, certain government assistance programmes to encourage agriculture and rural development in developing countries, and other support on a small scale when compared with the total value of the products supported 15 per cent or less in the case of developed countries and 10 per cent or less for developing countries.

Similar to domestic support subsidies, developing countries are not allowed to increase their negligible level of export subsidies while developed countries are allowed to maintain 64 per cent of their subsidy outlays on the base level. Consequently, agriculture imports from developed countries are available at much below the market price in the domestic economy. ***Human Development Report*** (1997) reviewing this problem mentions: "According to the OECD, the per capita transfer to US farmers amounted to $ 29,000 in 1995. In the main maize producing areas of Mindanao and Cagayen Valley, the average per capita income amount to less than $ 300. So each US farmer receives in subsidies roughly 100 times the income of a maize farmer in Philippines."

"In the real world, as distinct from the imaginary or inhabited by free traders, survival in agricultural markets depends less on comparative cost advantage than on comparative access to subsidies. Liberalising local food markets in the face of unequal competition is not a prescription for improving efficiency, but a recipe for the destruction of livelihood."

"Implementation of the Uruguay Round agriculture agreement over the next five years will not materially change the picture . . . Agriculture remains the only area in which export dumping is accepted as a legitimate trade practice." (p. 86)

Earlier, Indian agricultural prices were lower than international prices mostly. But as a result of the heavy

11. *Ibid.*, pp. 52-53.
12. *Ibid*, p.51.

subsidization of agricultural exports by developed countries, the situation undertook a dramatic about-turn. The Indian farmers have been put to serious disadvantage. The phenomenon of farmers suicides and the growing unrest in several states because of the distress of farmers specialising in agricultural commodities and their exports is a very serious human problem.

Has the Situation Changed after Doha?

Doha Ministerial (2001) forced the developed countries to consider issues of implementation before undertaking consideration of new issues. Developed countries agreed to discuss the issues related with implementation. It was also felt that developed countries should reduce tariffs and also remove non-tariff barriers. But did the situation change thereafter? It would be relevant to quote the findings of the ***Human Development Report (2003)*** in this regard.

"The most important expectation of poor countries in the Uruguay Round of international trade negotiations (1986-94) was that rich countries would open their markets in these two sectors (Agriculture and Textiles). But the results have been largely disappointing. Protection in most rich countries remains extremely high, through a variety of instruments."

Tariffs: "In agriculture, the tariffs of OECD countries are heavily biased against low-priced farm products produced by developing countries .. . Bangladesh exports about $ 2.4 billion to the United States each year and pays 14% in tariffs—while France exports $ 30 billion and pays 1% in tariffs. Moreover, the Uruguay Round did not change peak tariffs (those above 15%) on many developing countries—60% of imports from developing countries by Canada, the European Union, Japan and United States were subject to peak tariffs."

Quotas: Import quotas are a more extreme version of the same policy. Rather than just making developing country products less competitive, quotas do not allow those products past a certain volume to compete at all . . . Quotas on clothing and textiles are to be phased out by 2005. But in 2002 quotas still governed most of the same clothing products covering quotas in the late 1980s. The lack of progress raises doubts about the seriousness of OECD countries to meet their 2005 commitments."

"***Export subsidies***: . . . Rich countries, to varying degrees, pay large subsidies to their domestic food producers. These subsidies are so large—totalling $ 311 billion a year—that they affect the market prices of agricultural goods, causing direct harm to poor countries. EU-subsidized exports have contributed to the decline of dairy industries in Brazil and Jamaica and the sugar industry in South Africa . . . Annual subsidies in rich countries ($ 311 billion) considerably exceed the national income of all Sub-saharan Africa" ($ 52 billion) in 2001. (p. 154-55)

From the facts revealed by the ***Human Development Report (2003)*** which are based on the Research work done by the Millennium Task Force 9, 2003 and Birdsall and Clemens (2003) provide an overview of the ground reality and the intentions of the rich countries to jealously protect their own domestic interests in the name of free trade and globalisation under the auspices of the WTO.

What needs to be done

The basic question is: What needs to be done? There are two levels at which action has to be taken. First is the international level and the second is the domestic level.

At the international level, resistance has to be built against the developed countries so that a level playing field is available to goods and services exported by India and other developing countries. The net impact of the protective and discriminatory policies of the US and OECD countries is to corner all benefits of globalisation in their favour. ***Human Development Report (2003)*** opines: "But in the long-run low prices dampen incentives to invest, which leads to stagnation of an important sector of the economy (*viz*., agriculture) on which many poor people depend. That leaves the rich countries farmers as the sole true beneficiaries of subsidies, with a multitude of losers across the globe." (p. 156)

At the international level, combined pressure of developing countries is bound to make an impact. With an improvement in relations with China after Prime Minister Vajpayee's successful visit, if these two big countries belonging to the developing world, mobilize support from Brazil, Pakistan, Bangladesh, Vietnam, Philippines, Africa, etc. it could represent the voice of two-third of the people of the world. Developed countries will ultimately have to yield to the basically logical stand of these countries so that the benefits of globalisation should be equitably shared between the developed and the developing world.

In case, the developed and rich countries do not listen to the pleadings of the developing countries to adhere to the norms and agenda agreed for reduction of tariffs and subsidies, then there are two alternatives left. Developing countries should decide whether they would like to continue to be members of the WTO or whether they should also take recourse to retaliatory measures. History provides

ample evidence that when the voice of reason and logic was not listened to, then the only alternative left was to retaliate. Since agricultural subsidies in India are much less than the 10 per cent of the GDP level stipulated by the WTO (they are around 3 per cent), there is enough scope to raise them as a retaliatory measure. But such a course is likely to give a serious jolt to the movement towards globalisation, but if such an eventuality is forced on developing countries, they have to use the bitter pill to save the livelihood of the farmers who depend exclusively on agricultural exports. Late Prof. P.R. Brahmananda went so far to assert in one of his lecture: "We have to think of domestic interests as paramount. If we have to leave WTO for the interests of our farmers, I would not mind it."

India's agricultural imports were of the order of US $ 1.86 billion in 2000-01, but they increased to $ 2.29 billion in 2001-02. If the surge continues, then the interests of Indian farmers would be seriously affected. ***Economic Survey (2002-03)*** makes a forthright statement: "India has considerable flexibility to counter flooding of the Indian market by cheap agriculture imports through the imposition of tariffs (bound rates) under WTO. WTO permissible tariff rates are reasonably high: 112 per cent for nuts, 150 per cent for sugar and coffee, 100 per cent for tea and cotton, 70 to 100 per cent for foodgrains, 45 to 300 per cent for edible oils and 40 to 50 per cent for fruits. Countervailing duties can also be imposed to counter questionable subsidies given to agriculture products by the exporting countries apart from having the option of acting under safeguard provisions to counter the surge of imports. In budget 2001-02, import duties were raised for many agri products such as tea, coffee, pulses and edible oils. In 2002-03 budget, the import duties were raised for pulses (from 5 to 10 per cent, tea and coffee (from 70 to 100 per cent), natural rubber, pepper, cardamom and clove (from 35 to 70 per cent)." (pp. 174-75) So far India has followed the Agreement on Agriculture very honestly, but honest implementation should not be treated as a sign of weakness. In case, the US and OECD countries persist in their nefarious game of protective tariffs, quotas and subsidies for their farmers, India and other developing countries may be left with no choice but to retaliate. But this would mean the start of a process which may result in the decline of globalisation world over.

However, this does not mean that at the domestic level, India has no action to take to improve its agriculture. In fact, the reform process is guilty of neglecting agriculture. In agricultural infrastructure, the most important is irrigation. The reform process emphasized the role of the private sector in promoting irrigation. But the experience of the Ninth Plan as documented in the Tenth Plan reveals that the private sector invested in irrigation technologies which were mainly extractive such as tubewells. But these investments are not sustainable unless appropriate investments are made in rain-water harvesting and recharging of ground water resources. However, data as provided by CSO reveals that in gross capital formation in agriculture, the share of the public sector declined from 33 per cent in 1994-95 to merely 23.5 per cent in 2000-01. In absolute terms, public sector investment declined from ₹ 4,947 crores in 1994-95 (measured at 1993-94 prices) to just ₹ 3,919 crores in 2000-01. Although private sector investment improved, but it did not fulfill the functions of rain water harvesting and recharging of ground water resources.

In boosting agri exports, some success has been achieved, but agri-exports which reached $ 6,004 million in 2000-01, declined to $ 5,871 million in 2001-02. ***Economic Survey (2000-03)*** indicating the main reasons for Indian exports continuing to be in the range of 13-14 per cent of total exports states: "Main reason is poor export infrastructure, low level of agri processing, grading, quality control and poor or lack of quality branding and packaging. Infrastructure specific to agri exports, such as storage, and fast track inland and mechanical port handling facilities, is also a limiting factor." (p. 173)

Another important area which needs attention is to make agricultural credit available at lower rates of interest. There is no doubt that the total flow of institutional credit to agriculture which was of the order of ₹ 31,956 crores in 1997-98 has more than doubled to ₹ 82,000 crores in 2002-03. This is really heartening, but the rate of interest charged on loans ranges between 14-18 per cent. This implies that the benefit of declining rates of interest has not been passed on agricultural borrowers. On account of the efforts of former Agriculture Minister Mr. Rajnath Singh, the Finance Ministry agreed to reduce interest on farm loans upto ₹ 50,000 to 9 per cent. This step, though in the right direction, is still inadequate, moreso, in view of the fact interest on housing loans has been reduced to 8.5 to 10 per cent, it is imperative on the part of the Government to bring down interest rates on all agricultural loans—short-term, medium-term and long-term. Accepting the need to reduce interest rate on agricultural loans, Former Prime Minister Atal Behari Vajpayee on 27th July 2003 announced: "Crop loans below ₹ 50,000 will be charged nine per cent interest and banks are being asked to charge the rate of interest below the PLRs for agricultural loans up to ₹ two laks." It

may be noted that the current PLR for most banks is between 11 to 12 per cent.

The upshot of the entire analysis is that whereas the developed countries want to penetrate the markets of developing countries in agriculture, they continue to use tariffs, quotas and subsidies to help their farmers. There has been no pereptible change in the policies of the United States and OECD countries. To share the benefits of globalisation in an equitable manner, it is imperative that developed countires bring about reductions in tariffs and subsides and eliminate quotas so to permit a level playing field for developing countries. Moreover, as estimated by the European Commission, half of all subsidies go to just 5% of large farms. If under the banner of globalisation, WTO intends to build a more equitable and just world order, then at forthcoming ministerial meet at Cancum in September 2003, it has to apply pressure on developed countries so that the principle of comparative cost becomes the basis of trade in agriculture, rather than the principle of access to subsidies.

6. INDIA'S ROLE AT DOHA MINISTERIAL CONFERENCE (2001)

The Doha ministerial under the auspices of the WTO in November 2001 had a draft prepared by its Director General Mr. Mike Moore, which intended to raise new issues such as investment, competition policy and transparency in Government procurement. The developed countries headed by USA were keen on discussing these issues, but the developing nations wanted the 142-members to consider issues related with the implementation of the early decisions taken after the Uruguay Round in 1994.

The major cause of complaint of the developing countries was that whereas the developed nations in principle agreed to reduction of tariff and non-tariff barriers which were a hindrance to the free trade, but in practice used a number of non-tariff barriers to obstruct the much-intended free flow of trade. US had been able to influence a number of small developing nations to agree to the new agenda, but India spearheaded the attack with Mr. Murasoli Maran, Commerce and Industry Minister by asserting: "We want implementation issues addressed. We want further progress on the built-in agenda of the Uruguay Round, especially on trade in services and agriculture. We will not accept any discussion on non-trade issues like labour standards." Mr. Maran said: "WTO is not a global government and it should not seek to appropriate to itself responsibilities that legitimately belong to national Governments and legislatures." Although it was feared at an earlier stage the India may be isolated, but the logical stand taken by India to further the interests of developing nations, a number of countries came to support the strong stand taken by India. As a matter of convention, all WTO decisions are taken by the entire membership, typically by concensus. Though a majority vote can be taken, but it hasn't happened so far since the WTO replaced GATT.

As a consequence of the pressure from the developing nations, USA and the European Union relented and accepted a number of issues, which had been strong irritants for developing nations.

First of all, it was agreed that developing countries need not source their essential medicines and drugs at high cost from western multinational companies, which hold patents. South Asian, African and Caribbean countries will benefit from this decision. Since China, India and Brazil possess the capacity and technology to manufacture these drugs, they will be entitled to export these medicines without having to secure compulsory licences from licence holders. Brazil representative very candidly put forward the case of developing countries: "We need a political signal that we can do what the US and Canada have just done in providing low-priced doses of antibiotics to combat the anthrax scare." In this way, the fear that the health cover to about 30 per cent of the population available will be eroded significantly as a consequence of the apprehended rise in their prices, will be significantly taken care of.

Secondly, the poor countries will be able to better look after their food security concerns. This would become possible with the start of negotiations on reduction of domestic support and elimination of export subsidies being provided by US and European Union to their farmers. Now that the developed countries are relenting on this issue as a consequence of the strong line taken by India and other developing countries, consequently poorer nations in need of food will be able to get food cheaper and countries intending to export their surplus grains would be able to stand competition from developed countries.

Thirdly, with regard to services and the related removal of restrictions on the natural movement of people, developed countries are going to be tied down for negotiations. The real argument put forth in this regard was that flexibility may be left to different members for bilateral pacts. In this way, it is hoped that India would gain by increasing access for banking, insurance and other companies and increasing opportunities for people to work in other countries.

Fourthly, reduction and elimination of tariffs in non-agricultural goods and other barriers, particularly on products that are important to developing countries, is another major gain for India.

Fifthly, WTO ministerial declaration has stressed the need for establishing a system of registration for wines and spirits known by the region where they are made like champagne. Extension of this geographical indication to other items like basmati rice will also be looked into.

Lastly, US agreed to review anti-dumping rules, but there is a fear that this may not be achieved unless the developing countries build up strong pressure on the US to do so.

Gains for India

The Commerce and Industry Minister who represented India at the Doha WTO Conference succeeded in sending a strong message that India can no longer be ridden roughshod over by the developed countries, more especially US and the European Union. The biggest gain was that WTO chairman declared that negotiations on Singapore issues–investment, competition, labour standards and environment would be held only after an "explicit concensus" was reached at the Fifth Ministerial. Such a concensus may not be easy to emerge even in 2003, keeping in view the reservations expressed by the developing nations at the Doha Conference.

Another major gain was that instead of opening discussion on new issues, it was agreed under pressure from India and other developing countries that it would be more advisable to undertake an exercise on a more complete implementation of Uruguay Round recommendations. This would involve review of bottlenecks and constraints arising out of the roadblocks in the way of fulfillment of their obligations by the developed countries. This would be particularly directed towards the US, Japan and countries of the European Union to open markets to products in which the developing countries enjoyed a comparative advantage.

The anti-dumping laws of the US were another painful thorn in the flesh of countries like India in respect of steel and other allied items of manufacture. This was taken up strongly by India and other member countries. The pressure built on US was so strong that the US was forced to promise a toning down of its policies and legislation pertaining to anti-dumping laws.

Now that the WTO has appointed a 9-member committee to which the key issue of Trade Related Intellectual Property Rights (TRIPS) has been referred to, it is hoped that the WTO will find a structural change in its functioning and decision-making. The agenda, henceforth, will not be set by the US and European Union (EU), but the developing countries would also be able to air their views more freely so that the WTO does not operate to the dictates of US and the European Union, but becomes a more democratic forum, in the real sense of the term. India and Brazil are members of the committee and they would be able to place the view of developing countries with the same strength with which they presented and articulated the arguments in the WTO Conference at Doha.

CONLUSION

A survey of the globalisation policies followed in India reveals that the promised benefits of globalisation in the form of sharp increase in GDP, exports, foreign direct investment, reduction of poverty, deceleration of unemployment could not be realised by India during the 1990s. Globalisation has adversely affected Indian industry, it has enabled the developed countries to push their exports to India at a much faster rate, but did not facilitate the process of access to international markets; small scale industry has suffered due to the policy of dumping practised by developed countries, more especially in consumer goods. The most distressing part of the story is the double standards practised by the developed countries which manifest in the form of unfair agreement on textiles; a policy marked by a bias in favour of the farmers of developed countries as against the poor farmers in India. Developed countries brought forth spurious environmental and social issues to prevent the exports from India of such commodities in which the country possessed comparative advantage. Mr V S Vyas rightly points out: "The international agreements, particularly under World Trade Organisation (WTO) have not helped the developing countries as was professed at the time of the establishment of WTO"[14]. All these factors have resulted in an erosion of faith in globalisation as the new "mantra" for stimulating development in India.

7. GENEVA FRAMEWORK OF WTO AND INDIA

India along with the group of G-20 countries took the initiative to voice the strong feeling of the majority of developing countries at Cancun in 2003. Mr. Arun Jaitley,

14. Vyas V S (2002), Globalisation : Hopes, Realities and Coping Strategy, *Economic and Political Weekly*, May 23-29, 2002.

the then Commerce and Industry Minister speaking on the 10th September 2003 stated:

"The plight of farmers in developing countries was directly linked to the level and kind of subsidy extended to farmers in the advanced countries."

"OECD governments support sugar producers at the rate of $ 6.4 billion annually—a sum nearly equal to all developing countries exports. Subsidies to cotton growers in a developed country totalled $ 3.7 billion last year, which is thrice the country's foreign aid to Africa. The agricultural subsidies provided by OECD countries are more than six times what they spent on official development assistance for developing countries." It was alleged that the OECD countries provided domestic support of the order of $ 320 billion to their farmers, thus enabling them an unequal bargaining power against farmers of developing countries. OECD farmers were thus able to push subsidised agricultural exports to the developing countries impacting adversely on the interests of farmers in developing and least developed countries. The Cancun round ended in fiasco because of the stubborn attitude of the representatives of US and EU countries, not to discuss reduction of agricultural subsidies, but to push the Singapore issues, viz. investment, competition, government procurement and trade facilitation. Since India, Brazil, China, Indonesia, Egypt, Malaysia, Philippines, Bangladesh including other developing countries voiced their strong opposition to the Cancun (2003) draft, the negotiations ended in total failure.

At the Geneva meeting in July 2004, efforts were made to discuss the concerns of the developing countries. India was represented by Commerce and Industry Minister Mr. Kamal Nath. The Indian Government has claimed that it has been able to extract substantial gains on the export of industrial goods and services. It has also been able to safeguard the interests of the farmers. The major gains claimed are:

Firstly, out of four contentious issues which the developed countries wanted to be included in the Doha Round, three issues, namely, investment, competition policy and government procurement have been dropped from the agenda. Only trade facilitation will be taken up for consideration.

Secondly, developed countries have agreed to do away with direct and indirect subsidies provided to their exports. They have also promised to bring about substantial reduction of domestic support provided to their farmers. In particular, the Geneva framework requires that there would a minimum reduction in such support to 80 per cent of the pre-existing levels in the very first year and throughout the period of implementation.

Thirdly, the developed countries have recognised the need for special and differential treatment for developing countries in terms of quantum of tariff reduction, tariff rate quota expansion, number and treatment of sensitive products and the length of implementation period.

Fourthly, developing countries have the right to identify the number of special products, based on the criteria of food security, livelihood security and rural development needs, which would be eligible for flexible treatment.

Lastly, a Special Safeguard Mechanism has been provided in the framework against disruptive imports, the details of which are to be worked out. The developed countries have also accepted the adoption of less-than-full reciprocity principle for developing countries.

Commerce Minister Kamal Nath recounting the achievements at Geneva in the new WTO framework listed the following:

1. Zero-to-zero tariff approach will not be binding on all sectors. It implies that India can choose the sectors and products whose zero-duty imports will be allowed. This will enable India check a flood of imports in areas where we are not competitive. This will help to safeguard the interests of domestic industries.

2. On the agricultural front, the biggest achievement seems to be the two windows open for developing countries like India to place the products of their choice in Special Products and Sensitive Products windows. Special product windows can be used by developing countries to block flooding of imports of a particular product. The Commerce Minister believes that these two windows will help India to effectively block US and EU access to our agricultural markets.

3. On the question of promoting cost-effective quality services, the framework gives a bigger push to Mode-4 Services. However, the Government concedes that restrictive policy regime vis-a-vis services may hinder their growth.

On balance, it may be stated that WTO Framework Agreement has made a break-through in world trade negotiations. There are significant gains made, but the most question is: Will the developed countries permit the developing countries to realise these gains in the near future? The critics are not very sure because as has been argued by former Commerce Minister Arun Jaitley, C.P. Chandrasekhar and Jayati Ghosh of JNU, Devinder Sharma

and Rupa Chanda of IIM Bangalore: for, the devil is in the details. Members have only agreed to a framework. The actual modalities need to be worked out.

It is argued that India has pinned down developed countries to reduce and eliminate export subsidies. But no date has been specified. The time table for this will be negotiated in Hong Kong. So, at the present moment, this can give us a notional satisfaction.

The subsidies take three forms: (a) Amber Subsidies are intended to encourage more production; (b) Blue Box provide incentives to limit production; and (c) Green Box subsidies are provided in the name of environment and livestock. The total subsidies provided by the developed countries are $ 320 billion per year or nearly $ 1 billion per day. The most unfortunate part of the negotiations is that the Blue Box subsidies have been legitimized. The declaration states: "Members recognised the role of the Blue Box for promoting agricultural reforms." Similarly, the declaration accepts that the Green Box subsidies will not in future be subject to any reduction in subsidies. This implies that we have shut the doors so far as reduction in Blue Box and Green Box subsidies is concerned. Arun Jaitley in a sharp comment argues: "We have painted ourselves in a corner by legitimizing the existence of Green Box and the Blue Box. We have not only hurt ourselves in the Doha round but accepted a principle that will continue to haunt us in future rounds. ... We can rejoice that there would be a capping on the expanded Blue Box and an overall reduction." The developed countries can feel relieved that the Green Box is wholly outside any reduction commitment and jugglery of box shifting would effectively prevent any reduction in the quantum. The colour of subsidies may change but will the quantum be substantially reduced?" (*Hindustan Times*, August 11, 2004). Critics, therefore, are of the opinion that the developed countries have emerged as the winners in this game of negotiations and have been able to extract a framework which would strengthen the bargaining position of US and EU in the future round of negotiations.

On the question of restricting trade distorting support to 80 per cent, Para 7 of the Framework for Establishing Modalities in agriculture states: "As the first instalment of the overall cut, in the first year and throughout the implementation period, the sum of all trade-distorting support will not exceed 80 per cent of the sum of the final bound total AMS (Aggregate Measurement of Support) plus permitted de minimus plus Blue Box at the level determined in paragraph 15."

Table 6 provides information regarding the total AMS subject to reduction to be of the order of 101.6 billion euro. 80% of this will provide the post-minimal support permissible under the framework and this works out to be 81.2 billion euro. However, the actual total support as per the formulation of para 7 quoted above works out to 78 billion euro. Thus the European Union (EU) has still a leverage to increase subsidies by 3.6 billion euros, instead of reducing them. Obviously, the Framework does not impose any restrictions in practice to reduce subsidies. Change will be required if the developing countries in the course of negotiations are able to force developed countries to agree to more than 20 per cent reduction. But that lies in the womb of the future!

Table 6: Total AMS Support and Actual AMS in European Community

		Billion Euro
(i)	Total bound AMS commitment	67.2
(ii)	De Minimus	12.2
(iii)	Blue Box	22.2
(iv)	Total AMS Support Subject to reduction (i)+(ii)+(iii)	101.6
(v)	Post-minimal reduction level-80% of (iv)	81.2
	Actual Total Support	
	(a) Actual total AMS	43.6
	(b) De Minimus	12.2
	(c) Total Blue Box	22.2
	Total	**78.0**

Regarding Blue Box subsidies, the framework places them at the level of 5 per cent of total production value. In case of the European Community, total production value has been estimated at 243.4 billion euros. Thus, the permissible Blue Box support works out to be 12.2 billion at the rate of 5% of production value. The actual Blue Box support is 22.2 billion euros. The arithmetic, therefore, suggests an immediate reduction of Blue Box subsidies by 10 billion euros. But this reduction has not been guaranteed in the Framework which provides some flexibility where "a member has placed an exceptionally large percentage of its trade distorting support in the Blue Box." C.P. Chandrasekhar and Jayati Ghosh also agree with Arun Jaitley that the member may restructure the subsidies and shift the Blue Box support to the Green Box and thus avoid any reduction of subsidies.

Another claim made is the safeguard mechanism provided in the framework. The developing countries can brand certain products as "sensitive' and bring some others under the 'special product' category. This mechanism can enable developing countries to safeguard the interests of their agriculture. However, the inclusion in the 'Sensitive' or 'Special Product Category' will need the approval of the WTO. This requires evidence to prove that inclusion in Special Category is based on the criteria of food security, livelihood security and rural development needs or is based against disruptive imports. For instance, India produces about 250 crops whereas Europe does not grow more than 25 crops. Devinder Sharma is right when he argues: "For Europe, getting a score of crops protected under 'sensitive' and 'special products' will be justified. But to expect WTO to accord 'special product' status to over 200 crops from India would be asking for impossible." (*Business Line*, August 5, 2005)

Another area which is very important for India is the non-agricultural market access (NAMA) which has a high potential to increase our share in exports to US and EU. The broad modalities proposed in the framework have not been accepted by members. In the area of services in which India has strong interest, there is total absence of specificity. This is very disappointing.

Lastly, it has to be noted that two stalwarts among G-20 who spearheaded the interests of the developing countries at Doha and later at Cancun, joined "by invitation" the FIPs groups (Five Interested Parties) which included US and EU representing the developed countries, Australia representing the Cairns group of agricultural exporters with India and Brazil representing the developing countries. All this was intended with the clear objective that if India and Brazil can be softened, then it would become much easier to make inroads into the G-20 group. Chandrasekhar and Jayati Ghosh lament: "These claims of success not withstanding, the creation of FIPs, the inclusion of India along with Brazil, in the grouping and the nature of the framework agreement that FIPs was instrumental in forging, has weakened the developing country camp, which G-20 was expected to strengthen." (*Business Line*, August 10, 2004) This explains why India and Brazil did not take up the specific cause of African nations related with the elimination of cotton subsidies. It is really amazing that US supports its 25,000 cotton growers to the extent of $ 3.7 billion. Average subsidy per grower works out to be $ 1,48,000 which in 2002 is more than 4 times the per capita GDP in United States. The Cancun talks were deadlocked on this issue. The EU has withdrawn aid to Kenya, the most vocal of the African countries to the tune of $ 6[illegible] million on July 21, 2004 on the pretext of 'bad governance'. Although the framework pays lip sympathy and "recognis[illegible] the vital importance of this sector to certain LDC members but instead of taking specific decision on the issue "promis[illegible] to work to achieve results expeditiously."

To conclude, it may be pointed out that thoug[illegible] developed countries have agreed to reduce subsidies, ye[illegible] when the issue is probed in detail, it comes out very clear[illegible] that the developed countries have been successful [illegible] creating an illusion, without conceding anything substanti[illegible] The Framework Agreement leaves several vital issues [illegible] further negotiations. By creating FIPs, the developed countries have been able to break the resistance of tw[illegible] most powerful advocates of the interests of developing countries, thereby weakening the G-20 camp. In the ligh[illegible] of all these developments, there is no cause for jubilation over the achievement of WTO Framework Agreement [illegible] Geneva.

8. UPDATE ON TRADE NEGOTIATIONS

On Going WTO Negotiations

India has been one of the first signatories of WT[illegible] trade agreements, which concluded in 1994. There we[illegible] certain issues on which negotiations had not concluded. For remaining issues Doha Round of trade negotiatio[illegible] have been going on since 2001. These negotiations cove[illegible] several areas such as agriculture, market access for no[illegible] agricultural products, trade related intellectual propert[illegible] rights, rules (covering anti-dumping and subsidies) an[illegible] trade facilitation. Since 2001 negotiations have been going on at a very slow speed. While the years 2007 and 200[illegible] saw intensive discussions in the WTO and progres[illegible] achieved on several complex subjects, the negotiatio[illegible] were slow to resume following the December 2008 brea[illegible] at the WTO. Major stumbling block for negotiations [illegible] make a head way was the rigid stand taken by th[illegible] developed countries with regard to agricultural subsidie[illegible] issue. Developed countries were supposed to reduc[illegible] their agricultural subsidies as per the commitments mad[illegible] by them in WTO. Since issue of agricultural subsidies [illegible] very sensitive in their respective countries, developed countries instead of reducing their agricultural subsidie[illegible] have rather chosen to increase them manifold. [illegible] developing countries like India give market access to th[illegible] agricultural produce of developed countries, agricultu[illegible] in developing countries may suffer heavily. Anothe[illegible] contentious issue is that of Non-Agricultural Marke[illegible] Access (NAMA), according to which developin[illegible] countries would have to reduce their bound tariffs wi[illegible]

maximum overall average cut of 36 per cent over a larger implementation period of ten years. Therefore there has been a deadlock in WTO Doha Round of negotiations.

Based on discussions during the Mini-Ministerial Meeting held in July 2008, the Chairs of the Negotiating Groups on Agriculture and Non Agricultural Market Access (NAMA) brought out fresh drafts of modalities for Agriculture and NAMA on December 6, 2008.

Again after a standstill, going by the political commitments expressed by WTO members in international fora, India took the initiative and hosted a Ministerial Conference in New Delhi from September 3-4, 2009 which was the first occasion since July 2008 for ministers representing practically all shades of opinion and interests in the WTO to come together. There was unanimous affirmation of the need to expeditiously conclude the Doha Round, particularly in the present economic situation, and for development remaining at the heart of the Doha Round.

The Seventh WTO Ministerial meeting was the first full Ministerial meeting of the WTO in the aftermath of the global economic meltdown was held in Geneva from November 30-December 3, 2009. While the Conference was not intended as a negotiating forum, it provided a platform for different groups to assess the direction of the negotiations. India and her coalition partners reiterated their commitment to upholding the development dimension, the centrality of the multilateral process and the need to safeguard livelihood concerns, particularly of the poor, subsistence farmer in their countries.

Bilateral and Regional Cooperation

We understand that WTO continues to be at the center of India's trade negotiation. Given the fact that it is difficult to arrive at a consensus on contentious issues related to trade in goods, services and investment, and regional cooperation would continue to feature for a long time in world trade, India has been active in regional and bilateral trading arrangements in recent years. RTAs, which help in expanding India's export market, are considered as "building blocks" towards the overall objective of trade liberalization and multilateral negotiations.

Some of the recent developments with regard to Bilateral and Regional Trade Agreements (whether concluded or under negotiations) are listed as follows:

1. Indian-ASEAN CECA (FTA) : A Framework Agreement on Comprehensive Economic Cooperation between ASEAN and India was signed by the Prime Minister of India and the Heads of Nations/Governments of ASEAN members during the Second ASEAN-India Summit on October 8, 2003 in Bali, Indonesia. The agreement on Trade in Goods was signed on August 13, 2009. The India-ASEAN Trade in Goods Agreement has come into effect on January 1, 2010. The Agreements provides for elimination of basic customs duty on 80 per cent of the tariff lines accounting for 75 per cent of the trade in a gradual manner. Negotiations towards trade in a services and investment are expected to conclude by August 2010.

The signing of the ASEAN-India Trade in Goods Agreement paves the way for the creation of one of the world's largest free trade areas (FTA) – market of almost 1.8 billion people with a combined GDP of US$ 2.75 trillion. The ASEAN-India FTA will see tariff liberalization of over 90 percent of products traded between the two dynamic regions, including the so-called "special products," Such as palm oil (crude and refined), coffee, black tea and pepper. Tariffs on over 4,000 product lines will be eliminated by 2016, at the earliest.

Critics of this agreement argue that libralising trade in special products like palm oil, coffee, tea, coconut etc will have serious implications on livelihood of farmers engaged in the production of these commodities.

2. India-South Korea Comprehensive Economic Partnership Agreement (CEPA) : The Agreement was signed on August 7, 2009. This happens to be India's first FTA within OECD country. Under this agreement tariff will be reduced or eliminated on 93 per cent of Korea's tariff lines and 85 per cent of India's tariff lines.

3. India-Japan CEPA : Agreements in goods, services and investment are under negotiation. So far more than a dozen meetings of Joint Task Force have taken place in this regard.

4. India-EU Trade and Investment Agreement: A broad-based bilateral Trade & Investment Agreement is being negotiated with the EU . Negotiations cover trade in goods, services and investment, sanitary and phyto sanitary measures, technical barriers to trade, rules of origin, trade facilitation and customs cooperation, competition, trade defence mechanism, Government procurement, dispute settlements, Intellectual Property Rights (IPR) and Geographical Indications (GIs).

There are many issues of concern in the EU-India FTA. According to the critics this FTA is going to have an adverse impact on livelihood of Indian people. According to a study commissioned by the European Commission itself, the FTA would increase EU exports to India by $17-18 billion while India's export would increase by around $5 billion only. The impact of reducing as many as 95% of our import duties down to zero or close to zero percent in seven years will result in import surges—especially since EU agriculture imports in particular are heavily subsidized in a wide range of products such as sugar, dairy, tomato paste, poultry, to

name a few. Because the EU FTA will do nothing to curb EU subsidies—farmers and farm workers will be hard hit by our steep reduction of import duties. Moreover, a rapid reduction of import duties, combined with ease of entry of European agro-processing and retail firms through the services and investment chapter of the FTA will dramatically impact how food is produced and sold in this country. Indian farmers and workers will not be able to bargain against the power of Europe's multinational retail firms.

According to critics this agreement would pave a way for unrestricted export of metallic minerals and other rare natural materials, which would cause great loss for our feature generation. Critics also believe that liberalization in services and investment would have severe implications for India's existing and future small and homegrown industries and businesses related to agricultural, manufacturing and services. This agreement would also seriously affect the scope of intellectual property protection and enforcement. If EUs demand for liberalising government procurement is accepted than our small and medium enterprises, poorer section of the society and poorer states would be adversely affected. This would also adversely affect the government's ability to adopt suitable policies to take care of economic upheavals.

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CHAPTER

48

INDIAN CURRENCY SYSTEM

"The mint was pitted against the smelting pot, and the coin produced by so much patience and skill by one was rapidly reduced to bangles by the other."

—Gustav Cassels
quoted by* B.R. Ambedkar *in The Problem of the Rupee.

1. INDIAN CURRENCY SYSTEM TODAY

The present monetary system in India is managed by the Reserve Bank of India (RBI) which is the central bank of the country. The Indian monetary system is based on inconvertible paper currency. For internal purposes there are rupee coins and currency notes. For external purposes, the rupee is convertible into other currencies of the world.

Rupee Coins and Small Coins

The rupee is the monetary unit of India and is based on the decimal system. The rupee consists of 100 paise. The rupee coin is a token coin made of nickel and its face value is higher than its metallic value. The one rupee is also printed on paper by the Finance Ministry of the Government of India. The rupee as well as the half-rupee coins are unlimited legal tenders but the subsidiary coins are only limited legal tender. The volume of rupee coins and small coins as well as one-rupee notes is controlled by RBI. The total value of rupee coins and small coins in circulation in India amounted to:

1970-1971 - ₹ 390 crores
1990-1991 - ₹ 1,620 crores
2000-2001 - ₹ 6,350 crores
2008-2009 - ₹ 9,957 crores
2009-2010 - ₹ 11,010 crores
2010-2011 - ₹ 12,725 crores
2011-2012 - ₹ 14,110 crores

Despite this huge increase in the volume of rupee coins and small coins (increase from ₹ 390 crores to ₹ 14,110 crores between 1971 and 2012) there is often shortage of the coins in circulation.

Currency Notes in Circulation

The printing of currency notes is the monopoly of RBI which is owned and managed by the Government of India. The Reserve Bank of India can print and issue currency notes of different denominations from two rupee notes to ten-thousand rupee notes. The Reserve Bank maintains a separate Issue Department to manage the issue of currency notes. This Department maintains reserves or assets against the issue of currency notes. At one time, the assets of the Issue Department consisted of two parts:

(a) At least 40 per cent of total assets would consist of gold coins, gold bullion or sterling securities of which the gold part should at least be ₹ 40 crores in value; and

(b) 60 per cent of the assets could be in rupee coins, rupee securities of the Government of India, eligible bills of exchange or promissory notes payable in India.

These provisions — known originally as the proportional

system — were modified many times and at present the assets of the Issue Department consist of a minimum of gold and foreign securities to the extent of ₹ 200 crores (of which gold should be of the value of ₹ 115 crores) and the balance in rupee securities. ***The present system is known as the minimum reserve system of note issue.*** The total currency notes in circulation amounted to:

1970-71	:	₹ 4,170 crores
1990-91	:	₹ 53,660 crores
2000-01	:	₹ 2,12,850 crores
2009-10	:	₹7,88,279 crores
2010-2011	:	₹ 9,36,935 crores
2011-2012	:	₹ 10,53,790 crores

Between 1971 and 2012, the currency notes in circulation had increased from ₹ 4,170 crores to ₹ 10,53,790 crores.

The Volume of Money Supply

The supply of money with the public in India — or the volume of money in circulation — refers to the volume of money held by the people in the country, i.e. by individuals, institutions and business houses. We include only the amount of money held and used by the public for transactions for making payments and for settlement of debt. We exclude money held by the Government in its treasuries and the money lying with the commercial banking system.

The quantity of money in existence in a country at a particular time — or the supply of money in a spendable form — consists of two important items :

(a) ***Currency component*** consisting of coins and currency notes issued by the central bank which are in circulation, and

(b) ***Deposit component*** : Deposit money consists of deposits of the general public with banks, which they can withdraw through bank cheques and ATM cards. The volume of deposit money in the country was:

1970-71 - ₹ 7,340 crores
1990-91 - ₹ 92,890 crores
2000-01 - ₹ 1,69,900 crores
2009-10 - ₹ 7,17,943 crores
2010-11 - ₹ 7,21,372 crores
2011-12 - ₹ 7,03,270 crores

Calculation of Money Supply in India (M_1)

We may get a clear idea of the money supply with the public in India—this is referred to as M_1 in India from Table 1.

As we have explained earlier, the currency with the public — i.e., the currency component of the money supply — is composed of currency notes and coins in circulation but ***excludes*** cash held by banks (for, this cash is not in circulation). Currency money is legal tender money for, it has general acceptability and it is used in all transactions and settlement of debts; it is also known as *common money or ordinary money.*

From Table 1, it will be seen that currency with the public, i.e. currency notes and coins was ₹ 53,050 crores at the end of March 1990-91 and ₹ 9,14,197 crores at the end of March 2011-12.

The deposit money with the public — i.e. deposit component of the money supply — is composed of demand deposits[1] of the people in banks and other deposits with the Reserve Bank. It is against these deposits that people issue cheques.

Now, RBI has two types of deposits — one is the deposits commercial banks keep with RBI and the other is the deposits kept by certain individuals with RBI, such as ex-Governors of RBI who are permitted to use RBI like any commercial bank. In deposit money, therefore, we include demand deposits of the people with commercial banks and with RBI (known as the other deposits). From table 1, it will be seen that deposit money with public was ₹ 39,840 crores in 1990-91; it rose to ₹ 7,03,270 crores in 2011-2012.

Table 1: Money Supply with Public in India (M_1) (as on March 31)

(₹ crores)

	1990-91	2011-12
A. Currency with the Public (a+b+c-d)	53,050	10,26,68[illegible]
(a) Notes in circulation	53,660	10,53,79[illegible]
(b) Circulation if rupee coins	940	12,54[illegible]
(c) Circulation of small coins	680	1,57[illegible]
(d) Cash on hand with banks	2,230	41,36[illegible]
B. Deposit money with the public (i + ii)	39,840	7,03,27[illegible]
(i) Demand deposits of Banks	39,170	7,00,21[illegible]
(ii) Other deposits with RBI	670	3,06[illegible]
Money supply (M_1) with the public (A + B)	92,890	17,29,87[illegible]

Source RBI, Handbook Statistics on the Indian Economy 2010-11. All tables in this chapter are taken from RBI Bulletins - Various Issues.

While small transactions involving small amounts of money are carried on with the use of common money, large transactions are normally settled through the use of bank money, i.e. cheques and bank drafts. The interesting point to note is that bank money really refers to ***bank deposits and not to cheques and/drafts*** which are only instruments for transferring an amount of money from the account of one person to another. A cheque by itself has no value; only the transfer through it is valuable. A cheque does not command general acceptability as a medium of exchange but it is accepted as an instrument for settlement of debt (through transferring a specified amount from one account to another). As demand deposits do not have a legal status and are not always acceptable as money, they

1. Individuals and institutions keep their money with banks in the form of demand deposits, savings deposits and fixed deposits. Depositors are generally allowed to withdraw their demand and savings deposits by means of cheques.

are known as bank money they may also be called as or optional money.

There has been some confusion about the "deposit component" of money supply with the public. Traditionally, "deposit money" included only demand or current deposits of the general public, over which cheques could be issued. Since 1951, Indian banks permitted the use of the cheque system against savings deposits also. Since 1978 the general practice of Indian banks is to consider

(a) that portion of savings deposits subject to the cheque system as demand deposits, and

(b) that portion of savings deposits not subject to the cheque system as "time" or fixed deposits.

We have explained (a) the currency with the public in India — this is called the ordinary money or common money; and (b) the deposit money with the Indian public — commonly known as the bank money. The two items together give us the concept of money supply in India.

In Table 1, the money supply in India in 1990-91 was ₹ 92,890 crores (₹ 53,050 crores of currency with the public + ₹ 39,840 crores of deposits with the people).

The money supply in India rose to ₹ 17,29,870 crores at the end of 2011-12 in a matter of 21 years, the money supply had increased more than 18.6 times.

Item Excluded from Narrow Money Supply

We must explain one item which is excluded from the concept of money supply in India. Coins and currency notes (i.e., cash) held by commercial banks, also known as cash reserves of banks (item A(d) in Table 1), are excluded from the calculation of money supply of the public, since these coins and currency notes are held by banks and not by the generaly public.

Narrow Money (M_1) and Broad Money (M_3)

We have explained above the conventional concept of money supply with the public. This concept is now known as narrow money (M_1) because it consists of currency plus bank money held by the people. There are other liquid or monetary resources with the public. Hence, there is another concept of money supply known as broad money—this is referred to as M_3 by RBI

The Radcliffe committee on the Working of the English Monetary System clearly distinguished between money and liquidity though previously, we regarded "money", "cash" and "liquidity" as one and the same. According to the Redcliffe Committee, "Spending is not limited by the amount of money in existence but it is related to the amount of money people think they can get hold of". From this point of view, not only "money" but also "near-money" assets constitute liquid assets in a broad sense and *are available for people to spend at any given time*. In near-money assets, we include fixed deposits or time deposits with the banking system. Time deposts or fixed deposits contribute to the liquidity of the general public in three ways:

(a) The depositors can borrow from the banks against time or fixed deposits in case of emergency;

(b) They can encash their fixed deposits even before their maturity — by sacrificing part of the interest; and

(c) They are allowed by some banks to withdraw, from out of their fixed deposits; i.e., use fixed deposit as a form of savings deposits.

It was after Radcliffe Committee Report that RBI started using two concepts of money supply — the conventional money supply (M_1) and broad money supply (M_3) which includes, besides conventional money, fixed deposits with banks (which were previously called income-yielding assets).

Monetary Aggregates in India

Actually, the RBI now calculates four concepts of money supply in India. These are known as **money stock measures** or measures of monetary aggregates. The four concepts of money supply are:

M_1 = Currency with the public, i.e. coins and currency notes + demand deposits of the public; also known as **narrow money.**

M_2 = M_1 + Post Office savings deposits

M_3 = M_1 + Time deposits of the public with banks; M_3 is known as **broad money**

M_4 = M_3 + Total post office deposits*

* People maintain fixed deposits of various maturities with post offices, apart from savings deposits.

Table 2 : Money Stock Measures (as on March 31)

(₹ crores)

	1990-91	*2011-12*
1. Money Supply with the people (M1)	92,890	17,29,870
2. Post Office saving bank deposits*	4,210	5,041
3. M_2 (M_1 + Serial No. 2)	97,100	17,34,910
4. Time deposits with banks	1,72,940	56,14,200
5. M_3 (M_1 + Serial No. 4)	2,65,830	73,44,070
6. Total post office deposits	14,680	25,970
7. M4 (M_3 + Serial No. 6)	2,80,510	73,70,040

* RBI had not cared to collect (up-to-date) statistics of post office saving, serial No. 2) and total deposits of the public with the post offices (serial No. 6) and has given the same figures for a number of years; accordingly, M2 and M4 became meaningless and have no relevance. Only M1 and M3 are significant.

Table 2 shows (a) the calculation of the four

concepts of money supply with the public, viz., M_1, M_2, M_3 and M_4 and (b) comparison of these figures for two years, viz., 1990-91 and 2011-12. This table shows that:

1. **Common money** (M_1) with the people has increased from ₹ 92, 890 crores in 1990-91 to ₹ 17,29,870 crores in 2011-12 - increase by 18.6 times in a matter of 21 years.
2. **Broad money** (M_3) with the people has increased from ₹ 2,65,830 crores in 1990-91 to ₹ 73,44,070 crores in 2011-12 increase by over 27.6 times. In other words, broad money (M_3) has been rising much faster than narrow money (M_1). This is because people are keeping bank money increasingly in the form of time deposits.

M_2 and M_4 are irrelevant

Finally, we may comment on M_2 and M_4 which are the other money stock measures prepared by RBI. They include post office savings accounts (M_2) as well as all other deposits with the post offices (M_4). Properly speaking, these savings and other deposits with the postal system should also form part of the aggregate monetary resources of the people in the country, since the people consider them as liquid resources. However for some peculiar reasons, RBI does not attach any importance to these money stock measures and has not updated figures of Post Office savings deposits and other public deposits wth post offices from time to time. For years together, while giving estimates of M_2 and M_4, RBI had mentioned the same amount of post office saving deposits (₹ 5040 crores) and total post office deposits (₹ 25970 crores). On the other hand RBI does provides updated figures for postal deposits to give estimates of liquidity aggregates L_1 and L_2, where L_1 approximates M4 whereas L_2 is more wider term which includes deposit of non-banking financial companies (NBFCs) also.

Whichever money aggregate we take, there has been steady and continuous increase in money and liquid resources with the general public in India.

Now with more money and with more liquid resources in hand, the public will demand more of goods and services. If the supply of goods and services does not increase proportionately, there is bound to be an *upward pressure on prices*; we call this as inflationary pressure.

Broad Money (M_3)

The basic distinction between narrow money (M_1) and broad money (M_3) is the *treatment of time deposits with banks*. Narrow money excludes time deposits of the public with the banking system on the ground that they are income-earning assets and as such are not liquid. On the other hand, broad money includes time deposits of the public with the banking system, not as cash proper but as part of the total monetary resources of the public. For, even though time deposits are income-earning assets, and people have acquired them by converting cash into time deposits with a view to earn interest income, the time deposits have come to acquire some liquidity. In recent years, banks have been liberalising the rules and allowing partial or full convertibility of the time deposits at the request of the deposit holders. *Accordingly, people have come to consider time deposits also as liquid or monetary resources*.

In Table 2 we have given (a) narrow money or ordinary money (M_1); (b) time deposits of the people with the banking system; and we have added them together, to get broad money (M_3). [Serial Nos. 1+4]

There is a basic flaw in RBI's concept for broad money in that it includes only time deposits with the banking system. It came as a big eye-opener even to RBI that the general public hold huge volume of their funds in the form of fixed deposits with Non-Banking Financial Companies (NBFCs). It is, therefore, logical that the deposits of the general public with NBFCs should also be included in the calculation of M_3.

2. SOURCES OF BROAD MONEY (M_3) : FACTORS AFFECTING MONEY SUPPLY IN INDIA[2]

The Reserve Bank of India shows that there are five sources[2] which contribute to the aggregate monetary resources in the country (M_3) viz.

(a) Net bank credit to the Government;
(b) Bank credit to the commercial sector;
(c) Net foreign exchange assets of the banking sector;
(d) Government's currency liabilities to the public and
(e) Non-monetary liabilities of the banking sector.

We shall explain these five sources or factors affecting money stock in the country.

Net Bank Credit to the Government

The first factor which influences the volume of money supply in India is the volume of bank credit to the Government. There are two kinds of bank credit (or advances) to the Government: RBI's credit to the Central and State Governemnts, and other bank's credit to the Central and State Governemnts.

Normally, the Government finances its current expenditure through taxation. In case tax revenue (and

2. Originally, RBI characterised these as factors on which money supply depended. Later, RBI called them as sources of monetary aggregates.

other non-tax revenues) are inadequate, it resorts to borrowing. Borrowings of the Government from the general public will have the effect of reducing the money supply with the people — for money is transferred from the people to the Government. But when the Government borrows from the Reserve Bank of India — by providing Government securities or Government IOUs to RBI — it receives the loan amount from the latter. It is against Government securities that RBI prints and issues currency notes. This means that every increase in Government securities with RBI will have the direct effect of increasing the issue of currency notes in India, which, in turn, increases the money supply in the country. On the other hand, whenever the Government repays its loans to RBI — that is, buys back its securities from RBI — it will have the direct effect of reducing the money supply in the country.

Now, RBI extends credit to the Central and State Governments; it has also other claims on the Governments. As against these, the Governments — that is, the Central and State Governments — keep their cash balances with RBI as deposits. Accordingly, the calculation of net RBI credit to the Government will derive:

RBI's claims on Governments *minus*
Deposits of the Governments with RBI
= Net RBI credit to the Government.

Apart from RBI, other banks too have been extending credit to the Government. The Government borrows from commercial banks against its own securities. In such a case, the commercial banks create demand deposits in the name of the Government. This is similar to the Government borrowing from RBI. When the Government uses the deposits provided by the banking system, the volume of money supply with the public is increased. The more the Government borrows from the commercial banks, the more will be the volume of money supply with the people.

Hence, net bank credit to the Government is composed of:

(a) Net RBI credit to the Government *plus*
(b) Other banks' credit to the Government.

Bank Credit to the Commercial Sector

The second source of money supply and monetary resources in the country is the bank credit to the commercial sector. Here commercial sector stands for all types of production and trade; in fact, it stands for all types of non-government activities. One major function of commercial banks is to give loans and advances to the commercial sector. When a bank lends to a customer, it does not hand over currency notes to him; instead, it allows him to withdraw the loan amount by means of cheques. These cheques come back to the banking system as fresh deposits. This is what is called as "credit creation" or "deposit multiplication. Through giving more loans the banks "multiply" deposits. This is quite significant, for the banking system can expand the volume of deposits through granting more loans. Such deposits created at the initiative of the commercial banks are known as derivative deposits or secondary deposits.

The significant thing about these derivative deposits is that they involve exchange of claims — the borrowers supply to the banks their IOUs and receive instead the IOUs of the banks. While the debt of the customers is not generally acceptable and, therefore, is not money, the debt of the commercial banks is acceptable and is money. In a modern economy, bank deposits are significant because (a) they constitute money, and (b) they influence the level of economic activity in the country. More bank loans mean more investment, more production and trade, more employment, and so on.

Now, bank credit to the commercial sector can also be classified into two types:

(a) RBI's credit to the commercial sector
(b) Other banks' credit to the commercial sector.

Foreign Exchange Assets

The third source of money supply in India is the foreign exchange assets acquired by the banking system, that is, by RBI and by the other banks. Suppose that an Indian exporter earns dollars for his exports and surrenders the same to RBI and gets an equivalent amount of rupees in India. In other words, whenever RBI or any other bank acquires foreign exchange or foreign asset, it will have to distribute equivalent amount of rupees within India. Correspondingly, whenever Indian importers pay foreigners through buying foreign exchange from RBI, two things happen: first, foreign exchange with the Indian banking system will decline and second, the volume of money supply in the country will also decline.

Accordingly, when we consider net foreign exchange assets of the banking system, we take the gross foreign exchange assets minus foreign liabilities of the banking system. Thus, net foreign exchange assets of the banking sector = net foreign exchange assets of RBI + net foreign exchange assets of other banks.

In the last 10 years or so, India has been attracting huge foreign exchange reserves.

Government's Currency Liabilities to the Public

The fourth source of broad money in the country or the fourth factor which influences the money stock in the country (M_3) is Government's currency liabilities to the public.

The Government of India prints/mints one-rupee notes, rupee coins and small coins (50 paise, 25 paise etc.).

These notes and coins constitute Government's currency liabilities to the public. Whenever the Government resorts to issuing more currency notes and coins, two things take place :

(a) The volume of money supply with the people increases; and

(b) Government's currency liabilities to the public increase.

There is thus ***direct and positive*** relationship between Government's currency liabilities to the public and the volume of money supply and monetary resources in the country.

All the above four sources have to be ***added*** in order to arrive at the volume of broad money.

Non-Monetary Liabilities of the Banking Sector

There is one item, however, which has to be deducted before we could arrive at the volume of broad money in the country. We refer here to the banking sector's non-monetary liabilities. These non-monetary liabilities may be of the Reserve Bank of India or of the other banks. For instance, the non-monetary liabilities of RBI comprise its paid-up capital and reserves, RBI Employees' Pension Fund, Provident Fund, etc. The non-monetary liabilities of other banks comprise mainly their capital and reserves, other liabilities like bills payable over other assets (like premises, furniture) of banks, errors and omissions, etc. Since these are liabilities of the banking system, they have to be deducted to arrive at the money stock (M_3) of the country.

Thus, RBI gives the following summary of the factors affecting aggregate monetary resources (M_3). It calls them also as sources of change in money stock (M_3):

1. ***Net bank credit to Government*** **(A + B)**
   - A. RBI's net credit to government (i-ii)
     - (i) Claims on government
     - (ii) Government deposits with RBI
   - B. Other Bank's credit to government.
2. ***Bank credit to commercial sector*** **(A+B)**
   - A. RBI's credit to commercial sector
   - B. Other banks's credit to commercial sector
3. ***Net foreign exchange assets of banking sector*** **(A+B)**
   - A. RBI's net foreign exchange assets
   - B. Other bank's net foreign exchange assets
4. ***Government's currency liabilities to the public***
5. ***Net non-monetary liabilities of the banking sector*** **(A+B)**
   - A. Net non-monetary liabilities of RBI
   - B. Net non-monetary liabilities of banks.

Thus,

$$M_3 = 1 + 2 + 3 + 4 - 5.$$

Table 3 shows the above five sources which affect broad money (M_3) in India.

The two major sources of money stock till 1997-98 were :–

(a) the bank credit to the government sector, and

(b) bank credit to the commercial sector.

Table 3: Sources of Money Stock (M_3)

(₹ crores)

	Outstanding as on 31st March		
	1990-91	**2000-01**	**2011-12**
1. Net bank credit to government	1,40,190	511955	23,60,78[illegible]
2. Bank credit to commercial sector	1,71,770	679218	42,36,24[illegible]
3. Net foreign exchange assets of the banking sector	10,580	249820	13,87,97[illegible]
4. Government's current liability to the public	1,620	5354	12,59[illegible]
5. Banking sector's net non-monetary liabilities	58,330	133126	10,36,94[illegible]
Broad Money M_3 (1+2+3+4-5)	**2,64,830**	**1313220**	**65,03,54[illegible]**

Source: RBI, Bulletin, May 2012.

Since 1992-93, however, net foreign exchange assets of the banking sector (particularly of RBI) have had a major influence on the supply of money in the country. For instance, between 1990-91 and 2011-2012, net foreign exchange assets of the banking sector rose by over 131.1 times – from ₹ 10,580 crores to ₹ 13,87,970 crores.

3. THE NEW MONETARY AND LIQUIDITY AGGREGATES

For the last quarter of a century, RBI has continued to calculate money supply and monetary aggregates in four forms viz., M_1, M_2 M_3 and M_4 though in practice, only M_1 and M_3 have been used; M_2 and M_4 are actually irrelevant as RBI does not care to collect figures for people's deposits with post offices.

3. RBI Bulletin, July 1998: Report of the Working Group on *"Money Supply, Analysis and Methodology of Compilation"*.

RBI appointed a Working Group on Money Supply to redefine the parameters for measuring money supply in India. This Working Group dropped savings bank deposits of post offices (included previously in M_2) and also all deposits with post office savings banks (included in M_4). Accordingly, there are now only three monetary aggregates viz., M_1, M_2 and M_3. The revised monetary measures are :

(a) There is no change in the calculation of money supply with the public (M_1). That is, M_1 continues to be calculated as :

M_1 = Currency (coins + notes)
+ Demand Deposits
+ Other Deposits with RBI

(b) The new or revised M_2 is calculated as follows:

M_2 = M_1
+ Time liabilities portion of Savings Deposits with banks
+ Certificates of Deposits (CDs) issued by banks
+ Term Deposits, maturing within a year {excluding FCNR(B) Deposits}

It may be noted that the new M_2 excludes post office savings bank deposits but includes short-term deposits of one year maturity and certificates of deposits issued by banks. All these can be readily converted to money by people, if need arises.

(c) The new revised M_3 is calculated as follows :

M_3 = M_2
+ term deposits with banks with maturity of over one year
+ call/term borrowing of the banking system

The new M_3 can be designated as broad money and will be the significant monetary measure.

It may be noted that the new concepts of M_2 and M_3 are improvements and refinements of the corresponding previous concepts in that :

(a) Post office savings deposits and all other deposits of post office have been excluded;

(b) Savings deposits and term deposits held by the public with banks have been divided into deposits into short term maturity (up to one year) and long term maturity (above one year) ; and

(c) borrowing of the banking system (call and short term) have been included for the first time.

RBI Working Group on Money Supply has introduced a new concept of ***liquid resources in India***. These liquid resources are calculated as follows :

(i) L_1 = New M_3
+ All Deposits of Post Office Savings Banks excluding National Savings Certificates (NSCs)

(ii) L_2 = L_1
+ Term Deposits with Term Lending Institutions and Refinancing Institutions
+ Term borrowing by Financial Institutions (FIs)
+ Certificates of Deposits (CDs) issued by (FIs)

Monetary Aggregates in India

Original Calculation	*Revised Calculation*	*Liquidity Aggregates*
M_1 = currency + demand deposits + other deposits	M_1 = currency + demand deposits + other deposits (unchanged)	L_1 = New M_3 + All deposits with post office savings banks (excluding NSCs)
M_2 = M_1 + savings deposits with post office savings banks	M_2 = M_1 + time liability portion of savings deposits with banks + CDs issued by banks + term deposits maturing within one year	L_2 = L_1 + term deposits with term lending institutions + term borrowing of FIs + CDs issued by FIs
M_3 = M_1 + Time deposits of banks	M_3 = M_2 + term deposits over one year maturity + call/term borrowings of banks	L_3 = L_2 + public deposits of NBFCs
M_4 = M_3 + total deposits with post office	M_4 = Abolished	

(iii) $L_3 = L_2$
+ Public deposits with non-banking finance companies (NBFCs)

It may be noted that while the revised monetary aggregates (M_1, M_2 and M_3) consider only bank deposits and bank borrowings, liquidity aggregates (L_1, L_2 and L_3) include also (i) term deposits with and term borrowings by FIs and certificates of deposits issued by FIs and (ii) public deposits with NBFCs.

RBI now prepares both monetary aggregates and liquidity aggregates as well as the sources which influence them. For all practical purposes, however, monetary aggregates are given more significance by RBI.

4. RESERVE MONEY AND MONEY MULTIPLIER

In simple terms, reserve money (RM) may be called as ***government money***, issued by RBI (RBI is also taken as government) and held by the people and the banks. ***Reserve money is really the cash held by the public and the banks.*** It is composed of:

(a) currency in circulation with the public — that is, coins and currency notes held by the general public designated as (C); this is the total amount of notes and coins issued and circulated by RBI *less* the amount held by banks as cash on hand or as cash reserves.

(b) deposits of some people with RBI generally called "other deposits" with RBI (OD) — the public regard their deposits with RBI as cash or money;

(c) cash reserves of banks (CR) which are actually composed of two parts *viz.*, (i) cash reserves (in terms of currency notes) kept by banks with themselves and (ii) Bankers' deposits with RBI (which banks maintain with RBI as cash reserve and which they correctly consider as their cash).

Thus

Reserve Money (RM) = C + OD + CR

This means that reserve money or Government money (RM) is held partly by the public (C and OD) and partly by banks (CR)

We can calculate the extent of reserve money in any given year. For instance, in Table 4, we have shown that for the year 2011-12.

RM (in crores) = C + OD +CR
= ₹ 10,67,890 + ₹. 3,060+ ₹ 3,97,590 crores
= ₹ 14,27,240 crores

Now, consider first C which is currency with the public. C is the total volume of money issued and circulated by RBI (in 2010-11 this was ₹ 9,14,170 crores);

Besides C (which is currency with the public), the general public also hold some money or cash not with themselves, but with RBI — this is in the form of deposits with RBI by a select group of privileged individuals like ex- governors and deputy governors of RBI and a few others; This select group of individuals—these also form part of the general public—correctly regard their deposits with RBI as their cash or money. This form of money held by the public is designated as OD (i.e. other deposits with RBI).

Commercial banks too keep deposits with RBI. In fact, there is a statutory requirement in India that every commercial bank has to keep compulsorily some deposits with RBI. The redeposits kept by commercial banks with RBI are known as Bankers Deposits or cash reserves of banks with RBI (column 5 in Table 4) Accordingly.

The amount of cash held by banks - known as CR is partly by banks in their own premises (₹ 41,300 crores in 2011-12) and partly with RBI (₹ 3,56,290 crores in 2011-12). The first amount of cash reserves is meant to meet the day-to-day cash requirements of depositors and the second amount is kept with RBI to fulfil the statutory cash reserve requirement referred to as CRR. The first is called own cash reserves; and the second is called Bankers' deposit with RBI. Both are cash reserves and both belong to banks; together, they constitute CR. In 2011-12, the total cash reserves of banks (column 6 in table 4) came to ₹ 3,97,590 crores. Thus in 2011-12.

TABLE 4: Reserve Money and its Components

(as on March 31) *(₹ crores)*

Year	*Currency with the public (C)*	*Other deposits with RBI (OD)*	*Cash Reserves of Banks (CR)*			*Reserve Money (RM)*
			Cash Reserves with themselves	*Bankers deposits with RBI*	*Total (CR)*	
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7) = (2+3+6)*
1980-81	13,430	410	880	4,730	5,610	19,450
1990-91	53,050	670	2,230	31,830	34,060	87,780
2000-01	2,09,560	3,630	8,640	81,480	90,120	3,03,310
2007-08	5,68,411	9,054	22,390	3,28,447	3,50,837	9,28,302
2008-09	6,66,246	5,573	24,877	2,91,275	3,16,132	9,88,001
2009-10	7,68,049	3,785	31,149	3,52,299	3,83,448	11,55,281
2010-11	9,14,170	3,740	35,351	4,23,509	4,58,860	13,76,770
2011-12	10,67,890	3,060	41,300	3,56,290	3,97,590	14,27,240

SOURCE: Same as Table 1.

RM = C + OD + CR
= ₹ 10,67,870 + ₹ 3,060 + ₹ 3,97,590 crores
= ₹ 14,27,240

Thus, RM is the Government money or **Reserve money** produced and issued by RBI and held by the general public and commercial banks.

In what way, then is Government money (RM) different from common money (M_1) in a country ?

Comparison between Reserve Money (RM) and Common Money (M_1)

Common money (M_1), as we have already explained, refers to currency with the general public. This consists of two components:

- Currency Component: Currency notes + Rupee and small coins (C)
- Deposit Component:
  - (a) Demand deposits held by the general public with all banks (DD)
  - (b) Demand deposits held by some people in the Reserve Bank of India, commonly called 'other deposits' (OD).

Thus,

M = C + DD + OD, in which

C = Currency notes in circulation among the public

plus Rupee coins and small coins in circulation

minus cash held by banks.

DD = Demand deposits of the general public kept in banks

OD = Other deposits held by some people with RBI.

The above formula shows that the money supply with the people (M_1) at any given time consists of (a) net currency notes and coins in circulation (C), that is, the total money issued by RBI **minus** cash held by the banks in their premises

plus (b) demand deposits (DD) with banks which people consider as their cash, and

plus (c) "other deposits" with RBI(OD) which is also considered as cash by the deposit holders.

Let us now compare RM (reserve money with the people) and M_1 (money supply with the people).

$$RM = C + OD + CR$$

$$M_1 = C + DD + OD$$

We find that C and OD are common in both equations. There is only one difference between the two equations of RM and M_1. While reserve money (RM) includes CR, ordinary money (M_1) includes DD. Now

CR = Cash reserves of banks, held partly in their premises and partly held with RBI under statutory requirements.

DD = Demand deposits of the general public held in banks.

There is a fundamental or basic relationship between CR and DD.

Relation between CR and DD

The cash reserves of banks (CR) is the actual base for the total demand deposit structure (DD) of the banking system. A little explanation is needed here to show the creation of demand deposits.

Every time a commercial bank gives a loan to a party or acquires an asset from *someone, it creates or* credit equivalent amount of bank deposit in the name of borrower or seller, of the asset. Banks take the initiative to give loans and advances and acquire other earning assets, and by doing so, they increase the total volume of their deposits in the country. Now, demand deposits or cash deposits are money and are used as such. Every depositor having a bank account — both current and savings account in India — in a commercial bank can meet his obligations through cheques drawn on his account. Expansion and contraction of demand deposits, therefore, means expansion and contraction of money with people in the country. Now, ***this power of commercial banks to expand deposits through expanding their loans and advances is known as credit creation and / or multiplication of deposits***.

Theoretically, the banking system can create an unlimited amount of money by way of expansion of deposits — it has just to acquire more assets from the market or give more loans to the industrial and trading community. But there are limits to the volume of credit creation or deposit multiplication. The basic limitation is the amount of cash with the banking system — cash is required to meet the requirements of depositors as and when they demand cash. If a bank considers or the banking law of the country requires that cash reserve equivalent to 10 per cent of deposits should be kept, the bank can expand the volume of its demand deposits to 10 times the volume of its cash reserves. On the other hand, if the bank is expected to keep 20 per cent cash reserves against its deposits, deposit multiplication will be only by 5 times the cash reserves. In other words, the higher the percentage of cash reserve ratio to be kept, the smaller will be the volume of credit creation and deposit multiplication.

Thus CR in RM formula (RM = C + OD + CR) is the actual base for the total volume of deposits in the banking system. ***By manipulating CR, RBI can influence the total volume of bank credit and the total volume of bank deposits or bank money in the country.***

In such a case, only CR should have been designated as reserve money; instead, the whole of C + CR + OD is called as reserve money (RM) by RBI. This is so because the other components of reserve money, namely, C and OD, held by the general public also ***have a potential of becoming*** CR without any further intervention of RBI. For instance, the public can shift part of their currency holding (C) into bank deposits. Likewise, they can move part of their deposits with RBI (OD) into bank deposits. It is for this reason that the whole of C+OD+CR is regarded as reserve money or base money or high-powered money; ***it has the capacity to serve as the reserve base for the creation of bank deposits***. This fact is also at the bottom of the money multiplier and the deposit and credit creation by banks.

Growth of Reserve Money in India

Table 4 illustrates the growth of reserve money (RM) in India since 1980-81.

Reserve money was ₹ 19,450 crores in 1980-81. It increased to ₹ 87,870 crores in 1990-91, to ₹11,55,281 crores in 2010-11. The annual rate growth of RM since 1980-81 was : -

During 1981-1991	16%
During 1991-2001	13%
During 2010-2011	19%

This annual rate of growth of reserve money in India is indeed high, showing the possibility of rapid deposit multiplication. But the interesting point is the remarkable transformation in the factors driving reserve money growth. Throughout 1990s, net RBI credit to the Central Government was the driving force behind the expansion in money. During that period, government budget deficit was covered through borrowing from RBI. In other words, ***Government's monetized deficit was behind the expansion of reserve money*** (RM).

During the 1990s, there was a change in the Government policy of borrowing to cover its deficit. Instead of borrowing from RBI, Government started borrowing from the market to cover its fiscal deficit. This should have led to a decline in the rate of growth of reserve money. During the ten year period 1991-2001 the annual rate of growth of RM declined to 13 per cent. From the beginning of the 21st century, RM started increasing rapidly — from 13 per cent to 16 per cent per annum. The reason was the rapid accumulation of net foreign exchange assets or foreign reserves. From almost negligible amount during 1990-91, net foreign exchange reserves of RBI rose rapidly over the last 15 or 16 years resulting in increase in reserve money.

Money Multiplier

The simple theory of money supply states that the supply of money (M) is an increasing function of reserve money (RM). That is,

(a) as RM changes, M also changes, in the same direction, and

(b) much of the change in M is due to the change in RM.

Mathematically, this relationship can be expressed by the equation:

M = mRM, or

$$m = \frac{M}{RM}, \text{ in which}$$

M = Money supply in the country

m = Money multiplier, and

RM = Reserve money

In other words, money multiplier is the money supply divided by reserve money. The above formula can be rewritten in terms of both narrow money and broad money respectively:

$$m = \frac{M_1}{RM}; \quad \text{(Narrow money)}$$

$$m = \frac{M_3}{RM}; \quad \text{(Broad money)}$$

Money multiplier is thus the ratio of M_1 or M_3 to reserve money and is calculated on a point-to-point basis. The money multiplier tells us the nature of the effect on M_1 or M_3 ***as a result of a change in RM***. Table 5 shows the calculation of the money multiplier by RBI.

TABLE 5: Money Multiplier, point-to-point as on March 31

Year	*M_1 (₹crore)*	*M_3 (₹crore)*	*RM (₹crore)*	*M_1/ RM*	*M_3/ RM*
1980-81	23,420	55,770	19,450	1.5	2.3
1990-91	92,890	2,65,830	87,780	1.1	3.0
2000-01	3,79,450	13,13,220	3,03,310	1.3	4.3
2009-10	14,85,991	55,79,567	11,55,281	1.3	4.8
2010-11	16,35,569	64,99,548	13,76,770	1.2	4.7
2011-12	1729870	6503540	1427240	1.2	4.6

SOURCE : RBI Handbook of Statistics on Indian Economy 2010-11. RBI, Bulletin, May 2012. All tables in this chapter are taken from RBI Bulletins - Various Issues.

In table 5, we have given M_1, M_3 and RM for some selected years. Taking narrow money, the money multiplier was 1.5 in 1981; it has been around 1.1 to 1.3 in the 1990's. It was 1.2 in 2011-12.

In terms of broad money, however, money multiplier has gradually increased from 2.3 to 4.6 between 1981 and 2012. This indicates that every increase of RM by 1 will result in an increase in broad money (M_3) by over 4.8 times. This shows clearly that the ***increase in time deposits*** since 1981 has been quite considerable.

5. EXTERNAL VALUE OF THE RUPEE

The Rate of Exchange of the Rupee

The rupee was historically linked to the British pound-sterling till 1946. The rate of exchange of the rupee was 1 shilling 6 pence; this rate was fixed as far back as 1927. Soon after the Second World War, the International Monetary Fund (IMF) was set up and as one of the founder-members of IMF, India had to fix and maintain the external value of the rupee in terms of gold or the U. S. dollar (the major international currency).

Initially the Indian Government had fixed the par value of the rupee at ₹ 3.30 per U. S. dollar. This was the official rate of exchange and RBI would buy and sell foreign currencies at this rate. But the market rate of exchange would reflect market demand and supply of the dollar in terms of the rupee. Since the demand the dollar was always heavy, dollar appreciated in value and the rupee depreciated. The par value of the rupee was periodically changed to correspond with the market rate of exchange. For example, it was changed to Rs 4.76 per dollor in 1949 and to Rs 7.50 in 1966 (through devaluation of the rupee by the Government).

In September 1975 the Government of India along with other members of IMF found it difficult to maintain fixed exchnage rate and, accordingly, gave up the system of fixed par value for the rupee and, instead, directed RBI to fix the external value to a basket of prominent international currencies viz., the pound sterling, the U.S.dollar, the Japanese Yen and the Deutsche Mark.

Depreciation of the Rupee

Since 1975, the rupee was depreciating in value because of relatively high rate of inflation within India and the consequent decline in the internal purchasing power of the rupee.The depreciation of the rupee in terms of U. S. dollar and other major currencies before 1991-92 was due to mounting deficits in India's balance of payments which were worsened by liberal import policy and the devaluation of the rupee forced on India by IMF as one of the conditionality clauses for helping India. The rupee-dollar rate was as follows:

TABLE 6: Rupee US Dollar Exchange Rate for some selected years

(₹ per U.S. dollar)

1980-81	:	₹ 7.91
1990-91	:	₹ 17.94
1991-92	:	₹ 24.47

Continued Depreciation of the Rupees in the post reform period till 2003.

The rupee continued to depreciate since 1991-92 (see Table 7) even though there has been improvement in India's balance of payments position and foreign exchange reserves.

TABLE 7: Rupee– US Dollar Exchange Rate Till 2003

(₹ per U.S. dollar)

March 1992	:	25.89
March 1994	:	31.37
March 1996	:	33.45
March 1998	:	37.16
March 2000	:	43.33
March 2003	:	48.39

Table 7 shows that generally depreciation of the rupee in dollar terms was gradual and did not call for RBI intervention in the foreign exchange market.

Towards the end of 1997, however, there was tremendous speculation in the foreign exchange market and the rupee depreciated rapidly. As in all other monetary and banking matters, there were differing perceptions about the depreciation of the rupee against the dollar since the last quarter of 1997-98.

One theory was the so-called *'contagion effect'*. Many Asian countries like Malaysia, Indonesia and South Korea had come under serious economic crisis and their currencies fell by 50 per cent or more against the dollar. The rupee also suffered in sympathy with other Asian currencies; this was called the 'contagion effect'.

The Finance Ministry of the Government of India and RBI argued that they did not subscribe to the "contagion effect theory". According to them, the basic cause of Asian crisis was the heavy current account deficits of Asian countries — between 5 and 7 per cent of GDP; but in India, the current account deficit was around 1 per cent of GDP. Besides, most Asian countries had attempted to cover their current account deficits through external short-term borrowing — e. g. short-term debt of Thailand exceeded 32 per cent of its total debt. In India, the ratio was only 6 to 7 per cent.

Large current account deficits and external short-term borrowings put heavy pressure on the rate of exchange of Asian currencies and this led to serious turmoil in their foreign exchange markets. Since these conditions did not prevail in India, the Government of India allowed the rupee to find its own level —it was around ₹ 48.70 to US dollar during July 2002. It was even anticipated that the rupee and dollar exchange rate would touch ₹ 50 to a dollar.

Continuous depreciation of the rupee throughout the Nineties and upto middle of 2003 gave a special advantage to India's exports. Indian goods got a competitive advantage in the international markets. Besides, Indian exporters got

an additional profit in terms of rupees from the dollars they earned. Exports of India's textiles and readymades to USA. Europe etc. rose considerably despite stiff competition from China, Bangladesh etc. Likewise, Indian IT industry could rise at a compound rate of 25 per cent or more in this period. Relatively low wages, and the additional advantage of continuous rupee depreciation (more rupees for every dollar earned through exports) made Indian industries the most powerful in the whole world.

Appreciation of the Rupee since 2003

The rupee dollar exchange rate took a dramatic turn since the middle of 2003. (Table 8)

TABLE 8: Rupee US Dollar Exchange Rate Since 2003

(₹ per US dollar)

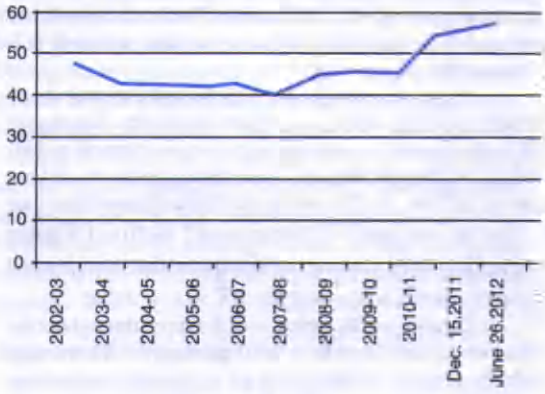
Year	*Average*	*End-year*
2002-03	48.3953	47.5050
2003-04	45.9516	43.4450
2004-05	44.9315	43.7550
2005-06	44.2735	44.6050
2006-07	45.2849	43.5950
2007-08	40.2410	39.9850
2008-09	45.9170	50.9450
2009-10	47.4166	45.1350
2010-11	44.499	44.4698
Dec.15, 2011	54.30	
June 26, 2012	57.07	

Source: RBI, Handbook of Statistics on the Indian Economy (2009-10). Economic Survey 2010-11

Since the middle of 2003-04, the rupee started appreciating in terms of dollar. Initially, rupee appreciation was marked – nearly ₹ 3 to a dollar in 2003-04. Later, the appreciation of the rupee was quite gradual.

Since March 2007 again, appreciation of the rupee was quite marked. There were many causes for rupee appreciation. The basic cause is the huge influx of foreign exchange into India. India has been developing fast, particularly India's manufacturing, IT and other service sectors. The Government of India opened up these sectors for direct foreign investment.

Rupees US $ Exchange Rate Since 2003



But from early 2008 rupee started depreciating again due to large scale out go of foreign exchange as a result of recession in USA and European Union. As there was a crisis of liquidity in these countries, foreign institutional investors (FIIs) transferred a large amount of foreign exchange to their respective countries. As s result of all this rupee depreciated to nearly ₹ 51 per US dollar by March 2009. Again as a result of a surge in the inflow of foreign institution investment in the last three months of 2009, rupee again started appreciating and reached a record of last 18 months at ₹ 45.34 per $ US on Jan. 11, 2010, but later the value of rupee has come down slightly. In 2010-11 we find appreciation of rupee again to ₹ 44.5 per $ US in 2010-11. On December 15, 2011, rupee declined to a historic low at ₹ 54.3 per US $, mainly due to large outflow of foreign exchange by FIIs. By June 26, 2012, exchange rate fell to ₹ 57.07 per US $.

Besides, with rapid development of the economy, India's stock market started booming after 2003. Foreign institutional investors (FII) registered themselves with Securities Exchange Board of India (SEBI) and brought foreign exchange for investment in Indian securities in the stock market.

Even FII's which were not registered with SEBI but which wanted to speculate in the Indian stock market used a special instrument, called Participatory. Notes (PNs) through SEBI registered brokers. PNs are also foreign currency entering India but the individuals/institutions sending them and the purposes for which they are used are not known.

In any case, there was heavy demand for the rupee in terms of the dollar since 2004 and the following consequences resulted:

(a) The rupee appreciated and the dollar depreciated.

(b) Foreign exchange reserves increased by 4 to 5 billion dollars a month.

(c) The demand for Indian securities in the stock market rose and in a brief period after a few months, the SENSEX crossed 20,000 mark.

(d) Exporters lost 15 to 16 per cent because of the rupee appreciation. The specially affected groups of exporters were those who exported textiles and readymades and software. They incurred heavy losses in their rupee earnings and demanded relief from the government — tax relief, subsidies, etc.

Heavy foreign exchange inflow leads to large rupee liquidity within India and possible inflationary pressure. RBI neutralised the increase in rupee liquidity within by raising Cash Reserve Ratio (CRR) and through open market operations. The RBI and the Finance Ministry were originally of the view that large capital inflow, by itself, is welcome and not to be worried about.

6. INDIA' S FOREIGN EXCHANGE RESERVES

During the Second World War (1939-45), India was compelled to contribute to the war effort of the Allies in terms of both men and materials. For this, India was paid in the form of pound sterling – India was then part of the British Commonwealth of Nations and the Indian Rupee was connected to the English pound sterling – and these came to the called the sterling reserves of the Government

of India held in England. At the time of Independence in 1947, India held sterling balances to the tune of Rs 1,730 crores – a huge amount at that point of time.

After India adopted economic planning it started experiencing heavy adverse balance of payments – excess of imports and exports. On one side, there was considerable increase in imports, particularly of machinery and raw materials. On the other, exports did not increase proportionotely because of the increased demand within the country due to rapid rise in population, rise in national and per capita income and standard of living. Accordingly, the sterling balances were used up to pay for the adverse balance of payments.

The depletion of India's foreign exchange reserves was so fast that in 1957 an amendment to the Reserve Bank of India Act had to be passed permitting the Reserve Bank to hold foreign securities worth only ₹ 200 crores of which gold coins and bullion should be at least ₹ 115 crores (actual amount of gold held by RBI at that time). Thus, foreign exchange reserves, which once formed a substantial part of the backing for India's currency before independence, came to be considerably reduced and the link between foreign exchange reserves and the Indian paper currency system was snapped. Besides, India had to adopt stringent exchange controls.

During the Third Plan period too, acute shortage of foreign exchange resources continued, and India could only pull through this difficult situation with generous assistance from Aid India Club countries, Russia and others and through borrowing from the IMF. Ultimately India had to devalue her currency in June 1966. Even after devaluation, India continued to experience adverse balance of payments.

Since September 1973, India's foreign exchange deficits had widened because of the hike in oil prices.

Low Foreign Exchange Reserves and IMF assistance

In 1980-81, India's balance of payments position had become highly critical and India was forced to approach IMF to pay off its creditors. IMF granted a loan of SDRs* 5 billion under Extended Fund Facility. This was the single largest loan made by IMF to a member country till then. India managed the loan facility admirably and used only SDRs 3.9 billion and surrendered the balance to IMF.

Foreign Exchange Reserves Crisis, 1991

Between 1985 and 1990, the management or rather the mismanagement of the Indian economy by successive Governments was responsible for a deep economic crisis, partly due to internal fiscal deficits and partly due to external balance of payments deficits. India's foreign exchange reserves declined from $ 7 billion in 1979-80 to just $ 750 million (₹ 1,500 crores) in January 1991 (the rate of exchange of the rupee at that time was $ 1 = ₹ 20). This amount of foreign exchange reserve was just sufficient to meet 2 *weeks import requirements*.

This dangerous position of foreign exchange reserves was further compounded by the state of India's foreign debt. In 1979-80, India's foreign debt was placed at $ 18 billion and by March 1991, it had risen to $ 90 billion. This five-fold increase in *just a decade was* due to reckless commercial borrowings in the international markets at high rates of interest. This level of external debt and its servicing cost had clearly put India in a debt trap. The debt service which was estimated at 8 per cent of export earnings was later put at 30 per cent of export earnings. This was much above what was regarded as a safe level.

With a balance of payments crisis, a dangerously low level of exchange reserves ($ 750 millon), a rising debt burden, ever-widening budget deficits and mounting inflation, India found it difficult and expensive to raise commercial loans in the international markets. To overcome this crisis situation, Dr. Manmohan Singh, the then Finance Minister of the Government of India, took a series of bold steps.

He arranged to sell about 20 tonnes of confiscated gold in the international market for $ 200 million or ₹ 400 crores to meet, in time, India's international obligation. The alternative was to default on our international debt repayments and this would have led to a further loss of confidence in India among international lending institutions and a further downgrading of our credit rating.

Dr. Man Mohan Singh also approached Asian Development Bank, Japan, Germany and other countries for loan assistance to overcome India's critical situation.

IMF assistance and conditionality

The Government of India approached IMF for a new loan of $ 2.5 billion (or ₹ 5,000 crores) and requested the World Bank for a structural adjustment loan of $ 500 million (₹ 1,000 crores) which would not be tied to specific projects. While agreeing to come to the assistance of India, IMF insisted that certain conditions should be fulfilled by India. Normally, there are no set standard conditions insisted on by IMF; instead, IMF conditionalities vary with the quantum and nature of the loan and the duration of the repayment. The IMF conditions to India in 1991 were:

(i) Devaluation of the rupee by 22 per cent, that is, from ₹ 20-21 to ₹ 27 per dollar;

(ii) Drastic reduction in import tariff from the then 130 per cent to 30 per cent for all goods including

consumables and putting them on Open General Licence (OGL) list;

(iii) Since this would affect Government revenue adversely, the excise duties should be hiked by 20 per cent;

(iv) All government expenditure should be cut down by 10 per cent.

The ultimate objective of the IMF conditions was to help India bring about equilibrium in its balance of payments and remove internal fiscal deficit and the consequent inflationary conditions. As could be expected, there was considerable opposition from Indian political parties specially the Leftist parties to the conditionality clauses. According to these parties, the acceptance of the various conditions would compromise India's economic sovereignty and would further open up the Indian market to multinationals. There was, however, no alternative to the IMF loan at that time and the Narasimha Rao government ignored all criticisms..

The real solution to the recurring problem of India's BOP and internal fiscal deficits was to work out drastic structural reforms in the Indian economy. The Government's expenditure would have to be drastically pruned; the public sector would have to be effectively disciplined; productivity had to be raised all round; and urgent steps had to be taken to raise India's exports.

The Narasimha Rao Government with Dr. Man Mohan Singh as finance minister took vigorous steps, to modernise the Indian economy and speed up economic reforms since 1990-91. This helped India to accumulate large foreign exchange reserves continuously from about $ 6 billion in 1990-91 to $ 42 billion in 2000-01 to over 309 billion dollars at the end of 2007-08 (Table 10). But later they came down to $ 294.4 billion in 2011-12.

TABLE 10: Foreign Exchange Reserves of India

(millions of U.S. Dollars)

Year	*Gold*	*SDRs*	*Foreign currency assets*	*Total*
	(2)	(3)	(4)	(2+3+4)
1970-71	240	150	580	970
1980-81	370	600	5,850	6,820
1990-91	3,500	100	2,230	5,830
2000-01	2,730	2	39,550	42,280
2007-08	10,039	4514*	2,99,230	3,09,723
2008-09	9,577	982*	2,41,426	2,51,985
2009-10	17,986	1,380	2,54,685	2,79,057
2010-11	22,972	4,569	2,74,330	3,04,818
2011-12 (March 30,2012)	27,023	4,452	2,60,069	2,94,398

SOURCE: RBI, Report on Currency and Finance, 2000-01 and RBI Bulletin, August 2007, RBI, Handbook Statistics on the Indian Economy (2008-09), RBI Bulletine May. 2012
Note : *The total SDRs in 2007-08 on wards include Reserve Tranche position in IMF.

Mounting Forex Reserves

The huge increase in forex reserves since 1990-91 has come in response to both international and domestic conditions. U.S.A. had cut interest rate drastically to check recession and to stimulate the American economy. Despite cut in interest rates in India, relatively higher Indian interest rate had attracted NRI investments to India.

There was also a strong bullish turn in the Indian stock market since 2001, particularly since May 2003. This attracted foreign institutional investors (FII) funds to India and consequent rise in forex resources . This large increase in forex reserves in recent years was trumpeted by the NDA Government as one of the "India shining" symptoms.

Actually, the heavy increase in forex reserves would have increased the money supply in India—increase in liquidity—kicked up inflation, substantially appreciated the rupee, killed exports and boosted imports. But RBI managed, rather efficiently, *to neutralize the adverse effects of heavy inflow of dollars*. RBI bought dollars on the one hand (and paid rupees) and sold Government securities so as to mop up liquidity on the other. Accordingly, India did not suffer from inflationary pressure from the influx of forex reserves. RBI, however, was left with holding huge forex reserves – estimated at over $ 299 billion at the end of 2007-08 which earn very little interest income and which are highly volatile.

Generally, a country accumulates forex reserves through trade surplus. This was how China and Singapore have managed to accumulate huge foreign reserves which India has accumulated in recent years, however, represent influx of foreign capital by way of direct investment in Indian companies, investment in stock market shares and more recently, investment in real estate. The growth of India's forex reserves also reflects the confidence of foreign investors in India's economic fundamentals and its rate of economic growth. Some of the forex reserves, however, may be regarded as hot money having entered India for stock market speculation.

Deployment of Forex Reserves

With such large forex reserves, India did not worry about ballooning of crude oil prices and the consequences of adverse of balance of payments in the current account. At the same time, RBI was also prepared for any flight of hot money from India.

But the real questions are: how much forex reserves should RBI keep to meet sudden withdrawals and what should it do with the balance of reserves?

For, it should not be forgotten that forex reserves are mostly sterile, earning only two to three per cent rate of interest (3.1 per cent during 2004-05). RBI, itself, raised

this question. RBI Bulletin March 2004 mentioned: "While safety and liquidity constitute the twin objectives of reserve management in India, return optimization becomes an embedded strategy within this framework." Return optimization is doubtful but reasonable return is more appropriate and possible.

In this connection we may cite a few cases of forex deployment of some Asian countries. Singapore – only a city-state – has had forex reserves of nearly $ 130 billion (in May 2006, 7th highest reserves in the world), which is managed by Singapore's Government Investment Corporation (GIC). The reserves are kept in USA, Europe, Japan and in some developing countries; the reserves are kept in US Government securities, equities, bonds, real estate, commodities and other investments; GIC has allowed private investment agencies to manage 25 per cent of the forex reserves. The result is that Singapore has managed to get annual rate of return of over 9 per cent (in dollar terms) and 8.2 per cent in Singapore currency. Contrast this with the absurdly low 3.1 per cent return from Indian forex reserves.

South Korea, China and Taiwan have also adopted Singapore model. For instance, South Korea has set up the Korean Investment Corporation to manage its external reserves but the Government has kept the option to recall the assets in the event of an emergency.

China had huge forex reserves to the tune of $925 billion (in May 2006) out of which $300 billion were kept in US government securities. China has also planned to adopt Singapore model.

In other words, India too can explore new possibilities of using forex reserves profitably and get a "reasonable" return. After a long period of hesitation, RBI has now assigned a small portion of forex reserves to be managed by international brokers and investment adviers.

Secondly, there is a serious discussion in India regarding the use of forex resources within India itself when the rate of growth of GDP is 8 to 9 per cent – a comparable rate of return to any investment elsewhere. Investment within India will add to the production capacity of the country and increase employment opportunities. Besides, the sectors suffering from obsolescence of plant and machinery and which need massive inputs of sophisticated machinery and equipment can be helped through forex reserves. This will overcome the usual complaint of the Government that it is short of resources. A good example is Taiwan, whose Government has given $15 billion to banks to finance major development projects.

Thirdly, India can follow the example of China in using forex reserves to raise the capital base of Public Sector Banks (PSBs). China, for instance, injected $60 billion of its forex reserves into Bank of China, the Construction Bank of China and Industrial Construction Bank of China. The Government of India, on the other hand, issued Rupee Bonds to recapitalize some of the PSBs in difficulty. RBI has allowed some PSBs to increase their capital assets by raising debt instruments abroad. Instead, India can follow the Chinese model.

Fourthly, India can use forex reserves for pre-payment of commercial debt (now amounting to over $25 billion) borrowed at higher rate of interest. India has done this before, it can do so now, as it has sufficiant reserves.

Finally, there is, a strong opinion – initially, the proposal came from Dr. Montek Singh Ahluwalia, the Deputy Chairman of the Planning Commission – that RBI should use/divert a part of its forex reserves for infrastructure development of the country. If this proposal is accepted, RBI may place them at the disposal of Infrastructure Development Finance Corporation (IDFC) and other financial institutions which, in turn , will lend to the private and public sector units to develop roads, ports, airports, power and so on. The development of economic infrastructure is very essential and has actually been a serious constraint on India's economic development.

The major objection to this proposal is that a good part of forex reserves constitute short term hot money, and hence should not be invested in long term infrastructure investments. Since large forex reserves have entered for purpose of stock exchange speculation in India, they may be withdrawn at very short notice. This necessitates that RBI should always be prepared for this eventuality.

There is, however, no danger in using part of the forex reserves in infrastructural development. If need be, the Government of India can guarantee such investment by RBI. Besides, for purposes of security and emergencies and market intervention, a cut-off limit of, say, $100 billion can be kept and the balance used more productively.

Keeping huge forex reserves idle, when there is a huge demand for funds for development of infrastructure, is similar to the huge food reserves rotting in government godowns, with nearly 250 to 300 million people starving in our villages (in 2002-03). Unfortunately RBI is managed by bureaucrats who will always follow conservative and safe policies.

Because of its strong foreign exchange reserves position, India, a traditional borrower of IMF, has now become the latter's creditor. Since September 2002, India has been invited by IMF to contribute to its Financial

Transactions Plan (FTP). These funds enable IMF to finance the balance of payments needs of other member countries. During May-June 2003, India contributed $ 292 million to IMF towards its FTP.

7. CONVERTIBILITY OF THE RUPEE : CURRENT AND CAPITAL ACCOUNT

Exchange Control Mechanism in India

As a member of the IMF, India had to accept the system of multilateral payments i.e. the rupee should be freely convertible to the currencies of all member countries of IMF. In practice, however, India had long followed strict exchange control. The Reserve Bank adopted a comprehensive system of exchange controls under the Foreign Exchange Regulation Act (FERA), with the express purpose of conserving India's foreign exchange resources.

(a) Imports were rigidly controlled and imports of all "unnecessary" items were prohibited.

(b) All external payments had to be made through authorised dealers controlled by the Reserve Bank of India and foreign exchange was rationed out strictly according to availability.

(c) Exporters who acquired foreign exchange had to surrender their earnings to authorised dealers and get rupees in exchange.

(d) Purchase and sale of foreign securities by Indians were strictly controlled.

The purpose of strict exchange control was to prevent the wrong use of the available foreign exchange resources and utilise them for importing machinery and raw materials essential for India's economic development.

The foreign exchange controls and the enforcement of FERA led to serious difficulties and inconveniences to both importers and exporters and to the general public. Besides, exchange control led to a flourishing black market in foreign exchange.

As part of the liberalisation of the Indian economy and doing away with the licensing and controls regime, the Government of India under Narasimha Rao and Man Mohan Singh started dismantling the foreign exchange control system from 1991-92 onwards.

(a) Partial Convertibility of the Rupee in the Current Account

During 1992-93 the Government of India introduced a dual exchange rate system. Under this system:

(a) The Government of India accepted the existence of two exchange rates in the country — the official rate of exchange (which was controlled) and the market rate – or the black market rate – of exchange (which was free to move or fluctuate according to market conditions).

(b) All foreign exchange remittances into India — earned through export of goods or services or through inward remittances — were allowed to be converted in the following manner :

— 60 per cent of the export earnings could be converted at the free market determined rate; this amount could be used freely for current account transactions and payments (i.e. for import of goods, for travel and for remittances abroad).

— the balance 40 per cent of the earnings should be sold to RBI through authorised dealers (ADs) at the official rate of exchange; this amount of foreign exchange would be made available by RBI for financing preferred imports, bulk imports, etc.

This system of dual exchange rate of the rupee enabled the exporters to convert (at least) 60 per cent of their export earnings at the market rate of exchange which was much higher than the official exchange rate. The Government hoped that this would be a sufficient incentive to promote exports and increase foreign exchange reserves. The performance of the external sector was indeed quite spectacular. Foreign exchange reserves zoomed from $ 5.8 billion to $ 25.2 billion between 1990-91 and 1994-95.

(b) Full Convertibility of the Rupee on Current Account

The existence of the dual exchange rate, however hurt exporters and Indians working abroad who had to surrender 40 per cent of their earnings at the official rate which was lower than the market rate of exchange. It was to remove this defect that the Government adopted *full convertibility of the rupee on trade account* — Indian exporters and Indian workers abroad could convert 100 per cent of their foreign exchange earnings at the market rates. As the next step, Dr. Man Mohan Singh, the then Finance Minister, introduced the convertibility of the rupee on *the current account*, that is, liberalise the access to foreign exchange for all current business transactions including travel, education, medical expenses, etc. — the objective of the Government was to eliminate reliance upon illegal channels for such transactions. Dr. Man Mohan Singh justified his decision for full convertibility of the rupee on current account on account of his success

in the international sector viz., spectacular rise in forex reserves, increase in exports but stagnancy in imports in dollar terms and improvements in balance of payments on current account.

What is then *current account convertibility of the rupee? All current transactions of India with all other countries – with regard to trade or merchandise, services such as education, travel, medical expenses etc. and "invisibles" such as remittances – are fully met through full convertibility of the rupee into other currencies*. The rupee can be used to buy other currencies and other countries can buy the Indian Rupee without limit. Full current account convertibility of the Rupee has been in operation since the middle of 1990s.

Distinction between Current and Capital Convertibility

The next step for India is to go for convertibility of the rupee on capital account also. *Under Capital Account Convertibility, (CAC), any Indian or Indian company is entitled to move freely from the Rupee to another currency, to convert Indian financial assets into foreign financial assets and back, at an exchange rate fixed by the foreign exchange market and not by RBI.* In a way, CAC removes all the restraints on international currency flows on India's capital account.

There is a basic difference between current account convertibility and capital account convertibility. In the case of current account convertibility, it is important to have a transaction – importing and exporting of goods, buying and selling of services, inward or outward remittances, etc. – payment or receipt of one currency against another currency. On the other hand, in the case of capital account convertibility, a currency can be converted into any other currency *without any transaction.*

Final Step Capital Account Convertibility (CAC) : Tarapore Committee (1997)

When the convertibility of the rupee on the current account was successful and when RBI accumulated over $ 25 billion forex reserves it was ready to take the next step — capital account convertibility.The Reserve Bank of India appointed in 1997 the Committee on Capital Account Convertibility with Mr. S.S. Tarapore, former Deputy Governor of RBI, as its chairman.

The Tarapore Committee defined CAC as "the freedom to convert local financial assets with foreign financial assets and vice-versa at market determined rates of exchange". In simple language, CAC allowed any one to freely move from local currency into foreign currency and back. The purpose of CAC was

(a) to woo foreign investors by showing an easy market to move in and move out;

(b) to send a strong message that Indian economy was strong enough; and

(c) India had sufficient forex reserves to meet any flight of capital from the country to any extent.

The Tarapore Committee explained the benefits of CAC to India.

The Benefits of CAC

(i) Availability of large funds to supplement domestic resources and thereby promote economic growth,

(ii) Improved access to international financial markets and reduction in cost of capital,

(iii) Incentive for Indians to acquire and hold international securities and assets, and

(iv) Improvement of the financial system in the context of global competition.

Accordingly, the Tarapore Committee recommended the adoption of capital account convertibility. Under the system of CAC

(a) Indian companies would be allowed to issue foreign currency denominated bonds to local investors, to invest in such bonds and deposits, to issue Global Deposit Receipts (GDRs) without RBI or Government approval, to go for external commercial borrowings within certain limits, etc.

(b) Indian residents would be permitted to have foreign currency denominated deposits with banks in India, to make financial capital transfers to other countries within certain limits, to take loans from non-relatives and others up to a ceiling of $ 1 million, etc.

(c) Indian banks would be allowed to borrow from overseas markets for short term and long term up to certain limits, to invest in overseas money markets, to accept deposits and extend loans denominated in foreign currency. Such facilities would be available to financial institutions and financial intermediaries also.

(d) All-India financial institutions which fulfil certain regulatory and prudential requirements would be allowed to participate in foreign exchange market along with authorised dealers (ADs) who are, at present, banks. At a later stage, certain select NBFCs would also be permitted to act as ADs in foreign exchange market.

(e) Banks and financial institutions would be allowed to operate in domestic and international markets — they would be allowed to buy and sell gold freely and offer gold denominated deposits and loans.

Preconditions for CAC

The Tarapore Committee recommended that, before adopting CAC, India should fulfil three crucial preconditions :

(i) Fiscal deficit should be reduced to 3.5 per cent. The Government should also set up a Consolidated Sinking Fund (CSF) to reduce Government debt.

(ii) The Government should fix the annual inflation target between 3 and 5 per cent — this was called ***mandated inflation target*** — and give full freedom to RBI to use monetary weapons to achieve the inflation target.

(iii) The Indian financial sector should be strengthened — for this, interest rates should be fully deregulated, gross non-paying assets (NPAs) should be reduced to 5 per cent, the average effective CRR should be reduced to 3 per cent and weak banks should either be liquidated or be merged with other strong banks.

Apart from these three essential pre-conditions, the Tarapore Committee also recommended that :

(a) RBI should have a monitoring exchange rate band of 5 per cent around Real Effective Exchange Rate (REER) and should intervene only when the REER is outside the band;

(b) The size of the current account deficit should be within manageable limits and the debt service ratio should be gradually reduced from the present 25 per cent to 20 per cent of the export earnings;

(c) To meet import and debt service payments, forex reserves should be adequate and range between $ 22 billion and $ 32 billion; and

(d) The Government should remove all restrictions on the movement of gold.

It was generally agreed that full convertibility of the rupee, both on current account and capital account was a welcome measure and ***was necessary for closer integration of the Indian economy with the global economy***.

The major difficulty with the Tarapore Committee recommendation was that it would like the CAC to be achieved in a 3 year period — 1998 to 2000. The period was too short and the pre-conditions and the macro-economic indicators could not be achieved in such a short period.

Basically, the Committee failed to appreciate the political instability in the country at that time, and the complete absence of political will and vision to carry forward the process of economic reforms and economic liberalisation. The outbreak of Asian financial crisis at this time was also responsible for shelving the recommendation of Tarapore Committee.

Second Tarapore Committee on Fuller Capital Account Convertibility

In a speech at RBI on March 18, 2006, Prime Minister , Dr. Man Mohan Singh, stated: "Given the changes that have taken place during the last two decades, there is merit in moving towards fuller capital account convertibility with a transparent framework..... I will, therefore, request the Finance Minister and RBI to revisit the subject and come out with a roadmap based on current realities." Promptly, within two days RBI constituted the "Committee on Fuller Capital Account Convertibility" with S.S. Tarapore again as Chairman. The Tarapore Committee submitted its report in September 2006 (more commonly called the Second Tarapore Report or Tarapore II).

Roadmap for FCAC

The Tarapore II assumed that there was already an on-going process of capital account liberalization which required further deepening – hence, the use of the term "fuller" Capital Account Convertibility. It further assumed that India's forex reserves would only increase and suggested raising the ceilings for fresh investment abroad by Indian companies, banks and individuals.

Accordingly, as in the case of Tarapore I, Tarapore II outlined a framework or roadmap or phases for achieving FCAC not in 3 years but in 5 years. For instance:

Phase I	:	2006-07: Involves move from the current capital movement of individuals from $25,000 to $ 50,000
Phase II	:	2007-09: Further raised to $100,000.
Phase III	:	2009-11: Raised to a maximum of $200,000.

In the case of corporates, the remittance would rise from the present 200 per cent of net worth to 400 per cent by 2011.

In the case of banks, overseas borrowings are made more liberal.

In the case of mutual funds, the overall ceilings should be moved up from the current level of $2 billion to $5 billion by 2011.

According to Tarapore II, this roadmap is not rigid but a broad path and the actual implementation would be determined by

(*a*) assessment of overall macroeconomic development; and

(*b*) any specific problems which may unfold.

At the end of the five-year period, there would be a comprehensive review to chalk out the future plan of action.

The First Tarapore Committee recommended a roadmap in 1997 for free float of the rupee by the year 2000, after a set of conditions were fulfilled. These conditions were not fully met and CAC took a back seat, though capital controls were eased along the way. The Second Tarapore Committee has again drawn up a roadmap putting 2011 as the target date for free float of the rupee. But for this, the conditions are more favourable, as for instance:

(*i*) strong fundamentals of the Indian economy;

(*ii*) healthy foreign exchange reserves – as much as $ 165 billion;

(*iii*) more liberalized use of forex, already in place; and

(*iv*) a financial system better geared to deal with external capital flows.

Steps to Free Float of the Rupee

As a fresh move, the Tarapore II has made many important recommendations, some of which led to minutes of dissent by two members of the Committee (S.S. Bhalla and A.V. Rajwade).

The Tarapore II contends that capital outflows by residents, corporates and banks are a strong confidence building measure but at the same time the Committee asserts that net inflows should not drop. In this connection, the Tarapore II has suggested that:

(*a*) the distinction between non-resident Indians (NRIs) and foreigners be narrowed down;

(*b*) foreign corporates to be allowed to invest in Indian equity and debt; this will help to deepen the Indian stock market;

(*c*) multilateral institutions and corporates to be allowed to raise Rupee Bonds in India subject to overall upward mobile ceiling;

(*d*) liberal external commercial borrowings to be permitted by corporates (i) with the removal of cap on 10 year loans and (ii) raising the automatic approval of such loans to $1 billion by 2011;

(*e*) import-linked short term loans should be monitored in a comprehensive manner; however, the over-all limit of external commercial borrowings (ECB) should be gradually raised but keeping (*i*) the cap of $18 billion, and (*ii*) automatic approval limit of up to $500 million for an entity for the year 2006-07.

These suggestions were accepted and were being implemented by the RBI and Finance Ministry. However, Tarapore II has made two radical suggestions, which may be accepted by RBI but may be rejected by the Finance Ministry.

Ban Participatory Notes (PNs)

The first critical recommendation of Tarapore II refers to Participatory Notes (PNs).

PNs are contract notes from FIIs to their counterparts and brokers in India who are registered with Stock Exchange Board of India (SEBI). PNs representing foreign funds are transferable but the source of funds is unknown – non-SEBI registered brokers, hedge funds NRIs and possibly Indian residents with illegal foreign funds repatriating them through this route as much as 40 per cent of foreign funds used in the Indian Stock Exchange may be of this variety.

Tarapore II has suggested banning PNs i.e. Foreign Institutional Investors (FIIs) should be prohibited from investing fresh money raised through PNs. Existing PN holders should be provided an exit route and phased out completely within one year.

There has been considerable difference of opinion regarding the Tarapore II's outright banning of PNs. RBI accepted this recommendation but the Finance Ministry was against it. Dr. S S Bhalla put a strong minute of dissent. True, there is a veil of secrecy surrounding the identity of PNs; it is equally true that the illegitimate individuals and institutions may misuse them. But, instead of an outright ban, Prof. Bhalla would like some measures to be adopted to make them more transparent even while allowing investors who do not wish to register with SEBI to participate in Indian equity and debt markets.

Participatory Notes (PNs) and Volatility in the Indian Stock Market

When Tarapore II recommended the immediate suspension of PNs, RBI readily accepted but the Finance Ministry rejected the recommendation. PNs were entering in large volumes and this inflow increased after the Federal Reserve cut the interest rate on 18th September 2006 basically to support the American economy. This gave an additional incentive to foreign funds to enter Indian stock market by taking the PN route. SENSEX rose, in a matter of a few months from 16,000 to 21,000 points. The bulls were so optimistic that the SENSEX would even touch 25,000 before the end of the fiscal year (March, 2008). SEBI and the Finance Ministry got alarmed at the dizzy rise of the SENSEX and blamed PNs as the major factor for this rise.

SEBI wanted all FIIs to register with it and enter the Indian market directly and not take the illegal PN route. No fresh PNs will be allowed and all existing PNs will have to be repatriated in 18 months' time. As a result of these steps, the SENSEX fell by nearly 2000 points in a matter of three days — 17th to 19th October, 2007. Some of the interesting things from this three-day plunge in SENSEX were :

(a) Approximate inflow into Indian equities through PNs : $ 32.4 billion

(b)	Loss to PN holders	:	₹ 10,000 crores
(c)	Loss in market value of companies in which holders of PNs held shares	:	₹ 2,00,000 crores
(d)	Total market capitalisation of these companies	:	₹ 22,00,000 crores

The high volatility and confusion in the Indian Stock market in October 2007 could have been avoided if the Finance Ministry had accepted the recommendation of Second Tarapore Committee to ban PN with immediate effect in 2006.

Discriminating Treaties Should Go

A second critical recommendation of Tarapore II relates to discriminatory treaties with countries. The prevention of double taxations treaty with Mauritius has always created much opposition in India as Mauritian route was taken by many FII's to send money into India to invest in the equity and debt markets. Tarapore II Report states:

"Such discriminatory treaties are not consistent with an increasing liberalization of the capital account as distortions inevitably emerge possibly raising the cost of capital to the host country. It would, therefore, be desirable that the Government undertakes a review of tax policies and tax treaties."

This recommendation is in line with the thinking of RBI but the Finance Ministry has not accepted it as it has generally favoured Mauritius Connection.

Consolidation of Banking System

Another recommendation of Tarapore II – actually made earlier by Tarapore I – was with regard to the consolidation of banks. Tarapore II states:

(i) "In the FCAC context, the banks be exposed to greater level of risks than at present and hence the capital requirement would go up even further." Besides,

(ii) "the Government is unable or unwilling, to provide large additional capital injection into the public sector units."

The PSBs, however, will need to strengthen their capital base to meet the exigencies of greater and possibly more volatile capital flows. Accordingly, Tarapore II urges upon the Government:

- to reduce its holding or RBI's holding in PSBs to 33 per cent from the present holding of 51 per cent (or 55 per cent as the case may be) ; and
- postpone the transfer of SBI to the Government.

Tarapore II has recommended that commercial banks, including PSBs should be incorporated under the Indian Companies Act so as to provide a level playing field. The Committee has further recommended that large industrial houses should take a stake in Indian banks or they should come forward to promote private banks – participation of institutions has been responsible for the successful working of banks. Further, NBFCs can also be allowed to convert themselves into banks. Besides, Tarapore II recommends that after 2009, foreign banks may be allowed to enhance their presence in the Indian banking system.

The purpose of all these proposals is to strengthen the banking system in the country. The Finance Ministry will definitely go with this recommendation but RBI may hesitate to implement it.

Finally, the Tarapore II reiterates Tarapore I conditionalities of inflation control and control of fiscal deficit within international limits. These conditionalities mentioned as far back as 1997 are still relevant.

The RBI and the Finance Ministry may accept and implement recommendations of Tarapore II Report on Fuller Capital Account Convertibility according to their convenience.

Basic Problem in India now ?

Is capital account convertibility so important and urgent in the present context of India's growth? Are there not more important problems which the UPA Government should address ?

John Williamson, chief economist of the World Bank, questions the wisdom of India moving to FCAC, by pointing out to the need for more important and more liberalizing reforms in India: such as electricity pricing, priming the fiscal deficit, make the courts work faster, etc. etc. John Williamson writes: "At this stage full capital account liberalization promises no large benefits, while it increases the risk of things going badly wrong". This, indeed is a fair and considered opinion of FCAC of the Rupee.

As a matter of fact, neither RBI not the finance Ministry, is least concerned about the FCAC. All their concern is about the control of the double digit inflation – which is around 13 per cent in September 2008. RBI has used both the interest rate and cash revenue ratio – raised both the monetary weapons – to check demand for goods and services and thus control the rise in the general price level. The Finance Ministry has used tax measures to influence the supply and thus control prices. Direct physical controls have also been used to control inflationary rise in prices. Control of inflation has thus become the number one economic problem – not even economic growth – and neither RBI nor the Finance Ministry talk about FCAC.

8. FOREIGN EXCHANGE MANAGEMENT ACT (FEMA)

Soon after India's independence, the Government of India enacted the Foreign Exchange Regulation Act, 1947 (FERA) to regulate the operation of foreign controlled

companies in India. The Act was amended comprehensively in 1973. The major objectives of new FERA, 1973 were (a) the conservation of India's precious foreign exchange resources, and (b) the issue of guidelines to the foreign investors to invest in India's core sectors which employ sophisticated foreign technology.

FERA, 1973 was enacted at a time when India had less than a billion dollars in foreign exchange reserves and when almost all spheres of the economy were sought to be controlled and regulated by the Government. Under FERA, all transactions in foreign exchange and all transactions with non-residents (whether in foreign exchange or in rupees) were absolutely prohibited, except where specific relaxations were made. Similarly, non-residents were also not permitted to have any dealings in India. However, the practical and day-to-day provisions were *contained not in* the Act, but in the guidelines issued by the Government of India. These guidelines related to foreign business in India, as for instance, the necessity of all branches and all subsidiaries of foreign companies (except airlines and shipping companies) to have minimum Indian equity participation of 26 per cent. These guidelines were revised substantially in 1976.

FERA (1973) came under severe criticism particularly for the section which stipulated that whenever a person was prosecuted or proceeded against for contravention of any provision, rule, regulation, directive or any order under the Act, the onus of proving that he had the requisite permission was on him. This often led to unnecessary harassment of bona fide persons and companies with show cause notices and prosecution for alleged violations of FERA on narrow technical grounds. At the same time, however, thousands of crooks, both individuals and companies, managed to evade and avoid the draconian provisions of FERA and got away scot free.

The Foreign Exchange Management Act (FEMA) was introduced in July 1998 in the Parliament to repeal FERA, 1973 and to *consolidate and simplify* the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.

The Salient Features of FEMA

According to Section 3 of FEMA, 1998, no person shall deal in or transfer foreign exchange or foreign security to any unauthorised person.

Section 4 provides that no person resident in India shall acquire, hold, own, possess or transfer any foreign exchange, foreign security or any immovable property situated outside India, save as otherwise provided in this Act.

Section 5 provides that any person may sell or draw foreign exchange to or from an authorised person if such sale or drawal is a current account transaction, provided that the Central Government may, in public interest and in consultation with RBI, impose such reasonable restrictions for current account transactions as may be prescribed.

Section 6 states that any person may sell or draw foreign exchange to or from an authorised person for a capital account transaction. RBI, in consultation with the Government of India, may specify the class of capital account transactions which are permissible, the limit up to which foreign exchange shall be admissible for such transactions. RBI may prohibit, restrict or regulate the following:

(a) Transfer or issue any foreign security by a person resident in India; by a person resident outside India, or by any branch, office or agency in India of a person resident outside India;

(b) Any borrowing or lending in foreign exchange in *whatever form or by whatever* name called;

(c) Any borrowing or lending in rupees between a person resident in India and a person resident outside India;

(d) Deposits between persons resident in India and persons resident outside India;

(e) Export, import or holding of currency or currency notes;

(f) Transfer of immovable property outside India, other than a lease not exceeding five years by a person resident in India; likewise, acquisition or transfer of immovable property in India, other than a lease not exceeding five years, by a person resident outside India;

(g) Giving a guarantee or surety in respect of any debt, obligation or other liability incurred by a person resident in India and owed to a person resident outside India.

Section 6, subsection 4 provides that a person resident in India may hold, own, transfer or invest in foreign currency, foreign security or any immovable property situated outside India, if such currency, security or property was acquired, held or owned by such person when he was resident outside India or inherited from a person who was resident outside India.

Section 6, subsection 5 applies to persons who reside outside India i.e., they may hold, own, transfer or invest in Indian currency, security or any immovable property situated in India if such currency, security or property was acquired, held or owned by such person when he was resident in India.

Under Subsection 6, RBI may, by regulation, prohibit, restrict, or regulate establishment in India of a branch, office or other place of business by a person resident outside India, for carrying on any activity relating to such branch, office or other place of business.

Under FEMA, 1998, every exporter of goods shall furnish to RBI a declaration containing true and correct material particulars including the amount representing the full export value of the goods exported for the purpose ensuring the realisation of the full export proceeds by such exporter without any delay. Further, every exporter of services shall furnish to RBI a declaration containing the

true and correct material particulars in relation to payment for such services.

Where any amount of foreign exchange is due or has accrued to any person resident in India, such person shall take all reasonable steps to realise and repatriate the amount to India within a period and manner specified by RBI.

Section 9 refers to certain exemptions from realisation and repatriation of foreign exchange in certain cases.

Contravention and Penalties. If any person contravenes any provision of FEMA, 1998 or contravenes any rule, regulation, notification, direction or order issued in exercise of the powers under this Act or contravenes any condition subject to which authorisation is issued by RBI, he shall be liable to penalty up to ***twice the sum involved in such contravention.***

The Central Government shall establish an Appellate Tribunal for Foreign Exchange to hear appeals against the orders of the adjudicating authorities under this Act. Appeal against the judgement of the Appellate Tribunal lies with the High Court.

The Central Government shall establish a Directorate of Enforcement to enforce the provisions of this Act.

Section 40 of the Act gives power to the Central Government to suspend or relax, either indefinitely or for a specific period, the operation of all or any of the provisions of FEMA. The notification issued by the Central Government in this regard will have to be placed before the Parliament and got approved within a specified period.

Evaluation of FEMA

As mentioned at the beginning, FEMA was sought to repeal FERA, 1973, because the conditions under which FERA 1973 was enacted and was implemented do not exist any more. For instance, India has now huge forex reserves. It is, however, true that the size of the economy in general and the external transactions in particular have gone up substantially. Even then, none can deny the fact that the situation on the external front in recent times is a great deal more favourable than at any time in the past. Hence, there is no place for the fear complex that characterised regulatory efforts in the past. For another, with the culture of liberalisation that has come to be accepted as a framework of management of the economy, strict exchange control regime as visualised in FERA, 1973 had to be disbanded.

FEMA, 1998 attempts to simplify the provisions of FERA 1973. In fact, there are several major changes with immediate effect and relevance, particularly those relating to certain substantive matters and contraventions and punishments.

Besides, there is a major shift under FEMA, 1998. Under FERA 1973, all transactions in foreign exchange and all transactions with non-residents (in foreign currencies or in rupees) were absolutely prohibited except where specific relaxations were made. Similarly, non-residents were also not permitted to have any dealings in India. Under FEMA 1998, however, the major focus is on transactions involving foreign exchange and foreign securities. Restrictions over dealings with non-residents and by non-residents in India have been substantially diluted, though not eliminated.

Another major change under FEMA is that only a monetary penalty will be slapped on the convicted, and there is no punishment by way of imprisonment for contravention of any of the provisions. The only circumstance under which imprisonment can be made is for non-payment of such penalty. Under FERA, however, the Enforcement Directorate had sweeping powers to arrest anyone suspected in indulging in forex violations. Naturally, individuals and particularly employees of companies would welcome the new provisions of FEMA. Cases under FEMA will also have to be referred by RBI.

9. THE PREVENTION OF MONEY LAUNDERING ACT, 2002

The Prevention of Money Laundering Bill, 1998 was introduced in the Parliament in July 1998 along with FEMA Bill, 1998 and was pased as an Act in 2002. Basically, Money Laundering Act is aimed to prevent transfer of funds in order to conceal a transaction of dubious or illegal origin. The Act proposes to address laundering of money derived from specified offences listed under the Indian Penal Code, the Immoral Traffic (Prevention) Act, 1956, the Arms Act, 1959, the Narcotic Drugs and Psychotropic Substances Act, 1985 and the Prevention of Corruption Act, 1988. The Act does not define money laundering but states that a money laundering offence will have the following ingredients:

(a) a crime should have been committed;

(b) there are proceeds of or gains from the crime and

(c) there is a transaction in respect of the proceeds of the gains.

In other words, "Whoever acquires, possesses or transfers any proceeds of crime or enters into any transaction which is related to proceeds of crime either directly or indirectly or conceals or aids in the concealment of the proceeds of crime commits the offence of money laundering." In simple language, money laundering refers to the cunning act of vesting proceeds of crime with legitimacy.

Under Section 4 of the Act, money laundering is punishable with rigorous imprisonment for a term not less than three years but which may extend up to 7 years – and 10 years in the case of drug-related crimes – in addition to a fine extending up to ₹ 5 lakhs. Section 5 of the Act empowers the Director of Money Laundering to attach provisionally the property involved in money laundering. All money laundering offences are cognisable and non-bailable and the onus of proof of innocence is on the

accused. The officers of the Directorate of Money Laundering will also have the power to search, seize documents and attach the property of the accused after recording their reasons for doing so.

Offences committed by companies are also punishable and those in charge of and responsible for the conduct of business of the company will be liable for prosecution.

Since money laundering offences can be detected only with the help of financial institutions, the Act makes it mandatory for all financial institutions (FIs) and intermediaries to maintain a record of all transactions which exceed the value of ₹ 25 lakhs. They are required to furnish information of such transactions to the Commissioner of Income Tax under whose jurisdiction they are located. The Director of Money Laundering is given power to call for the records maintained by FIs and intermediaries for purposes of investigation.

The Act does not mention that a separate money laundering directorate will be set up but it provides for the appointment of Adjudicating Authorities (AAs) and the setting up of an Appellate Tribunal (with benches at Mumbai, Delhi and Chennai) to hear appeals against the AAs. Appeals against the Tribunal will lie with the High Court.

Evaluation of the Money Laundering Act

The Money Laundering Act includes all major offences which help in generation of black money. However, all tax offences, including smuggling, have been kept out of the definition of money laundering. *(It is interesting to note* here that even Swiss laws recognise tax evasion as a money laundering offence.) This means that such serious offences as mis-invoicing rackets, transfer pricing abuses, insider-trading and FEMA violations will be out of the purview of the Money Laundering Act.

What gives real teeth to the Act is that any case under this Act is non-bailable. Once an accused is put behind bars, he will have to wait a maximum of six months for the judgement from the appellate authority before the accused can go in for appeal to the High Court. Among the provisions of the Act are prosecution of any person acquiring the proceeds of crime, attachment of the property of the accused during trial and confiscaton upon conviction, a minimum of three years' imprisonment extendable to seven years and ten years in respect of drug-related offences. According to the Act, the offences are non-bailable and the right to appeal before the High Court is only permitted after the Appellate Tribunal has given its verdict.

The Finance Ministry has justified the stiff penalty provisions of the Money Laundering Act on the ground that, in the last 15 years or so, financial crimes – such as Value Based Advance Licence (Vabal) misuse, excise evasion, bogus exports, etc. – have reached unmanageable proportions. According to the Finance Ministry, Money Laundering Act is based on the provisions of the model money laundering bill prepared and circulated by the Financial Action Task Force (FATF), an international body which has been working with the officials of several countries to develop laws to counter the menace of money laundering.

Associations of businessmen and industrialists, however, have strongly criticised the Act on the ground that the penal provisions are too harsh and that they may be used or misused to harass and settle scores. In fact, the Act incorporates provisions which are more severe than those contained in FERA, 1973. Broadly, the Act falls short of the requirements for effective legislation.

(a) Tax evasion and smuggling have been left out.

(b) Indian banking laws are outmoded and there is no power given to the Income Tax Department or the proposed Money Laundering Directorate to call for statutory reports from banks and financial institutions. (It may be remembered here that all the agencies set up under the two Acts have to utilise information provided *by banks and financial institutions.)*

(c) There is the difficult problem of obtaining information from abroad about the money-laundering activities of resident Indians.

(d) The legal procedure even in this Act is made deliberately lengthy and time consuming – Adjudicating Authority, Appellate Tribunal, High Court and finally Supreme Court – this provides ample opportunity for our lawyers to literally play with the legislation and see that no one is ultimately punished.

In any case, the Act is a good beginning and takes note of the menacing proportions of money laundering. Ultimately, however, it boils down to effective enforcement.

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CHAPTER

49

INDIAN FINANCIAL SYSTEM : COMMERCIAL BANKING SYSTEM

"The resources of the financial system are held by financial institutions in trust and have to be deployed for the maximum benefit of their owners - viz., depositors and investors. The safety of their funds should be the primary concern of banks and regulatory authorities and ensuring solvency, health and efficiency of the institutions should, therefore, be central to effective financial reform."

—Report of the Committee on Financial Reform, 1991 (Narasimham Committee)

1. INDIAN FINANCIAL SYSTEM : AN OVERVIEW

In a broad sense, finance refers to funds or monetary resources needed by individuals, business houses and the Government. Individuals and households require funds essentially for meeting their current requirements or day-to-day expenses or for buying capital goods (commonly known as investment).

A business unit — a factory or a workshop — needs funds for paying wages and salaries, for buying raw materials, for purchasing new machinery or replacing an old one, etc. Traders require finance for buying and stocking goods in their shops and godowns.

Farmers require finance for short periods of 12 to 15 months for cultivation purposes, such as for buying seeds, manure, fodder for cattle, etc. Such short-period loans are normally paid off after the harvest has been collected. The farmers may need finance for medium term and long-term — say, for periods up to 5 to 10 years — for the purchase of livestock, agricultural machinery and implements, digging wells, making permanent improvements on land, etc.

Finally, the government needs funds to meet its expenditure on goods and services (revenue expenditure) and finance its development programmes (capital expenditure).

The Structure of the Financial System

The financial system of India refers to the system of borrowing and lending of funds or the demand for and the supply of funds of all individuals, institutions, companies and of the Government. Commonly, the financial system is classified into:

(a) *Industrial finance*: funds required for the conduct of industry and trade;

(b) *Agricultural finance*: funds needed and supplied for the conduct of agriculture and allied activity;

(c) *Development finance*: funds needed for development; actually it includes both industrial finance and agricultural finance; and

(d) *Government finance*: relates to the demand for and supply of funds to meet Government expenditure.

India's financial system includes the many institutions

and the mechanism which affects the generation of savings in the community, the mobilisation of savings and the effective distribution of the savings among all those who demand the funds for investment purposes. Broadly, therefore, the Indian financial system is composed of:

(a) The banking system, the insurance companies, mutual funds, investment funds and other institutions which promote savings among the public, collect their savings and transfer them to the actual investors; and

(b) The investors in the country composed of individual investors, industrial and trading companies and the government — these enter the financial system as borrowers.

Apart from these two broad categories of institutions which promote savings on the one side and investment on the other, there are certain other essential institutions of the Indian financial system which are actually *facilitators*. For example, the New Issues Market which facilitates new savings to flow into new issues of stocks and shares. In the same way, the stock exchanges in India facilitate the buying and selling of shares and debentures of existing companies and thus help savers to shift from one type of investment to another. The new issues market and the stock exchange may not promote savings and investment directly but they facilitate savings on the one side and help the transfer of funds for investment, on the other.

The Function of the Indian Financial System: Promotion of Capital Formation

The Indian financial system performs a crucial role in economic development of India through saving-investment process, also known as capital formation. It is for this reason that the financial system is sometimes called the financial market. The purpose of the financial market is to mobilise savings effectively and allocate the same efficiently among the ultimate users of funds, viz., investors.

A high rate of capital formation is an essential condition for rapid economic development. The process of capital formation depends upon:

(a) Increase in savings, that is, the resources that would have been normally used for consumption purposes, should be released for other purposes;

(b) Mobilisation of savings — domestic savings collected by banking and financial institutions and placed at the disposal of actual investors; and

(c) Investment proper, which is the production of capital goods.

The third stage or process is the real capital formation but this stage cannot arise or exist without the first two processes. Thus, the general public should save and be prepared to release real resources from consumption goods to capital goods. The savings of the people should be mobilised by banking and financial institutions. Finally, the savings of the people should be made available to investors to produce capital goods. All these three steps or processes, though independent of each other, are necessary for accumulation of capital. The importance of banking and financial institutions in the capital formation process arises because those who save and those who invest in India are generally not the same persons or institutions. The financial institutions and the banks act as intermediaries to bring the savers and investors together.

Composition of the Indian Financial System

The Indian financial system which refers to the borrowing and lending of funds or to the demand for and supply of funds, consists of two parts, viz., the Indian Money market and the Indian Capital market.

The Indian money market is the market in which short-term funds are borrowed and lent. The capital market in India, on the other hand, is the market for medium-term and long term funds.

Usually, we classify the Indian money market into organised sector and the unorganised sector. The organised sector of the money market consists of commercial banks in India, which includes private sector and public sector banks and also foreign banks. The unorganised sector consists of indigenous bankers including the non-banking financial companies (NBFCs). Besides these two, there are many sub-markets in the Indian money market, as we shall see later.

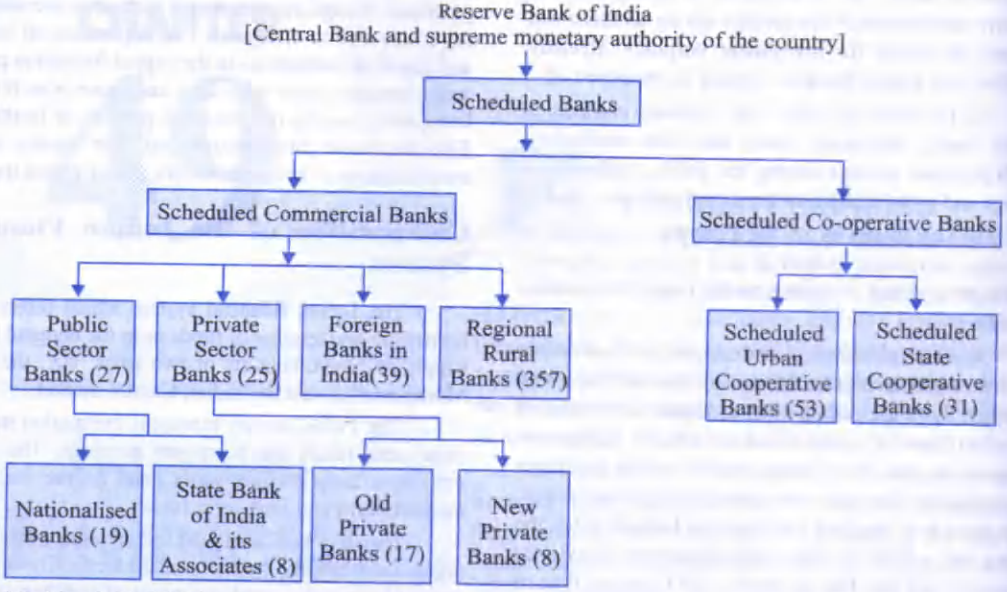
The Composition of the Indian Banking System

The organised banking system in India can be broadly divided into three categories, viz., the central bank of the country known as the Reserve Bank of India, the commercial banks and the co-operative banks. Another and more common classification of banks in India is between scheduled and non-scheduled banks. The Reserve Bank of India is the supreme monetary and banking authority in the country and has the responsibility to control the banking system in the country. It keeps the cash reserves of all scheduled banks and hence is known as the "Reserve Bank".

Scheduled and Non-Scheduled Banks

Under the Reserve Bank of India Act, 1934, banks were classified as scheduled banks and non-scheduled banks. The scheduled banks are those which are entered in the Second Schedule of RBI Act, 1934. Such banks are those which have a paid-up capital and reserves of an aggregate value of not less than ₹ 5 lakhs and which satisfy RBI that their affairs are carried out in the interests of their depositors. All commercial banks —Indian and foreign, regional rural banks and State co-operative banks — are

Chart 1: Scheduled Banking Structure in India



[As March 31, 2007]

scheduled banks. Non-scheduled banks are those which have not been included in the Second Schedule of RBI Act, 1934. At present, there are only three non-scheduled banks in the country. Scheduled banks are divided into commercial banks and cooperative banks. Commercial banks are based on profit, while cooperative banks are based on cooperative principle.

Commercial banks have been in existence for many decades. They mobilise savings in urban areas and make them available to large and small industrial and trading units mainly for working capital requirements. After 1969 commercial banks are broadly classified into nationalised or public sector banks and private sector banks. The State Bank of India and its associate banks along with another 20 banks are the public sector banks. The private sector banks include a small number of Indian scheduled banks which have not been nationalised and branches of foreign banks operating in India — commonly known as foreign exchange banks.

The Regional Rural Banks (RRBs) came into existence since the middle of 1970s with the specific objective of providing credit and deposit facilities particularly to the small and marginal farmers, agricultural labourers and artisans and small entrepreneurs. The Regional Rural Banks have the responsibility to develop agriculture, trade, commerce and industry in the rural areas. The RRBs are essentially commercial banks but their area of operation is generally limited to a district.

The Indian Capital Market

The Indian capital market is the market for long-term capital; it refers to all the facilities and institutional arrangements for borrowing and lending "term funds" — medium-term and long-term funds. The demand for long-term money capital comes predominantly from private and public manufacturing industries, trading and transport units, etc. and agriculture too requires some funds for long-term purposes. The Central and State Governments raise substantial amounts from the capital market. The supply of funds for the capital market comes largely from individual savers (they supply through banks and insurance companies), corporate savers, commercial banks, insurance companies, public provident funds and other specified agencies. The capital market in India can be classified into:

(a) Gilt-edged market or market for Government and semi-government securities;

(b) Industrial securities market;

(c) Development financial institutions; and

(d) Non-banking financial companies.

The gilt-edged securities market is the market for Government and semi-government securities which carry fixed interest rates. The industrial securities market is the market for equities and debentures of companies of the corporate sector. This market is further classified into (a)

new issue markets for raising fresh capital in the form of shares and debentures, (commonly referred to as primary market) and (b) old issues market (or secondary market) for buying and selling shares and debentures of existing companies — this market is commonly referred to as the stock market or stock exchange.

2. INDIGENOUS BANKERS

Though commercial banking of the western type was developed during the British rule, banking as such has not been unknown to India. From very ancient days indigenous banking as different from the modern western banking had been organised in the form of family or individual business. The indigenous bankers have been variously called as Shroffs, Seths, Sahukars, Mahajans, Chettis, and so on, in different parts of the country. They vary in their size from petty money-lenders to substantial shroffs who carry on large and specialised business which at times exceeds that of the scheduled banks.

Operations of Indigenous Bankers

The indigenous bankers lend money, act as money changers and finance the internal trade of India by means of hundis or internal bills of exchange. There are three types of indigenous bankers:

(a) those whose main business is banking,

(b) those who combine their banking business with trading and commission business, and

(c) those who are mainly traders and commission agents but who do a little banking business also.

The majority of the indigenous bankers belong to the second group.

The business of the indigenous bankers is generally a family concern. They employ their own working capital. These indigenous bankers do not generally get deposits from the public as do joint stock banks (and in this sense, they are not really banks) but in some exceptional cases some of them do accept deposits from their friends and relations. They grant loans against all kinds of securities such as gold, jewellery, land, promissory notes, hundis, etc. They lend against personal credit of the borrowers. They also buy and sell remittances and discount hundis. They finance the movement of crops from the villages to the inland trade centres and ports. In regard to their banking business they still follow their traditional methods; they keep accounts according to the vernacular system and their principal instrument is the hundi which is the internal bill of exchange drawn up in flowery language.

The indigenous bankers occupy a very prominent position in the money market in the country and at one time they were estimated to meet at least 90 per cent of the financial requirements of the farmers and a substantial portion of the needs of industry and trade. According to the Committee on Finance for the Private Sector (known as the Shroff Committee 1954, between 75 and 90 per cent of the total internal trade of the country was being financed by the indigenous bankers.

Indigenous Bankers and The RBI

Despite the predominant role played by the indigenous bankers in India's economic life, they had generally remained outside the pale of organised banking. As early as 1931, the Central Banking Enquiry Committee emphasised the necessity to unify the organised and unorganised sectors of the Indian money market and recommended the linking of the indigenous bankers with RBI when the latter was created. The Committee specially recommended that appropriate steps should be taken to evolve a modern bill market of the western type in which the hundi, the traditional bill of exchange used by the indigenous bankers, would figure actively.

In the 1930s RBI suggested that the indigenous bankers should give up their trading and commission business, switch over to western system of accounting, develop the deposit side of banking activities, have their accounts audited by certified accountants, submit to RBI periodical statements of their affairs, etc. RBI desired that the ambiguous character of the hundi should cease and that it should become a negotiable instrument always representing a genuine trade transaction. Besides, some of the leading indigenous banks should play the role of the discount houses (to buy and sell bills of exchange, etc.) as in London. As against these obligations, RBI promised to provide them with all the privileges enjoyed by the scheduled banks, that is, they would be entitled to borrow from or rediscount bills of exchange with RBI on the same terms and conditions as those available to the scheduled banks.

The indigenous bankers, with their age-old traditions of independence, declined to accept the restrictions as well as the compensating benefits of securing accommodation from RBI on favourable terms. They disagreed with the suggestions regarding accepting deposits from the public and giving wide publicity to their accounts and their state of affairs. They were unwilling to give up their trading and commission business, and confine themselves to banking business only. Besides, they did not consider that the privileges offered by RBI were adequate enough to compensate for the loss of their non-banking business. As a result, the scheme proposed by RBI to bring the indigenous bankers under its direct influence fell through.

In 1954, the Shroff Committee recommended that RBI should take steps to encourage the rediscounting of the hundis of the indigenous bankers by RBI through the scheduled banks. Similar proposals for the linking of the

indigenous bankers with RBI and the organised money market were put forward among others, by the Bombay Shroffs Association and the Banking Commission (1972).

Indigenous Bankers and Non-Banking Financial Companies

There has been very rapid banking development in the country and with the extensive branch banking adopted by the commercial banks in the country, it was thought that the role of indigenous bankers would decline considerably. But the indigenous bankers have continued to play a prominent role in both towns and villages because the work they perform and the risk they are prepared to take are not ordinarily performed by the organised banking system. For instance, the commercial banks are extremely rigid in lending to small borrowers. Many small-scale units do not possess sufficient fixed assets to offer as security against the loans raised by them. Naturally, therefore, they turn to the indigenous bankers who are prepared to finance on a clean basis to the vast multitude of small borrowers. In other words, indigenous bankers make credit available to those sectors (small scale business units and retail trade) which are productive. Their methods of operation are also speedy and flexible. Besides, some important sections of indigenous bankers (Multani Shroffs) provide commercial banks with a useful money market instrument (hundis) possessing high degree of liquidity and giving a good yield. In cities like Mumbai, Kolkata, Chennai, Kanpur, Delhi and in many other large and small towns, the indigenous bankers continue to find profitable scope for their business.

In the opinion of the Banking Commission, the indigenous bankers would have to grow in size, become more professional in operation and diversify their business. They should link themselves with the organised financial system by taking on some of the activities of ancillary non-banking financial intermediaries. This is precisely what the prominent indigenous bankers have done – namely, convert themselves into non-banking financial companies (NBFCs)[1].

3. PROGRESS OF BANKING IN INDIA SINCE 1969

The Indian banking system had gone through a series of crises and consequent bank failures and thus its growth was quite slow during the first half of the 20th century. But after Independence, the Indian banking system has recorded rapid progress. This was due to planned economic growth, increase in money supply, growth of banking habit, control and guidance by the Reserve Bank of India and, above all, nationalisation of banks in July 1969.

In 1950-51, there were 430 commercial banks but the number of banks declined rapidly due to RBI's policy of mergers and amalgamations of small banks with big banks as a measure of strengthening the banking system. In 1960-61, for instance, there were as many as 256 small non-scheduled commercial banks but in 1980-81 there were only 4 such banks; the rest of them were merged with bigger banks or had become large banks themselves. There were 172 reporting scheduled commercial banks in the country during 2007-2008.

Nationalisation of Banks

The nationalisation of 14 major banks with deposits of ₹ 50 crores or more in July 1969 was a "historic" and momentous event in the history of India. Nationalisation was resorted to on the ground that the commercial banking system did not play its proper role in the planned development of the nation. It was controlled by a coterie of industrialists and business magnates who had used bank funds to build up private industrial empires. Small industrial and business units were continuously and consistently ignored and starved of funds, even though the Government policy was to encourage small, tiny and cottage and village industries. Agricultural credit was never seriously considered by banks. Bank funds were used to support anti-social and illegal activities against the interest of the general public. It was for these reasons that the Government took over 14 top commercial banks in July 1969. In 1980 again the Government took over another 6 commercial banks—altogether there were 20 nationalised banks. These were in addition to the State Bank of India and its associate banks—commonly called the State Bank of India group—which were taken over in 1955. Later on due to amalgamation of New Bank of India with Punjab National Bank, number of Nationalised Banks is reduced to 19.

Branch Expansion

Rapid economic development presupposes rapid expansion of commercial banks. Initially, the banks were conservative and opened branches mainly in metropolitan cities and other major cities. Branch expansion gained momentum after the nationalisation of major commercial banks and the introduction of the Lead Bank Scheme. Table 1 shows the progress of branch expansion of public sector and other commercial banks :

TABLE 1. Branch Expansion of All Commercial Banks

As on June 30	*Total no. of branches*	*Rural branches*	*Rural branches as percentage of the total*	*Population per bank office*
1969	8,260	1,860	22	63,800
1991	60,650	32,750	54	14,150
2007	71,831	30,551	42.5	16,000
2008	76,142	31,002	40.7	15,100
2009	79,931	31,646	39.6	14,500
2010	84,604	32,494	38.4	14,000

SOURCE : *Economic Survey*, 2009-10. RBI, Trends and progress of banking in India 2009-10.

1. Refer to section on "Non-Banking Financial Companies (NBFCs) in the Capital Market" in the next chapter.

From table 1, it is clear that in a matter of 33 years, after bank nationalisation, there was over 800 per cent increase in number of branches, but the most spectacular progress was in rural branches— increase was from about 1,860 to nearly 30,600 bank offices. M. Gopalakrishnan, a professional banker states : "The single striking feature of the post-nationalisation banking scene is the rapidity with which the branch network has multiplied itself. The rate of branch expansion has been unparalleled anywhere else in the world."[7] With the progress of branch expansion programmes, the national average of population per bank office has progressively declined from 64,000 to 15,000. A rural branch office frequently serves 15 to 25 villages within a radius of 16 kms. Some banks have started mobile offices and satellite offices. Rapid expansion of branches of commercial banks after nationalisation has led to integration of rural and urban areas as well as integration of organised and unorganised money markets in India. Bank nationalisation was hailed as a major instrument of social change. But this is indeed doubtful.

The massive branch banking, significant though it is, shows the magnitude of the problem before the commercialised banking system; at present only about 30,600 villages out of 5 lakh villages are covered by commercial banks directly. Expansion of bank facilities in rural and backward areas and provision of bank credit to farmers and rural artisans and in most cases at concessional rates of interest – these have contributed to low profitability of public sector banks.

Deposit Mobilisation

Expansion of bank deposits has been an important feature in recent years. Planned economic development, deficit financing and increase in currency issue have led to increase in bank deposits. At the same time, banks have contributed greatly to the development of banking habit among people through sustained publicity, extensive branch banking and relatively prompt service to the customers. Bank nationalisation gave a great fillip to deposit mobilisation, due partly to the expansion of a network of bank branches and partly to the incentives given to savers. The trend of increase in deposits and credit of scheduled banks is given in Table 2.

Table 2. Deposits and Credit of All Scheduled Commercial Banks

Year	*No. of reporting banks*	*Bank deposits (₹ crores)*	*Bank credit (₹ crores)*
1950-51	430	820	580
1970-71	73	5,910	4,690
1990-91	271	1,92,541	1,16,300
2000-01	297	9,62,620	5,11,430
2007-08	172	31,96,941	23,61,916
2008-09	165	38,34,110	27,75,549
2009-10	N.A	44,92,826	32,44,788

P: Provisional

Sources : RBI Report on Currency and Finance, 2000-01, Vol. II, RBI Bulletin June, 2008, May 2010 RBI, Handbook of Statistics on Indian Economy (2008-2009).

7. M. Gopalakrishnan in The Hindu : *Survey of India*, 1989.

Since 1950-51 deposit mobilisation and supply of credit by banks were growing at a rapid rate particularly after bank nationalisation in 1969. For instance,

Growth of deposits in India of all scheduled commercial banks was as follows : -

1951-1971 (20 years) — 700% or 7 times
1971-1991 (20 years) — 3,260% or 33 times
1991-2010 (19 years) — 2,296% or 23 times

It is clear that the most rapid deposit expansion was during 1971-91 – nearly 33 times. This was because of nationalisation and the tremendous expansion of banking. In general, there has been regular and continuous rise in bank deposits indicating clearly that banking habit is growing in India and more and more people are keeping their cash with banks than with themselves.

Even then, there are now 5 lakh villages waiting for banking services. In the banked areas also, new depositors have to be attracted and the existing depositors have to be motivated to increase their deposits.

Causes for Rapid Deposit Growth

There are many factors which have influenced deposit mobilization and deposit multiplication in India, specially after bank nationalisation:

(a) Rapid branch expansion — Banking services have almost been taken to the door of the people both in rural and urban areas. Besides, they have encouraged the lower and middle income groups to save and deposit their savings with banks through various innovative saving schemes.

(b) Increase in the amount of cash with the banking system — Due to Government's policy of deficit financing and creation of new money, the larger the cash reserves with the banking system, the larger the credit they can give and larger the deposits they can multiply.

(c) The ratio of cash reserves to deposits — The smaller the cash-reserve ratio, the greater is the scope for lending by banks — multiplication of loans leads to multiplication of deposits. To start with, Cash Reserve Ratio (CRR) and the Statutory Liquidity Ratio (SLR) were quite low—3 per cent and 25 per cent — and banks were able to register a high rate of deposit growth. In course of time, however, when CRR and SLR were raised to the statutory maximum of 15 per cent and 38.5 per cent respectively, banks were forced to maintain large cash reserves and, therefore, were forced to restrict their lending and correspondingly restrict deposit multiplication. In spite of this, the general economic conditions were good and business was expanding rapidly. Accordingly, GDP and private savings were growing fast. This explained the expansion of bank deposits between 1971 and 1991.

Since 1992, with the implementation of Narasimhan Committee recommendations both CRR and SLR were gradually reduced by RBI. This has increased the cash reserves with the banking system and, accordingly, stimulated bank credit and expanded bank deposits still further.

(d) Favourable business conditions in the country — Under the impact of planning, all sectors of the economy were expanding. Expansion of these sectors was helped by expansion of bank funds. At the same time, expansion of the banking sector was also brought about by the growth of the other sectors of the economy. Commercial banks too have adopted an aggressive policy of attracting the savings of the households and deposits of NRIs and lending to the corporate sector.

(e) High rates of interest—The monetary authorities have continually raised the rates of interest on bank deposits and this has encouraged expansion of bank deposits.

In recent years, however, commercial banks have been facing stiff competition from mutual funds, housing banks, leasing and investment companies etc. which offer higher interest rates and have tried to mobilise the savings of the households. Actually, this competition from financial institutions for the savings of the households is really hotting up but the commercial banks can be expected to maintain the growth rate in the years to come since the interest rates are being decontrolled and liberalised.

Expansion of Bank Credit

Side by side with the expansion of bank deposits, there has been continued expansion of bank credit reflecting the rapid expansion of industrial and agricultural output. The banks are also meeting the credit requirements of industry, trade and agriculture on a much larger scale than before. Just as bank deposits have expanded, bank credit too has expanded tremendously particularly since July 1969, from about ₹ 1,16,300 crores in 1990-91 to ₹ 27,70,012 crores during 2008-2009.

In recent years, bank credit has picked up smartly by around 20 to 21 per cent per year and many factors have contributed to this:

(a) Rise in lendable resources of commercial banks as a result of large reduction in reserve requirements (viz., CRR and SLR);

(b) Release of impounded cash balances under incremental cash reserve ratio (ICRR);

(c) Sharp increase in food credit mainly due to increased food procurement operations;

(d) Increased demand for credit from public sector undertakings and the large increase in export credit; and

(e) Fall in the rates of interest due to RBI's cheap money policy — rapid expansion in bank lending for industry, for housing, buying of cars etc.

In the sphere of bank credit, however, some of the old abuses regarding bank lending are still to be met with. For instance, bank credit is freely available to well-established houses of industry and trade without much difficulty while the tiny and small businessmen really find it difficult to get credit from banks; even now, some powerful but unscrupulous speculators are able to use bank funds to corner shares and acquire control over companies. Finally, bank credit is not available to small and marginal farmers who are in the clutches of rapacious money lenders.

Development-oriented Banking

Historically, there was close association of banks with commerce and with some traditional industries—cotton textiles in Western India and jute textiles in the East. For a long time, banks were unwilling to venture into new fields of financing. The concentration of joint stock banks in large commercial areas to the virtual neglect of non-commercial regions was due to the preference of banks for trading activities and traditional industries. After Independence, banking has moved away from the traditional pulls into new directions. The concept of banking has widened from mere acceptance of deposits and lending of funds to development-oriented banking. Banks are increasingly catering to the needs of industrial and agricultural sectors. From short term financing, banks have been gradually shifting to medium and even long-term lending. From well-established large industrial and business houses, banks are positively assisting small and weak industrial units, small farmers, artisans and other hitherto neglected groups in the country.

By far, the most significant aspect of the new awareness and involvement in development effort since nationalisation, is the adoption of the lead bank scheme under which all the districts of the country are allotted to some bank or the other. The lead bank of a district is actively engaged in :

(a) opening bank offices in all the important localities;

(b) providing maximum credit facilities for development in the district; and

(c) mobilising the savings of the people in the district.

The performance of the lead banks should be judged not by the number of branches opened by them but by the number of projects helped by them for improving productivity or creating employment opportunities which are expected to become catalysts of development of the district. Since 1988, commercial banks had adopted the "Service Area Approach" under which each semi-urban

and rural branch of a commercial bank was assigned a specific area comprising a cluster of villages within which it was asked to operate, adopting a planned approach for its economic growth.

Priority Sector Lending by Banks

Before 1969, commercial banks had largely neglected agriculture on the ground that rural credit was to be undertaken by cooperative credit societies and banks. Accordingly, they remained largely indifferent to the credit needs of farmers for agricultural operations and for land improvement. This was regarded as a basic reason for the failure of planning in the agricultural sector and consequently for the failure of general planning. At the same time, as the banks were owned and controlled by big industrialists before nationalisation, small industrial concerns and business units were ignored by banks. Soon after nationalisation, the commercial banks were asked to be specially concerned with the financing of priority sector of agriculture, small industry and business and small transport operators. In course of time, other priority sectors were also added, such as retail trade, professional and self-employed persons, education, housing loans for weaker sections and consumption loans.

Neglect of priority sector lending was one of the causes for nationalisation of the top 14 banks in 1969. However, it was the Working Group on the Priority Sector Lending and the 20-Point Economic Programme chaired by Dr. K. S. Krishnaswami which clearly spelt out the concept:

"The concept of priority sector lending is mainly intended to ensure that assistance from the banking sector flows in an increasing manner to those sectors of the economy which, though accounting for a significant proportion of the national product, have not received adequate support of institutional finance in the past."

RBI Directives on Priority Lending

In 1980, RBI issued certain directives to the banks regarding priority sector lending and expected their cooperation and compliance:

(a) Priority sector advances should constitute 40 per cent of aggregate bank credit;

(b) Out of priority sector advances, at least 40 per cent should be provided to agriculture;

(c) Direct advances to the weaker sections in agriculture and allied activities in rural areas should form at least 50 per cent of the total direct lending to agriculture;

(d) Bank credit to rural artisans, village craftsmen and cottage industries should at least be 12.5 per cent of the total advances to small-scale industries; and

(e) About 12 per cent of bank credit should go to exporters.

The commercial banking system and particularly the public sector banks (under the influence of the Finance Ministry and the ruling party politicians) took to priority lending enthusiastically.

The total credit extended by the public sector banks to agriculture, small-scale industries and other priority sectors went up from ₹ 440 crores in June, 1969 to ₹ 7,20,083 crores in March 2009. As a result, advances to priority sectors as percentage of total credit increased from 15 per cent in June 1969 to 42.5 per cent in 2008-09. The rate of progress was quite rapid soon after nationalisation but later progress was more modest. The relatively slow progress of advances to the priority sectors was due to the fact that the bank officials from top to bottom were not imbued with the new objectives of banking. At the same time, banks were also worried at the poor and unsatisfactory recovery performance of the agricultural and small sectors.

TABLE. 3 Public Sector Banks' Advances to Priority Sectors : Amount Outstanding

(₹ crores)

Priority sectors	*June 1969*	*June 1971*	*March 2005*	*March 2009*
1. Agriculture	160	340	109917	2,98,211
2. Small-scale industries	260	440	68000	1,91,307**
3. Other priority sectors*	20	130	125114	2,30,565
4. Total priority sector advances	440	910	307046	7,20,083
5. Total Bank credit	3,020	4,080	717419	16,93,437
6. Percentage of priority sector advances to total bank credit	12	25	42.8	42.5

Source: RBI, Trends and Progress of Banking in India, 2007-08. RBI Bulletine June 2010.

*Include small transport operators, professional and self-employed persons, rural artisans, retail trade, education housing loans, advances to self-help groups, etc.

** Includes other small enterprises also.

@ Provisional

Problems of Priority Sector Lending

The initial enthusiasm in favour of priority sector lending gradually waned because of certain concrete problems faced by the banking sector:

(i) In their anxiety to reach the target of 40 per cent, the banks went in for indiscriminate lending. There was also political pressure too on the banking sector to lend to weaker sections.

(ii) As priority sector loans were of small accounts, the public sector banks were not able to monitor the distribution, follow-up and recovery of tiny loans. This increased their costs on the one side and adversely affected their profitibility, on the other.

(iii) The commercial banks were squeezed in both ways. On the one hand, they were forced to keep a high proportion of their deposits — as much as 53.5 per cent in liquid reserves till 1992 under CRR (15%) and SLR provisions (38.5%). They had, therefore, only 46.5 of the deposit resources for loans and advances. Even out of these limited deposit resources, banks were to allocate 40 per cent of their resources as loans to the priority sector. What was still worse was that much of the priority sector lending had to be at a low concessional rate of interest. The result was that the banking sector was unable to satisfy the credit requirements of the other sectors. At the same time, their profitability was squeezed badly and most of the banks incurred huge losses.

(iv) The bank lending to priority sector was not uniform in all states. Actually, it was quite low in many backward states like UP, Bihar, Rajasthan etc. In order to attain 40 per cent of the target for the country as a whole, the banks were stepping up their loans to the priority sector in the more advanced states. This had further worsened the regional imbalance in the country.

Opposition to Priority Sector lending

The Narasimham Committee on the Financial System, 1991 was against the continuance of the priority sector lending. The Committee recommended:-

(a) The priority sector should be redefined;

(b) It should be fixed at 10 per cent of the aggregate bank credit;

(c) It should be reviewed after a period of three years; and

(d) it should be completely phased out gradually.

The Government of India did not accept Narasimham committee's recommendation on priority lending. However, the panel of bankers constituted by the Indian Banks' Association (IBA) suggested to the Narasimham Committee on Banking Sector Reforms (1998) that the present priority sector credit limit of 40 per cent (of net bank credit) should be slashed to 10 per cent primarily for three reasons :

(i) Operating expense for small loans was very high due to deployment of large number of field staff;

(ii) Success of recovery process was very low in agriculture and small scale sector; and

(iii) Quality of assets was bad as there were too many risk factors.

The panel of bankers of IBA also suggested redefining the priority sector:

(a) Priority sector lendings should be restricted to only the core sector and all other loans should be left to the commercial judgement of banks.

(b) Banks should also be involved in the selection process of beneficiaries in all Government-sponsored schemes.

(c) The Government extending subsidies directly to the banks instead of routing them through intermediaries.

The bankers' panel also suggested that the interest rate on priority sector lending should be deregulated and the banks be allowed to fix their own rate of interest depending on the cost of funds, risk cost, administration and transaction costs and profit margin. The panel argued that the identified priority sectors would not be starved of credit as banks would service them according to their expertise by lending at market-related interest rates.

In order to speed up recovery from the priority sector borrowers, the panel suggested that the disbursement target for various branches at the state and district levels should be linked to the percentage of recovery. The panel has called for setting up a debt recovery tribunal for small loans and adequate legal support for recovery of assets. Banks should also be empowered to take over assets in case of default.

The Finance Ministry of the Government of India had ignored all these suggestions.

Instead, the Finance Minister announced in his 2008-09 budget a one-time waiver of all agricultural debt of small and marginal farmers to the extent of ₹ 61,000 crores – later raised to nearly ₹ 70,000 crores. All banks were obliged to comply with Government order. They would be compensated in two instalments by the Finance Ministry.

Social banking : Special Employment and Poverty Alleviation Programmes

Under the guise of social banking, the Government of India has used the public sector banks to finance many of its pet programmes of poverty reduction and poverty alleviation. Despite many adverse criticisms and even clear condemnations of such schemes being financed through banks, the Finance Ministry of the Government of India has persisted in using bank funds to finance various social sector schemes for employment generation and poverty alleviation. In fact, this has been an essential feature of the country's development strategy and a major cause for low profitability of public sector banks.

Differential Interest Rates (DIR). The Government of India introduced the scheme of differential interest rates from April 1972 covering 162 districts. Later the scheme

as extended to the whole country. Under the scheme, the public sector banks (PSBs) give loans at a concessional interest rate of 4 per cent to the weaker sections of the community who have no tangible security to offer but who can improve their economic condition through financial assistance from PSBs. This scheme showed a marked increase in number of accounts (4.3 million) and the advances outstanding were ₹ 710 crores at the end of June 1990. The relative success of the scheme was attributable to the compulsion imposed on the PSBs by the Finance Ministry to step up their lending at concessional rates to the weaker sections.

Since then, the number of accounts and amount outstanding declined. The decline in the number of borrowing accounts was probably due to the carefulness of banks to select the really deserving ones.

Integrated Rural Development Programme (IRDP). This is a pioneering and ambitious programme to rectify imbalances in rural economy and also for all-round progress and prosperity of the rural masses. Under the programme, banks had assisted nearly 3 million beneficiaries during 1990-91 and disbursed a total amount of ₹ 1,190 crores as loan and ₹ 800 crores as subsidy. Out of the 3 million beneficiaries, over 1.5 million belonged to SCs/STs and 0.9 million were women. The outstanding advances of PSBs under the scheme stood around ₹ 430 crores in March 2000 - this was only 0.2 per cent of their total advances.

During 1999-2000, PSBs had advanced ₹ 19,240 crores to weaker sections of the community. This stood at 12 per cent of the total PSBs' credit, as against their target of 10 per cent.

The proportion of recovery by public sector banks under IRDP loans was rather low — only about 12 per cent at one time but it has improved in recent years to 34 per cent. This indeed was welcome.

Other important schemes under social banking introduced by the Government of India and implemented through the commercial banking system include :

(a) Prime Minister's Rozgar Yojana for Educated Unemployed Youth (PMRY)

(b) Scheme for Urban Micro Enterprises (SUME).

(c) Bank credit to minority communities

In January 1996, the Government of India launched a new scheme known as the Prime Minister's Integrated Urban Poverty Eradication Programme, with the objective of eradicating urban poverty by the year 2000. The scheme was being implemented in 400 urban centres and was expected to cover urban poor living below the urban poverty line of about ₹ 12,000 per household per annum. Like many other Government schemes to remove poverty, this was another impracticable scheme. For one thing, the objective could never be achieved by the year 2000, and for another, with the steady migration of people from rural areas to the ever bulging towns and cities, there was continuous increase in the number of urban poor and it was impossible to remove urban poverty in the short period.

The Finance Ministry of the Government of India is thus responsible for using the hard earned savings of the general public, particularly of the lower and middle income groups, on social banking and poverty alleviation programmes. On Government's own admission, as much as 60 per cent of these funds are misappropriated by the bank officials, the middlemen and the politicians and do not reach the poor for whom they are meant. Even the balance 40 per cent of bank advances which really reach the poor does not return to the banks, because of the collusion between the borrowers and the corrupt and inefficient bank staff. The ultimate sufferers are the banks and the saving public who entrust their hard-earned savings to the safe custody of the commercial banks and hope to earn a decent interest income.

Diversification in Banking

The changes which have been taking place in India since 1969 have necessitated banking companies to give up their conservative and traditional system of banking and take to new and progressive functions. The Government of India issued guidelines to the banks under section 6 of the Banking Regulation Act, 1949 permitting and encouraging them to diversify their functions.

Merchant banking and underwriting. Commercial banks have now set up merchant banking divisions and are underwriting new issues, especially preference shares and debentures, and they have been instrumental in the conclusion of deferred payment agreements between Indian industrial houses and foreign firms. Formerly, banks provided merchant banking services only to a few known companies. But now, they have floated separate subsidiaries and offer wider services to a large clientele. There are now eight commercial banks which have set up equipments leasing and merchant banking subsidiaries.

Mutal Funds. Some banks were permitted to float subsidiaries as mutual funds (at one time, mutual fund operations were a monopoly of Unit Trust of India). In all 7 public sector banks have set up mutual funds.

Retail Banking : Commercial banks in India are increasingly taking up retail banking as an attractive market segment with opportunities for growth and for profit. Retail banking refers to housing loans, consumption loans for purchase of durables like refrigerators, TVs, air-conditioners, auto loans, credit cards, educational loans. The loan values can average between ₹ 20,000 and ₹ 1 crore. The loans are generally for a duration of 5 to 7 years, with housing loans granted even up to a period of 15 years. Retail banking has been facilitated by growth in banking technology and automation of banking processes.

ATMs : ATMs (Automated Teller Machines, or "any time money" as one bank has been wittily advertising)

have emerged as an alternative banking channel which facilitate low cost banking transaction. Bank customers need not go to the bank branches but can withdraw money and deposit cheques in ATMs through the use of ATM cards provided by the banks to their customers. ATM cards are becoming popular, like credit cards and debit cards which are used for buying goods and services. These are the normal purposes for which persons go to a bank. This is now avoided by the neighbourhood ATM. The use of ATMs by foreign banks and private sector banks has helped these banks to expand their reach and compete effectively with public sector banks (PSBs). PSBs, in their turn, are also rapidly introducing ATMs.

Anywhere Banking : Anywhere Banking is the new system of banking adopted and made popular by a few foreign banks and is now being increasingly adopted by PSBs. This facility is a technology based customer friendly service for the convenience of customers. Under this system, a customer having an account with any select branch can operate it from other designated branches of the bank throughout the country. The facility includes cash withdrawal, cash deposit, transfer of funds, collection of local cheques, intra-city and inter-city transactions, etc. Now distance is no hindrance and banking is made more convenient irrespective of where the consumer resides.

Internet Banking in India : Growth of the internet and wireless communication technologies, advances in telecommunications, etc. have dramatically changed the structure and nature of banking and financial services. However, internet banking is only in a rudimentary stage in India. Every bank client is supplied with a unique personal identification number (PIN) for transacting with the bank on-line. Already, there are reports of big frauds and cheating of banks and clients by unscrupulous persons through faking credit and debit cards and finding and PINs.

Even then with the purpose of promoting safety and soundness of e-banking activities and as a precautionary measure, RBI has issued guidelines to the banks on internet banking covering:

(a) the risks associated with internet banking;

(b) the technology and security standards for internet banking;

(c) legal issues relating to this new type of activity; and

(d) the regulatory and supervisory concerns of RBI.

Venture Capital Funds. Some banks have launched venture capital funds (VCF) to provide equity capital for pilot plants attempting commercial application of indigenous technology and adaptation of previously imported technology to domestic conditions. The Government of India has issued detailed guidelines and procedures for establishment of VCF, management structure, size and investment of the fund, etc.

Factoring. Finally, banks are permitted to take up factoring by floating subsidiaries. Factoring is a new type of service which banks can provide. It is a device by which book debts are quickly realised through outright sale of accounts receivable to a financial intermediary (or a bank's subsidiary) called the 'factor'. The RBI has already accepted factoring in principle and banks may float subsidiaries to take up factoring. SBI and Canara Bank are the only two banks which have set up separate subsidiaries exclusively for undertaking factoring services.

20 banks have now been given permission to introduce the stockinvest scheme, increasing the total number of such banks to 51. A number of banks have set up Asset Management Companies (AMCs) to manage their mutual funds.

Banks have thus been diversifying their activities into a host of financial services by setting up subsidiaries, mutual funds or contributing to the equity of companies offering financial services.

During the last four decades since nationalisation in July 1969 Indian commercial banks have transformed themselves beyond recognition. Their major business before 1969 was to finance trade and industry. In accordance with the national plans, policies and priorities, banks have now taken up major responsibilities for developing and diversifying the Indian economy. They have come in a big way to help agriculture and hitherto neglected sectors. The need for avenues for profits have made them enter new fields of activity such as mutual funds, portfolio management, merchant banking, leasing and housing finance. Some of the banks have already floated subsidiaries for merchant banking, mutual funds and housing finance. In the future, banks may float many more subsidiaries to take up new lines of activity. They can be expected to diversify their functions and adopt new technologies.

Table 4. Net Profits of Scheduled Commercial Banks

₹ *crores*

Reporting Banks	*1991-92*	*1995-96*	*2002-03*	*2007-2008*	*2010-11*
State Bank Group (8)	244	793	4,510	9,006	11,863
Nationalised Banks (19)	559	-1,160	7,780	16,856	33,037
Private Sector Banks (30)	77	557	2,960	9,622	17,713
Foreign Banks (40)	320	749	1,820	6,612	7,719

SOURCE: RBI, Trend and Progress of Banking in India (2008-2009) and previous issues.
RBI, Handbook of Statistics for Indian Economy 2010-11.

4. PROFITABILITY OF BANKS IN INDIA

RBI's *Annual Report on Trend and Progress of Banking in India* as well as GOI *Economic Survey* give the profitability of the different types of commercial banks in the country.

Table 4 indicates the profitability of scheduled commercial banks in India in recent years.

State Bank of India and its 7 associate banks have recorded steady rise in net profits from ₹ 244 crores in 1991-92 to ₹ 4,510 crores in 2002-03.

In the case of the 19 nationalised banks viz. other public sector banks, profitability has always been quite low. During 1992-93 and 1993-94 these public sector banks actually posted huge losses to the tune of ₹ 3,648 crores and ₹ 4,779 crores respectively. These losses were due to the securities scam engineered by Harshad Mehta but they were also the result of decades of non-commercial orientation, directed lending, loan waivers and rising trend in non-performing assets from the time of bank nationalisation in 1969. In 1995-96 too these banks again posted losses to the tune of ₹ 1,160 crores. Since then, all public sector banks have recorded substantial improvements in both operating and net profits; they registered net profit of ₹ 2,094 crores during 2000-01, and ₹ 7,780 crores in 2002-03.

Since 2003-04, *Economic Survey* has worked out the combined profit of public sector banks (PSBs). In fact, the Finance Ministry has for some time, aggressively advocated mergers and consolidation of PSBs to take advantages of economies of scale. One proposal is for the State Bank to merge all its associated banks with itself. Another proposal is for some of the public sector banks to merge or consolidate in some form. Since 2003-04, *Economic Survey* of the Finance Ministry publishes working results of all PSBs. In 2010-11, the net profits of all PSBs came to ₹ 44,900 crores.

In the case of Indian private sector banks, net profit had increased from ₹ 77 crores to ₹ 17,713 crores between 1991-92 and 2010-11. As percentage of total assets, net profit of private sector banks was better than that of the nationalised banks.

The profitability of the foreign banks has always been excellent. But in 1992-93, these banks were caught up in the securities scam and suffered a huge loss of ₹ 842 crores. But soon these banks recovered and have posted impressive profit regularly, year after year. The net profit of foreign banks in India was ₹ 7,719 crores during 2010-11.

A comparison of profitability of different banking systems in India brings out clearly the relatively low profitability of public sector banks. Three public sector banks were deeply in the red for many years. It is possible to defend the low profitability and poor financial condition of public sector banks by referring to their "deep" commitment to social obligations "imposed" by the Government : as, for instance, opening rural branches, setting up and subsidising regional rural banks, financing IRDP and other poverty alleviation programmes at concessional rates of interest, priority sector lending to the extent of 40 per cent of the total credit, etc. These arguments hold good, to a large extent, to the private sector scheduled commercial banks too but these banks are making more profits than public sector banks. In the case of foreign banks which have offices mainly in metropolitan areas and in some selected permitted cities, the social obligations may not apply. But the other constraints on revenues such as high SLR and CRR apply to them also. Still they manage to make much higher rate of profits.

Causes for Low Profitability of Public Sector Banks

The Narasimham Committee[3] (1991) clearly explained that the deteriorating profitability of public sector banks in India at that time, was the result of two sets of factors, that is, those responsible for declining interest income for banks on the one side, and those responsible for increasing cost of operation on the other.

The declining interest income was the result of high proportion of the total deposits being impounded in CRR and SLR and earning relatively low rate of interest. Further, a high proportion of bank deposits had to be allocated to priority sectors under social banking and the rate of interest earned was quite low. At least one per cent of the total deposits had to be lent to the weaker sections of the community at a low concessional rate of interest of 4 per cent only. In the past, barely 30 per cent of total deposits of the banks was really available for lending at the market rate of interest. Above all, the public sector banks had been forced by the Government — in agriculture and industry to lend to dubious parties — and large proportion of these loans became doubtful debts, commonly known as non-paying assets (NPA's). For all these problems, the Government of India in general and the Finance Ministry in particular were responsible directly or indirectly.

While their income was not rising as it should, the banks were faced with the problem of rising costs of operation — uneconomic branch expansion, heavy recruitment of employees, growing indiscipline and inefficiency of the staff due to trade union activity, low productivity, heavy salary bill, etc. Because of these reasons, bank expenditure had been mounting, profits were squeezed and some of the public sector banks have been in the red for many years.

Apart from these causes, generally applicable to all public sector banks, there were specific causes which led to losses for some public sector banks. For instance,

3. There were two Committees presided over by Narasimham, one on financial sector reforms (1991) and the other on banking sector reforms (1998). We mention the year to distinguish between the two reports.

Harshad Mehta caused the Stock Market Scam of 1992 and was responsible for huge losses for some public sector banks and even for some foreign banks, Further, Indian Bank, Bank of India, and many urban cooperative banks have suffered huge losses due to manipulations of Ketan Parekh, C.M. Agarwal and other stock exchange brokers.

Suggestions for Improvement of Profitability

We are summarising here the various suggestions made by the Narasimham Committee[3] on the question of improving the financial strength and the profitability of the public sector banks:

(a) The setting up of Assets Reconstruction Fund (ARF) to take over all doubtful debts;

(b) SLR to be reduced to 25 per cent of the total deposits over a period and likewise, CRR to be reduced to 3 to 5 per cent of the total deposits of the banks; this would leave more funds with the banks for profitable deployment;

(c) market interest rates to be offered to the banks by the Government for government and semi-government securities coming under SLR arrangements;

(d) banks to get more freedom to fix minimum lending rates of interest;

(e) priority sector lending to be reduced to 10 per cent instead of the 40 per cent of the total bank credit;

(f) all concessional rates of interest to be removed;

(g) banks should go for new sources of funds; for example, certificates of deposits (CDs) could bring in additional funds for the banks which, in turn, could lend the amount to the corporate sector at profitable rates of interest;

(h) banks should increasingly go for 365 days Treasury bills which carry higher rates of interest;

(i) branch expansion to be carried out strictly on commercial principles, and the banks be permitted to swap branches among themselves; and

(j) diversification of banking activities.

The major causes for poor profitability of the public sector banks were to be seen in political and administrative interference and control of their working by the Finance Ministry of the Central Government, poor work culture and general indifference to consumer services and vicious trade union activity which periodically paralyse the banking system and through it, the economic system. Whatever be the causes of poor profitability, it is highly important that this state of affairs is rectified. In the words of Narasimham Committee, 1991, "The deterioration in the financial health of the system has reached a point where, unless remedial measures are taken soon, it could further erode the real value of and return on the savings entrusted to them and even an adverse impact on depositor and investor confidence."[4]

4. *Report of the Committee on Financial System*, 1991, p. iv.

NPAs and SARFAESI Act, 2002

A major cause for poor performance and low profitability of PSBs (and financial institutions like IFCI and IDBI) was the accumulation of non-performing assets (NPAs) consisting of loans and advances given to corporates which, for some reason, do not repay the amounts borrowed. For a long time, banks were finding themselves helpless. The Government of India enacted Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act , 2002 (SARFAESI Act) to enable banks ro realise their dues without intervention of courts and tribunals. The Act enables the setting up of Asset Management Companies to acquire NPAs of any bank or financial agency by issuing debentures, bonds or any other security. The company (which is the second creditor) is entitled to serve a notice to the borrower to discharge his liabilities within 60 days. Failing to discharge the liabilities in the stipulated time will entitle the second creditor to take possession of the secured assets, take over the management of the assets and to appoint any person to manage the secured assets. Borrowers have the option of appealing to the Debts Tribunal after depositing 75 per cent of the amount claimed by the second creditor. The latter is also entitled to enforce any security interest created in its favour without the intervention of Courts or Tribunals.

The SARFAESI Act 2002 puts in place a long overdue legal framework, without attendant delays for the recovery of NPAs. In April 2003, the RBI had issued guidelines and directions for the registration and operation of asset reconstruction/securitisation companies.

The recovery of NPAs got a boost after the enactment of SARFAESI Act. There was a decline in gross NPAs from ₹ 70,860 crores in 2001-02 to ₹ 51,820 crores in 2005-06. Improved industrial climate helped banks to recover a substantial amount of NPAs during 2005-06.

5. NARASIMHAM COMMITTEE (1991) ON THE BANKING SYSTEM IN INDIA

India had witnessed a phenomenal expansion in the geographical coverage and functional spread of our banking and financial system since bank nationalisation in 1969. Despite impressive quantitative achievements in resource mobilisation and in extending the credit reach, several distortions had, over the years, crept into the banking and financial system. As a result, productivity and efficiency of the system had suffered; its portfolio quality had badly deteriorated and profitability had been eroded. Several public sector banks and financial institutions had become weak and some public sector

banks had been incurring losses year after year. Their customer service was poor, their work technology outmoded and they were unable to meet the challenges of a competitive environment. It was under these circumstances that the Government of India set up a High Level Committee with Mr. M. Narasimham, a former Governor of the Reserve Bank of India as Chairman to examine all aspects relating to the structure, organisation, functions and procedures of the financial system. This Committee on the Financial System submitted its report in November 1991.

Basic Approach of the Committee

The Narasimham Committee (1991) was primarily interested in improving the financial health of public sector banks and development financial institutions (DFIs), so as to make them viable and efficient and meet fully the emerging needs of the real economy. The basic approach of the Committee was that greater market orientation would strengthen the financial system and thus improve its efficiency: "The solvency, health and efficiency of the institutions should be central to effective financial reform". The major recommendations of the Narasimham Committee centred round the banking system, the development finance institutions (DFIs) and the money and capital markets.

At the outset, the Narasimham Committee (1991) acknowledged the spectacular success of the public sector banks since their nationalisation in July 1969.

(a) massive branch expansion, particularly in rural areas;

(b) expansion in the volume of deposits — bank deposits now constituted two-fifths of financial assets of the household sector in 1991;

(c) rural penetration of the banking system — rural deposits as a proportion of total deposits had increased from 3 per cent to 15 per cent;

(d) diversion of an increasing portion of the bank credit to priority sectors, viz., agriculture, small industry, transport, etc. — the priority sector credit had gone up from 14 per cent to 41 per cent between 1969 and 1991;

(e) increase in deposit and borrowal accounts — over 300 million deposit accounts in the country and over 35 million borrowal accounts (there were barely 4,00,000 borrowal accounts in 1969); and

(f) more involvement in the relatively underbanked states — the expansion of priority sector lending and the emphasis on area approach has almost evened out regional disparities and the concentration of banking business was relatively less in 1991.

While the banking system in India had thus recorded spectacular progress since nationalisation, it had also suffered serious decline in productivity and efficiency and consequent erosion in profitability. Narasimham Committee (1991) pointed out that Government directed investment and Government directed credit programmes were the two major causes for this state of affairs.

Problems and Constraints of the Banking System: Directed Investment

Maintenance of adequate liquid assets is a basic principle of sound banking. Hence commercial banks in India were required by the Banking Regulation Act, 1949 (under Section 24) to maintain liquid assets in the form of cash, gold and unencumbered approved securities — that is, government securities and government guaranteed securities — equal to not less than 25 per cent of their total demand and time deposit liabilities. This requirement was known as statutory liquidity ratio (SLR) and the RBI was given the power to change this ratio. Accordingly, RBI raised SLR from 25 per cent to 30 per cent (in November 1972) and further gradually to 38.5 per cent by 1991. RBI had stepped up the SLR for two reasons:

(a) A higher SLR forced commercial banks to maintain a larger proportion of their funds in government securities and government guaranteed securities (of public sector financial institutions) and thus reduced the capacity of commercial banks to grant loans and advances to business and industry.

(b) A higher SLR diverted bank funds away from loans and advances to industry and trade, to investment in Government securities (G-Sec); this was said to have an anti-inflationary effect.

The Narasimham Committee (1991) argued that the high SLR adversely affected profitability of the banks because the rate of interest received by banks on government securities was less than the market related rates of interest. Besides, with higher SLR, the amount of funds left with banks for allocation to the productive economic sectors like agriculture, industry and trade was reduced. The Narasimham Committee characterised the high SLR ***as a tax on the banking system*** and also on the savings routed through banks.

The Narasimham Committee (1991) accepted the view, though indirectly, that the high SLR ***was a fraud perpetrated by the Finance Ministry of the Government of India on the captive banking system***. By using Section 24 of the Banking Regulation Act, the Finance Ministry could manage to get as much as 38.5 per cent of the aggregate deposits of banks for (a) financing its own expenditure and at the sme time, (b) pay a rate of interest lower than what the banks were paying to their depositors. The Finance Ministry could at least be justified if it used these funds for development purposes. But the Government was using bank funds even for paying salaries of Government employees in certain years.

***Cash Reserve Ratio* (CRR).** Under the Reserve Bank of India Act, 1934, every scheduled bank had to keep certain minimum cash reserves with the RBI — initially, it was 5 per cent against demand deposits and 2 per cent against time deposits. By an amendment of 1962, RBI was empowered to vary the cash reserve ratio between 3 per

cent 15 per cent of the total demand and time deposits. Generally, CRR is changed only occasionally by Central Banks in other countries but this was not so in India. The CRR had been changed many times, as part of the overall strategy of demand management. By 1991, the CRR was raised to the statutory maximum of 15 per cent on the average.

Now, taking SLR and CRR together, banks had to keep as much as 53.5 per cent of their aggregate deposits as cash balances with RBI or in government securities and securities of public sector financial institutions. The RBI paid interest at the rate of 3.5 per cent on the cash reserves kept by scheduled banks with it under CRR and at 5 per cent on incremental cash balances. Narasimham Committee (1991) found that the rates of interest received by the scheduled banks from RBI for their eligible cash balances were below the rate which the scheduled banks had to pay to their depositors for one year deposits. Likewise, the rate of interest the banks received on government securities was much lower than market rate. Thus the reserve requirements imposed on the scheduled banks were like taxes and had led to continuous loss in potential income of banks which, in turn, had adversely affected their profitability.

Directed Credit Programmes

A major objective of bank nationalisation in July 1969 was to extend the reach of bank credit both geographically to unbanked regions and functionally to agriculture and other hitherto neglected sectors, designated as "priority sectors". In course of time, the Government added more categories of sectors like the export sector, food procurement operations, etc. for the special attention of scheduleds banks. Banks were asked to make a success of these *directed credit* programmes. They were also told to shift from security-oriented credit to *purpose-oriented credit*.

This system of directed credit programme was hailed by the Indian Government as a great success but this was achieved at the cost of :

(a) deterioration in the quality of the loans, inadequate attention to qualitative aspects of lending, growth of overdues and consequent erosion of profitability; and

(b) shift from security oriented credit to purpose-oriented credit — the banks were asked to make this shift so as to establish a link between technological upgradation in agriculture and small industry and the availability of finance. Over the years, this aspect was ignored and, as a result there was no proper loan appraisal of credit applications, no collateral requirements and no post-credit supervision and monitoring.

Political and Administrative Interference

According to the Narasimham Committee (1991), the most serious damage to the public sector banks was the political and administrative interference in credit decision making. For instance, *loan melas* organised by Congress Party leaders in the 1970s and 1980s to direct bank credit to their supporters in rural and urban areas were contrary to the principle of sound banking. Commenting on the *loan melas*, the Narasimham Committee 1991 stated: "The intended socially oriented credit in the process, degenerated into irresponsible lending".[5] This was also the case in the distribution of IRDP loans among the poor and the economically weak in our rural areas. "In many cases of IRDP lending, banks have virtually abdicated their responsibilities in undertaking need-based credit assessment and appraisal of potential viability and instead have tended to rely on lists of identified borrowers prepared by Government authorities."[6] According to Narasimham Committee (1991), as much as 20 per cent of agricultural and small industrial credit is of this "infected" or "contaminated" portfolio.

Political interference in banking functions was found in other areas also. For instance, the Centre and the States directed banks to continue to extend credit to sick industrial units, often against their better commercial judgment. Likewise, "advice" from BIFR and "directions" from judicial courts had forced banks to extend credit to sick industrial units. As a result of all these "instructions", "advice" and "directions", public sector banks had suffered badly : lower income, inadequate provisioning for bad debt, locking of credit from more productive uses and erosion of profitability.

Subsidizing of Credit : Low Rate of Interest

The Government of India managed to appropriate bank funds under the SLR scheme at low rates of interest for its own use. At the same time the Government of India stipulated that bank lending to the priority sector and IRDP lending would also be at concessional rate of interest, which really amounted to subsidy on such loans – to make up this loss, banks were forced to charge very high rates of interest on borrowers from industry and trade. The Narasimham Committee (1991) pointed out that this was clearly based on the *misconception that socially-oriented credit should also be low cost credit*. The Committee emphasised that adequate and timely access to credit was far more important than its cost. The policy makers in this country had clearly ignored the fact that institutional finance was much cheaper than the alternative of informal sector finance (from money-lenders and indigenous bankers). According to the Narasimham Committee (1991), there was actually no need for interest subsidy which only reduced the ability of the banking system to build its strength and to extend the coverage of bank credit even wider. Besides, there was the question of basic morality or logic in forcing banks to make available

5. *Report of the Committee on the Financial System*, 1991 p. 30.
6. *Ibid*, p. 30.

their funds to Government at low rates of interest or for the Finance Ministry of the Government of India to use bank funds for IRDP at concessional rates of interest. The public who keep their hard-earned savings with banks for safe custody have a right to expect a decent rate of interest on their savings. The Finance Ministry has no moral right to use or rather waste the funds of the public sector banks.

Mounting Expenditure of Banks

We have explained above the squeeze on profitability of banks from the side of revenue. From the expenditure side, public sector banks were saddled with mounting expenditure. The Narasimham Committee (1991), mentioned the following points :

(i) Phenomenal increase in branch banking, without any relation to demonstrated need and potential viability.

(ii) The lines of command and control tended to weaken central office supervision, internal inspection and audit, and increased unreconciled inter-branch and inter-bank entries.

(iii) Rapid growth in staff in number and in accelerated promotions : this had led to deterioration in the quality of manpower, over-manning at all levels, etc.

(iv) Role of trade unions : they had contributed increasingly to the restrictive practices regarding promotions, transfers, discipline and work culture, mechanisation and computerisation, etc. Remunerations and their upward revisions were not related to productivity of either individual banks or to the system. Inefficient customer service and declining labour productivity were the consequences.

(v) Extension of the coverage of bank credit to agriculture and small industry where the unit cost of administering the loans was high; besides, this type of credit was at low rates of interest, as mentioned earlier.

Thus, despite impressive quantitative achievements in resource mobilisation and in extending the credit reach, several distortions had, over the years, crept into the banking system. Several public sector banks had become weak financially and were unable to meet the challenges of a competitive environment.

Recommendations of the Narasimham Committee, 1991

The Narasimham Committee's recommendations were based on the fundamental assumption that the resources of the banks come from the general public and were held by the banks in trust and that they were to be deployed for maximum benefit of the depositors. This assumption automatically implied that even the Government had no business to endanger the solvency, health and efficiency of the nationalised banks under the pretext of using banks' resources for economic planning, social banking, poverty eradication, etc. Besides, the Government had no right to get hold of the funds of the banks at low rates of interest and use them for financing its consumption expenditure — paying the salary of the employees, for example—and thus defraud the depositors. The Narasimham Committee recommendations were aimed at:

(i) ensuring a degree of operational flexibility;

(ii) internal autonomy for the public sector banks in their decision-making process; and

(iii) greater degree of professionalism in banking operations.

A. On Directed Investment

The Narasimham Committee (1991), gave two important recommendations as regards SLR and CRR.

(a) *Statutory liquidity requirements* (SLR). The Government should give up immediately the practice of using SLR as a major instrument of mobilising funds for the Government and the public sector financial institutions. The Narasimham Committee (1991) recommended that the government should reduce the SLR from the present 38.5 per cent of the net demand and time liabilities of banks to 25 per cent over the next five years. A reduction in the SLR levels would leave more funds with banks for allocation to agriculture, industry, trade, etc.

The Committee further recommended that the Government borrowing rates should be progressively *market-related* and that these higher rates would help banks to increase their income from their SLR investments.

(b) *Cash reserve ratio* (CRR). The Narasimham Committee (1991) recommended that RBI should rely on open market operations increasingly and reduce its dependence on CRR. The Committee proposed that

(*i*) CRR should be progressively reduced from the present high level of 15 per cent to 3 to 5 per cent; and

(*ii*) RBI should pay interest on impounded deposits of banks above the basic minimum at a rate of interest equal to the level *of banks' one year deposits*.

These recommendations would reduce the amount of idle cash balances kept by the banks with RBI under CRR and release the amount for more productive and remunerative purposes. Besides, banks would also earn more income from the cash balances they kept with RBI.

B. On Directed Credit Programmes

The Narasimham Committee (1991) recommended that the system of directed credit programmes should be gradually phased out. For one thing, agriculture and small industry had already grown to a mature stage and they did not require any special support. For another, two decades of assistance with interest subsidy were enough and.

therefore, concessional interest rates could be dispensed with. The Committee had argued that the system of directed credit should not be a regular programme but should be a case of extraordinary support to certain weak sections of the economy. Besides, it should be temporary and not a permanent one.

The Committee also proposed that the concept of priority sector should be redefined to include only the weakest sections of the rural community such as marginal farmers, rural artisans, village and cottage industries, tiny sector, etc. The directed credit programme for this "redefined" priority sector should be fixed ***at 10 per cent of the aggregate bank credit***. The system should be reviewed after a period of three years or so to assess the need to continue or terminate the programme as also the stipulation of the concessional rate of interest. The social purpose of bank credit should be to enhance small industry. The Narasimham Committee (1991) emphasised in this connection: "The postulates of social banking need not clash with sound banking."

C. On the Structure of Interest Rates

The Narasimham Committee, (1991) recommended that the level and structure of interest rates in the country should be ***broadly determined by market forces***. All controls and regulations on interest rates on lending and deposit rates of banks and financial institutions on debentures and company deposits, etc. should be removed. Concessional rates of interest for priority sector loans of small sizes should be phased out; and subsidies in IRDP loans should be withdrawn.

The Committee further proposed that RBI should be the sole authority to simplify the structure of interest rates. The Bank rate should be the anchor rate and all other interest rates should be closely linked to it.

D. On Structural Reorganisation of the Banking Structure

To bring about greater efficiency in banking operations, the Narasimham Committee (1991) proposed a substantial reduction in the number of public sector banks through mergers and acquisitions. According to the Committee, the broad pattern should consist of :

(a) 3 or 4 large banks (including the State Bank of India) which could become international in character;

(b) 8 to 10 national banks with a network of branches throughout the country engaged in general or universal banking;

(c) Local banks whose operations would be generally confined to a specific region; and

(d) Rural banks including RRBs whose operations would be confined to the rural areas and whose business would be predominantly engaged in financing of agriculture and allied activities.

Since the country had already a network of rural and semi-urban branches, the Narasimham Committee (1991) proposed that the present system of licensing of branches with the objective of spreading the banking habit should be discontinued. Banks should have the freedom to open branches purely on profitability considerations.

The Committee wanted the Government to make a positive declaration that there would be ***no more nationalisation of banks***. RBI should permit the setting up of new banks in the private sector, provided they conform to the minimum start-up capital and other requirements. There should be no difference in the treatment between public sector banks and private sector banks.

The Narasimham Committee (1991) recommended that the Government should allow foreign banks to open offices in India either as branches or as subsidiaries. They should conform to or fulfil the same or similar social obligations as the Indian banks. Foreign banks and Indian banks should be permitted to set up joint ventures in regard to merchant and investment banking, leasing and other newer forms of financial services.

Other Recommendations Relating to the Banking System

The setting up of Assets Reconstruction Fund (ARF). Nationalised banks and Development Finance Institutions (DFIs) were burdened with sub-standard, doubtful and loss assets known as non-performing assets (NPAs). Narasimham Committee recommended the setting up of the Assets Reconstruction Fund (ARF), to take over from the nationalised banks and financial institutions, a portion of their bad and doubtful debts at a discount. All bad and doubtful debts of banks and financial institutions were to be transferred in a phased manner to ensure smooth and effective functioning of the ARF. This arrangement would help the banks and the financial institutions to take off bad and doubtful debts from their balance sheets and recycle the funds realised through this process into more productive uses.

Remove the Duality of Control. The Narasimham Committee (1991) recommended that the present system of dual control over the banking system between RBI and the Banking Division of the Ministry of Finance should ***end immediately*** and that RBI should be the primary agency for the regulation of the banking system.

Free and Autonomous Banks. The Narasimham Committee 1991 recommended that the public sector banks should be free and autonomous. Every bank should go for a radical change in work technology and culture, so as to become competitive internally and to be in step with wide ranging innovations taking place abroad. RBI should

examine all the guidelines and directions issued to the banking system in the context of the independence and autonomy of banks. Finally, the appointment of the Chief Executive of a bank (Chairman-cum-managing director) should not be based on political considerations but on professionalism and integrity and should be made by an independent panel of experts and not by the Government as at present.

The Narasimham Committee 1991 directly blamed the Government of India and the Finance Ministry for the sad state of affairs of the public sector banks. These banks were used and abused by the Finance Ministry of the Government of India, the bank officials and the bank employees and the bank unions.

The recommendations of the Narasimham Committee, 1991 were revolutionary in many respects and were naturally opposed by the bank unions and the leftist political parties.

6. REFORM OF THE BANKING SECTOR (1992-2008)

Despite stiff opposition from bank unions and political parties in the country, the Government of India accepted all the major recommendations of Narasimham Committee (1991) and started implementing them straightway:

(1) ***Statutory Liquidity Ratio (SLR)***: On incremental net demand and time liabilities (DTL) has been reduced from 38.5 per cent to 25 per cent and SLR on outstanding net domestic demand and time liabilities were reduced gradually from 38.5 per cent to 25 per cent in October 1997; this was the minimum stipulated under section 24 of the Banking Regulation Act, 1949.

(2) ***Cash Reserve Ratio (CRR)***: The incremental cash reserve ratio (ICRR) of 10 per cent was abolished. But RBI could not reduce CRR immediately. When conditions eased and money growth started slowing down since 1995-96, RBI reduced CRR gradually from 15 per cent to 5.5 per cent in December 2001. The purpose of reducing CRR was to release funds locked up with RBI for lending to the industrial and other sectors which were starved of bank credit.

(3) ***Interest Rate Slabs***: were gradually reduced from 20 to 2 by 1994-95. The important changes in interest rates since 1991-92 are as follows :-

(a) Interest rate on domestic term deposits has been decontrolled;

(b) The prime lending rate of SBI and most other banks on general advances of over ₹ 2 lakhs has been reduced;

(c) Rate of interest on bank loans above ₹ 2 lakhs has been fully decontrolled; and

(d) The interest rates on deposits and on advances of all cooperative banks (except urban cooperative banks) have been deregulated.

The purpose of deregulation of interest rate on the high slab of bank advances was to stimulate healthy competition among the banks and encourage their operational efficiency. It would also help banks better adjust their lending rates to the track record and risk perception with regard to their customers.

Scheduled commercial banks have now the freedom to set interest rates on their deposits subject to minimum floor rates and maximum ceiling rates.

(4) ***Prudential Norms***: have been started by RBI as part of the reformative process. The purpose of prudential system of recognition of income, classification of assets and provisioning of bad debts is to ensure that the books of the commercial banks reflect their financial position more accurately and in accordance with internationally accepted accounting practices. These help in more effective supervision of banks.

Initially, prudential norms required banks to make 100 per cent provision for all non-performing assets (NPAs). As funding for this purpose was placed at ₹ 10,000 crores at that time, it was phased over two years. Banks had to make at least 30 per cent provision against doubtful and bad debts during 1992-93 and the balance 70 per cent in 1993-94.

(5) ***Capital Adequacy Norms***: were fixed at 8 per cent by RBI in April 1992 and banks had to comply with them over a three year period. By end March 1996, all public sector banks had attained capital to risk weighted assets ratio of 8 per cent. The full norm of 8 per cent was also attained by foreign banks in India and by some Indian banks.

A new capital framework was introduced for Indian scheduled commercial banks based on the Basle Committee recommendations presenting two tiers of capital for the banks:

(a) Tier I or core capital, considered the most permanent and readily available support against unexpected losses, includes paid-up capital, statutory reserves, share premium and capital reserve; and

(b) Tier II capital consisting of undisclosed reserves, fully paid-up cumulative perpetual preference shares, revaluation reserves, general provisions and loss reserves, etc.

It was also prescribed that Tier II capital should not be more than 100 per cent of Tier I capital.

(6) ***Access to Capital Market***. The Government of India has amended the Banking Companies (Acquisition and Transfer of Undertakings) Act to enable the nationalised banks to access the market for capital funds

through public issues, subject to the provision that the holding of the Central Government would not fall below 51 per cent of the paid-up capital.

(7) *Freedom of Operation.* Scheduled commercial banks have now been given freedom to open new branches and upgrade extension counters, after obtaining capital adequacy norms and prudential accounting standards. They are also permitted to close non-viable branches other than in rural areas. Bank lending norms have been liberalised and banks have been given freedom to decide levels of holding of individual items of inventories and receivables.

(8) *New Private Sector Banks.* Ten private sector banks have already started functioning. These new private sector banks are allowed to raise capital contribution from foreign institutional investors upto 20 per cent and from non-resident Indians (NRIs) upto 40 per cent.

(9) *Local Area Banks.* In the 1996-97 budget, the Government of India announced the setting up of new private local area banks (LABs) with jurisdiction over three contiguous districts. These banks would help to mobilise rural savings and to channellise them into investment in local areas. The RBI has issued guidelines for setting up such banks in 1996 and gave its approval "in principle" to the setting up of seven LABs in the private sector. Of these, RBI had issued licences to 5 LABs, located in Andhra Pradesh, Karnataka, Rajasthan, Punjab and Gujarat. These LABs are already in business.

(10) *Supervision of Commercial Banks.* Supervision of commercial banks is being tightened by RBI, specially after the securities scam of 1992. RBI has set up a Board of Financial Supervision with an Advisory Council under the chairmanship of the Governor to strengthen the supervisory and surveillance system of banks and financial institutions. RBI has also established in December 1993 a new department known as Department of Supervision as an independent unit for supervision of commercial banks and to assist the Board of Financial Supervision.

The Working Group under Mr. S. Padmanabhan, set up to review the system of on-site supervision of banks, has recommended extensive changes in bank inspection which include target appraisal of major portfolios and control systems and a discriminatory approach to supervision and inspection that distinguishes sound banks from problem banks.

(11) *Recovery of Debts.* The Government of India passed "Recovery of Debts due to banks and Financial institutions Act, 1993" in order to facilitate and speed up the recovery of debts due to banks and financial institutions. Six Special Recovery Tribunals have been set up at Kolkata, New Delhi, Jaipur, Ahmedabad, Bangalore and Chennai to facilitate quicker recoveries of loan arrears within six months) and an Appellate Tribunal has also been set up in Mumbai.

Perspectives

The banking reforms since 1992, based on the recommendations of Narasimham Committee 1991 aimed at transforming the highly regulated and directed public sector banking system into one characterised by *openness, competition, prudential and supervisory discipline.* In the Report on *Trend and Progress of Banking in India: 1992-93,* RBI states clearly "Commercial Banks thus need to become conscious that they are entering a challenging environment and will have to redefine their position within the financial industry. New ways and methods will have to be determined in order to successfully respond to the new challenges particularly the growing demands from customers for high quality service."

This will necessitate "commercial orientation" of all banks especially public sector banks; and they will have to:

(a) provide better returns on the savings of the investors;

(b) adopt strategies to generate additional revenues;

(c) reduce emerging financial risks through the creation of new services;

(d) improve income to cost ratios and enhance operational effectiveness; and

(e) address aggressively to the problems of depressed profitability and high and growing non-performing assets (NPAs).

Committee on Banking Sector Reforms (1998)

The Finance Ministry of the Government of India appointed Mr. Narasimham as chairman of one more Committee; this time it was called the Committee on the Banking Sector Reforms. This Committee was asked to "review the progress of banking sector reforms to date and chart a programme on financial sector reforms necessary to strengthen India's financial system and make it internationally competitive." The Narasimham Committee on the Banking Sector Reforms submitted its report to the Government in April 1998. This report covers the entire gamut of issues, ranging from capital adequacy, bank mergers, the creation of global-sized banks, recasting bank boards and revamping bank legislation. Important findings and recommendations of this Narasimham Committee (1998) were as follows :

(i) *Need for a Stronger Banking System.* The Narasimham Committee on Banking Sector Reforms (1998) made out a strong case for a stronger banking system in the country, especially in the context of capital account convertibility (CAC) which would involve large inflows and outflows of capital and consequent complications for exchange rate management and domestic

liquidity. To handle such problems, India needed a strong and resilient banking and financial system. For this purpose, the Narasimham Committee (1998) recommended the merger of strong banks which would have a 'multiplier effect' on industry. The Committee, however, cautioned the merger of strong and weak banks, as this might have a negative impact on the asset quality of the stronger bank. During 2004-05, Finance Minister P.C. Chidambaram had vigorously advocated merger of PSBs to get the benefits of large scale economies.

The Committee also recommended that two or three large Indian banks be given international or global character.

(ii) Experiment with the Concept of Narrow Banking. The Narasimham Committee (1998) was seriously concerned with the rehabilitation of weak PSBs which have accumulated a high percentage of non-paying assets (NPAs), which, in some cases was as high as 20 per cent of the total assets. The Committee (1998) suggested the concept of narrow banking to rehabilitate such weak banks. Narrow banking implies that the weak banks place their funds only in the short-term in risk free assets — these banks attempt to match their demand deposits by safe liquid assets. In case the concept of narrow banking was found to be non-applicable to rehabilitate weak banks, the issue of closure should be examined, according to the Committee.

(iii) Small, Local Banks. The Narasimham Committee (1998) argued : "While two or three banks with an international orientation and 8-10 large national banks should take care of the needs of the large and medium corporate sector and the larger of the smaller enterprises, there will still be a need for a large number of local banks." The Committee has, therefore, suggested the setting up of small, local banks which would be confined to States or cluster of districts in order to serve local trade, small industry and agriculture. At the same time, these banks should have strong corresponding relationship with the larger national and international banks.

(iv) Capital Adequacy Ratio. The Narasimham Committee (1998) also suggested that the Government should consider raising the prescribed capital adequacy ratio to improve the inherent strength of banks and to improve their risk absorption capacity. The Committee suggested higher capital adequacy requirements for banks and the setting up of an Asset Reconstruction Fund (ARF) to take over the bad debt of the banks.

(v) Public Ownership and Real Au[illegible]. The Narasimham Committee (1998) argued that Government ownership and management of banks did not enhance autonomy and flexibility in the working of public sector banks. In this connection, the Committee recommended a review of the functions of boards so that they (the bank boards) remain responsible for enhancing shareholder value through formulation of corporate strategy.

The Narasimham Committee (1998) considered the issue of 'autonomous status' for the Board for Financial Supervision of RBI and the need to segregate regulatory and supervisory functions of RBI. The Committee expressed the need for RBI to maintain an arms length from those being regulated and hinted at the need for withdrawing RBI nominee from bank boards. The Committee stated : "Regulation should be concerned with laying down procedural and disclosure norms and sound procedures and ensure adherence to these and not get into the day-to-day management of banks."

(vi) Review and Update Banking Laws. The Narasimham Committee (1998) suggested the urgent need to review and amend the provisions of RBI Act, Banking Regulation Act, State Bank of India Act, Bank Nationalisation Act, etc. so as to bring them in line with the current needs of the banking industry.

Other recommendations related to the need for computerisation process in PSBs, professionalising and depoliticising bank boards, review of recruitment procedures, training and remuneration policies etc.

Evaluation of Narasimham Report (1998)

Really speaking, there was no purpose in setting up the second Narasimham Committee on Banking Sector Reforms even before a decade had elapsed for the full implementation of the First Committee Report (submitted in 1991). As one critic commented : "Barring, that is, a stray recommendation here or there like the categorical rejection of the merger of weak with strong banks and the suggestion to try out narrow banking, as far as all other issues are concerned, whether it is organisation, restructuring, freeing bank boards from day-to-day management and interference or segregating the regulatory and supervisory role of the Reserve Bank of India (RBI), it is like watching an action replay of the earlier report." We can compare some of the major recommendations of the 1991 and 1998 reports of the Committees, both presided over by Mr. Narasimham.

In simple terms, the setting of the Narasimham Committee on Banking Sector Reforms was clearly the brainwave of the officials of the Banking Division of the Finance Ministry who have actually no real work to do. Monetary and banking supervision was the responsibility of RBI and not the Finance Ministry. It is worth noting here that two members of the Narasimham Committee (1991) clearly recommended the closing down of the Banking Division of the Finance Ministry as redundant and unnecessary and that all matters pertaining to the banking system should be the responsibility of only one authority viz., RBI. Obviously, this recommendation was not accepted by the Finance Ministry.

1998 Recommendations	*1991 Recommendations*
More strong banks	Merge banks to reduce numbers
Free bank boards from Government interference	Free bank boards from Government interference
Move to three tier structure	Move to three tier structure
Review capital adequacy norms	Fix capital adequacy at 8 per cent
Consider whether autonomy is consistent with public ownership	Ensure autonomy of banks: wind-up banking division of the finance ministry.

7. PRESENT STATUS OF BANKING SYSTEM

There was an upward swing in the stock market, from 1988-89, spearheaded by excellent performance by market leaders, industry-friendly policies by successive governments, such as liberalisation of licensing procedures, liberal fiscal measures, liberal and positive export-import policy, greater scope for the private sector etc. The upward trend displayed by the stock market was given a big boost by Dr. Manmohan Singh's 1991-92 budget with a series of market-friendly policies. RBI's all-India index number of ordinary share prices (1981-82 = 100) rose from 189 at the end of March 1988 to 528 at the end of March 1991 and crossed 1,000 at the beginning of February 1992. At this stage, Dr. Manmohan Singh's 1992-93 budget sent the stock market booming into a "frenzy". In the two budget sessions (pre and post) alone, the Sensex flared up by 360 points. The Sensex — the index of 30 of the key and most-traded scrips in the country in Mumbai — was nearly 2,000 in January 1992, crossed 3,350 on March 9 and had crossed 4,300 on April 20, 1992.

According to the Finance Ministry officials of the Government of India, this unprecedented stock exchange boom was a reflection of the tremendous welcome accorded to the 1992-93 budget by the industrial and business community. Actually, however, ***it was a manipulated stock exchange boom***. It was later found that some unscrupulous brokers in the stock exchange, like Harshad Mehta, colluding with some bank officials, violated established rules and guidelines and siphoned off bank funds for speculative transactions in the stock market. These irregularities and frauds were popularly called "securities scam". On the one hand, the scam led to one of the worst manipulated booms in the Indian stock markets which later crashed resulting in huge losses to many. On the other hand, it revealed serious weaknesses of internal control and supervision of banks which led to huge losses to banks.

Misuse of Bank Funds

Janakiraman Committee, to RBI set-up identified the types of irregularities in securities transactions which were used to siphon off funds out of the banking system:

(i) Purchases were made by banks and their subsidiaries of securities and other instruments where the counter-party was ostensibly another bank. In reality, the proceeds were directly or indirectly credited to the accounts of brokers.

(ii) Ready-forward (sale and purchase) transactions were entered into either on their own or on clients' accounts by banks with brokers who used these funds for speculative activity.

(iii) Brokers in the stock exchanges were directly financed by banks by discounting their bills, not supported by genuine transactions.

(iv) Banks and other institutions showed large payments as call money to other banks. However, in the books of the receiving banks, there was no record of call money acceptances but instead, ***the amounts were credited to the accounts of individual brokers***. On the due date, these alleged call loans were repaid by payment out of the brokers' accounts in the name of other banks.

(v) Banks and other institutions rediscounted bills of exchange held by other banks and institutions but the proceeds and repayments were routed through brokers' accounts.

(vi) Sums received as inter-corporate deposits and under portfolio management schemes (PMS) by merchant banking subsidiaries of public sector and other banks were passed on to brokers through ready-forward deals.

There were other types of bank frauds too. The Janakiraman Committee estimated that the extent of unreconciled amounts was around ₹ 4,000 crores. These irregularities were committed by all banking companies – *viz.*, public sector banks, private sector banks and foreign banks.

Factors Responsible for Bank Irregularities

Janakiraman Committee in its Final Report went into the environment in which these bank irregularities and frauds took place. According to the Committee, there were three factors:

(a) Public Sector Undertakings (PSUs), flushed with funds, were looking for profitable avenues of investment;

(b) Banks, burdened with CRR and SLR commitments on the one side and social commitment of priority lending on the other, were faced with the problem of low interest income and possible losses and were looking for opportunities for making quick profits; and

(c) The stock exchange was booming during this period and the bulls desperately needed funds to finance their over-bought positions.

Banks which had accepted funds from PSUs imagined that the only way they could earn high returns was to finance stock brokers in a booming market.

Let us describe the above three points more clearly.

(i) Public Sector Undertakings (PSUs) and search for high returns — The PS undertakings had huge short term funds and were looking for avenues of profitable investment. They were restricted in investing these funds in the call money market. They were prohibited to invest in intercorporate deposits as this was considered risky. The interest on bank deposit was fixed and rather low. For CDs, however, there was no ceiling rate of interest but there was a monetary ceiling on the aggregate amount of CDs which could be issued by banks. It was under these conditions that the stock exchange boom came along.

(ii) Banks search for profits — At that time, banks were required to maintain a significant portion of their deposits in cash or in specified securities or with RBI. During most of the relevant period, (a) cash reserve ratio (CRR) was figed at the statutory maximum of 15 per cent of the total bank deposits and (b) Statutory Liquidity Ratio (SLR) requirement was to another 38.5 per cent — thus 53.5 per cent of bank deposits earned either no interest or earned interest which was considerably lower than the market rate. Only 46.5 per cent of deposits was available for commercial lending.

Even out of this 46.5 per cent, almost 40 per cent, in respect of nationalised banks and private sector banks, and a lower percentage for foreign banks, was required to be lent to the priority sector, at a concessional rate of interest.

Further, the yield on banks' investment in Government Securities under SLR was much below the prevailing market rates on long-term debt instruments.

All these measures taken by RBI under orders of the Finance Ministry, squeezed the profitability of commercial banks. Commercial banks had *no other alternative* but to improve the yield through trading in stock exchange securities and through the mechanism of ready forward transactions.

(iii) Stock Exchange Boom and the role of Bankers Receipts — The upward rise in share prices started as far back as 1989-90 but the stock exchange boom started after 1991-92 budget of Dr. Manmohan Singh. During 1991-92 the average *Badla rates* at which stock exchange brokers borrowed ranged between 7.8% to 59.1%. Banks, particularly foreign banks, were quick to identify "arbitrage" opportunities whereby funds could be borrowed cheap and lent dear. It was to exploit these arbitrage opportunities that banks needed *to circumvent existing regulations*. They found in the bankers' receipts (BRs) a useful medium and the stock exchange brokers willing and eager cooperators in their criminal activities. Banks used the BRs extensively in ready-forward transactions (sale and purchase) in government securities. BRs were used by banks even when no securities were transferred and, in some cases, they were used against forged securities. BRs were also used by banks to transfer huge funds to stock brokers to finance their securities transactions.

The whole thing collapsed when the stock exchange boom crashed. It was at this stage that the Government and RBI realised that the stock market frenzy was not *the result of the public response to a favourable budget but was the result of artificial manipulation by a few unscrupulous brokers with huge funds supplied by equally unscrupulous bankers*.

Response of the Government to Securities Scam

The Government took immediate steps to identify and punish those responsible for the irregularities and fraudulent transactions and to recover the money lost by the banks:

(a) A special court was appointed to try all matters relating to the securities scam and legislation was passed with powers to attach the assets of the notified persons involved in the scam.

(b) A special judge of the Bombay High Court was appointed for trial of scam-related cases.

(c) The Government appointed a custodian for prompt disposal of the attached assets.

(d) The Central Bureau of Investigation (CBI) was asked to take over investigation of all the frauds and underhand dealings.

(e) Because of the seriousness of the fraudulent transactions and because of the need for thorough examination of all aspects of the Scam, a Joint Parliamentary Committee (JPC) was set up with Mr. Ram Niwas Mirdha as Chairman to enquire into all aspects of the scam, to fix responsibility and to make suggestions about future reforms of the banking system.

Securities Scam and the Weaknesses of the Banking System

The securities scam brought out the serious weaknesses of the banking system of the country. At one level, the scam reflected the deliberate and criminal violation of rules and procedures with the intention of defrauding the banks. This was done through criminal collusion between some stock exchange brokers and bank officials. At the same time, there were also systemic weaknesses which made the scam possible. These weaknesses were:

(a) Weaknesses in the internal control mechanism within the commercial banks themselves. More effective internal control mechanism could have exposed the fraudulent activities much earlier.

(b) Weaknesses in the supervisory mechanism : RBI proposed new Board of Financial Supervision under RBI to rectify this weakness.

(c) Finance Ministry's directive to deploy bank resources at low rates of interest: This really put pressure on banks to find various mechanisms for earning higher rates of return to supplement their income from non-fund based activities.

(d) Difficulty in running an over-regulated financial system: These irregularities reflected the difficulty of a financial system in which administered interest rates in one part of the system co-existed with the market-determined rates of return in the capital market. Rigid control over interest rates which took them too far away from market-determined rates of interest was not workable and only led to attempts to by-pass regulations in search of available high rates of interest.

On the recommendation of Janakiraman Committee, RBI took steps to improve internal control mechanisms in the banks and to strengthen the supervisory system so as to prevent the recurrence of such problems in the future. A series of structural reforms were worked out for the banking system.

The common man, however, does not believe in any of these steps nor does he believe that such irregularities would not recur. He is convinced that the securities scam is the biggest fraud and scandal and that it is the result of the collusion of stock exchange brokers and bank officials and also of Government officials and powerful politicians. The fact that the Governor of RBI and the Finance Secretary and the Banking Secretary of the finance ministry were not dismissed — they should have resigned taking moral responsibility — and that the CBI was not allowed to investigate properly and thoroughly, were a clear proof that the Government was only just interested in a cover-up operations. The JPC proved nothing and achieved nothing. One has only to accept the fact that the scam took place, that it affected the small investors badly and that *there is every possibility of recurrence of fraudulent practices in the banking system in the future*. This was what exactly happened in 2001 when Ketan Parekh used the funds of Bank of India, urban cooperative banks and UTI to manipulated the stock exchange.

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CHAPTER

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INDIAN FINANCIAL SYSTEM II : MONEY AND CAPITAL MARKETS IN INDIA

1. THE COMPOSITION OF THE INDIAN MONEY MARKET

A money market is not a market for money but it is a market for "near money"; or it is the market for lending and borrowing of short-term funds. It is the market where the short-term surplus investible funds of banks and other financial institutions are demanded by borrowers comprising individuals companies and the Government. Commercial banks are both suppliers of funds in the money market and borrowers. The composition of the Indian money market is given in Chart 1 (next page) :

The Indian money market consists of two parts: the unorganised and the organised sectors. The unorganised sector consists of indigenous bankers who pursue the banking business on traditional lines and non-banking financial companies (NBFCs). The organised sector comprises the Reserve Bank, the State Bank of India and its associate banks, the 20 nationalised banks and private sector banks, both Indian and foreign.

The organised money market in India has a number of sub-markets such as the treasury bills market, the commercial bills market and the inter-bank call money market.

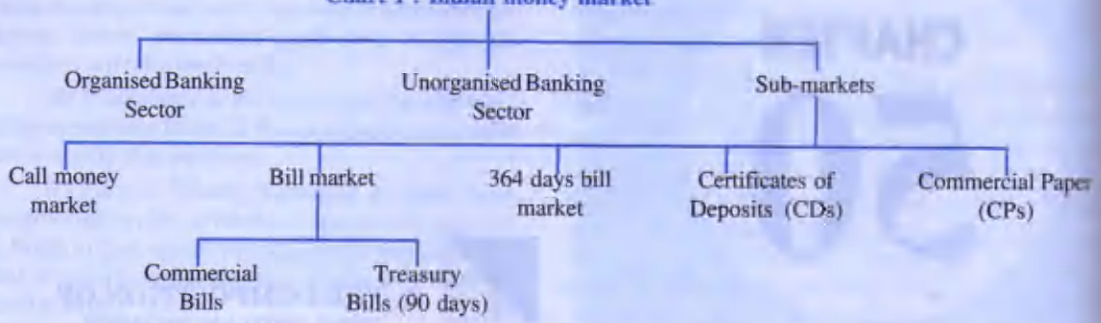
The Indian money market is not a single homogeneous market but is composed of several sub-markets, each one of which deals in a particular type of short term credit.

Call Money Market

One important sub-market of the Indian money market is the Call Money Market, which is the market for very short-term funds. This market is also known as money at call and short notice. This market has actually two segments, viz. (a) the call market or overnight market, and (b) short notice market. The rate at which funds are borrowed and lent in this market is called the call money rate.

Call money rates are market determined, i.e., by demand for and supply of short term funds. The public sector banks account for about 80 per cent of the demand (that is, borrowings) and foreign banks and Indian private sector banks account for the balance of 20 per cent of borrowings. Non-banking financial institutions such as IDBI, LIC, GIC, etc. enter the call money market as lenders and supply up to 80

Chart 1 : Indian money market



per cent of the short-term funds. The balance of 20 per cent of the funds is supplied by the banking system. While some banks operate both as lenders and borrowers, others are either only borrowers or only lenders in the call money market.

Bill Market in India

The bill market or the discount market is the most important part of the money market where short term-bills—normally up to 90 days – are bought and sold. The bill market is further subdivided into commercial bill market and treasury bill market.

The market for commercial bills has not become popular in India, unlike in London and other international money markets where commercial bills are extensively bought and sold (*i.e.*, discounted)

The 91-day treasury bills are the most common way the Government of India raises funds for the short period. Some years ago, the government had introduced the 182-day treasury bills which were later converted into 364–day treasury bills. In 1997, the Government introduced the 14-day intermediate treasury bills.

The Indian Money Market and RBI

Over all these institutions of the Indian money market, there is RBI which, as the ultimate authority and controller of monetary and banking conditions in the country, is the accepted leader of the money market. RBI has the responsibility to guide and control the institutions of the money market and towards this end, it is armed with both qualitative and quantitative weapons of credit control.

2. FEATURES AND DEFECTS OF THE INDIAN MONEY MARKET

(i) Existence of Unorganised Money Market. The major defect of the Indian money market has always been the existence of the indigenous bankers who do not distinguish between short-term and long-term finance, nor even between the purposes of finance (as the Hundi does not indicate whether it is a genuine trade bill or a financial paper). Many attempts were made by RBI to bring the indigenous bankers under its direct influence and control. During the last 50 years, there is a whole lot of non-banking financial companies (NBFCs) who raise funds from the general public but who are generally outside the control and supervision of RBI. To the extent these bankers/NBFCs are outside the organised money market, RBI's control over the money market is limited.

(ii) Absence of Integration. An important defect of the Indian money market at one time was the division of the money market into several segments or sections loosely connected to each other. Each section of the money market—such as the State Bank of India and its subsidiaries, the foreign exchange banks, the urban co-operative banks and indigenous bankers—limited itself broadly to a particular class of business and remained independent in its own sphere. Moreover, the relations between the various sections of the money market were not cordial. This is so even now between Indian banks and foreign banks. With the passage of the Banking Regulation Act, 1949, all banks have been treated equally by RBI as regards licensing, opening of branches, share capital, the type of loans and advances to be given, etc. According the Indian money market is getting closely integrated.

RBI is now fully effective in the organised sector of the money market, as it is in a position to control the operations of the organised sector. Both commercial and cooperative banks have come to rely increasingly on the rediscounting and borrowing facilities provided by RBI, especially during the busy season. Besides, RBI guides and directs them in their lending policies and regulates, inspects the books of scheduled commercial banks.

However, RBI's control and monitoring of the commercial banking sector are not always fully effective. This is clear from Harshad Mehta scam in 1992 and Ketan Parekh scam in 2001.

(iii) Diversity in Money Rates of Interest. Another defect of the Indian money market related to the existence

of too many rates of interest — the borrowing rate of the Government, the deposit and lending rates of commercial banks, deposit and lending rates of cooperative banks, the lending rates of DFTs, etc. The basic reason for the existence of so many rates of interest simultaneously is the immobility of funds from one section of the money market to another. In recent years the different money rates of interest have been promptly adjusting to changes in the bank rate.

(iv) **Seasonal Stringency of Money.** A very striking characteristic of the Indian money market was the seasonal monetary stringency and high rates of interest during a part of the year—during the busy season from November to June when funds were required to move the crops from the villages and up country districts to the cities and ports. During the off-season (July to October) or slack season, banks have large surplus funds and the rates of interest reach low levels. There are even now wide fluctuations in the money rates of interest from one period of the year to another. RBI attempts to lessen the seasonal fluctuations in the money market by pumping money into the money market during busy seasons and withdrawing the same during off seasons. This feature of the money market—seasonal stringency or glut — is present even now.

(v) **Absence of the Bill Market.** Another defect of the Indian money market was the absence of a commercial bill market or a discount market for short term commercial bills. A well organised bill market is necessary for linking up the various credit agencies ultimately and effectively to RBI. No bill market was developed in India due to certain historical accidents—such as the practice of banks keeping a large amount of cash for liquidity purposes, preference of industry and trade for borrowing rather than rediscounting bills, the improper drafting of the bazar hundi, the system of cash credit as the main form of borrowing from banks, the preference of cash transactions in certain lines of activity, the absence of warehousing facilities for storing agricultural produce and the high stamp duty on usance bills.

The commercial bill market has not been fully developed, even though there is general appreciation of the need for such a market :

(a) commercial bills, along with bank credit, are an important source of finance for business and industrial houses;

(b) Banks with surplus funds like to buy (that is, discount) commercial or trade bills, as they yield a good rate of return; they are for a short period (90 days) and they are self-liquidating, that is, the drawee of the bills would pay off at the time of maturity.

(c) Commercial bills are useful to RBI for its open market operations. In times of monetary shortage, RBI can buy bills from the market and pump in additional funds and help create more bank credit. In times of glut of funds in the money market, RBI can sell bills in the market and absorb the surplus funds with banks.

RBI introduced a bill market scheme known as the New Bill Market Scheme in 1970 under which RBI rediscounted genuine trade bills. The Scheme was not developed fully as was anticipated. Basically, the development of a bill market would depend on whether industry and trade are prepared to recover their receivables through the medium of bills and whether the buyers of goods are prepared to bind themselves to the discipline of the bills, that is, pay the amount due on the specified date mentioned on the bills.

Development of a bill market is extremely useful to the country from the point of expanding credit as well as from the point of monetary policy.

(vi) **Highly volatile call money market.** As explained earlier, the call money market is the market for short term funds, known as "money at call and short notice". The rate at which funds are borrowed in this market is called the call money rate. Call money rates are ***market-determined***, i.e., by demand for and supply of short term funds. Despite all the efforts made by RBI to moderate the fluctuations in the call money rates, the latter have continued to be highly volatile. The highest and lowest quotations of the call money rate during the past few years were as follows:

TABLE 1: InterBank Call Money Rates in India

(per cent per annum)

Year	*Highest*	*Lowest*
1990-91	70.00	4.00
1993-94	17.00	0.25
2000-01	14.00	4.00
2007-08	55.0	6.15
2008-09	23.0	1.0
2009-10	9.00	0.50

Source : *RBI Handbook* of Statistics on Indian Economy 2009-10.

The high rates reflect the huge demand for short term funds by the banking system specially to meet the RBI requirement of minimum CRR. RBI attempts to moderate the fluctuations through supporting the market with additional funds – by buying securities from the market when there is short supply of funds and high call rates and absorbing the additional funds when the call market has large surplus funds – through selling securities. In general, however, RBI has only a limited success in its efforts to check the high volatility of the call money market in India in the past.

(vii) **Absence of a well-organised banking system.** Another major defect of the Indian money market was the absence of a well-organised banking system. Branch banking was extremely slow before bank nationalisation in 1969. There are only a few big banks in the country and they have concentrated themselves in large towns and mandi towns. The extreme sluggishness in the movement of funds and the existence of different

interest rates in different regions are the result of slow branch banking in the country.

Since Independence and specially after the passing of the Banking Regulation Act, 1949, the Reserve Bank has been exercising considerable influence and control over the banking system. Through mergers and amalgamations the number of banks has been considerably reduced. Besides, branch banking has been speeded up since 1969.

In spite of the various steps taken to strengthen the Indian banking system, RBI has failed to really control and guide it. In this connection, we may refer to three instances.

(a) Harshad Mehta engineered securities scam in 1992 by using funds from well-known banks, both foreign and Indians.

(b) Ketan Parekh used the funds of urban co-operative banks and those of Bank of India and UTI to manipulate the prices of shares of a few companies in which he was interested. This led to a virtual crash of the Indian stock market as a whole in 2001; and

(c) C.M. Agarwal of Home Trade used the funds of urban cooperative banks and of pension funds to play in the gilt-edged market in March 2002.

The failure of RBI to prevent these abuses of the banking system proves clearly that the Indian banking system is still far from being a well organised and efficiently supervised system :

(viii) **Availability of credit instruments.** Till 1985-86, the Indian money market did not have adequate short-term paper instruments. Apart from the call money market, there was only the treasury bill market. At the same time, there were no specialist dealers and brokers dealing in different segments of the Indian money market and in different kinds of paper instruments. It was only after 1985-86 that RBI started introducing new paper instruments such as 182 days treasury bills, later converted to 364 days treasury bills, certificates of deposits (CDs) and commercial paper (CPs).

Indian Money Market : An Under-developed Money Market

An evaluation of the various characteristics and defects of the Indian money market which we have described above will show clearly that the Indian money market is relatively undeveloped and cannot be compared with such advanced money markets as the London and New York money markets. It is a "money market of a sort where banks and other financial institutions lend or borrow funds for short periods." The Indian money market is undeveloped because :

(a) The Indian money market does not possess a highly organised banking system, so necessary for the successful working of a money market. At present, the Indian banking system covers only metropolitan cities and the towns. Rural areas and lower income groups are largely outside the organised banking system.

(b) It does not possess an adequate and continuous supply of short-term assets or money market instruments such as the bills of exchange, treasury bills, or short-term Government bonds. As a result, banks with surplus funds are unable to invest them profitably in the short period; and those who require short-term funds (like companies which need working capital) are unable to raise them from the market at competitive rates.

(c) There are no specialised dealers in short-term assets in India who may act as intermediaries between the Government and the banking system. In this connection we should remember the significant role which the discount houses and bill brokers play in London money market.

(d) The Indian money market does not contain the very essential sub-markets such as the acceptance market and the commercial bill market. It is true, however, that there is a sufficiently organised and well-developed call money market but the others are not present.

(e) There is no co-ordination between the different sections of the money market. This is so because the inter-connection between the different sections of the money market is often loose and uncoordinated. As a result, there are differences in the money rates in different sub-markets in the Indian money market.

(f) Till recently, the Indian money market was purely a domestic market and it did not attract foreign funds as the London money market does. Besides, the rupee was not a major currency in international foreign exchange markets. In the past 10 years or so, India is attracting a large volume of foreign capital.

Reserve Bank of India and the Indian Money Market

While describing the characteristics of the Indian money market, we have pointed out the important measures which RBI has taken from time to time to remove some of the defects. RBI has been able to remove the differences which existed between the different sections of the money market. The discrimination between foreign and Indian banks does not exist now. RBI has also reduced considerably the differences in the rates of interest which existed between different places, different sections of the money market and at different times. Further RBI has been able to reduce considerably monetary shortages through open market operations.

At the same time, we should also appreciate the difficulties RBI faces while controlling the money market. The absence of a bill market limits the ability of RBI to

withdraw surplus funds form the money market by disposing of bills. The inadequate development of the call money market makes the work of RBI difficult, since the banks do not keep fixed ratios between their cash reserves and their deposits and RBI will have to undertake large open market operations to influence the policy of commercial banks. At the same time, the indigenous bankers and non-banking financial companies occupy an important position in the money market, but they have not *been properly integrated with the rest of the money market*. Accordingly, whatever influence RBI exercises over the Indian money market, is almost confined to the organised banking system only.

Under these circumstances, therefore, the traditional weapons of credit control are not so very effective and new and direct methods — viz., selective controls — are increasingly used by RBI.

3. THE REFORM OF THE INDIAN MONEY MARKET (1986-2008)

While describing the characteristics of the Indian money market, we pointed out to the important steps taken by RBI to correct some of those defects. For example, RBI has considerably reduced the differences which existed between the different sections of the money market. The Indian money market has now been closely knit together, at least in the organised sector. RBI has considerably reduced the differences in the rates of interest which existed in different places and at different times. Finally, RBI has been able to reduce considerably monetary stringency through open market operations and the bill market scheme.

However, the Indian money market is still centred on the call money market but a beginning has been made to develop a secondary market. A major problem in the call money market is its high volatality. In recent years, the quantum of call money transactions has been increasing and the average call money rates have been rising. On the recommendations of the Sukhmoy Chakravarty Committee on the *Review of the Working of the Monetary System*, and the Narasimham Committee *Report on the Working of the Financial System in India, 1991, RBI has initiated a series of money market reforms*.

(i) Relaxation of Interest Rate Regulations

As part of its anti-inflationary policy, RBI had followed a strict policy of interest rate control and regulations. Deposit rates of banks, lending rates of banks and financial institutions — in fact, all kinds of interest rates were subject to strict control and regulation by RBI. However from 1988, RBI took steps to reduce the ceiling rate on bank advances and on inter-bank call and short notice money.

Following the recommendations of the Narasimham Committee in November 1991, interest rates were further deregulated and banking and financial institutions were told to determine and adopt market related rates of interest. The minimum lending rate of commercial banks and public sector development financial institutions (DFIs) declined steeply from 18 per cent in 1990-91 to 10.5 per cent in 2005-06.

The lending rate is being raised frequently since 2006-07. The present position of interest rate regulations is :

(a) RBI continued to reduce the bank rate from 10 per cent in 1990-91 to 6 per cent in 2006-07 because of improved liquidity position with the banking system and also because of the need to stimulate the economy.

(b) RBI depends more on the repo rate than the bank rate to influence the volume of lending by banks. Repo rate is the rate out which RBI repurchases securities from the market.

(c) Interest rates on domestic term deposits have been broadly decontrolled.

(d) Likewise, rate of interest on bank loans has been decontrolled and is determined by market forces.

In other words, the system of administered interest rates in India has been dismantled.

(ii) Introduction of New Instruments in the Money Market

Traditionally, the Indian money market had suffered from inadequacy of short-term credit instruments. In the past, there were only 91 days treasury bills which were traded in the Indian money market. On the recommendations of Vaghul Working Group, RBI has introduced many new money market instruments. The new instruments introduced by RBI are: 182 days treasury bills, 364 days treasury bills, longer maturity treasury bills, dated Government securities, certificates of deposits and commercial paper. We shall describe these money market instruments briefly.

The 91 day Treasury bill has been the traditional instrument in the Indian money market through which the Government of India raised funds from the market for short periods and in which commercial banks invested their short term funds. From January 1993, the Government introduced the system of selling 91 day treasury bills through weekly auctions. The interest rates on these bills used to fluctuate between 8 to 11 per cent but during 1996-97 they ranged between 7 to 13 per cent. The weekly auctions of these bills have become quite popular, with larger participation of banks.

At one time, the demand for the treasury bills by

commercial banks was solely governed by SLR considerations. This is not true any more. Besides, the secondary market transactions in them are being increasingly driven by the felt-need for effective management of short term liquidity by the commercial banks.

(a) **182 days treasury bills** were variable interest bills and were sold through fortnightly auctions. The yield of these long-dated papers had become attractive for a highly liquid instrument. These were replaced by 364 day Treasury bills. They have been re-introduced during 1999-2000.

(b) **364 days Treasury Bills.** There was considerable scope for banks and financial institutions to be interested in long-dated bills, as they were far superior to their loan assets and investments which cannot be easily liquidated in times of need, without incurring heavy losses. The 364 day Treasury Bills have thus become an important instrument of Government borrowing from the market and also leading money market instrument in the sense that their yield is most reflective of market conditions. Financial institutions recognise the yield rate on 364 day Treasury Bills as the anchor rate for floating interest rate instruments.

The fortnightly offerings of these bills bring in, annually, about ₹ 20,000 crores to the Government. These bills are entirely held by the market and RBI does not subscribe to them.

RBI introduced two more Treasury Bills in 1997 :

(i) ***14-day Intermediate Treasury Bills*** from April 1997 at a discount rate equivalent to the rate of interest on ways and means advances to the Government of India — these bills cater to the needs of State Governments, foreign central banks and other specified bodies (these have surplus funds which can be invested for very short periods).

(ii) A new category of ***14-day Treasury Bills***, sold through auction for the first time in June 1997, to meet the cash management requirements of various sections of the economy.

(c) **Dated Government securities.** The Government of India have also decided to sell dated securities (of 5-year maturity and 10-year maturity) on an auction basis. The purpose of this Government decision is :

(i) to develop dated securities as a monetary instrument with flexible yields;

(ii) to provide financial instruments to suit investors' expectations; and

(iii) to meet Government needs directly from the market.

In this connection, it is important to note that the Government of India accepted the recommendation of Narasimham Committee to reduce SLR over a period of time and at the same time, change its own method of raising funds from the market. As against the traditional method of borrowing through dated securities with fixed coupon rates, the Government switched over to auctioning them at market related interest rates. This includes dated securities of varying maturities. These relate to new borrowing and the recycling of old below-market rate securities which mature during the year. They are now auctioned and naturally they carry market related interest rates. This is an important step which was originally recommended by the Chakravarty Committee and it makes these securities useful instruments in open market operations of RBI.

(d) ***Repos and Reverse Repos.*** A very interesting development is the introduction of repurchase auctions (Repos, for short) since December 1992, in respect of Central Government dated securities. Repos are now a regular feature of RBI's market operations. If the banking system experiences liquidity shortage — and consequently, the rate of interest is rising, RBI comes to assist the banking system by repurchasing Government securities. When Government securities are repurchased from the market, payment is made by RBI to commercial banks, and this adds to their liquidity and enables them to expand their credit to industry and trade. Repos are developing into an instrument useful for evening out sharp fluctuations in liquidity and rate of interest in the money market.

Since November 1996, RBI has introduced ***"Reverse Repos", i.e., to sell dated government securities through auction at fixed cut-off rate of interest.*** The objective is to provide short term avenue to banks to park their surplus funds - when there is considerable liquidity in the money market and the call rate has a tendency to decline.

Liquidity Adjustment Facility (LAF) : In the last one decade, RBI has been using Repos and Reverse Repos as a deliberate policy to

(a) influence the volume of liquidity in the money market, and through it,

(b) stabilise the short term rate of interest or the call rates.

This policy of using Repos and Reverse Repos is now called the Liquidity Adjustment Facility (LAF). RBI has adopted LAF as an important tool for adjusting liquidity through Repos and Reverse Repos on a day-to-day basis. Actually, since 2000-01, ***LAF has emerged as a major instrument of monetary policy.***

(e) **Certificates of deposits (CDs).** The CDs are another important money market instrument. They were issued by banks in multiples of ₹ 25 lakhs to expand the investor base for CDs, the minimum value was reduced and is presently ₹ 1 lakh. The maturity is between 3 months and one year. They are issued at a discount to the face value and the discount rate is freely determined

according to market conditions. CDs are freely transferable after 45 days after the date of issue. The CDs became immediately popular with banks for raising resources at competitive rates of interest.

Two important policy decisions were taken by RBI regarding the issue of CDs. First, RBI raised, from May 1992, the limits for issue of CDs by scheduled commercial banks from 5 to 7 per cent of their average aggregate deposits. As a direct result, the aggregate limits for the banking system for issue of CDs increased from ₹ 7,540 crores to ₹ 20,600 crores. Second, RBI permitted IDBI, ICICI and IFCI — these were development financial institutions — to issue CDs with a maturity period of more than one year and up to 3 years. The aim of this step was to provide flexibility to development financial institutions to raise resources from the market. Despite these steps, there was lack of interest among banks in issuing fresh CDs.

The stringent conditions in the money market in 1995-96 induced banks to mobilise resources on a large scale through CDs — the amount of CDs more than doubled during the year, to ₹ 21,500 crores at the end of June 1996. The discount rate of interest on CDs also rose sharply – for example, the ruling discount rate of interest on CDs with 3 months maturity ranged between 12 to 13.5 per cent during March 1995 and to 16 to 21 per cent in June 1996. Subsequently, liquidity conditions in the money market eased considerably bringing down the amount of resources raised through CDs (e.g. ₹ 12,130 crores in June 1997 to ₹ 4,460 crores in March 2004. Since then, the issue of CDs has risen smartly :

April 2005 — ₹ 15,000 crores
April 2006 — ₹ 38,570 "
April 2007 — ₹ 93,800 "
April 2008 — ₹ 150,870 "
April 2009 — ₹ 1,98,497 "
April 2010 — ₹ 3,41,830 "

The discount rate on CDs has also risen from 6 to 11.50 per cent.

Thus, the volume of CDs issued by banks and financial institutions and the discount rate on them clearly reflect the degree of liquidity in the money market during a given period.

(*f*) **Commercial paper (CP).** The commercial paper (CP) is issued by companies with a net worth of ₹ 10 crores, later reduced to ₹ 5 crores. The CP is issued in multiples of ₹ 25 lakhs subject to a minimum issue of ₹ 1 crore. The maturity of CP is between 3 to 6 months. The CPs are issued at a discount to face value and the discount rate is freely determined. The maximum amount of CP that a company can raise was limited to 20 per cent (now raised to 30 per cent) of the maximum permissible bank finance.

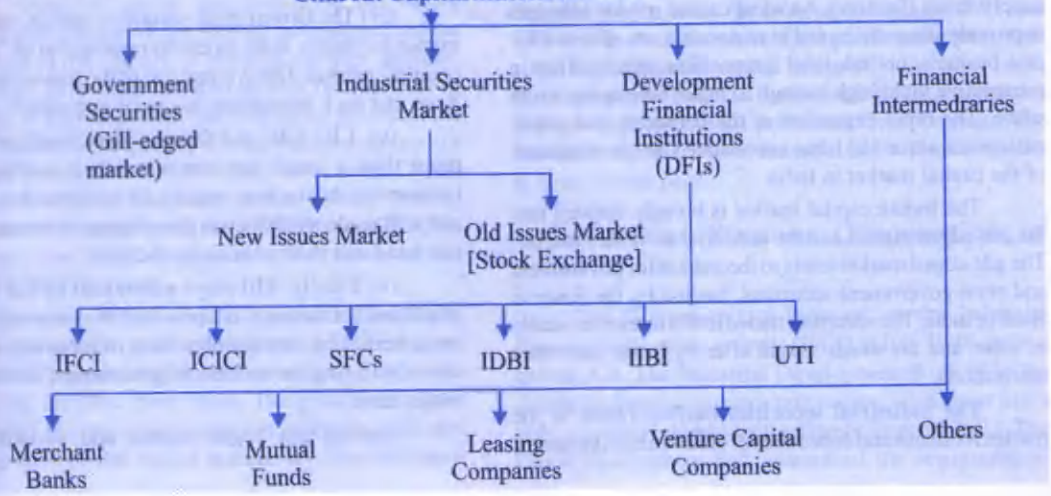
The purpose of introducing CP is to enable high-level corporate borrowers — such as leasing and finance companies, manufacturing companies and financial institutions — to diversify their sources of short-term borrowing on the one hand, and provide an additional instrument to the banks and financial institutions in the money market, on the other.

Banks are the principal holders of CPs and to some extent, lending to well-rated companies through CPs was a substitute for direct bank credit to companies. For various reasons, the CP did not become popular. There has been fluctuation in the issue of CPs depending upon liquidity conditions in the market – from ₹ 2,700 crores in 1993-94, only ₹ 80 crores in March 1996; from ₹ 5,750 crores in March 2003 and ₹ 37,600 crores in April 2008. The rate of discount on CP reflects market conditions and ranges between 7 per cent to 10 per cent in April 2008.

4. COMPOSITION OF THE INDIAN CAPITAL MARKET

Capital market is the market for long-term funds, just as the money market is the market for short-term

Chart 2: Capital market in India



funds. It refers to all the facilities and the institutional arrangements for borrowing and lending term funds (medium-term and long-term funds). It does not deal in capital goods but is concerned with the raising of money capital for purposes of investment.

The demand for long-term money capital comes predominantly from private sector manufacturing industries and agriculture and from the Government largely for the purpose of economic development. As the Central and State Governments are investing not only on economic overheads as transport, irrigation and power development but also on basic industries and sometimes even consumer goods industries, they require substantial sums from the capital market.

The supply of funds for the capital market comes largely from individual savers, corporate savings, banks, insurance companies, specialised financing agencies and the government. Among institutions, we may refer to the following :-

(a) Commercial banks are important investors, but are largely interested in government securities and, to a small extent, debentures of companies;

(b) LIC and GIC are of growing importance in the Indian capital market, though their major interest is still in government securities;

(c) Provident funds constitute a major medium of savings but their investments too are mostly in government securities;

(d) Special institutions set up since Independence, viz., IFCI, ICICI, IDBI, UTI, etc. – generally called development financial institutions (DFIs) — aim at supplying long-term capital to the private sector.

(e) There are financial intermediaries in the capital market, such as merchant bankers, mutual funds, leasing companies etc. which help in mobilising savings and supplying funds to investors.

Like all markets, the capital market is also composed of those who demand funds (borrowers) and those who supply funds (lenders). An ideal capital market attempts to provide adequate capital at reasonable rate of return for any business or industrial proposition which offers a prospective yield high enough to make borrowing worth while. The rapid expansion of the corporate and public enterprises since 1951 has necessitated the development of the capital market in India.

The Indian capital market is broadly divided into the gilt-edged market and the industrial securities market. The gilt-edged market refers to the market for government and semi-government securities, backed by the Reserve Bank of India. The securities traded in this market are stable in value and are much sought after by banks and other institutions.

The industrial securities market refers to the market for shares and debentures of old and new companies. This market is further divided into the new issue market and the old capital market meaning the stock exchange. The new issue market — often referred to as primary market — refers to the raising of new capital in the form of shares and debentures whereas the old issues market — commonly known as stock exchange on stock market — deals with securities already issued by companies The old issues market or the stock exchange is also known as ***secondary market***. Both markets are equally important but often the new issue market is much more important from the point of view of economic growth. However, the functioning of the new issue market will be facilitated only when there are abundant facilities for transfer of existing securities through a vibrant secondary market.

Financial intermediaries like merchant bankers help the corporate sector to raise funds in the capital market.

The Government Securities (G-SEC) Market vs Industrial Securities Market

The Government Securities Market, also known as the gilt-edged market differs from the industrial securities market in many important respects :

(i) There are no uncertainties regarding yield, management, additions to capital, etc, and, therefore, there is much less speculation in this market.

(ii) The investors in government securities are predominantly institutions which are often compelled by law to invest a certain portion of their funds in these securities. The commercial banks, the LIC, the GIC and the provident funds come under this category; these are often referred to as the captive market for Government securities.

(iii) The average value of the transactions in the Government securities market is very much larger than in the case of shares and debentures of companies. Often a single transaction in government securities may run into several crores or even hundreds of crores of rupees.

(iv) The Government securities market, unlike the market for shares, is not an auction market but an "over the counter" market. The average size of the transactions is so large that each transaction has to be negotiated.

(v) LIC, GIC and the provident funds rarely sell more than a small percentage of their holdings, but commercial banks may engage in considerable buying and selling, depending upon their deposit resources on the one hand and their policies on the other.

(vi) Finally, RBI plays a dominant role in the gilt-edged market through its open-market operations which are governed by the twin objectives of monetary stability and of ensuring the success of government's borrowing programme.

Besides gilt edged market and variable yield

industrial securities, the Indian capital market includes development financial institutions and financial intermediaries.

Indian Capital Market before Independence

The Indian capital market was not properly developed before Independence. The growth of the industrial securities market was very much hampered since there were very few companies and the number of securities traded in the stock exchanges was still smaller. Most of the British enterprises in India looked to the London capital market for funds than to the Indian capital market. A large part of the capital market consisted of the gilt-edged market for government and semi-government securities.

Before independence, individual investors were very few and limited to the affluent classes in the urban and rural areas. Besides, the Government had placed many restrictions on the institutional savers such as banks and insurance companies which necessarily had to prefer government securities and only to a small extent to the fixed interest-bearing debentures.

Specialised issue houses, so common in Western countries were not developed in India, and the managing agency system, a peculiar institution in pre-Independence India, performed to some extent the functions of promotion, issue and underwriting of new capital issues. Finally, there were no specialised intermediaries and agenices to mobilise the savings of the public and channelise them to investment. Such institutions were started only after Independence.

The Indian Capital market since Independence

Since Independence and particularly after 1951, the Indian capital market has been broadening significantly and the volume of saving and investment has shown steady improvement. All types of encouragement and tax relief exist in the country to promote savings. Besides, many steps have been taken to protect the interests of investors. A very important indicator of the growth of the capital market is the growth of joint stock companies or corporate enterprises. In 1951 there were about 28,500 companies both public limited and private limited companies with a paid-up capital of ₹ 775 crores; in 2000, there were over 70,000 companies with a paid-up capital of over ₹ 200,000 crores.

The rate of growth of investment has been phenomenal in recent years, in keeping with the accelerated tempo of development of the Indian economy under the impetus of the Five Year Plans. The growth of public borrowings for investment purposes is also an indicator of the growth of the capital market. By 2003-04, there were 250 non-departmental public enterprises of the Central Government alone with capital investment of ₹ 150,000 crores.

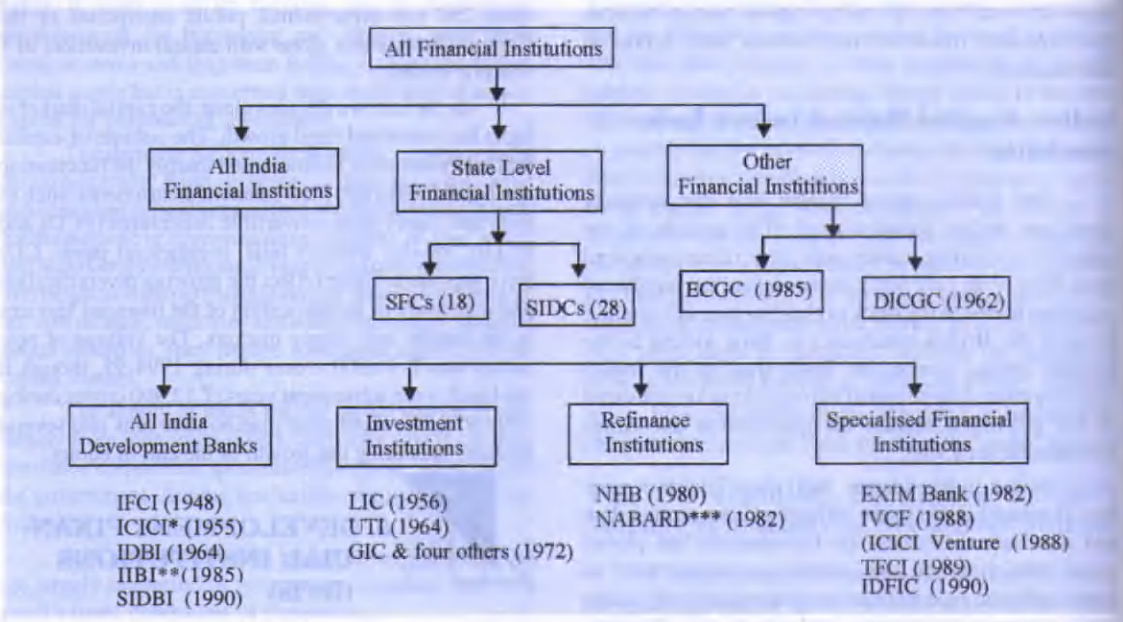
In the last two decades alone, the capital market in India has witnessed rapid growth. The volume of capital market transactions has increased sharply; its functioning has been diversified. New financial instruments, such as fully and partly paid convertible debentures (FCDs and PCDs) 364-day treasury bills, commercial paper, CDs have appeared. These reflect the growing diversification and a measure of sophistication of the financial services in the capital and money markets. The volume of new issues was ₹ 31,800 crores during 1994-95, though it declined in the subsequent years (₹ 12,900 crores during 1996-97). The number of shareholders runs into several millions indicating the growth of the cult of equity.

5. DEVELOPMENT FINANCIAL INSTITUTIONS (DFIs)

Soon after Independence, the Government of India set up a series of financial institutions to be of special help to the private sector industries in the matter of finance. IFCI was the first of these institutions (1948). It was followed by SFCs (set up by State Governments with cooperation of RBI and other banks) to provide long term finance to small and medium industrial units. ICICI (1955), IDBI (1964) and UTI (1964) followed soon after. LIC was set up in 1956 to mobilise individual savings and to invest part of the savings in the capital market. Many more specialised financial institutions were set up and are commonly called public sector financial institutions. These institutions have been doing very useful work in subscribing to the shares and debentures of new and old companies, in giving loan assistance, in underwriting new issues, and so on. At present, many of them have become powerful shareholders in many prominent companies. LIC and UTI mobilise resources from the public and place them at the disposal of the capital market. On the other hand, the development financial institutions (DFIs) are engaged in providing funds to the private sector enterprises. The structure of public sector financial institutions is shown in chart 3 next page.

1. Industrial Finance Corporation of India (IFCI)

The Government of India set up the Industrial Finance Corporation of India (IFCI) in July 1948 under a special Act. The Industrial Development Bank of India, scheduled banks, insurance companies, investment trusts and co-operative banks are the shareholders of I.F.C.I. The Union Government had guaranteed the repayment of



Note: * Industrial Credit and Investment Corporation of India (ICICI) was merged with ICICI Bank in 2002 and ceased to be a development finance institution.

** The Industrial Reconstruction Bank of India (IRBI) was set-up in 1985 but was renamed as Indistrial Investment Bank of India in 1997.

*** **NABARD** took over the refinance functions performed earlier by Agricultural Refinance Development Corporation.

capital and the payment of a minimum annual dividend. The Corporation was authorised to issue bonds and debentures in the open market, to borrow foreign currency at from the World Bank and other organisations, accept deposits from the public and also borrow from the Reserve Bank.

The IFCI performed three important functions :

(a) It granted loans and advances to industrial concerns and subscribed to the debentures floated by them.

(b) It guaranteed loans raised by the industrial concerns in the capital market.

(c) It underwrote the issue of stocks, shares, bonds and debentures of industrial concerns. It also subscribed to the equity and preference shares and debentures of companies.

IFCI was authorised to give long and medium-term finance to companies engaged in manufacturing, mining, shipping and generation and distribution of electricity.

IFCI had played a pioneering role in financing private sector investment and had a big hand in the rapid industrial development of India. The loans sanctioned by IFCI increased from ₹ 210 crores in 1980-81 to Rs 2.430 crores in 1990-91 and 1,860 crores in 2000-01. This was partly due to the mobilization of large financial resources by IFCI (in fact, by all public sector financial institutions such as IDBI and ICICI) and also due to the rapid development of industries during this period. But the same time, IFCI was plagued by the accumulation of non-paying assets (NPAs) mainly because it was forced to lend to wrong parties. Accordingly IFCI is no more a development financing institution.

2. State Financial Corporations

The scope of assistance provided by the Industrial Finance Corporation of India was limited since it dealt with large public limited companies and co-operative societies which were engaged in manufacturing, mining, shipping and generation and distribution of electricity. But there were both small-scale and medium-sized industries which require financial assistance and for this purpose the State Governments desired to set up State Financial Corporations. The Government of India passed the State Financial Corporations Act in 1951 and made it applicable to all the states. The authorised capital of a State Financial Corporation is fixed by the State Government within the minimum and maximum limits of ₹ 50 lakhs and ₹ 5 crores and is divided into shares of equal value which are taken by the respective State Governments, the Reserve Bank of India, scheduled banks, co-operative banks, other financial institutions such as insurance companies and investment trusts and private parties. The shares are

aranteed by the State Government. A State Financial orporation can augment its funds through issue and sale bonds and debentures.

All types of industrial concerns can get ccommodation from State Financial Corporations. A tate Financial Corporation can:

(a) guarantee loans raised by industrial concerns hich are repayable within a period not exceeding 20 ars and which are floated in the public market; (b) nderwrite the issue of stocks, shares, bonds or debentures industrial concerns; (c) grant loans or advances to dustrial concerns repayable within a period not xceedingly 20 years; and (d) subscribe to debentures oated by industrial concerns.

A State Financial Corporation is, however, rohibited from subscribing directly to the shares or stock any company having limited liability except for nderwriting purposes and granting any loan or advance the security of its own shares. Besides the above nctions, nine S.F.Cs act as agents for their respective tate Governments for sanctioning and/or disbursing ans to small-scale industries under the State Aid to dustries Act. The SFCs have also been entrusted with DA (International Development Association) credit for sisting small and medium industrial units.

The bulk of the assistance granted by the SFCs is small-scale industries including road transport operators. he SFCs have continued to extend liberal financial sistance on concessional terms to industrial units in the ecified backward areas. Finally, the SFCs are granting beral financial assistance to technician-entrepreneurs.

There are at present 28 State Financial Corporations, nd almost every State has a Financial Corporation of its wn. During 2000-01 SFCs had sanctioned loans ggregating ₹ 2,800 crores and disbursed ₹ 2,000 crores. heir assistance had declined subsequently. Over 70 per ent of the total assistance sanctioned and disbursed by all FCs is provided to small-scale industries. Attempts are ow being made to strengthen and improve the effectiveness SFCs as regional development banks.

Besides SFCs, there are 28 State Industrial evelopment Corporations (SIDCs) which promote dustrial development in their respective states and also ovide financial assistance to small entrepreneurs and elp backward regions.

Industrial Credit and Investment Corporation of India (ICICI)

The Industrial Credit and Investment Corporation as sponsored by a mission from the World Bank for the urpose of developing small and medium industries in the ivate sector. It was registered in January, 1955 under the dian Companies Act. The aim of I.C.I.C.I. was to mulate the promotion of new industries, to assist the pansion and modernisation of existing industries and to furnish technical and managerial aid so as to increase production and afford employment opportunities. The Corporation granted :

(a) long-term or medium-term loans, both rupee loans and foreign currency loans;

(b) participated in equity capital and in debentures and underwrote new issues of shares and debentures,

(c) guaranteed loans from other private investment sources.

(d) provided financial services such as deferred credit, leasing credit, instalment sale, asset credit and venture capital.

There was a remarkably significant increase in financial assistance by ICICI in recent years :

Table 2 : Financial Assistance by ICICI

(₹ crores)

	1980-81	*1990-91*	*2000-01*
Loans sanctioned	310	3,740	55,820
Disbursements	180	1,970	31,660

In a matter of 20 years, loans between, 1981 and 2001 sanctioned by ICICI had increased from ₹ 310 crores to over ₹ 55,820 crores and loans disbursed had increased from ₹ 180 crores to ₹ 31,660 crores.

The Corporation assisted industrial concerns with loans and guarantees either in rupees or in any foreign currency. Besides, it underwrote ordinary and preference shares and debentures and it also subscribed directly to ordinary and preference shares issues. A significant function performed by the Corporation was the provision of foreign currency loans and advances to enable Indian Industrial concerns to secure essential capital goods from foreign countries.

ICICI commenced leasing operation in 1983. It provided leasing assistance for computerisation, modernisation/replacement, equipment of energy conservation, export orientation, pollution control etc. The industries helped under leasing included textiles, engineering, chemicals, fertilizers, cement, sugar, etc.

ICICI had set up a Merchant Banking Division which was working very creditably. ICICI had joined with J.P. Morgan & Co. to set up ICICI Securities and Finance Co. Ltd. (I-SEC) to offer services in areas relating to issue management and credit syndication services. ICICI has also set up ICICI Asset Management Co Ltd. in June 1993 to operate the schemes of the ICICI Mutual Fund — this was later called Prudential ICICI Mutual Fund. Yet another subsidiary called ICICI Investors Services Ltd (March 1994) and ICICI Banking Corporation Ltd. (January 1994) were also set up.

Apart from these, ICICI had promoted the following companies and institutions in recent years:

(a) Credit Rating Information Services of India Ltd. (CRISIL), set up by ICICI in association with Unit Trust

of India (UTI) to provide credit rating services to the corporate sector;

(b) Technology Development and Information Company of India Ltd. (TDICI), promoted by ICICI, to finance the transfer and upgradation of technology and provide technology information – this was christened as ICICI Venture Funds in 1988.

(c) The SCICI Ltd. (formerly Shipping Credit and Investment Company of India Ltd.) specialised in giving loans for acquisition of ships. It had diversified its operations to cover all sectors of the economy with focus on sectors of special significance to exports and infrastructure. As a result of this diversification of activities, SCICI Ltd. lent to a variety of industries, besides shipping and fishing industries such as automobiles and its ancillaries, chemicals and petrochemicals, electronics, information technology, power generation, and distribution, steel and steel products, other metals, textiles and food processing. However, shipping and fishery industries continued to be the priority for the SCICI Ltd. Till the end of March 1996, SCICI had sanctioned a total assistance of ₹ 12,750 crores. SCICI was, however, merged with ICICI in April 1996.

Of all the development financial institutions set up by the Indian Government after Independence, ICICI registered the most spectacular success. In fact, the financial assistance sanctioned and disbursed by ICICI rose tremendously during the 1990's and had exceeded the assistance extended by IDBI which was the apex institution in the field of development finance.

Another pioneering event was the reverse merger of ICICI with its subsidiary the ICICI Bank in March 2002 and the creation of the first universal bank in India. With this merger, ICICI was no more a development financial institution.

The Industrial Development Bank of India (IDBI)

The Industrial Development Bank of India was set up since 1947 to provide long-term finance to industry. IFCI, the SFCs, ICICI, and the Refinance Corporation of India were functioning for several years provided direct plans, subscribed to shares and bonds and to guarantee loans and deferred payments. The volume of long-term finance provided by these institutions were substantial and were steadily increasing too, but it was found inadequate to meet the requirements of new and growing industrial enterprises. On the one side, the needs of rapid industrialisation necessitated the establishment of a new institution with large financial resources. On the other side, there was the need to co-ordinate the activities of all agencies which are concerned with the provision of finance for industrial development. It was to fulfil this two-fold objective that the Government establish the Industrial Development Bank of India (IDBI) which formally came into existence in July 1964.

IDBI was a wholly-owned subsidiary of the Reserve Bank of India till 1976. The general direction, management and superintendence of IDBI was vested in a Board of Directors, which was the same as the Central Board of Directors of the Reserve Bank of India. The Governor and Deputy Governor of the Reserve Bank were the Chairman and Vice-Chairman of IDBI. The Finance Ministry of the Government of India, however, wanted direct conrol and direction of IDBI. Accordingly, IDBI was delinked from the Reserve Bank of India and was taken over by the Finance Ministry in 1976.

Functions of IDBI

The main function of IDBI, as its name suggests, was to finance industrial enterprises such as manufacturing, mining, processing, shipping, and other transport industries and hotel industry. IDBI granted direct assistance by way of project loans, underwriting and direct subscription to industrial securities, soft loans, technical refund loans and equipment finance loans. The Bank guaranted loans raised by industrial concerns in the open market from scheduled banks, the State cooperative banks, I.F.C.I. and other "notified" financial institutions. It could assist industrial concerns in an indirect manner also, that is, through other institutions. It could refinance term loans to industrial concerns given by the IFCI, the State Financial Corporations, scheduled banks or State co-operative banks.

The Industrial Development Bank of India Act, 1964, had provided for the creation of a special fund known as the Development Assistance Fund. This Fund was used to assist those industrial concerns which were not able to secure finances in the normal course because of low rate of return.

IDBI became the most important institution assisting industrial units till 2000-01.

IDBI's loan sanctions had increased from ₹ 1,280 crores in 1980-81 to ₹ 26,830 crores in 2000-01; and during the same period disbursements had increased from ₹ 1,010 crores to ₹ 17,480 crores — also reflecting the rapid industrial and business growth of the country on the one side and the corresponding increase in the mobilisation of resources by the development financial institutions on the other. In this, IDBI had a leading role as it was the apex financial institution of the country.

Table 3 : Financial Assistance by IDBI

(₹ crores)

	1980-81	*1990-91*	*2000-01*	*2004-81*
Loans sanctioned	1,280	6,250	26,830	5,47
Disbursements	1,010	4,460	17,480	4,82

As in the case of other public sector term lending institutions, IDBI registered steep decline in loan

sanctioned and disbursed since 2000-01. For instance, the financial assistance sanctioned by IDBI declined from ₹ 6,830 crores in 2000-01 to ₹ 5,470 crores in 2004-05. Disbursements by IDBI declined from ₹ 17,480 crores to ₹ 4,820 crores between 2001 and 2005. This was mainly due to heavy accumulation of NPAs and paucity of funds.

IDBI, like other public development financial institutions, managed by the Finance Ministry of the Union Government, collapsed and was merged with IDBI Bank in October 2004. With that, the chapter on development banks was closed for ever.

Small Industries Development Bank of India (sidbi)

The Small Industries Development Bank of India (SIDBI) was set up by the Government of India under a special Act of the Parliament in April 1990 as a wholly-owned subsidiary of IDBI. SIDBI took over the outstanding portfolio of IDBI relating to the small scale sector worth over ₹ 4,000 crores.

SIDBI is now the principal financial institution for promotion, financing and development of small scale industries in the country. It coordinates the functions of existing institutions engaged in similar activities. Accordingly, SIDBI has taken over the responsibility of administering Small Industries Development Fund and National Equity Fund which were earlier administered by IDBI.

While extending financial assistance to the small units scattered all over the country, SIDBI makes use of the existing banking and financial institutions, such as the commercial banks, cooperative banks and RRBs, SFCs, and SIDCs which have a vast net work of branches all over the country. As many as 870 institutions are eligible for assistance from SIDBI.

The important functions of SIDBI are as follows:

(i) SIDBI refinances loans and advances extended by the primary lending institutions to small scale industrial units, and also provides resources support to them;

(ii) SIDBI discounts and rediscounts bills arising from sale of machinery to or manufactured by industrial units in the small scale sector;

(iii) SIDBI extends seeds capital/soft loan assistance under National Equity Fund, Mahila Udyam Nidhi and Mahila Vikas Nidhi and seed capital schemes through specified lending agencies;

(iv) SIDBI grants direct assistance as well as refinance loans extended by primary lending institutions for financing export of products manufactured by industrial concerns in the small scale sector;

(v) SIDBI provides services like leasing, factoring etc. to industrial concerns in the small scale sector;

(vi) SIDBI extends financial support to State Small Industries Development Corporations for providing scarce raw materials to and marketing the end-products of industrial units in the small scale sector; and

(vii) SIDBI provides financial support to National Small Industries Corporation for providing, leasing, hire-purchase and marketing support to industrial units in the small scale sector.

In the setting up SIDBI, the intention of the Government of India was to ensure larger flow of financial assistance to the small scale sector. SIDBI has already initiated steps for technological upgradation and modernisation of existing units. It is expanding the channels for marketing of products of SSI sector in internal and international markets. It is promoting in a big way employment-oriented industries especially in semi-urban areas to create more employment opportunities, and thereby checking migration of rural population to urban and cosmopolitan areas.

SIDBI has liberalised its terms of assistance and simplified procedures, with a view to widen its scope for larger coverage of schemes. Some of the salient features of SIDBI can be listed as follows:

(a) SIDBI has been operating Single Window Scheme (SWS) which is enlarged to cover units in identified areas. The extent of refinance against cash credit sanctioned by banks under SWS was raised from 50 to 70 per cent. The scope of SWS has been widened by making the proposals for rehabiltation, modernisation and technology upgradation of existing units.

(b) SIDBI provides refinance facilities under Automatic Refinance Scheme (ARS). The limit of term loans under ARS was initially fixed at ₹ 10 lakhs but was raised later to ₹ 50 lakhs and the extent of refinance has been raised from 75 to 90 per cent.

(c) SIDBI has introduced equipment financing for assistance to existing well-run small scale units for technology upgradation/modernisation during the year.

(d) SIDBI has introduced a refinance scheme for resettlement of voluntarily retired workers of National Textile Corporation (NTC) and helps them to buy upto 4 looms.

(e) SIDBI has set up a venture capital fund to assist entrepreneurs.

During 2006-07, financial assistance sanctioned and disbursed by SIDBI amounted to ₹ 11,200 crores and ₹ 10,130 crores respectively. Within a short span of time, SIDBI has emerged as a major player in the field of finance for the small scale sector.

TABLE 4: Financial Assistance by SIDBI

₹crores

	1990-91	*2000-01*	*2007-08 (P)*
Loans sanctioned	2,410	10,820	16,181
Loans disbursed	1,840	6,440	15,098

P. Provisional

Source : RBI, Annual Report 2007-08

Industrial investment Bank of India (IIBI)

At one time, several industrial units, particularly in the Eastern Region, were in severe difficulties and were on the verge of closing down. Lack of adequate demand, managerial imprudence, labour troubles, shortage of raw materials and import restrictions were some of the reasons responsible for this state of affairs. In view of their importance to the national economy and the needs of employment of a large work force, these units had to be assisted financially. The Government of India set up the Industrial Reconstruction Corporation of India (IRCI) in April 1971 under the Indian Companies Act mainly to look after special problems of 'sick' units and provide assistance for their speedy reconstruction and rehabilitation, if necessary, by undertaking the management of the units and developing infrastructure facilities like those of transport, marketing etc.

Since its inception in 1971 till the end of March 1984, IRCI had sanctioned reconstruction assistance of ₹ 266 crores to 242 sick or closed industrial units and had disbursed ₹ 185 crores. Textiles, engineering, mining and foundry industries were assisted by IRCI which had paid special attention to the units located in the classified backward areas as also to those in the small scale sector. The Corporation had also charged concessional rate of interest.

In 1984 the Finance Ministry of the Government of India renamed the Industrial Reconstruction Corporation of India (IRCI) as Industrial Reconstruction Bank of India (IRBI) and made it as the principal all-India credit and reconstruction agency for industrial revival, rehabilitation and promotion of sick units. In 1995, the Finance Ministry again renamed IRBI as Industrial Investment Bank of India (IIBI). Despite all these changes in names, the financial assistance rendered by this institution was meagre and could be rendered by other development financial institutions: IIBI is currently being wound up.

Investment Institutions : The Unit Trust of India

The Unit-Trust of India was formally established in February 1964. The initial capital of the Trust was ₹ 5 crores which was subscribed fully by the Reserve Bank of India, the Life Insurance Corporation, the State Bank of India and the scheduled banks and other financial institutions. The general superintendence, direction and management of the affairs and business of the Trust is vested in a Board of Trustees.

The primary objective of the Unit Trust was two-fold: (a) stimulate and pool the savings of the middle and low-income groups, and (b) to enable them to share the benefits and prosperity of the rapidly growing industrialisation in the country.

These two-fold objectives were to be achieved through a three-fold approach : (i) by selling Units of the Trust among as many investors as possible in different parts of the country; (ii) by investing the sale proceeds of the Units in industrial and corporate securities; and (iii) by paying dividends to those who have bought the units of the Trust.

The operations of the Trust picked up conspicuously almost from the very begining. The total number of unit holders registered with the Trust at one time exceeded 25 million with mobilised funds exceeding ₹ 73,000 crores (in June 2000).

The Trust had built up a portfolio of investments which was balanced between the fixed income-bearing securities and variable income-bearing securities—the main objective of the Trust was to maximise income consistent with safety of capital.

The Trust had invested in securities of about 300 sound concerns, which were on regular dividend paying basis. Barring investment in bonds of public corporations, the Trust funds were invested in financial, public utility and manufacturing enterprises.

Apart from subscribing to the shares and debentures of companies, UTI sanctioned loans to the corporate sector.

The commencement of sales of units by the Unit Trust from July 1964 was acclaimed as a landmark in the development of India's capital market. In principle, the aim of the Unit Trust was praiseworthy since it sought to mobilise the community's savings for investment in trade and industry. The Trust, being a public sector enterprise created confidence among the general public. Besides, it received a number of tax concessions from the Government. Not only the capital was safe but it was highly liquid in the sense that any Unit holder could renew his/her Units and get back cash from the Trust.

The operation of the Unit Trust during the first three decades showed that the returns for unit holders were reasonable. On an average UTI paid annual dividend at 20 per cent. The response of investors especially of the small and medium income groups, to the Unit scheme was very encouraging and it seemed that the Unit Trust had met the genuine needs of a large number of investors by providing a form of investment which was safe, which brought in steady income and which was liquid enough. "Two crore investors come to UTI with safety and income expectations", stated the last CMD of UTI.

The whole edifice of UTI, however, crumbled in September-October 1998 when the prestigious Unit Scheme 1964 called US 64 came under serious trouble because of a serious depression in the Indian Stock market.

UTI finally collapsed during 2001-02. An institution built on the confidence and faith of crores of savers from lower and middle income groups was been callously ruined by scheming and petty politicians colluding with incompetent and corrupt bureaucrats on the one side and unscrupulous business houses and stock exchange brokers on the other. There were many reasons for the failure and collapse of UTI.

(a) UTI was forced—top officials of UTI and of the finance ministry were heavily bribed – to invest in the shares of scheming business houses and fly-by-night operators. These shares lost their value or, in some cases, they became worthless pieces of paper. UTI was made to lose thousands of crores of rupees in this way.

(b) The management of UTI was again bribed heavily by leading business houses to extend loans to them or to their subsidiaries; these loans were not repaid and became NPAs.

(c) While the basic purpose of UTI was to mobilise the savings of the poor and the middle classes, the Finance Ministry used these funds it as an instrument to support and influence the stock exchange. The UTI funds were extensively borrowed by unscrupulous stock brokers—Ketan Parekh was one – to manipulate the stock exchange, often against the interests of UTI itself.

(d) Finally, the former Finance Minister, Mr. Yashwant Sinha and the Finance Ministry officials, killed public confidence in UTI through their wrong and misleading statements about the ownership and management of UTI. They allowed large corporate members to withdraw their investments in US-64 units at high prices, when they had the secret information that UTI was about to collapse.

The complete failure of UTI was yet another glaring example of the interference and mismanagement of financial institutions by ill-qualified and corrupt Finance Ministry officials of the Government of India.

LIC and GIC

Apart from the Unit Trust of India which mobilises the savings of the public to specifically invest in the industrial securities, there are two other, investment institutions in the country—the Life Insurance Corporation of India (LIC) and the General Insurance Corporation of India (GIC). These two institutions specially LIC collect large amounts of funds from the general public to provide insurance cover but they use part of their funds to give long-term loans to the corporate sector or to acquire industrial securities (shares and debentures) from the market. Because of the large funds they are able to mobilise, these two institutions have become powerful operators in the stock exchange.

During 2006-07, LIC had disbursed term finance and other financial assistance amounting to ₹ 27,000 crores to the corporate sector.

DFIs and the Corporate Sector

It is useful to remember that the public sector financial institutions, specially IDBI, ICICI and IFCI sanctioned direct financial assistance to newly established companies to meet their block capital requirements. In the case of existing companies, direct financial assistance was made available on account of expansion of existing capacities, modernisation plans, etc.

Apart from the fact that there was considerable increase in the volume of loans sanctioned and the amount disbursed by the term-lending institutions, till 2000-01 there was a noticeable rising scale of financial assistance rendered by them to the small-scale industries, to projects in backward districts and to new/small entrepreneurs. For example, in case of projects located in backward districts, sanctions and disbursements by term-lending institutions had increased substantially in recent years.

The DFIs were set up and developed to meet specifically the requirements of industry for term finance and equity capital and foreign currency resources. They were expected to overcome the inadequately developed state of the capital market and the traditional preference of the banking sector in India to meet only the working capital requirements of industry and trade. In the last four decades, the DFIs had largely succeeded in meeting their primary objective of providing funds for industrial investment. They had also tried to channel increasing flow of assistance to industrially less-developed and backward areas. Besides, they had attempted a wide range of promotional activities including :

(a) a major thrust towards entrepreneurship development programmes;

(b) identifying industrial promotion needs of deserving segments of the industrial sector and evolving measures for their growth; and

(c) providing avenues for commercialisation of indigenous resources.

Broadly, all-India development financial institutions looked after the needs of large industrial enterprises; and state level institutions (SFCs and SIDCs) were meeting the financial requirements of the small and medium sector enterprises in the respective areas of their jurisdiction.

DFIs accounted for a major share of corporate

debt, with increasing reliance of the corporate sector on them, DFIs had representation in the boards of management and also had a say in internal management of companies.

DFIs had been increasing their share in the equity of the private corporate sector, through the use of the convertibility clause and through their underwriting commitments. Along with investment institutions (LIC, GIC and UTI) their equity holdings in most major companies were considerable. They could and often did influence mergers and acquisitions.

Resources of DFIs

From the very beginning, DFIs had enjoyed a privileged and concessional access to resources through the SLR mechanism. Besides they were able to raise funds from the market at relatively low and stable rates because of the guarantee offered by the government. At the same time, the lending rates of the DFIs were low and stable but the spread between the borrowing and lending rates was reasonable and enabled the public sector financial institutions to earn a reasonable rate of return.

However,after Narasimham Committee recommendations, these conditions have changed. There had been increasing competition from other parts of the financial sector; there was pressure on the availability of privileged and concessional funds through banks' SLR investments and there was progressive deregulation of interest rates. All these points clearly indicated the need for DFIs to become more competitive, more efficient and more profitable. The DFIs were forced to raise funds from the capital market at market-related rates.

S.H. Khan Working Group on DFIs

RBI set up a high power working group headed by IDBI Chairman S. H. Khan for the purpose of harmonising the role of development financial institutions and banks. This group submitted its report to RBI towards the end of April 1998. The basic assumption of the Khan Working Group was that the conventional distinction between commercial banking and development banking was getting blurred in India and that there was need to move progressively towards universal banking. The Khan Working Group, therefore, *recommended that DFIs be allowed, to convert themselves into banks and cease as development banks..*

RBI accepted the recommendations of Khan Working Group towards the setting up of Universal banking. The first universal bank was set up by ICICI merging with ICICI Bank. IDBI disappeared with its merger with IDBI Bank in 2004.

6. NON-BANKING FINANCE COMPANIES (NBFCs)

In recent years, non-banking finance companies variously called as "finance corporations", "Loan Companies", "Finance Companies", etc., have mushroomed all over the country . These finance companies, with very little capital of their own — often less than ₹ 1 lakh — have been raising deposits from the public by offering attractive rates of interest and other incentives. They advance loans to wholesale and retail traders, small-scale industries and self-employed persons. Bulk of their loans are given to parties which do not either approach commercial banks or which are denied credit facilities by the latter. The finance companies give loans which are generally unsecured and the rate of interest charged by them may range anywhere between 24 to 36 per cent per annum. Besides giving loans and advances to the small sector, NBFCs, incoporated under the companies Act 1956, run chit funds, purchase and discount hundis, and have also taken up merchant banking, mutual funds, hire-purchase, leasing, etc.

Historically, after Independence, all-India financial institutions like IFCI, ICICI, IDBI and others played a very important role in providing medium and long term credit to various sectors of the economy. By the beginning of the 21st century, these financial institutions – called variously as public sector term lending financial institutions, development financial institutions, etc. – declined in importance and some of them disappeared (ICICI and IDBI) and some were wound up (IDBI). Some specialized lending and refinance institutions like Import Export Bank of India, National Housing Bank (NHB), NABARD, SIDBI and Tourism Finance Corporation of India have continued to grow in importance by generally providing refinance to banks and other financial companies. LIC is also a financial institution which deploys its assets largely in marketable securities. State Finance Corporations (SFCs) and State Industrial Development Corporation (SIDCs) and North Eastern Development Finance Corporation Ltd. (NEDFI) are notified public sector financial corporations. All these non-banking financial institutions are mostly government-owned and they have been providers of long-term project loans.

Other non-banking institutions include wide variety of intermediaries such as insurance companies, non-banking financial companies, primary dealers, capital market intermediaries such as mutual funds.

RBI itself accepts the attractiveness of NBFC's : "Simplified sanction procedures, orientation towards customers, attractive rates of return on deposits and flexibility and timelines in meeting the credit needs of specified sectors (like equipment leasing and hire purchase)

are some of the factors enhancing the attractiveness of this sector."[1]

Essentially, these finance companies are banks, since they perform the basic twin functions of attracting deposits from the public and making loans. RBI again argues : "... The rapid growth of NBFCs especially in the nineties, has led to a gradual blurring of dividing lines between banks and NBFCs, with the exception of the exclusive privilege that commercial banks exercise in the issuance of cheques."[2]

Since NBFCs are not regarded as banking companies, they did not come under the control of RBI, there is no minimum liquidity ratio or cash ratio, no specific ratio between their owned funds and deposits. That the depositors of these companies are subject to extreme insecurity is clear from the fact that :

(a) bulk of their loans are unsecured and are given to very risky enterprises and hence their charging high rates of interest;

(b) the loans, though given for short periods, can be and are renewed frequently and thus become long-term loans;

(c) as there is no exchange of communication between different companies, it is possible for a person or party to borrow from more than one finance company; and

(d) the deposits of the public with the finance companies are not protected by the Deposit Insurance Corporation.

Chart 3 shows how RBI has classified the non-banking sector in the country under three categories, *viz.*: non-banking financial companies (NBFCs), mutual benefit financial companies (MBFCs) and miscellaneous non-banking companies (MNBCs). Properly speaking, only the first really qualifies to be called NBFCs— namely, those receiving deposits from the public under any scheme and lending in any manner. MBFCs and MNBCs are now regulated by the Department of Company Affairs, Government of India and are not considered as NBFC.

In a sense, NBFC ***resembles*** a banking company since it receives deposits from the public and lends the same to ready parties. It is not, however, a ***bank*** because it is not incorporated as a bank and is not governed by the provisions of the Banking Regulation Act, 1949—hence it is called a ***non-banking financial company***.

The RBI has mentioned 5 kinds of NBFCs (see chart - 3). Of these, there are four clearly defined categories of NBFCs, viz. (a) Leasing Finance Companies, (b) Hire-Purchase Finance Companies, (c) Loan Finance Companies and (d) Investment Finance Companies. The RBI mentions one more NBFC - the fifth category which cannot be classified under any of the first four categories. Hence the RBI has called them Residuary Non-Banking Companies (RNBCs). According to the RBI, there are only four such companies registered under section 451 A of the RBI Act, 1934 (amended in 1997).

Financial Position of NBFCs

NBFCs provide a wide range of financial services such as leasing and merchant banking. The financial services sector is teeming with over 40,000 NBFCs and

CHART 3 : Types of Non-banking Financial Institutions

(Regulated by RBI)

Institution	*Principal Business*
I Non-banking Financial Company (NBFC):	The principal business is receving deposits from the public under any scheme and lending in any manner.
(a) Equipment Leasing Company *	Equipment leasing or financing of such activity.
(b) Hire Purchase Finance Company*	Hire purchase transactions or financing of such transactions.
(c) Investment Company	Buying and selling of securities. These include Primary Dealers (PD who deal in underwriting and market making for government securities.
(d) Loan Company	Making loans or advances for an activity other than its own.
(e) Residuary Non-banking Company (RNBC)	Receives deposits from the public under any scheme but it does not belong to any of the categories mentioend above (under NBFC).
II. Mutual Benefit Financial Company (MBFC)	Any company which is notified by the Central Government as a *Nidhi* company under Section 620A of the Companies Act, 1956.
III. Miscellaneous Non-banking Company (MNBC)	Manages conducts and supervises *chit funds*.

* Under a new classification adopted by RBI in 2006, these are called as "Asset Finance Companies (AFCs)

1. RBI, *Trends and Progress of Banking in India (2000-01)*, p. 123.
2. *Ibid*, p.123.

their number continued to grow by about 4,000 per year. The RBI *Report on Currency and Finance,* (1997-98) gave some interesting statistics regarding the financial position of NBFCs. For instance, during 1996-97, the aggregate deposits of 13,970 NBFCs totalled upto ₹ 3,57,150 crores as compared to ₹ 295,340 crores in the previous year — marked increase of nearly 21 per cent. The large financial companies numbering 2,376 alone accounted for 63 per cent of the total deposits and the smaller companies accounted for the balance.

Surprisingly RBI has not estimated and published similar statistics for the succeeding years. RBI openly confessed that there were innumerable small financial companies about which it had no information at all, not even their addresses.

After 1997, it became obligatory for NBFCs to register with RBI. By the end of March 2006, RBI had received 38,244 applications for registration. At the end of June 2007 RBI had approved 12,968 applications.

Table 4 : Number of NBFCs registered with RBI
(end June)

	All NBFCs	*No. of deposit accepting NBFCs*
1999	7,855	624
2002	14,077	784
2007	12,968	373
2008	N.A.	333
2009	N.A.	275

Source: Economic Survey, 2007-08. RBI, Report on Trend and Progress of Banking in India, 1999-2000, 2006-07, 2007-08.

N.A. : Not Available

Table 5 shows the financial position of NBFCs in recent years. The aggregate deposits of the deposit taking NBFCs amounted to ₹ 24,305 crores at the end of March 2008.

Table 5: Financial Position of NBFCs (as at end-March)
(₹ crores)

	1998	*2001*	*2007*	*2008*	*2009*
No reporting	1,430	981	466	335	277
Total assets of which	34,790	53,880	71,170	94744	NA
Public deposits	13,570	18,080	24,670	24305	21548

Source: Report on Trend and Progress of Banking in India, 1999-2000, 2006-07, 2007-08. GOI : Economic Survey, 2007-08, Chapter 3. Hand book of statistics on Indian Economy, 2009-10.

Table 6 shows that the total assets of NBFC sector had increased from ₹ 34,790 crores to ₹ 94,744 crores between 1998 and 2008. During the period (1998-2009) public deposits mobilised by NBFCs had increased from ₹ 13,570 crores to ₹ 21,548 crores.

It is important to remember that

(a) RBI has ***no precise information*** about the number of NBFCs, their total assets, the volume of deposits they have raised, etc;

(b) all the financial information given in Table 3 is based on the reports by ***a few NBFCs only***; and

(c) there are thousands of NBFCs, both big and small, which do not report to RBI at all.

Legislative Control of NBFCs

NBFCs do not have any specific legislation governing them. Instead, they come under three different authorities:

(a) Being limited liability companies, NBFCs are governed by the Companies Act, 1956 which does not even contain the definition of a finance company. Application of general provisions of this Act, perforce, has invited avoidable violations by NBFCs.

(b) In the matter of deposits, NBFCs are governed by Non-banking Financial Companies (Reserve Bank) Directions, 1997.

(c) NBFCs which engaged in merchant banking and portfolio management services are governed by SEBI.

NBFCs have thus been working under a complex web of directives and guidelines formulated from time to time. Inevitably, some of the directives are viewed by NBFCs as being formulated in arbitrary manner, and at odds with practical realities. They have demanded separate legislation to guide and control them.

In May 1992, RBI constituted a working group under the chairmanship of Dr. A.C. Shah to conduct a comprehensive study of finance companies and recommend measures to facilitate their healthy growth. In its report submitted in September 1992, the Shah Working Group recommended specific regulations for companies with net owned funds of ₹ 50 lakhs and above and prescribe entry norms for new financial companies. It also prescribed capital adequacy standards, prudential norms for income recognition and provisions for bad and doubtful debts. RBI accepted the group's recommendations and started implementing them in phases.

In the mean time, instead of accepting their industry's demand for a separate and comprehensive law for NBFCs, the Government of India enacted the Reserve Bank of India (Amendment) Act, 1997 which confers wide ranging powers on RBI for controlling the functioning of non-banking financial companies.

Salient Features of RBI Amendment Act, 1997

The Act defines a non-banking financial company (NBFC) as a financial institution or as non-banking institution which has, as its principal business, the receiving of deposits under any scheme or arrangement and lending in any manner. Institutions carrying on agricultural or industrial activity as their principal business are excluded from the definition of NBFC.

RBI has taken a series of measures to enhance the regulatory and supervisory standards of the NBFCs and to bring them at par with commercial banks over a period of time. These include:

1. Secure a certificate of registration from RBI, the net owned funds (NoF) should be ₹ 2 crores (initially only ₹ 25 lakhs).

2. There is a quantum of public deposits which can be received by an NBFC, depending upon whether it is a loan and investment company or whether it is a leasing and hire-purchase company, and so on—fixed between 1.5 times to 4 times NoF.

3. NBFCs have to invest at least 5 per cent of their assets in unencumbered approved securities.

4. Every NBFC has to create a reserve fund and transfer at least 20 per cent of its net profit every year to the reserve fund.

5. Prudential norms are fixed for those NBFCs which are raising public deposits. For instance, such NBFCs should maintain Capital to Risks Asset Ratio (CRAR) comprising TIER I and II Capital:

12% for leasing, hire-purchase finance companies.

15% for loan and investment companies, and

12% for RNBCs.

Certain norms were prescribed for all NBFCs whether they hold or receive public deposits or not.

6. Under RBI regulations, RNBCs are required to invest not less than 80 per cent of aggregate liabilities with the depositors in Government securities, Government-guaranteed bonds, debentures, etc. RBI has reviewed these regulations.

7. All registered NBFCs should submit half yearly returns to RBI at the end of March and September every year. As non-submission of periodic returns to RBI was a common feature, RBI has now decided to impose penalties besides cancellation of certificates of registration and permission to receive deposits from the public.

The RBI is now entrusted with the following powers:

(a) specify from time to time a minimum percentage of investment for NBFCs in unencumbered "approved" securities;

(b) determine their policies and give directions to any or all NBFCs on capital adequacy, provisioning and other prudential norms, as also on the deployment of funds (similar to those applicable to banks);

(c) direct them on balance sheet, profit and loss accounts and disclosure of liabilities,

(d) levy fines and penalty on a NBFC for contravention and default, as also cancel its registration,

(e) prohibit an NBFC from accepting deposits and alienate its assets; and

(f) file a winding up petition for continued violation of the provisions of the Act and / or failure to comply with any direction or orders of the RBI.

Future of NBFCs

The NBFCs are now emerging as a growing segment of the Indian financial system and both the Government and RBI appreciate the need for their orderly and healthy development with appropriate prudential safeguards. The failure of the ₹ 1,200 crores CRB Capital – a well-known NBFC – in May 1997 focussed the need to regulate the working of NBFCs. It is to regulate NBFCs and to improve their financial health that the amendment to RBI Act 1934 was carried out. It, however, appears from the present experience of recent months that RBI has neither the necessary manpower, nor the capacity to control and supervise effectively the activities of all NBFCs — or even the major ones.

Merchant Banking

Initially, commercial banks set up merchant banking divisions, which later became separate merchant banking subsidiaries. A few merchant banks have been set up by private financial service companies in association with foreign banking and money market institutions, and some have been set up by firms and individuals engaged in brokerage and financial advisory business.

Merchant banks in India manage and underwrite new issues; they undertake syndication of credit; they advise corporate clients on fund raising and other financial aspects. Unlike merchant banks abroad, Indian merchant banks do not undertake banking business, viz., deposit banking, lending and foreign exchange services.

The merchant banks were subject to two types of authorities :

(a) The Securities and Exchange Board of India (SEBI) sought to authorise and regulate all merchant banks on issue activity and portfolio management of their business; and

(b) RBI supervised those merchant banks which were subsidiaries or affiliates of commercial banks. If the merchant banks were to raise deposits, they would have to be subject to the guidelines issued by RBI.

The Narasimham Committee (1991) saw considerable potential for the operation of merchant banks in the framework of deregulated industrial economy. The merchant banks were emerging as financially strong and independent. The Committee would like the

Government to encourage the formation of joint ventures with well-reputed international merchant and investment banks. The Committee would also like the merchant banks to have access, in course of time, to the market for deposits and borrowed resources, subject to the observance of prudential norms specially tailored to the conduct of their business.

Merchant banking has been statutorily brought under the regulatory framework of SEBI and has to be authorised by the latter. Merchant bankers have to adopt the stipulated capital adequacy norms, abide by a code of conduct which specifies a high degree of responsibility towards investors in respect of pricing and premium fixation of issues and disclosures in the prospectus or offer letters for fresh issues of capital. Merchant bankers have now a great degree of accountability in the offer document and issue process.

Leasing and hire-purchase companies

A large number of leasing companies have been floated recently, but several of them disappeared as they were under-capitalised and badly managed. Leasing has proved a popular financing method for acquiring plant and machinery specially for small and medium sized enterprises. Their growth is due to advantages of speed, informality and flexibility to suit individual needs.

The Narasimham Committee has recognised the important and growing role of leasing and hire-purchase companies in the financial intermediation process, and has recommended that :

(*i*) a minimum capital requirement should be stipulated;

(*ii*) prudential norms and guidelines in respect of conduct of business should be laid down; and

(*iii*) supervision should be based on periodic returns by a unified supervisory authority.

7. MUTUAL FUNDS

In recent years, mutual funds are the most important among the newer capital market institutions. Several public sector banks and financial institutions have set up mutual funds on a tax-exempt basis, virtually on the same footing as Unit Trust of India (UTI). Their main function is to mobilise the saving of the general public and invest them in stock market securities. Accordingly, they attracted strong investor support and showed significant progress. There was even diversion of savings of the middle classes from banks to mutual funds. The Government threw the field open to the private sector and joint sector mutual funds.

Regulation of Mutual Funds by SEBI

SEBI has the authority to lay guidelines and supervise and regulate the working of mutual funds. The guidelines issued by SEBI relate to advertisements and disclosure and reporting requirements. The investors have to be informed about the status of their investments in equity, debentures and government securities. SEBI has introduced a uniform set of regulations governing the mutual funds in the country, known as SEBI (Mutual Fund) Regulations, 1993, under which :

(*a*) mutual funds have to be formed as trusts and managed by a separate asset management company (AMC) and supervised by a board of trustees;

(*b*) the AMC must have a minimum net worth of ₹ 6 crores, of which the sponsors must contribute at least 40 per cent;

(*c*) SEBI should approve the offer documents of schemes of mutual funds;

(*d*) SEBI prescribes the minimum amounts to be raised by each scheme — a close-ended scheme should raise a minimum of ₹ 20 crores and open-ended schemes should raise a minimum of ₹ 50 crores. In case, the amount collected falls short by the prescribed minimum, the subscription amount must be refunded within a period of six weeks;

(e) the advertisement code prescribes norms for fair and truthful disclosure by the mutual funds in advertisements and publicity materials.

Growth of Mutual Funds

In the 1990s, MFs found it hard to attract investors. The competition for funds was hotting up from banks and the Government. With the Government offering interest rates of nearly 14 per cent for medium term securities — the Government of India proposed to offer 10-year paper on tap with a coupon rate of 14% — and banks pegging short term rates at 12 per cent, investors were focusing on debt instruments which were gaining popularity over equity. HDFC, leading housing finance company was offering 14% interest on fixed deposits; IDBI had decided on a 15.75% for a twin-bond issue.

Under these conditions, it was difficult for mutual funds to rival such high yields on debt instruments. They also found it hard to meet the high expectations of investors who were yet to break out of the get-rich-quick syndrome. Accordingly, the first wave of mutend funds failed.

The performance of mutual funds was not encouraging for many years. Investor confidence in mutual funds was low. This could be attributed partly to lack of confidence and partly to stock market conditions which had affected the perception of investors.

The revival of the MF market since 1995-96 was due to the entry of corporate majors—the Tatas, Birlas, Reliance and SBI. Many others followed with products designed for investor specific needs. They also offered improved liquidity, easy exit routes and regular income flows. All these changes coincided with the revival of the stock market. Sensex, for instance, crossed 6,000 mark in February 2000. Investors left the banking system and flocked to the mutual funds. This period of booming stock exchanges and mutual funds was, however, short lived.

After Ketan Parekh incident, the stock market crashed with sensex touching 2,600 (with 1974-75 = 100) during 2001-02. This led to a two-year period of recession in the MF market. In the mean time, the Unit Trust of India (UTI), the public sector mutual fund went through a crisis and had to be restructured. As a result, the share of the private sector MF companies increased considerably.

The overall assets under management (AUM) declined from 1,02,830 crores to ₹ 89,240 crores between April 2002 and 2003, but later rose rapidly to ₹ 3,26,290 crores by March, 2007. The Mutual Fund companies are now mobilising about ₹ 90,000 crores annually.

8. VENTURE CAPITAL FUNDS

Venture capital financing is one of the more recent entrants into the capital market. There is significant scope for them in the context of emergence of technocrat entrepreneurs who have technical competence and expertise but lack venture capital. Financial institutions generally insist on greater promoter contribution to investment financing, in which case, the technorcrat entrepreneurs need the support of venture capital companies. The importance of venture capital companies is to give commercial support to new ideas and for the introduction and adaptation of new technologies. There is high degree of risk involved in venture capital financing.

The Narasimham Committee has found that the guidelines given for the setting up of venture capital companies are too restrictive and unrealistic and have come in the way of their growth. The Committee would like the Government to review and amend the guidelines so as to widen the scope of eligibility criteria and impart a measure of flexibility to the operation of venture capital companies. As there is high risk in venture capital financing, the Narasimham Committee has recommended a reduction in tax on capital gains made by these companies and equality of tax treatment between venture capital companies and mutual funds.

The Union budget for 1999-2000 stressed the need for higher investment in venture capital activity. The Government launched the National Venture Fund for Software and IT Industry (NVFSIT) to provide funds for technology development/demonstration, especially for small and medium industries. NVFSIT is managed by Small Industry Development Bank of India (SIDBI). The SEBI Committee on venture capital under the chairmanship of Mr. K. B. Chandrasekhar has made many recommendations to facilitate the creation of a pool of risk capital to finance idea-based entrepreneurship with a disproportionate potential reward-to-cost ratio. The 2000-01 budget has further liberalised the tax treatment of venture capital funds to serve as a strong boost for NRIs in Silicon Valley and elsewhere to invest some of their capital, knowledge and enterprise in ventures in India. SEBI has been made the single point nodal agency for registration and regulation of both domestic and overseas capital funds. In recent years, venture capital is entering India in a big way because of the rapid growth of IT and other industries.

9. OTHER FINANCIAL INTERMEDIARIES

Infrastructure Leasing and Financial Services Ltd. (IL&FS)

IL & FS, set up in 1988, focusses on leasing of equipment and infrastructure development. The company has been provided a mandate for structuring the finances of major projects in the power and transportation sector. The company has identified several infrastructure projects in association with State Governments and Central Government agencies. Since 1994-95 IL & FS made significant progress in commercialisation of infrastructural projects. It was associated with various Central and State Government agencies for developing infrastructure projects in roadways, power generation, telecommunications, water supply, water transport system, etc.

In the field of investment banking, IL&FS undertakes merchant banking activity and has played a major role in structuring the sale of marketable securities to project finance requirements of the corporate clients. IL&FS is actively engaged in the money and gilt-edged markets for trading in government securities, bonds of public sector undertakings, corporate debentures and units.

The Credit Rating Information Services of India Ltd. (CRISIL)

CRISIL, set up in 1988, is a credit rating agency. It undertakes the rating of fixed deposit programmes, convertible and non-convertible debentures and also credit assessment of companies. Till March 1996, CRISIL has rated debt instruments issued by public sector and private

sector companies covering a total volume of ₹ 1,15,000 crores. It has developed CRISILCARD service to provide information to Indian companies. The service provides details about a company such as business it is engaged in, shareholding pattern, key management personnel, plant locations, equity share record, analysed profit and loss accounts and balance sheets for the past four years, accounting practices, key financial ratios, raw material consumption, major competitors, major lenders, excerpts from the Directors' report and events after the balance sheet date.

Apart from rating instruments like convertible and non-convertible debentures and fixed deposit programmes, CRISIL had also rated commercial paper programmes and also completed credit assessment of 78 companies. Again, for the first time, CRISIL rated the "auto-loan" of Citi Bank—an asset backed security. During 1992-93, CRISIL had launched banking rating services and had rated proposed debt instruments of three rationalised banks and one private sector bank. CRISIL introduced CRISIL - 500 Equity Index during 1995-96.

The services of CRISIL are being appreciated by similar agencies of other countries. During 1991-92 CRISIL provided technical assistance and training to Rating Agency Malasia Berhad. It has also agreed to give assistance and provide training to the staff of MALLOT the Israel Securities Rating Agency. CRISIL has received similar requests for assistance from Indonesia, Pakistan and Sri Lanka.

Apart from CRISIL, there is another credit rating agency called Investment Information and Credit Rating Agency of India Limited (ICRA). It rates debt instruments of both financial and manufacturing companies.

Stock Holding Corporation of India Ltd. (SHCIL)

SHCIL has been sponsored by seven all-India financial institutions, viz., IDBI, IFCI, ICICI, UTI, LIC, GIC and IRBI. The principal objective of the Corporation is to introduce a book-entry system for the transfer of shares and other type of securities replacing the present system that involves voluminous paper work. The SHCIL is currently handling market operations and providing custodial services to UTI, LIC Mutual Fund, LIC and GIC and its subsidiaries. The Corporation is also the trustee of LIC Mutual Fund and GIC Mutual Fund for holding and dealing in their securities.

The Government of India has directed that SHCIL should cover all public sector banks and all subsidiaries and mutual funds set up by the public financial institutions and public sector banks.

Among other development financial institutions we should mention the following:

Housing Finance: The Housing and Urban Development Corporation of India Ltd. (HUDCO) is a national level institution which gives loans to individuals and societies specifically for building houses and flats. 70 per cent of HUDCO's loans are reserved for economically weaker sections and lower income groups (65 per cent) and rural areas (15 per cent). Till March 1996, HUDCO had financed 11,820 projects with HUDCO's loan commitment of ₹ 16,580 crores. This has meant the construction of 5.3 million houses, about 46 per cent of them are located in rural areas. HUDCO along with the Union Ministry of Urban Development is deeply concerned in improving the quality of construction, promotion of appropriate technologies and improve the skills and economic conditions of building artisans.

Housing Development Finance Corporation Ltd (HDFC) is another national level housing finance institution. It was set up in 1977 by ICICI to provide long term finance to individuals in middle and lower income groups, cooperatives, etc. for the construction and purchase on ownership basis of residential houses all over the country. HDFC has set up the HDFC bank to function like any other banks's HDFC and HDFC Bank are quite successful. HDFC has entered into a joint venture agreement with the Standard Life Assurance Company of U.K. to establish an insurance company in India.

National Housing Bank (NHB) is a subsidiary of the Reserve Bank of India and has been set up to promote financing of housing in India. NHB promotes the flow of funds particularly in rural areas and its easy accessibility to the needy rural population. NHB has announced a "Direct financing scheme for housing for women" of economically weaker sections and lower income group categories. Under this scheme, NHB directly finances the projects of public agencies and local bodies.

10. STOCK EXCHANGE IN INDIA

In a modern capitalist economy, almost all commodities, even the smallest, are produced on a large scale; and large-scale production implies large amounts of capital. The joint stock company or the corporate form of organisation is ideally suited to secure large amounts of capital from all those who have surplus funds and who are willing to take risks in investing in companies. It issues stocks and bonds and enables those with surplus funds to invest them profitably in either of them, according to their convenience and temperament. An investor who puts his savings in a company by buying its securities cannot get the amount back from the company directly. The only way the capital invested in stocks and shares of a joint stock company may be realised by its owner is through the sale of those stocks and shares to others. *The stock market or*

exchange is a place where stocks and shares and other long-term commitments or investments are bought and sold. For the existence of the capitalist system of economy and for the smooth functioning of the corporate form of organisation, the stock exchange is, therefore, an essential institution.

History of Stock Exchanges in India

The first organised stock exchange in India was started in Bombay when the Native Share Stock Brokers' Association known as the Bombay Stock Exchange (BSE) was formed by the brokers in Bombay. BSE was Asia's oldest stock exchange. In 1894, the Ahmedabad Stock Exchange was started to facilitate dealings in the shares of textile mills there. The Calcutta Stock Exchange was started in 1908 to provide a market for shares of plantations and jute mills. The Second World War saw great speculative activity in the country and the number of stock exchanges rose from 7 in 1939 to 21 in 1945. Besides these organised exchanges, there were a number of unorganised and unrecognised exchanges known as kerb markets which functioned under a set of usages and conventions and did not have any set of rules which could be enforced in courts of law. There were also illegal "Dabba' markets in which stocks and shares were also bought and sold.

Under the Securities Contract (Regulation) Act of 1956, the Government of India has so far recognised 23 stock exchanges. Bombay is the premier exchange in the country. With the setting up of National Stock Exchange, all regional stock exchanges have lost relevance.

How Business is Transacted in a Stock Exchange

A typical investment transaction will consist of four stages :

(a) Placing an order with a broker : A client places his order with a stock broker who alone is entitled to transact business in a stock exchange either to buy or to sell the shares of a company at fixed prices or at best market prices.

(b) Execution of the order: The broker or his authorised clerk will execute the order and the same will appear in the Stock Exchange Daily Official List which will include the number and price of shares which exchanged hands.

(c) Reporting the deal to the client: As soon as the deal is transacted, the broker sends a contract note to the client giving details of the security bought or sold, the price, the broker's commission, etc.

(d) Settlement of transactions: There are two methods of settlement of transactions . In the case of ready delivery (or cash) transactions, payment has to be made immediately on the transfer of the securities or within a period of one to seven days. In the case of forward delivery contracts, the settlement is made on a fixed day--it is generally fortnightly, though in some stock exchanges like Chennai, it is weekly. In the case of forward delivery, there is a system of carry-over i.e. postponement of delivery or payment involving a payment by one to another). This system of carry-over provides great scope for speculation in the forward market.

Speculation and Stock Exchange

A high degree of speculation is associated with stock exchanges in India. There are two types of transactions in a stock exchange, viz., investment transactions and speculative transactions. Investment transactions refer to purchase or sale of securities undertaken with the long-term prospect relating to their yield and price. An investment transaction normally involves the actual delivery of the security and the payment of its full price. Actually, no stock exchange can operate purely on the basis of investment buying and selling alone, ***since pure investors cannot provide the requisite volume of business or continuity of business*** which alone will ensure correct valuation of the shares according to their real worth. Investment transactions are, therefore, supplemented by speculative transactions.

In a speculative transaction--buying or selling--the delivery of securities or the payment of full price are rare; instead, only the differences in prices are paid or received. The predominance of speculative transactions over investment transactions in a stock exchange is due to the fact that the latter involve a larger volume of money (as securities bought have to be paid in full) while speculative transactions are possible with smaller amounts of money (as delivery of securities and payment of full price are rare).

Speculative transactions too are of different types depending upon whether a transaction is settled in spot, ready and forward markets. A spot transaction implies that delivery of and payment for securities will take place on the same day. A ready delivery transaction (also known as cash transaction) is one which is completed in a short period of time, i.e. the delivery of and payment for securities will be completed within a specified period of one to seven days. A forward transaction implies that the delivery of and payment for securities will be made on certain fixed settlement days, coming once in 15 or 30 days. Of these three different types of transactions in the stock exchange, the forward transactions provide the greatest scope for speculation.

Firstly, the settlement of transactions in the forward market involves a long period o. ime, and therefore, there is an incentive to the speculator to keep his commitments

open as long as possible. This often leads to over-speculation and over-trading in stock exchange in India.

Secondly, the dealers in the cash market have only two alternatives before them, viz., (a) to square up their transactions by offering their purchase by sale and their sale by purchase before the expiry of the time limit, or (b) to deliver the securities and accept full payment (for sale) or to take delivery of the securities and make full payment (for purchase).

The dealers in the forward market have, besides the above two alternatives, a third alternative, that is, the postponement of delivery and payment to the next settlement day by mutual consent of the two parties to the contract. *This system of carry* over, i.e., postponement of delivery and payment usually involves the payment of a consideration by one party to the other. If the buyers (bulls) want postponement--for they have undertaken to buy but do not wish to buy--for they pay a consideration to the sellers, known as contango or the *budla*. If the sellers (the bears) desire the postponement (they have undertaken to sell but do not wish to sell) they pay a consideration to the buyers for agreeing to accommodate them until the next settlement known as backwardation or *undha budla* in Indian stock exchanges.

Is Speculation Essential ?

Speculation is essential in a stock exchange for, in its absence, it is impossible to have a large volume of business so very necessary for mobility and liquidity of securities. In the absence of speculation, demand and supply of any share may not be equal and, therefore, there may be violent price fluctuations. For instance, if the demand is very much more than the supply of a share, the price of that share will shoot up and the opposite will result when the supply exceeds demand. Speculators help to promote the establishment of demand and supply equilibrium and stability of prices.

But speculation often degenerates into gambling when operations are undertaken blindly and ignorantly by speculators who hope to reap rich rewards from their operations. As a result of excessive and reckless speculation, there is considerale risk of loss to the genuine investors. The speculators themselves may actually risk little since they operate largely on borrowed capital or without capital at all.

Manipulative speculation is carried on in our stock exchanges by many methods which are generally condemned and which are not permitted either by law or by the rules governing the practices of the stock exchanges. Some of the important manipulative practices are options, wash sales, touting, inside collusion, manipulation of fundamentals, corners, etc. The purpose of manipulative speculation is to push up the prices of any particular share or group of shares through artificially pushing up the demand for them. In 1991-92, the stock exchange boom started when Harshad Mehta, an unscrupulous bull operator, flushed with funds, could push up the price of ACC shares from ₹ 300 to ₹10,000, Mazda Leasing from ₹ 5 to ₹ 1,600 and so on in a matter of a few weeks.

Illegitimate speculation has another bad effect, namely, it is infectious. In certain periods as during 1991-92 when stocks and shares are rising in prices either in a natural way or through manipulation by brokers, the spirit of get-rich-quick enters into every man's head. As a result, excepting the cool-headed, well-informed, experienced and expert dealers in the stock market who are qualified to gauge the market influences, a multitude of ignorant and excitable persons, alternately reckless and weak and afraid, begin to speculate. These speculators being ignorant of the market conditions are ultimate losers, both individually and as a class.

To conclude, moderate speculation is not only inevitable but necessary and desirable for the proper working of a stock exchange. However, speculation often degenerates into over-speculation and into illegitimate or manipulative speculation in Indian stock exchanges and thus endangers the welfare of the investors and the community as a whole. The popular prejudice against stock exchange in India is due to the existence of manipulative speculation.

Major defects in Trading in Indian Stock Exchanges

There are certain serious defects in the working of our stock exchanges, particularly the major exchanges such as Bombay Stock Exchange (BSE) :

(a) Lack of integration. There are a large number of stock exchanges in the country, though BSE dominates them with over 70 per cent of all transactions in the country. There is nothing wrong in this, because in other countries too there are many small exchanges, with one dominating (New York SE in USA and London SE in England). But the real problem in India is that there is no proper integration between all the stock exchanges--with too much variation in prices of shares in the different markets.

(b) Specified and non-specified shares. Indian stock exchanges follow the peculiar practice of classifying listed shares into "specified" group and "unspecified" group. The shares in the specified group are provided certain special facilities like settelement period, carry forward and clearing to promote speculation. At present, market liquidity is limited to these speculative shares only, whereas investors would prefer liquidity for all shares, across a broad front. The only advantage of this artificial classification is that it is highly profitable to the

ock exchange brokers through brokerage fees on the high ume of speculative business generated in these shares.

(e) Margins. The margins levied by Indian SEs on peculative transactions are wholly of discretionary aracter, varying from share to share and from day to y, ranging from zero to 40 per cent. Despite a whole ay of daily, carry forward and ad hoc margins, numerous faults take place in several SEs whenever the market shed. In other words, the imposition of margins has iled to curb excessive speculation in SEs.

(d) The system of settlement and carry forward adla) is responsible for high price fluctuations and high k exposure to market participants. It is often responsible r excessive speculation.

A person who buys shares will normally have to ke delivery and pay at the end of the settlement. The rry forward system enables him to postpone this to the xt settlement day, by paying a carry-forward premium charge, known as *badla* in India. The *badla* rate is a free arket rate and now-a days is as high as 36 per cent. Many erators find badla financing very attractive. Roughly ound three-fourths of outstanding positons at the tlement period, get carried forward to the next settlement the major Indian exchanges. According to Dr. L.C. upta, roughly ₹ 300-400 crores may be involved in badla ancing.

The carry forward system is unjustifiable and nhealthy. It is exclusively aimed at helping the spurious peculators. The liquidity provided by speculators who e not interested in paying or taking delivery on the ttlement day cannot be genuine liquidity. Above all, the rry forward system is a powerful factor behind absurdly gh levels of speculation in our stock exchanges and is of help to genuine investors who are always interested in e earliest possible settlement of transactions.

(e) Investors' interests. The trading activity in our changes has been designed and evolved to benefit *only e brokers* and the intersests of the genuine investors are nerally ignored. The investors' confidence in market achinery is weak, as most of them have a suspicion that ey are always cheated on price by the brokers.

(f) Weakness of SE management. The management ganisation and structure of Indian stock exchanges, in neral, is weak and deficient. The Governing Body (GB) a stock exchange does not have either the concern or the ill to introduce necessary reforms in trading.

Suggestions for Stock Exchange Reform

In his *Expert Study of Trading in Shares in Stock Exchanges,* Dr. L.C. Gupta made very useful and practical ggestions for changing the current trade practices in our ock exchanges. These related to the weaknesses we have eady explained.

1. *Introduction of uniform one week settlement.* All stock exchanges in the country should switch over to a uniform system of one week settlement. This would unify all the SEs on a national basis. It would reduce risk exposure of market participants due to price movements in shares. Finally, it would check the strong tendency towards excessive speculation and excessive concentration of trading activity in a few shares only. Uniformity would make inter-market transactions easier and reduce cost and delay. It would assure market's financial integrity at all times and this would promote investors' confidence. It would remove investors' complaint of long delay--in certain cases upto 3 months-- and exposure to greater risk of default in payment/delivery.

2. *Marking to the market system.* The system of margin trading was defective and failed to prevent over-speculation and default. Dr. L.C. Gupta suggested two alternatives. The first was to adopt the margin trading system of U.S.A. under which commercial banks finance stock market trading. In this system, the buyer has to put up at least 50 per cent of the value of the shares purchased and also pledge the share with a bank in actuality (for, the bank will pay the balance, and the seller will get his full payment). Under this system, there would be a better control over speculation if we can change to margin trading supported by bank financing.

The second alternative was known as the marking to the market system on a daily basis. If there was a price change at the end of the trading day, one side would receive debit for a loss and the other side would receive a credit for a gain. The debits to a member's account every day would at once reveal if he was heading towards default. If the debits resulted in negative balance in a member's cash clearing account on any day, he was at once stopped from transacting any further business. In the present system, a member could continue to trade for many days even after losses had made him bankrupt. In the proposed system, the problem was not allowed to accumulate even for a day, not to speak of a whole fortnight or longer period as at present. This system of marking to the market system required complete computerisation of the trade data but it would be a complete fool-proof system, and would guarantee the financial integrity of the market at all times.

3. *Abolish the system of carry forward.* The system of carry forward has been the most important factor for over-speculation in India and it has to be done away with. In fact, with one week settlement and with the adoption of the system of marking to the market, the rationale of the carry forward system disappears automatically. If the stock exchanges were to accept only the two suggestions of one week settlement and the abolition of the carry forward system, many of the problems of stock exchanges would be over.

4. ***Market making.*** In all leading stock exchanges, like London and New York, there are market makers who are given market making responsiblities for specific shares. The market maker assumes the responsibility for both buying and selling a share at given prices. He is an integral part of the trading mechanism and arrangements. He protects the investors from being exploited by stock brokers and he ensures that the transactions are carried out at the best market rate. Besides, he ensures prompt execution of transactions and thus ensures liquidity. If this suggestion is accepted and implemented, the investors will be fully protected and all the listed shares will get liquidity.

5. ***Management Information system.*** It is essential that information should be available for each stock exchange about trading volume and prices, about trading concentration in individual securities, trading concentration by stock exchange members, etc. In other words, every stock exchange should introduce a well-designed management information system (MIS) capable of producing relevant information which could be used by the stock exchange authorities for restricting and regulating market on proper lines.

6. ***Governing Body (GB) and Mangement of Stock Exchanges.*** Two other changes should be immediately adopted. First, the ***Executive Director*** of a stock exchange should be appointed by the Government or by SEBI on the advice of a panel of independent experts, so as to make him independent of the conrol of stock brokers.

The composition of GB of stock exchanges should be changed to 50 : 50, between broker-directors and non-broker independent directors. This is necessary to make the governing body to be objective and direct and control the stock exchange trading from the point of the country as a whole and not exclusively for the benefit of member-brokers.

Most of the recommendations of Dr. L.C. Gupta were accepted and implemented.

The Bombay Stock Exchange (BSE) transformed itself into a corporate entity from being a brokers association, from the middle of August 2005. As a public limited company, BSE is obliged to dilute stock brokers stake to 49 per cent. Towards this end, BSE may bring in strategic investors, or possibly go for IPO or may go for both. These changes have been brought about by SEBI's notification on the BSE (Corporatization and Demutualization) Scheme, 2005.

11. SEBI AND CAPITAL MARKET REFORMS

The functioning of the stock exchanges in India has shown many weaknesses, with long delays, lack of transparency in procedures and vulnerability to price rigging and insider trading. To counter these shortcomings and deficiencies and to regulate the capital market, the Government of India set up the Securities Exchange Board of India in 1988. Initially, SEBI was set up as a non-statutory body but in January 1992 it was made a statutory body. SEBI was authorised to regulate all merchant bankers on issue activity, lay guidelines and supervise and regulate the working of mutual funds and oversee the working of stock exchanges in India. SEBI, in consultation with the Government, has taken a number of steps to introduce improved practices and greater transparency in the capital markets in the interest of the investing public and the healthy development of the capital markets:

The Capital Issues (Control) Act, 1947 governed capital issues in India so as ensure sound capital structure for corporate enterprises, to promote rational and healthy expansion of the joint stock companies in India and to protect the interests of the investing public from the fraudulent practices of fast operators. The capital issues control was administered by the Controller of Capital Issues (CCI) according to the principles and policies laid down by the Central Government. The Narasimham Committee on the Reform of the Financial System in India (1991) recommended the abolition of CCI and wanted SEBI to protect the investors and take over the regulatory function of CCI. The Government of India accepted this recommendation, repealed the Capital Issues (Control) Act, 1947 and abolished the post of CCI. Companies were allowed to approach the capital market without prior government permission subject to getting their offer documents cleared by SEBI. In other words, SEBI was given the power to control and regulate the new issue market as well as the old issues market (commonly known the stock exchange).

Primary Market Reforms in India

SEBI has introduced various guidelines and regulatory measures for capital issues. Companies issuing capital in the primary market are now required to disclose all material facts and specific risk factors with their projects; they should also give information regarding the basis of calculation of premium leaving the companies free to fix the premium. SEBI has also introduced a code of advertisement for public issues for ensuring fair and truthful disclosures.

In order to encourage Initial Public Offers (IPO) SEBI has permitted companies to determine the par value of shares issued by them (i.e. SEBI has now dispensed with fixed par values of ₹ 10 and ₹ 100). SEBI has allowed issues of IPOs to go for "book building" - i.e. reserve and allot shares to individual investors. But the issuer will have to disclose the price, the issue size and the number of securities to be offered to the public.

In recent years, ***private placement market*** has become popular with issuers because of stringent entry and disclosure norms for public issues. Low cost of issuance, ease of structuring investments and saving of time lag in issuance has led to the rapid growth of private placement market. Total resource mobilisation through private placement market had increased sharply from ₹ 13,360 crores during 1995-96 to nearly ₹ 50,000 crores during 1998-99.

To reduce the cost of issue, SEBI has made underwriting of issue optional, subject to the condition that if an issue was not underwritten and was not able to collect 90% of the amount offered to the public, the entire amount collected would be refunded to the investors. The lead managers have to issue due diligence certificate which has now been made part of the offer document.

SEBI has raised the minimum application size and also the proportion of each issue allowed for firm allotment to institutions such as mutual funds. SEBI has also introduced regulations governing substantial acquisition of shares and take-overs and lays down the conditions under which disclosures and mandatory public offers have to be made to the shareholders.

Merchant banking has been statutorily brought under the regulatory framework of SEBI. The merchant bankers are now to be authorised by SEBI. They have to adopt the stipulated capital adequacy norms, abide by a code of conduct which specifies a high degree of responsibility towards investors in respect of pricing and premium fixation of issues and disclosures in the prospectus or offer letters for issues. Merchant bankers have now a greater degree of accountability in the offer document and issue process.

In order to induce companies to exercise greater care and diligence for timely action in matters relating to the public issues of capital, SEBI has advised stock exchanges to collect from companies making public issues, a deposit of one per cent of the issue amount which could be forfeited in case of non-compliance of the provisions of the listing agreement and, non-despatch of refund orders and share certificates by registered post within the prescribed time.

SEBI has advised stock exchanges to amend the listing agreement to ensure that a listed company furnishes annual statement to the stock exchanges showing the variations between financial projections and projected utilisation of funds in the offer documents and the actual utilisation. This would enable the share-holders to make comparisons between promises and performance.

The Government has now permitted the setting up of private mutual funds and a few have already been set up. UTI has now been brought under the regulatory jurisdiction of SEBI. All mutual funds are allowed to apply for firm allotments in public issues. To improve the scope of investments by mutual funds, the latter are permitted to underwrite public issues. Further, SEBI has relaxed the guidelines for investment in money market instruments. Finally, SEBI has issued fresh guidelines for advertising by mutual funds.

SEBI vets offer documents to ensure that all disclosures have been made by the company in the offer document. All the guidelines and regulatory measures of capital issues are meant to promote healthy and efficient functioning of the issue market (or the primary market). Despite all these steps, there are flagrant breaches of issue procedures through collusion between unscrupulous promoters and corrupt officials in the lead banks and even of the top officials of SEBI, as was the case of the now famous or infamous M.S. Shoes East Ltd. whose mega-issue was literally aborted by SEBI in February-March 1995, soon after the issue was made public and subscribed.

Global Depository Receipts (GDRs) : Since 1992, the Government of India allowed Indian companies to access international capital markets through dollar and Euro equity shares. Up to January 1995, Indian companies had raised US $3.6 billion through launching GDR issues, and US $1.1 billion through launching Euro Convertible Bonds (ECBs). Initially, the Euro-issue proceeds were to be utilised for approved end uses within a period of one year from the date of issue. Since there was continued accumulation of foreign exchange reserves with RBI and there were long gestation periods of new investment, the Government required the issuing companies to retain the Euro-issue proceeds abroad and repatriate only as and when expenditure for the approved end uses were incurred.

The Government of India has also liberalised investment norms for NRIs so that NRIs and Overseas corporate bodies can buy shares and debentures without prior permission of RBI subject to an upper limit of 10 per cent by any one FII in an Indian entity.

Secondary Market Reforms in India

SEBI has started the process of registration of intermediaries, such as the stock brokers and sub-brokers under the provisions of the Securities and Stock Exchange Board Act, 1992. The registration is on the basis of certain eligibility norms such as capital adequacy, infrastructure, etc. There has been much opposition and resistance to this step of SEBI. SEBI has also made rules for making client/broker relationships more transparent, in particular,

segregating client and broker accounts.

SEBI has notified regulations on insider trading under the provisions of SEBI Act. Such regulations are meant to protect and preserve the integrity of stock markets and, in the long run, help inspire investor confidence in the stock exchange. Despite these regulations, ***insider trading is rampant*** in our stock exchanges, and, rigging the market and manipulating stock market price quotations are quite common. M.S. Shoes East Ltd. fiasco was an example of market rigging; SEBI could do nothing about it.

Since 1992, SEBI has constantly reviewed the traditional trading systems in Indian Stock Exchanges. It is simplifying procedures and achieving transparency in costs and prices at which customers' orders are executed, speeding up clearing and settlement, and, finally transfer of shares in the names of buyers.

To make the governing bodies of stock exchanges broad based, the governing body of stock exchanges should have 5 elected members, not more than 4 members nominated by the Government or SEBI and 3 or fewer members nominated as public representatives.

The Government has allowed foreign institutional investors (FIIs) such as pension funds, mutual funds, investment trusts, asset or portfolio management companies etc. to invest in the Indian capital market provided they are registered with SEBI. Till January 1995, as many as 286 FIIs have been registered with SEBI — they were only 10 in January 1993 and 136 in January 1994. The cumulative net investments of FIIs has increased from $200 million in January 1993 to $3 billion in January 1995, reflecting the economic liberalisation policy of the country and to some extent, the prevalence of low rates of interest abroad. The Government of India has now permitted joint venture stock broking companies to have non-Indian citizens on their Board of Directors.

To prevent excessive speculation and volatility in the stock market, SEBI has introduced rolling settlements from July 2, 2001, under which settlement has to be made every day. This, however, has not succeeded extreme volatility in the stock market.

Insurance Reforms

The most notable event during 1999-2000 in the field of contractual savings has been the passing of the Insurance Regulation and Development Authority (IRDA) Act despite stiff opposition from trade unions and the Left parties. The IRDA Act ends the monopoly of the Government in the insurance sector because it seeks to promote the private sector (including limited foreign equity) in the insurance sector. It gives priority in the utilisation of policy holders funds for the development of social and infrastructure sectors. The Government has given licences to a number of private sector companies to do insurance business.

Strengthening of SEBI

In January 1995, the Government of India promulgated an ordinance to amend SEBI Act, 1992 so as to arm SEBI with additional powers for ensuring the orderly development of the capital market and to enhance its ability to protect the interests of the investors. The important features of this ordinance are:

1. To enable SEBI to respond speedily to market conditions and to reinforce its autonomy, SEBI has been empowered to file complaints in courts and to notify its regulations without prior approval of the Government.

2. SEBI is now provided with regulatory powers over companies in the issuance of capital, the transfer of securities and other related matters.

3. SEBI is now empowered to impose monetary penalties on capital market intermediaries and other participants for a listed range of violations. The amendment proposes to create adjudicating mechanism within SEBI for leaving penalties and also constitute a separate tribunal to deal with cases of appeal against orders of the adjudicating authority.

Earlier the SEBI Act provided for the suspension and cancellation of registration and for the prosecution of intermediaries which led to the stoppage of business. The new system of monetary penalties constitutes an alternative mechanism for dealing with capital market violations.

4. While investigating irregularities in the capital market, SEBI is now given the power to summon the attendance of and call for documents from all categories of market intermediaries, including persons from the securities market. Likewise, SEBI has now the power to issue directions to all intermediaries and persons connected with securities markets with a view to protect investors or secure the orderly development of the securities market.

It was thought that SEBI has all necessary powers to control and regulate the securities market on the one side and effectively protect the interests of the shareholders on the other. However, SEBI ***failed miserably*** to prevent a small coterie of brokers in Mumbai to hammer the SENSEX in March 2001 and in May 2004. The stock markets in India went through one of the worst and most prolonged crises in their history.

According to Securities and Exchange Board of India (SEBI), currently 34 Foreign Institutional Investors (FIIs) sub-accounts issue ODIs (Offshore Derivative Instruments) such as participatory notes (PNs). This number was 14 in March, 2004. The notional value of PNs outstanding which was at ₹ 31,875 crores (20 per cent of the Assets under custody — AUC) of all FIIs in March 2004, increased to ₹ 3,53,484 crores (51.6 per cent of AUC) by August 2007 — a sharp increase by 11 times in a short span of a little over 3 years. This implies that more than 50 per cent of the Funds are flowing from this

anonymous route — a kind of foreign black money flowing into India.

When in 1992, foreign institutional investors (FIIs) were permitted by SEBI, it was assumed that they would make proprietory investments out of their own capital.

But the FIIs started borrowing at low rates of interest and without disclosing the identity of sub-accounts, assumed massive portions. As a result they could exercise effective control over the Indian Stock Market.

The 34 brokers have issued offshore derivatives to the tune of about $ 100 billion, or almost 10 per cent of the country's GDP. When it started PNs made up only a small portion of ownership by foreigners, but this has now assumed alarming proportions.

PNs were discriminatory. While the Indian investors are regulated, the PNs were not. In addition to know your customer (KYC) requirement, Indian brokers have to register their clients, giving details of proof of address, PAN etc. The question was raised : why this step-motherly treatment to Indians and red carpet welcome to FIIs who don't even want to be registered and yet participate in the Indian Stock Market. It was pointed out that one should not forget the Stock market crisis of 2001, when there was unprecedented flow of foreign money coming from OBCs (Overseas Bodies Corporates). It may be pointed out that PN is no different.

This compelled SEBI to take effective steps in October 2007 to issue directive that only 'regulated' entities can invest through PN route. It formalised a ban on sub-accounts of FIIs from issuing participatory notes (PNs). Foreign investors used accounts in tax havens like Mauritius or the Cayman Islands to trade in shares for their clients. These, designated as sub-accounts, issue participatory notes (PNs) to clients as proof of purchase, thus allowing them to remain anonymous. SEBI has given foreign funds 18 months to close such transactions. There is, however, no blanket ban. Registered foreign funds can isue up to 40 per cent of their investment in India by using the instrument of PNs.

SEBI's decision to curb illegitimate and massive increase in PNs which assumed menacing proportions has been welcomed by Indian investors. There is no need to feel alarmed that India will henceforth lose foreign funds. We should note the fact that in the world today, funds are in search of markets, and not the other way round. It is hoped that action taken by the SEBI will moderate the galloping increase in SENSEX. It is hoped that measures taken by SEBI will be beneficial in long term sustainable growth of the Indian capital market.

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CHAPTER

51

THE RESERVE BANK OF INDIA AND MONETARY MANAGEMENT

"The guiding principle for a Central Bank, whatever function or group of functions, it performs at any particular moment, is that it should act only in public interest and without regard to profit as a primary consideration."

—De Kock

The Reserve Bank of India was inaugurated in April 1935 with a share capital of ₹ 5 crores, divided into shares of ₹ 100 each fully paid up. The entire share capital was, in the beginning, owned by private shareholders. The Government of India held shares of nominal value of ₹ 2,22,000. But in view of the public nature of the Bank's functions, the Reserve Bank of India, Act, 1934 provided for the appointment by the Central Government of the Governor and two Deputy Governors (who were also directors of the Central Board). The Act also contained provisions governing the holding of the shares and the rate of dividend to be paid to shareholders. The Reserve Bank was nationalised in 1949. The general superintendence and direction of the Bank is entrusted to Central Board of Directors of 20 members, consisting of the Governor and four Deputy Governors, one Government official from the Ministry of Finance, ten Directors nominated by the Government of India to give representation to important elements in the economic life of the country, and four Directors nominated by the Central Government to represent the four local Boards. Besides the Central Board, there are four Local Boards with headquarters at Bombay, Calcutta, Madras and New Delhi. Local Boards consist of five members each appointed by the Central Government for a term of four years to represent territorial and economic interests and the interests of co-operative and indigenous banks.

1. FUNCTIONS OF THE RESERVE BANK OF INDIA

By the Reserve Bank of India Act of 1934, all the important functions of a central bank have been entrusted to the Reserve Bank of India.

(i) **Bank of Issue.** Under Section 22 of the Reserve Bank of India Act, the Bank has the sole right to issue bank notes of all denominations. The distribution of one rupee notes and coins and small coins all over the country is undertaken by the Reserve Bank as agent of the Government. The Reserve Bank has a separate Issue Department which is entrusted with the issue of currency notes. The assets and liabilities of the Issue Department are kept separate from those of the Banking Department. Originally, the assets of the Issue Department were to consist of not less than two-fifths of gold coin, gold bullion or sterling securities provided the amount of gold was not less than ₹ 40 crores in value. The remaining three-fifths of the assets might be held in rupee coins, Government of India rupee securities, eligible bills of

exchange and promissory notes payable in India. Due to the exigencies of the Second World War and the post-war period, these provisions were considerably modified. Since 1957, the Reserve Bank of India is required to maintain gold and foreign exchange reserves of ₹ 200 crores, of which at least ₹ 115 crores should be in gold. The system as it exists today is known as the minimum reserve system.

(ii) **Banker to Government.** The second important function of the Reserve Bank of India is to act as Government banker, agent and adviser. The Reserve Bank is agent of Central Government and of all State Governments in India excepting that of Jammu and Kashmir. The Reserve Bank has the obligation to transact Government business, viz., to keep the cash balances as deposits free of interest, to receive and to make payments on behalf of the Government and to carry out their exchange remittances and other banking operations. The Reserve Bank of India helps the Government—both the Union and the States to float new loans and to manage public debt. The Bank makes ways and means advances to the Governments for 90 days. It makes loans and advances to the States and local authorities. It acts as adviser to the Government on all monetary and banking matters.

(iii) **Bankers' Bank and Lender of the Last Resort.** The Reserve Bank of India acts as the bankers' bank. According to the provisions of the Banking Companies Act of 1949, every scheduled bank was required to maintain with the Reserve Bank a cash balance equivalent to 5 per cent of its demand liabilities and 2 per cent of its time liabilities in India. By an amendment of 1962, the distinction between demand and time liabilities was abolished and banks have been asked to keep cash reserves equal to 3 per cent of their aggregate deposit liabilities. The minimum cash requirements can be changed by the Reserve Bank of India.

The scheduled banks can borrow from the Reserve Bank of India on the basis of eligible securities or get financial accommodation in times of need or stringency by rediscounting bills of exchange. Since commercial banks can always expect the Reserve Bank of India to come to their help in times of banking crisis, the Reserve Bank becomes not only the bankers' bank but also the lender of the last resort.

(iv) **Controller of Credit.** The Reserve Bank of India is the controller of credit, i.e., it has the power to influence the volume of credit created by banks in India. It can do so through changing the Bank rate or through open market operations. According to the Banking Regulation Act of 1949, the Reserve Bank of India can ask any particular bank or the whole banking system not to lend to particular groups or persons on the basis of certain types of securities. Since 1956, selective controls of credit are increasingly being used by the Reserve Bank.

The Reserve Bank of India is armed with many more powers to control the Indian money market. Every bank has to get a licence from the Reserve Bank of India to do banking business within India, the licence can be cancelled by the Reserve Bank if certain stipulated conditions are not fulfilled. Every bank will have to get the permission of the Reserve Bank before it can open a new branch. Each scheduled bank must send a weekly return to the Reserve Bank showing, in detail, its assets and liabilities. This power of the Bank to call for information is also intended to give it effective control of the credit system. The Reserve Bank has also the power to inspect the accounts of any commercial bank.

As supreme banking authority in the country, the Reserve Bank of India, therefore, has the following powers:

(a) It holds the cash reserves of all the scheduled banks. (b) It controls the credit operations of banks through quantitative and qualitative controls. (c) It controls the banking system through the system of licensing, inspection and calling for information. (d) It acts as the lender of the last resort by providing rediscount facilities to scheduled banks.

(v) **Custodian of Foreign Exchange Reserves.** The Reserve Bank of India has the responsibility to maintain the official rate of exchange. According to the Reserve Bank of India Act of 1934, the Bank was required to buy and sell at fixed rates any amount of sterling in lots of not less than ₹ 10,000. The rate of exchange fixed was Re. 1 = 1 sh. 6d. Since 1935, the Bank was able to maintain the exchange rate fixed at 1 sh. 6d. though there were periods of extreme pressure in favour of or against the rupee. After India became a member of the International Monetary Fund in 1946, the Reserve Bank has the responsibility of maintaining fixed exchange rates with all other member countries of the I.M.F.

Besides maintaining the rate of exchange of the rupee, the Reserve Bank has to act as the custodian of India's reserve of international currencies. The vast sterling balances were acquired and managed by the Bank. Further, the RBI has the responsibility of administering the exchange controls of the country.

Supervisory Functions

In addition to its traditional central banking functions, the Reserve bank has certain non-monetary functions of the nature of supervision of banks and promotion of sound banking in India. The Reserve Bank Act, 1934, and the Banking Regulation Act, 1949 have given the RBI wide powers of supervision and control over commercial and co-operative banks, relating to licensing and establishments, branch expansion, liquidity of their assets, management and methods of working, amalgamation, reconstruction, and

liquidation. The RBI is authorised to carry out periodical inspections of the banks and to call for returns and necessary information from them. The nationalisation of 14 major Indian scheduled banks in July 1969 has imposed new responsibilities on the RBI for directing the growth of banking and credit policies towards more rapid development of the economy and realisation of certain desired social objectives. The supervisory functions of the RBI have helped a great deal in improving the standard of banking in India to develop on sound lines and to improve the methods of their operation.

Promotional Functions

With economic growth assuming a new urgency since Independence, the range of the Reserve Bank's functions has steadily widened. The Bank now performs a variety of developmental and promotional functions, which, at one time, were regarded as outside the normal scope of central banking. The Reserve Bank was asked to promote banking habit, extend banking facilities to rural and semi-urban areas, and establish and promote new specialised financing agencies. Accordingly, the Reserve bank has helped in the setting up of the IFCI and the SFC; it set up the Deposit Insurance Corporation in 1962, the Unit Trust of India in 1964, the Industrial Development Bank of India also in 1964, the Agricultural Refinance Corporation of India in 1963 and the Industrial Reconstruction Corporation of India in 1972. These institutions were set up directly or indirectly by the Reserve Bank to promote saving habit and to mobilise savings, and to provide industrial finance as well as agricultural finance. As far back as 1935, the Reserve Bank of India set up the Agricultural Credit Department to provide agricultural credit. But only since 1951 the Bank's role in this field has become extremely important. The Bank has developed the co-operative credit movement to encourage saving, to eliminate money-lenders from the villages and to route its short term credit to agriculture. The RBI has set up the Agricultural Refinance and Development Corporation to provide long-term finance to farmers.

Classification of RBI's Functions

The monetary functions also known as the central banking functions of the RBI are related to control and regulation of money and credit, i.e., issue of currency, control of bank credit, control of foreign exchange operations, banker to the Government and to the money market. Monetary functions of the RBI are significant as they control and regulate the volume of money and credit in the country.

Equally important, however, are the non-monetary functions of the RBI in the context of India's economic backwardness. The supervisory function of the RBI may be regarded as a non-monetary function (though many consider this a monetary function). The promotion of sound banking in India is an important goal of the RBI, the RBI has been given wide and drastic powers, under the Banking Regulation Act of 1949—these powers relate to licensing of banks, branch expansion, liquidity of their assets, management and methods of working, inspection, amalgamation, reconstruction and liquidation. Under the RBI's supervision and inspection, the working of banks has greatly improved. Commercial banks have developed into financially and operationally sound and viable units. The RBI's powers of supervision have now been extended to non-banking financial intermediaries.

Since independence, particularly after its nationalisation 1949, the RBI has followed the promotional functions vigorously and has been responsible for strong financial support to industrial and agricultural development in the country.

2. MONETARY POLICY OF THE RESERVE BANK OF INDIA

Controlled expansion (1951-72)

With the introduction of the Five-year Plans, the need for appropriate adjustment in monetary and fiscal policies to suit the pace and pattern of planned development became imperative. The monetary policy since 1952 emphasised the twin aims of the economic policy of the Government :

(a) speed up economic development in the country to raise national income and standard of living, and

(b) to control and reduce inflationary pressure in the economy.

This policy of the Reserve Bank of India since the First Plan period was termed broadly as one of controlled expansion, i.e., a policy of "adequate financing of economic growth and at the same time ensuring reasonable price stability." Expansion of currency and credit was essential to meet the increased demand for investment funds in an economy like India which had embarked on rapid economic development. RBI recognised and appreciated the need for expansion of credit and money supply commensurate with the rapid development and diversification of the economy. At the same time it was equally aware that an excessive expansion of money and credit would be clearly inflationary and would ultimately endanger the financial stability of the economy. Accordingly, RBI helped the economy to expand via expansion of money and credit and attempted to check rise in prices by the use of selective controls.

RBI's Anti-inflationary Monetary Policy since 1972

Since 1972, the Indian economy has been working with considerable inflationary potential — rapid increase in money supply with the public and with the banking system. There was also expansion of bank credit to finance trade and industry. A serious inflationary situation was emerging from the beginning of 1970's. This was fuelled by frequent fluctuations in agricultural production, faulty government policies, global inflationary situation directly due to hike in oil prices, the Gulf war, etc. RBI was forced to abandon 'controlled expansion' and adopt the policy of credit restraint or tight monetary policy. RBI has generally followed this kind of monetary policy with varying degrees of success.

The Indian economy was growing at the healthy annual rate of 8 to 9 percent and the general price level was generally under control. For the fiscal four years of UPA government, the emphasis was on maintaining the growth of GDP and if possible, raise it to double digit level. Secondly, however, the Government has been jolted by rapid rise in price level. Inflation, measured by variations in the wholesale price index (WPI) on a year-to-year basis were:

At the end of March 2007	:	4.76%
March 2008	:	7.75%
July 2008	:	12.44%

Inflation has presently increased to a 13-year high and inflation expectations have been driven up partly by unrelenting pressures from international commodity prices, particularly crude oil, basic metals and selected food items.

RBI has been directed by the Finance Ministry to regard inflation as number one problem of the country and to use monetary controls to check it as quickly as possible.

Other Objectives of Monetary Policy

In certain periods, RBI may be seriously concerned with other short-term objectives and problems. For instance, during in two years 1994-96, RBI had to enter the foreign exchange market in a big way to prevent heavy depreciation of the rupee. This was also done during January 1998 and later to prevent the rupee following the experience of South Asian currencies. Bimal Jalan, the Governor of RBI came out strongly with a series of measures to check the rapid sliding of the rupee against the dollar.

These objectives can be taken as short-term objectives of monetary policy of RBI. The long term policies of RBI, however, reflect the banks' firm commitment to pursue a low and stable order of inflation—the assumption is that real growth would be in jeopardy, if inflation goes beyond the margin of tolerance.

Let us now explain the major weapons of monetary policy.

Credit Control

1. General Credit Controls

Since 1955-56 and particularly after 1973-74 the inflationary rise in prices has been steadily mounting. Increased Government expenditure financed through deficit spending has the direct effect of pushing up the prices, wages and incomes. Shortfalls in production, and hoarding and speculation in essential commodities have contributed to this inflationary pressure. RBI has various weapons of control and, through using them, it hopes to achieve its monetary policy. These weapons of control are broadly two: quantitative and qualitative controls. Quantitative controls are used to control the *volume* of credit and, indirectly, to control the inflationary and deflationary pressures caused by expansion and contraction of credit. Quantitative controls are also known as general credit controls and consist of bank rate policy, open market operations and cash reserve ratio.

(a) **Bank Rate.** In accordance with the general tradition of the 1930's, RBI started with a cheap money policy and had fixed a low bank rate (3%) and did not change it till November 1953 when it raised the bank rate to 3.5 per cent. The Bank rate gradually rose to 10% in July 1981— these were only changes during this period. The bank rate remained unchanged at 10 per cent for another 10 years (1981-91). It was revised upwards to 11 per cent in July 1991 and further to 12 per cent in October 1991.

The bank rate or the central banks' rediscount rate is an important monetary instrument in modern economies. Its most useful role is to signal and/or clarify the central banks' monetary and interest rate stance to all participants in the financial sector and particularly to banks. If monetary policy is effective and credible, a change in the bank rate will result in a change in prime lending rate of banks and thus act as an independent instrument of monetary control. However, the role of the bank rate as an instrument of monetary policy has been very limited in India because of these basic factors:

(a) the structure of interest rates is administered by RBI — they are not automatically linked to the bank rate;

(b) commercial banks enjoy specific refinance facilities, and not necessarily rediscount their eligible securities with RBI at bank rate; and

(c) the bill market is under-developed and the different sub-markets of the money market are not influenced by the bank rate.

In other words, the bank rate in India is not the "pace setter" to the other market rates of interest and the money

market rates do not automatically adjust themselves to changes in the bank rate. At the same time, the deposit rates and lending rates of banks (and of development finance institutions) are not related to the bank rate. The Government of India and RBI are reviewing the rules and procedures for general access to RBI rediscount facilities so as to make bank rate an active instrument of monetary policy as in other modern economies.

Since the later part of 1995, India passed through a severe liquidity crunch and as a result the prime lending rates were ruling high. Industrial production was affected adversely. One step which RBI took was to reduce the bank rate from 12 to 11 per cent in April 1997, and gradually to 6 per cent. The reduction of the bank rate was to help in the reduction of other interest rates and thus stimulate borrowing from banks.

For the last ten years Bank Rate has been kept constant (at 6 per cent) and RBI is using the Repo rate (and the reverse repo rate) as a major instrument of monetary policy.

(b) **Cash Reserve Requirements (CRR).** Another weapon available to RBI for credit control is the use of variable cash reserve requirements. Under the RBI Act, 1934, every commercial bank has to keep certain minimum cash reserves with RBI—initially, it was 5 per cent against demand deposits and 2 per cent against time deposits—these are known as the statutory cash reserves. Since 1962, RBI was empowered to vary the cash reserve requirement between 3 per cent and 15 per cent of the total demand and time deposits. During 1973, RBI exercised this power twice, as a form of credit squeeze—the statutory reserves were raised from 3 to 5 per cent in June 1973 and to 7 per cent in September 1973. Since then, RBI has raised or reduced CRR a number of times (and ultimately raised to the maximum limit of 15 per cent of net demand and time liabilities) to influence the volume of cash with the commercial banking system and thus influence their volume of credit.

As explained already, Indian economy was passing through a severe liquidity problem since 1995-96 which was adversely affecting investment and production. RBI reduced CRR successively to 8 per cent in October 1997 and finally to 5 per cent in June 2002. Pressure was being brought on RBI to reduce CRR to the statutory minimum of 3 per cent and not to use it as a weapon of credit control.

(c) **Statutory Liquidity Requirements (SLR).** Apart from cash reserve requirements which commercial banks have to keep with RBI (under RBI Act, 1934), all commercial banks have to maintain (under Section 24 of the Banking Regulation Act, 1949) liquid assets in the form of cash, gold and unencumbered approved securities equal to not less than 25 per cent of their total demand and time deposit liabilities. This is known as the statutory liquidity requirement; this is in addition to statutory cash reserve requirements.

Maintenance of adequate liquid assets is a basic principle of sound banking. Hence commercial banks in India have been required by the Banking Regulation Act, 1949, to maintain minimum ratio of liquid assets. RBI was given the power to change the minimum liquidity ratio. Accordingly, it raised the liquidity ratio from 25 per cent gradually and finally to 38.5 per cent. RBI has stepped up the liquidity ratio for two reasons :

(a) higher liquidity ratio forces commercial banks to maintain a larger proportion of their resources in liquid form and thus reduces their capacity to grant loans and advances to business and industry—thus it is anti-inflationary in impact, and

(b) a higher liquidity ratio diverts bank funds from loans and advances to investment in government and other approved securities. In other words, a higher SLR was used to divert bank funds to finance Government expenditure.

It may be mentioned here that stepping up statutory liquidity requirements (SLR) and the cash reserve ratio (CRR) have the same effect, viz., they reduce the capacity of commercial banks to expand credit to business and industry and thus are anti-inflationary.

After accepting Narasimham Committee (1991) recommendation, RBI reduced the SLR by successive steps to 25 per cent in October 1997. There is now a demand to abolish SLR altogether.

Open Market Operations of RBI

In economies with well-developed money markets, central banks use open market operations — i.e. buying and selling eligible securities by the central bank in the money market — to influence the volume of cash reserves with commercial banks and thus influence the volume of loans and advances they can make to the industrial and commercial sectors. RBI had not used this weapon for many years.

Since 1991, the enormous inflow of foreign funds into India created the problem of excess liquidity with the banking sector and RBI undertook large scale open market operations. When RBI sells Government securities in the market, it withdraws a part of the cash reserves of commercial banks and, thereby, reduces the ability of banks to lend to the industrial and commercial sectors. At any given time, the banks' capacity to create credit — i.e. to give fresh loans — depends upon their surplus cash, that is, the amount of cash reserves in excess of their statutory CRR. Once the surplus cash is eliminated and even part of the statutory CRR is reduced, the banks have to contract their credit supply so as to generate some cash reserves to

meet their statutory CRR. As a result, the supply of bank credit which involves the creation of demand deposits, falls and money supply contracts.

The opposite will happen if RBI buys government securities from the market and pays for them. The commercial banks will find that they have surplus cash — they will create more credit and more bank deposits. The supply of money will expand. Such a policy of buying Government securities will be adopted to reverse economic recession in the country. It appears that RBI will actively use open market operations as an instrument of monetary policy and not simply to support the market for Government Bonds.

2. Selective and Direct Credit Controls

Under the Banking Regulation Act 1949, section 21 empowers RBI to issue directives to the banking companies regarding their advances. These directives may relate to :

(a) the purpose for which advances may or may not be made;

(b) the margins to be maintained in respect of secured advances;

(c) the maximum amount of advance to any borrower;

(d) the maximum amount up to which guarantees may be given by the banking company on behalf of any firm, company etc.; and

(e) the rate of interest and other terms and conditions for granting advances.

Since 1956-57 RBI has made full use of section 21 of the Banking Regulation Act to check speculation and rising prices. The controls are selective as they are used to control and check the rising tendency of the prices of ***certain individual*** commodities of common use. Let us take a few examples of the use of this method by RBI. In 1964-65, RBI fixed minimum margins to be maintained by commercial banks in respect of their advances against all foodgrains, oilseeds, vegetable oils including vanaspati, etc. The purpose was to restrict the volume of bank loans extended against these goods which were in short supply. Since January, 1970, the nationalised banks have to get prior approval of RBI for purchase of shares and debentures of a joint stock company for an amount of more than ₹ 1 lakh. Many other direct controls have also been imposed by RBI on the nationalised banks in the matter of their credit operations.

Generally RBI uses three kinds of selective credit controls:

(a) minimum margins for lending against specific securities;

(b) ceiling on the amounts of credit for certain purposes; and

(c) discriminatory rate of interest charged on certain types of advances.

While imposing selective controls, RBI generally takes great care that bank credit for production and transportation of commodities and exports is not affected. Selective controls are focussed mainly on credit to traders for financing inventories (for purposes of hoarding and speculation).

Credit Authorisation Scheme (CAS)

One form of selective credit control was the Credit Authorisation Scheme introduced by RBI, in November 1965. Under the scheme, the commercial banks had to obtain RBI's authorisation before sanctioning any fresh credit of ₹ 1 crore or more to any single party. This was later raised gradually to ₹ 6 crores in April 1986 in respect of borrowers in private as well as public sector. The cut-off point for all manufacturing units and exporters was raised to ₹ 7 crores. Total limits in force relating to parties covered under the scheme amounted to ₹ 21,670 crores, of which 93 per cent were for working capital needs. CAS was further liberalised in July 1987 to allow for greater access to credit to meet genuine demands in production sectors without prior sanction of RBI.

Under the scheme RBI required the commercial banks to collect, examine and furnish detailed data regarding the borrowing concerns. Banks are also required to ascertain the working of the borrowing concerns on such matters as inter-corporate lending or investment, excessive inventory build-up, diversion of short-term funds for acquisition of fixed assets, etc. The aim was that banks should lend on the basis of credit appraisal and the actual needs of the borrowing concerns.

With a view to de-regulate and liberalise the financial system in the country, RBI took a series of steps after 1987. One of the major steps taken by RBI was to abolish Credit Authorisation Scheme (CAS) in October 1988.

Credit Monitoring Arrangement (CMA)

However, to ensure that the basic financial discipline continued to be observed by banks, RBI would monitor and scrutinise all sanctions of bank loans exceeding (a) ₹ 5 crores to any single party for working capital requirement, and (b) ₹ 2 crores in the case of terms loans. This post-sanction scheme has been designated on Credit Monitoring Arrangement (CMA)

RBI has clearly advised the banks that there is no change in the prescribed criteria for lending to the borrowers to meet their working capital requirement or to meet their long-term credit requirements. Over 930 parties are under CAS/CMA.

For some time selective controls were prominent

as a weapon of credit control. During 1973-74 and 1974-75 RBI enforced a severe credit squeeze as an anti-inflationary measure. The banks generally conformed to the selective control directives of RBI and the advances against particular commodities were maintained within the permitted limits. In this connection, it is fruitful to quote RBI itself: "The efficacy of the selective credit control should not be assessed mainly in terms of their positive influence on prices since the latter primarily depends on the availability of supply of the relevant commodities relative to demand. The success of these controls is to be judged in a limited sphere, viz., their impact on the pressure of demand originating from bank credit—in this sense, the measures should be deemed successful; but for their operation it is likely that the price situation might have been somewhat worse."

An Evaluation of RBI's Monetary Policy

The objective of monetary policy was at one time characterised by RBI itself as 'controlled expansion.' This meant that RBI was taking steps such as the bill market scheme to expand bank credit to industry and trade and thus help in economic development. On the other hand, RBI was using both quantitative (general credit restraint) and selective credit controls so that the deployment of loans and advances by the commercial banks for speculative purposes was under control. This was necessary to keep the rising prices under check.

Thus, the monetary policy had twin aims—growth of the economy and control of inflationary pressure.

But in recent months, prices have risen rapidly partly due to demand and supply factors and domestic and international conditions. RBI's monetary weapons – specially repo rate and CRR – have been used to check the volume of money supply and thus control demand for goods and services. To some extent, they have succeeded in controlling demand for manufactured goods and check the volume of money supply and thus controlling the growth process. This is not anti-inflationary but anti-growth. The basic flaw is the perception of the Finance Ministry that inflation is due to expansion of credit and of money with the public and it is mainly due to demand pressures. Actually, the Finance Ministry ignores the supply constraints and international shortages of essential fuel and food items. The moment the supply constraints are reduced, inflation will automatically come down.

Monetary policy RBI has certain inherent constraints and is obviously limited in its usefulness.

Policy makers have always recognised the existence of violent fluctuations in agricultural produciton in India caused by weather conditions and the consequent difficulty in controlling inflationary pressures. Accordingly, they always recommend strong supply management measures. At the same time, demand management is equally important, that is, the demand for goods and services based on the volume of money and credit in the country. Thus, to achieve the objective of controlling inflation and stabilise the price level, the Chakravarty Committee for instance, suggested a two-pronged strategy: (a) the Government should aim at raising output levels; and (b) RBI should control the expansion in reserve money and money supply.

In this connection, it is important to realise the relationship between money supply, output and prices. In the last two decades, the increase in reserve money and in money supply has been largely due to a rise in the level of RBI credit to Government which reflects a significant monetisation of debt. The Chakravarty Committee has made two related recommendations.

(*a*) The target for increase in money supply in the broad sense (M_3) during a year should be announced in advance. The target should be in terms of a range, based on anticipated growth in output and in the light of the price situation.

(*b*) The Government should restrict its recourse to RBI at predetermined levels so as to restrict monetisation of debt. Towards this end, the yield rate of dated Government securities and Treasury bills should be made more attractive. Besides, the Government should attract lenders from outside the captive market (of banks and insurance companies). In other words, the Government should raise the needed financial resources by tapping the savings of the people or by increasing tax revenues or by incurring budget deficit financed by borrowings from sources other than RBI. The Government has accepted this recommendation and is borrowing from the market at market rates of interest.

Finally, the weapons and the powers available to RBI are such that they cover only organised banking sector viz., commercial banks and cooperative banks. To the extent inflationary pressure is the result of bank finance, the Reserve Bank's general and selective controls will have positive effect. But if inflationary pressure is really brought about by Government deficit financing and shortage of goods, domestic and international.

RBI's control may not have any effect at all. This is what is really happening in India now.

Besides, it should always be kept in mind that RBI has no real power over non-banking financial institutions as well as indigenous bankers who play such a major role in financing trade and industry. They can create supply constranity and nullity the effect of monetory policy of RBI.

3. WORKING OF THE INDIAN MONETARY SYSTEM: THE CHAKRAVARTY COMMITTEE REPORT

Since the time the Hilton Young Commission and the Central Banking Enquiry committee reviewed the working of the Indian monetary system as far back as the twenties and thirties of this century, so many changes had taken place in the Indian economy. Since Independence, for instance, the Indian monetary system has helped in the mobilisation of resources for the implementation of the

Five Year Plans and has also attempted to control the inflationary process inherent in rapid economic development. The Reserve Bank of India wanted a fresh look at the Indian monetary system and accordingly appointed a Committee in December 1982 with Professor Sukhamoy Chakravarty as chairman to review the working of the Indian monetary system. The Chakravarty Committee was asked :

(a) to review critically the structure and operation of the monetary system in the context of the basic objectives of planned development;

(b) to evaluate the various instruments of monetary and credit policies;

(c) to assess the interaction of monetary policy and public debt management; and

(d) to recommend suitable measures for the formulation and operation of monetary and credit policies and for strengthening the instruments of monetary and credit policies.

Chakravarty Committee submitted its report in May 1985.

The structure and operation of the Monetary System in India

According to the Chakravarty Committee, the operation of monetary system should be consistent with plan priorities, so that the process of mobilisation of savings and utilisation of these resources become socially purposive. Even though the rate of savings had increased from about 10 per cent to about 23 per cent between 1950-51 and 1983-84, this rate of saving was not adequate to finance public sector investment and hence the Government of India was forced to resort to deficit financing and was, thus, responsible for the creation of inflationary pressures. The Chakravarty Committee, therefore, emphasised the need for financing the Five Year Plans in a non-inflationary manner by

(a) tapping the savings of the public in a greater measure than in the past;

(b) raising higher savings from the public sector enterprises, and

(c) improving efficiency in both revenue gathering and in expenditure functions.

Objectives of Monetary Policy : Price Stability

The Chakravarty Committee argued that, in the context of planned economic development, monetary authorities should aim at "price stability" in the broadest sense. Price stability here does not mean constant price level but it is consistent with an annual rise of 4 per cent in the wholesale price index. To achieve this objective, the Government should aim at raising output levels, while RBI should control the expansion in reserve money and the money supply.

In this connection, the Chakravarty Committee recognises the existence of violent fluctuations in agricultural production caused by weather conditions and the consequent difficulty in controlling inflationary pressures in India. Accordingly, the Committee advocates strong supply management measures. At the same time, demand management is also equally important (that is, the demand for goods and services based on the volume of money and credit). This necessitates coordinated action by the Government and RBI in the field of demand management and more effective use of credit.

Monetary Targeting

Emphasising the inter-relationship between money, output and prices, the Chakravarty Committee has recommended the formulation of a monetary policy based on monetary targeting. According to the Committee, target for growth in money supply in a broad sense (M_3) during a given year should be in terms of a range:

(a) based on anticipated growth in output, and

(b) in the light of the price situation.

The target range should be announced in advance, the modifications and the circumstances under which such modifications would be made should also be announced in advance. According to the Committee, the target for money supply should be reviewed in the course of the year to accommodate revisions, if any, in the anticipated growth in output and any change in the price situation.

The Chakravarty Committee pointed out that the major cause of the substantial growth in money supply since 1970 was the rise in RBI credit to Government. The main reason for the high degree of monetisation of debt was the relatively low yields on government securities and the low discount rate on treasury bills (constant at 4.6 per cent per annum since 1974). In other words, the rate of interest on Government securities had been so low that neither the public nor banking, financial and other institutions willingly bought Government securities or treasury bills. The entire monetary requirement of the Government had thus to be borne by RBI; and RBI loans and advances to the Government became money.

In this connection, the Chakravarty Committee has recommended, among other things, that RBI and the Central Government should evolve a policy framework for the regulations of RBI credit to the Government. For instance, there should be higher yields on Government securities and the discount rates on treasury bills should also be suitably raised. These measures would facilitate greater participation in the Government's borrowing programmes by the non-bank sector of the public and this would reduce the growth in reserve money, attributable to RBI credit to the Government.

Change in the definition of Budgetary deficit

Till now, the budgetary deficit of the Central

Government essentially took the form of an increase in treasury bills outstanding. Not all the treasury bills were held by RBI but part of the treasury bills were absorbed by the public. Since the present concept of budget deficit did not distinguish between the amount of bills absorbed by the public and the amount held by RBI, it overstated the extent of monetary impact of fiscal operations. More importantly, the budgetary deficit did not presently reflect the support extended by RBI to the Government borrowing programme which represented a rise in RBI credit to Government with a corresponding impact on money supply. Accordingly, the Chakravarty Committee suggested a change in the definition of budgetary deficit, so that there could be clear distinction between revenue deficit, fiscal deficit and overall budgetary deficit.

Interest Rate Policy

At present, the interest rate structure is completely administered by the monetary authorities under the general direction of the Government. According to the Chakravarty Committee, the present system of administered interest rates has become unduly complex and needs to be modified. The Committee has mentioned some of the important aspects of interest rate policy which need to be taken into account, while modifying the administered interest rate structure, as for example, increasing the pool of financial savings, providing a reasonable return on saving of small savers, reinforcing anti-inflationary policies, the need to provide credit at concessional rate of interest to the priority sectors and the profitability of banks, etc.

In order that credit requirements of productive sectors were adequately met within the overall limits set for monetary expansion, the Committee recommended that banks should have greater freedom in determining their lending rates. This would also prevent excessive use of credit due to relatively low interest rates. The Committee was of the view that concessional interest rates as redistributive device should be used in a very selective manner. As regards interest rates on bank deposits, the Committee recommended that they should be positive after adjusting for inflation, so as to encourage small savers. The interest rates should reflect the real cost of long-term loans for industrial projects so that projects which were basically not viable were discouraged.

The Committee examined the various aspects of bank credit and made recommendations in regard to credit policies and procedures with a view to facilitating more efficient use of bank credit. It stressed the importance of providing bank credit in the form of loans and bills finance instead of cash credit as at present. It highlighted the disruptive effect on credit flows arising from tardy payments to suppliers by large public and private sector units as also by the Government and recommended that interest on delayed payments should be provided for in purchase contracts.

The Committee was of the view that the problems associated with improving the effectiveness of the priority sector lending were principally in the area of organisational reorientation and effective communication and monitoring. The Committee emphasised the importance of strengthending the credit delivery system in the area of priority sector lending so that adequate and timely credit was made available to this sector.

Thus, the Chakravarty Committee envisaged a strong supportive role for interest rate policy in monetary regulation based on monetary targeting.

Restructuring of the Money Market in India

The Committee envisaged an important role in treasury bill market, the call money market, the commercial bills market and the inter-corporate funds market in the allocation of short term resources, with minimum of cost and minimum of delays. Further, according to the Committee, a well-organised money market provided an efficient mechanism for the transmission of the monetary regulation to the rest of economy. Accordingly, the Committee has recommended that RBI should take measures to develop an efficient money market.

Follow up action on the recommendations

The Government of India accepted all the major recommendations of the Chakravarty committee :-

(a) In the 1986-87 budget presented to Parliament, the Government accepted the modified definition of budget deficit as suggested by the Committee.

(b) The Government has accepted the Committee's recommendation for the setting up of the over-all monetary targets with feed back to enable changes in the target in the light of the emerging trends in output and prices. RBI has been setting up operationally meaningful monetary targets and monitoring them regularly.

(c) The Government has accepted the Committee's recommendation to develop treasury bills as a monetary instrument with flexible rates which would enable banks to better manage their short-term liquidity. Accordingly, treasury bills of 182 days maturity and later 364 days maturity are being issued on a monthly auction basis. The rate of discount and the corresponding issue price of these bills are flexible and are determined through auctions.

(d) The Government has accepted the Committee's recommendation for an upward revision of yields on Government securities coupled with a shortening of maturities to attract funds from the capital market. The Government has been increasing the yield on Government securities according to market conditions.

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CHAPTER

52

INDIAN PUBLIC FINANCE

"A tax policy at lessening inequalities through reducing incomes at highest levels is only one form which fiscal operations may assume in this sphere. An important complementary aspect lies in the part that public expenditure for economic development (e.g., agriculture and irrigation) and expansion of social services like education and health, may play in strengthening the position of weaker sections of the community."

— Report of the Taxation Enquiry Commission

1. CENTRAL GOVERNMENT BUDGETS SINCE 1950-51

The Budget of the Government of India, for any year, gives a complete picture of the estimated receipts and expenditures of the Government for that year on the basis of the budget figures of the two previous years. Every budget, for instnce, gives three sets of figurs: (a) actual figures for preceding year, (b) budget and revised figures for the current year, and (c) budget etimates for the following year. For instance, the budget etimate for the year 2008-09 contains:

(a) "actuals" or accounts for the year 2006-07.

(b) budget and revised figures for the year 2007-08 and

(c) budget estimates for 2008-09.

The budget in India is divided into two parts, viz. revenue budget or revenue account and capital budget or capital account.

Current or revenue budget

The revenue budget of the Central Government deals with receipts from taxation and from non-tax sources and expenditure met out of these sources.

Tax revenue comes broadly from three sources:

(a) Taxes on income and expenditure

(b) Taxes on property and capital (or property) transactions; and

(c) Taxes on commodities and services.

Non-tax revenue consist of:

(i) currency, coinage and mint.

(ii) interest receipts and dividends; and

(iii) other non-tax revenue.

Current expenditure or revenue expenditure is met out of current revenues. Revenue expenditure is on: (a) such general services as general administration including police, judiciary, defence, collection of taxes; (b) social and community services, such as education, medical and public health, labour and employment; and (c) economic services, like agriculture, industries, transportation, trade, etc.

Capital budget

Capital budget of the Government of India, also known as the capital account consists of capital receipts and capital expenditure. ***The capital receipts*** of the Central Government are composed of:

(a) net recoveries of loans and advances made previously to State Governments, Union Territories and public sector undertakings;

(b) net market borrowings (i.e. gross borrowings from

the market less repayments of public debt);

(c) net small savings collections (gross collections less share of the States); and

(d) other capital receipts such as provident funds, special deposits, etc.

Capital expenditure of the Union Government consists of expenditure on capital items, mainly in the form of loans to States and Union territories for financing plan projects and other capital expenditure on economic development, on social and community development and capital expenditure on defence.

In table 1, we have summarized the Central Government budgets since 1950-51 for selected years to show the growth of receipts and disbursements of the Government of India during the last 60 years. From Table 1, the following trends may be noted:

TABLE 1: Budgets of the Central Government since 1950-51

(₹ crores)

	1950-51 Actuals	1980-81 Actuals	2001-02 Actuals	2012-13 Budget
Revenue Account				
Receipts	406	12,830	2,01,450	9,35,685
Expenditure	347	14,540	3,01,610	12,86,109
Revenue surplus (+) Revenue deficit (-)	+59	-1,710	-1,00,160	–3,50,424
Capital Account				
Receipts	120	8,770	1,61,000	5,55,241
Disbursements	182	9,630	60,840	2,04,816
Deficit / Surplus	-62	-860	+1,00,160	+3,50,242
Over-all budgetary deficit	-3	-2,570	Nil	Nil

SOURCE: Government of India, Budget at a Glance, 2012-13 and earlier issues.

(i) Huge increase in revenue expenditure — Expenditure on the revenue account has been rising very fast. For instance, revenue expenditure was

₹ 347 crores	in	1950-51
₹ 14,540 crores	in	1980-81
₹ 12,86,109 crores	in	2012-13 (Budget)

In the first 30 years (1951-81) revenue or current expenditure of the Central Government had risen by more than 40 times.

In the next 32 years (1981-2013) revenue expenditure of the Central Government had risen by 88 times. The conclusion is simple the current expenditure of the Central Government is rising extremely fast. What could be the reasons ?

This enormous increase in public expenditure of the Central Government was due to expansion of government machinery, new responsibilies, new departments, increase in Government of staff, increase in defence expenditure and continuous rise in the salaries and dearness allowances of Government servants because of the rise in prices and the consequent rise in the cost of living, and huge increase in interest payments.

(ii) Huge Increase in Revenue Receipts. To meet its current expenditure, the Central Government raises certain taxes and an other receipts. Revenue receipts had increased as follows :

₹ 406 crores	in	1950-51
₹ 12,830 crores	in	1980-81
₹ 9,35,685 crores	in	2012-13 (Budget)

During the first 3 decads (1951-81), revenue receipts rose by 30 times. During the next 32 years (1981-2013), revenue receipts rose by nearly 73 times.

This huge increase in revenue receipts reflects the imposition of new taxes, broadening the tax coverage, better tax administration and rise in prices and incomes due to general inflationary pressure and consequent increase in tax revenues.

One thing is clean from the above two points. Both revenue expenditure and revenue receipts were rising fast and regularly over the years. However, rise in revenue expenditure exceeded the rise in revenue receipts – thus, resulting in revenue deficit.

(iii) Mounting deficit in revenue Account. Till the middle of the 1970's, current receipts exceeded current expenditure *resulting in surplus in the current account;* this was known as revenue surplus. For instance, the revenue surplus was ₹ 59 crores in 1950-51; it rose to ₹ 160 crores in 1970-71. The Indian Government used this revenue surplus to finance economic development.

Since the middle of 1970's, however, the revenue expenditure has been rising much faster than current revenue, resulting in deficit in the revenue account. For instance, in 1980-81, the revenue deficit was ₹ 1,710 crores and in 2001- 02, it touched ₹ 1,00,160 crores. The Government of India took a series of steps, specially to raise tax revenue and thus reduce revenue deficit and was successful initially. But revenue deficit again jumped to 3,50,424 crores in 2012-13 (budget).

Deficit in the revenue account implies that the Government is living beyond its means and that it is forced to borrow even to meet its current expenditure. This is indeed a sad state of affairs in India. As mentioned above, the Government is taking steps to reduce revenue deficit.

We can summarise the surplus or deficit in the current account of the Central budget as follows:

(iv) Capital Receipts and Capital Disbursements

As explained earlier, capital expenditure – commonly called capital disbursements – of the Central Government refers to expenditure on capital assets such as financing Plan projects, acquiring capital items for the defence department and loans to state Governments. Capital receipts of the Central Government relate to the recoveries of Central Government loans to states made earlier, loans raised from the markets, that is, banks, financial institutions and the general public, collections of small savings from the public and provident fund collections.

Now, capital receipts have been rising much faster than capital disbursements in recent years. But in the inital years (1950-51), this was not so. Consider Table 1. Capital receipts have risen from :

₹ 130 crores in 1950-51
₹ 8,770 cores in 1980-81

During the same period, capital disbursements were:

₹ 182 crores in 1950-51
₹ 9,630 crores in 1980-81

It is clear that between 1951 and 1981, capital disbursements exceeded capital receipts – thus, there was deficit in the capital account too before 1981. The over-all deficit was calculated by considering both revenue deficit and capital deficit Table 2 gives the calculation of over-all deficit.

TABLE 2: Deficit or Surplus in the Central budgets since 1950-51

(₹ crores)

	Revenue Account Surplus (+) Deficit (-)	*Captial Ac Suplus (+) Deficit (-)*	*Over-all Budget Suplus (+) Deficit (-)*
1950-51	+59	-62	-3
1960-61	+50	+70	+120
1970-71	+160	-450	-290
1980-81	-1,710	-860	-2,570
1990-91	-18,560	+7,210	-11,350
2001-02	-1,00,160	+1,00,160	Nil
	-2,76,512	+2,76,512	Nil
2011-12 (B)	-3,50,424	+3,50,424	Nil

SOURCE: Government of India, Budget as a Glance, 2012-13 and earlier issues.

The Finance Ministry gave up the traditional concept of over-all budget surplus as useless. What the Ministry has now done is:

(a) equate exactly the surplus in the Capital Account with the deficit in the Revenue Account – obviously, there can be no over-all budget deficit; and

(b) to achieve the above, the Finance Minstry manages to create a surplus in the Capital Account **through raising market loans, small savings and borrowings from financial institutions**, etc. – exactly equal to the revenue deficit.

It may be observed from table 2 that the revenue deficit for the year 2001-02 was ₹ 100,160 crores; and the surplus in the capital account was exactly equal, that is, ₹ 100,116 crores. There is, therefore, no over-all budget deficit in the year 2001-02; in or other words, over-all budget deficit was nil.

Likewise, 2012-13 Budget provides for a surplus in the Capital Account to the tune of ₹ 3,50,424 crores; which covers fully the deficit in the current Account or Revenue Account. The over-all budgetary deficit is nil.

This is just an artificial method of raising capital surplus (through market borrowing, collection of small savings, etc.) to cover up the revenue deficit.

Actually, borrowing from the market, mobilising small savings and incurring other liabilities is bad for the economy. This is now designated as *fiscal deficit*. Formerly it was called deficit financing. (The different concepts of deficit are explained in section 8 of this chapter).

2. REVENUES OF THE CENTRAL GOVERNMENT

As mentioned above, the Central Government has

(a) Revenue budget that is to say, the estimates of receipts and disbursements on Revenue Account and

(b) a Capital budget which relates to receipts and disbursements on Capital Account.

In this section, we shall describe in great detail the revenue budget. The estimates of receipts on revenue account have been grouped under two broad heading viz. tax revenue and non-tax revenue.

Revenue Receipts

Table 3 reveals that the total current revenue of the Central Government consists of Tax revenue, and non-tax revenue. This has been rising quite fast, partly on account of more taxes and higher rates of taxes, and partly due to inflation. The total revenue receipts of the Central Government was a little more than ₹ 400 crores in 1950-51 but it rose to ₹12,830 crores in 1980-81 and in the 2012-2013 budget, it would be ₹ 9,35,685 crores. Between 1981 and 2013, the total revenue receipts had increased by 73 times.

Now, total revenue receipts come from two sources: tax revenue and non-tax revenue.

TABLE 3 : Revenue of Central Government in the Revenue Account 1

(₹ crores)

	1950-51 Actual	*1980-81 Actual*	*2001-02 Actual*	*2010-11 Budget*
Tax Revenue (net)	357	9,390	1,33,660	7,71,071
	(88)	(73)	(66)	(82.4)
Non-Tax Revenue	49	3,440	67,790	1,64,614
	(12)	(27)	(34)	(17.6)
Total Revenue receipts	406	12,830	2,01,450	9,35,685
	(100)	(100)	(100)	(100.0)

SOURCE: Government of India, Budget as a Glance, 2012-13 and earlier issues.

(a) Tax Revenue.

Tax revenue of the Central Government consists of three types : -

1. Tables 1 to 18 have been prepared from *"Budget at a Glance"* (GOI), 2012-13 and other previous issues.

(*a*) Income Taxes or taxes on income and expenditure

(*b*) Property taxes or taxes on property or capital assets; and

(*c*) Commodity taxes or taxes on goods and services.

The first two types of taxes are known as direct taxes and the third are known as indirect taxes. We shall describe these sources of tax revenue in greater detail.

Taxes on Income

The Government of India imposes two types of income taxes, viz., personal income-tax and corporation tax (or tax on company profits).

Income Tax

Personal income tax is levied on individuals by the Central Government. The income tax does not fall on all people but only on those people who are better off. It is based on the principle of "ability to pay." that is, those who can pay more should pay more to the Government.

On the basis of this principle, certain people with low incomes are exempted from paying income tax. The minimum exempted income has been changing from time to time. The exemption limit was ₹ 40,000 in the 1995-96 budget; it was raised periodically since then. For instance,.

The Budget 2012-13 budget has threshold limit of exemption in case of :

(a) all assessees at ₹ 2,00,000

(b) Senior citizen (Age 60 years to 80 years) at ₹ 2,50,000

(c) Senior citizen (80 years and above) 5,00,000.

During the last two decades, there has been continuous reduction in the income tax rates because high rates of income tax were an important reason for extensive evasion of income tax and rise of black money. It is now widely accepted that moderate rates of income tax encourage savings, foster growth and motivate voluntary compliance.

In 2012-13 budget the following slabs and rates of personal in come tax for all assessees except women and senior citizens are applicable :

- Income tax slab for individual tax payers to be as follows:

Income upto ₹ 2.0 lakh	Nil
Income above 2.0 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

- For women assesses it would be as follows

Income upto ₹ 2.0 lakh	Nil
Income above 2.0 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 percent

- For senior citizens (60 years and above below 80 years) it would be as follows

Income upto ₹ 2.5 lakh	Nil
Income above 2.5 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

- Very Senior Citizens (80 years and above)

Income upto ₹ 5 lakh	Nil
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

The marginal rate of tax is now 30 percent; it was as high as 97.25 percent before 1975.

Since then, there has been continuous reduction in the rates of income tax. this has helped to reduce tax evasion and increase tax collection.

Deductions

In the past, the income tax act permited certain deductions from the gross annual income. The first was known as standard deduction. Initially, standard deduction was fixed at ₹ 15,000, To give more relief 1998-99 budget raised the standard deduction to ₹ 25,000 to salaried persons upto an income of ₹ 1 lakh and ₹ 20,000 for all others. In the case of women employees, there was additional deduction of ₹ 5,000 from tax.

The 2005-06 budget removed all standard deductions and rebates.

To promote savings, the Income tax Act permits the exemption of income received by way of bank interest and dividends and income from units of the Unit Trust of India to the tune of ₹ 13,000.

Till recently, certain percentages of savings in the form of contribution to life insurance and provident funds were also deducted from gross annual income. From 1990-91 budget, there was a change. 20 per cent of savings, subject to a maximum of ₹ 12,000 or ₹ 14,000 in the case of artists, writers etc. was deductible *from the income tax payable* by an assessee (later raised to ₹ 16,000).

Since 2005-06 all forms of concessions previously given to promote savings were dropped. Instead, the budget allows every tax-payer a consolidated limit of ₹ 1 lakh for savings which will be deducted from the total income before tax is calculated. This amount of ₹ 1 lakh is in addition to the minimum exemption limit of ₹ 1.6 lakh in 2010-11 (budget). From Budget 2010-11 In addition to these investments, deduction of an additional amount of ₹ 20,000 is allowed, over and above the existing limit of ₹ one lakh an tax saving for investment in long term infrastructure bonds as notified by the central governement.

However, the six deductions, allowed by previous budgets, continue: viz (a) deductions on interest paid on housing loan for self-occupied house property; (b) medical insurance premia; (c) specified expenditure on disabled dependents; (d) expense for medical treatment for self or dependent, (e) deduction in respect of interest on loans for pursuing higher studies and (f) deductions to a person with disability.

In terms of yield, (Refer table 4) the personal income tax in India is highly productive. With rapid industrialisation and the consequent rise in personal incomes specially in the last 15 years, the amount of revenue collected from personal income tax has increased steadily over the years. Two facts will be clear from Table 4.

(*a*) The volume of revenue collected from personal income tax amounted to ₹ 140 crores in 1950-51: it rose to

₹ 1,510 crores in 1980-81 but is expected to be ₹ 1,72,026 crores in 2011-12 budget. This huge increase since 1981 has taken place, even though the rates of income tax have been reduced and a large number of people have been left out of the income tax net.

(b) The Central Government used to share the proceeds of the personal income tax with the States on the basis of the recommendations of the Finance Commissions. For instance , during 1950-51, the total collection of income tax was ₹ 140 crores; out of which, ₹ 50 crores were passed on to the States. Likewise, in 1980-81, the States' share was ₹ 1,000 crores and the Centre was left with only ₹ 510 crores. The Finance Commissions, generally increased the share of the states out of the gross proceeds of personal income tax. Under the Tenth Finance Commission, for instance 77.5 per cent of the income tax collections went to the States during 1995-2000. This arrangement was given up since 2000-01 on the recommendations of the Eleventh Finance Commission (EFC) such that now states are given a share in overall tax receipts of the central government.

Table 4 : Central Government Revenue from Taxes on Income

(₹ crores)

Items	*1950-51 Actual*	*1980-81 Actual*	*2001-02 Actual*	*2012-13 Budget*
1. Income Tax	140	1,510	32,000	1,95,786
Less : State Share	50	1,000	--	--
Net receipts from income tax	90	510	32,000	1,95,786
2. Corporation Tax	40	1,310	36,610	3,73,227
Net Revenue from taxes on income	130	1,820	68,610	5,69,013

Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

Corporation Tax

The corporation tax is a tax on the net income of the companies. The Central Government has been imposing a tax on the profits of the large and small companies known as the corporation tax. The rates of corporation tax were different for domestic Companies and for foreign companies.

At one time, the rates of corporation tax were quite high. They were reduced gradually since 1990-91. The reduction in the corporate tax rates was aimed at better compliance and to stimulate the growth process, create multiplier beneficial effects all round and also to attract foreign investments.

The 2005-06 budget aligned the corporate income tax rate for domestic companies to the highest marginal personal income tax rate of 30 percent – till then it was pegged at 35 percent.

The 2005-06 budget also pegged the rate of depreciation for general machinery and plant at 15 percent. The initial depreciation rate was, however, increased to 20 percent.

Besides the basic corporate taxes, there was a surcharge imposed and then removed periodically. The 1999-2000 budget reimposed a 10 per cent surcharge on corporate tax.

Many companies, – even some large companies with huge profits managed to escape the corporate tax net by taking advantage of using the provisions of exemptions, deductions, incentives, differential rate of depreciation etc. In 1996-97, P.C. Chidambaram imposed the Minimum Alternate tax (MAT). In case, total income of a company as computed under corporation tax, after availing all eligible deductions, was less than 30 per cent of the book profits, then the company would be charged to a minimum tax, which worked out to be 12 per cent of book profit. In the current year Budget 2009-10, minimum alternate tax has been increased to 15 percent from the current rate of 10 percent. Exemption from MAT was given to companies engaged in the power and infrastructure sectors, export-oriented units etc.

Other changes in the corporate tax structure in recent years include:

(a) Reduction of the tax rate from 30 to 20 per cent on royalty and technical services fees payable to foreign companies;

(b) modification of the minimum alternate tax (MAT) on companies;

(c) Abolition of tax on dividends in the hands of the shareholders; and

(d) Imposition of a tax on distributed profits at the moderate rate of 10 per cent. This is to induce companies to retain the bulk of their profits and plough them into fresh investments.

The corporation tax yielded revenue of ₹ 40 crores in 1950-51, which was about 30 per cent of personal income tax. It rose to ₹ 1,310 crores is 1980-81 and it was less than the personal income tax revenue. Under the impact of economic planning and rapid industrialisation, the yield from corporate tax has been rising steadily. The corporation tax is expected to yield ₹ 3,73,227 crores in 2012-2013 (budget) reflecting the growing industrialisation in the country. At present the corporation tax is the single largest revenue-yielding tax in the country.

Interest Tax

The Interest Tax Act 1974 provided for the levy and a special tax on the gross amount of interest accruing to the commercial banks on loans and advances made by them in India. The yield from this tax was ₹ 11 crores in 1974-75, and it shot up to ₹ 115 crores (1977-78). The Government, however, withdrew the interest tax in 1985 but later reintroduced it as an anti-inflationary measure. The tax was levied on the gross interest income of "credit institutions", that is, banks, public financial institutions, financial companies, etc. During the financial year 1999-2000 receipts from this source was estimated at ₹ 1,000 crores. The interest tax of 2 per cent paid by banks and financial institutions was abolished in 2000-2001 budget.

Expenditure Tax. There was an expenditure tax in India which was one of the many "progressive" taxes introduced by T.T. Krishnamachari (TTK) in the 1950's but was later withdrawn because it was a miserable failure.

As from November 1987, the Government imposed an expenditure tax under the Expenditure Tax Act, 1987. This Act provided for a levy of a tax on expenditure incurred in hotels where the room charges for any unit of residential accommodation were ₹ 400 or more per day per individual. The rates of expenditure tax were revised later from 10 per cent to 20 per cent and the tax was extended to expenditure incurred in restaurants providing superior facilities of air conditioning, etc.

The expenditure tax was dropped later.

The total net revenue collected by the Central Government from all the taxes on income and expenditure is shown in Table 4. As mentioned earlier revenue from interest income and from expenditure taxes has not been given. Only personal income tax and corporate income tax are given in Table 4. Tax revenue has steadily increased from ₹ 130 crores in 1950-51 to ₹ 1,910 crores in 1980-81, and is expected to be ₹ 7,71,071 crores in 2012-2013 (budget) (net of states share)

The yield from personal income tax and corporate income tax has risen smartly over the last few years reflecting clearly the rapid growth of the Indian economy and rise in personal incomes of the middle and higher income groups.

Central Taxes on Property

Since independence, the Central Government has imposed certain taxes on wealth, inheritance of wealth and gifts with the laudable objective that (a) these taxes would fall on the rich, and (b) they would help to reduce inequality of wealth and income in the country. But these taxes never became significant because of inefficient implementation and extensive evasion.

Wealth Tax

Wealth Tax is the most important in this group. It has been imposed on accumulated wealth or property of every individual, Hindu undivided family and closely held companies. Not all wealth holders are taxed. Wealth below ₹ 2.5 lakhs is exempted. At one time, the rate of wealth tax was too high—the highest rate was 15 per cent. When combined with the steeply progressive income tax, wealth tax forced the rich to go for extensive evasion and avoidance of both income and wealth tax. The rate of wealth tax is now quite low, ranging from 0.5 to 2 per cent. In the 1992-93 budget Dr. Manmohan Singh withdrew wealth tax on productive assets such as shares and limited the tax to unproductive assets only such as guest houses, residential houses, jewellery etc. With effect from April 1993, wealth tax was chargeable in respect of the net wealth exceeding ₹ 15 lakhs at 1 per cent only.

In view of these changes in the Wealth Tax Act, the collection from this source had gone down substantially. It is interesting to note that the budget estimate and actual realisation of wealth tax had remained constant at ₹ 145 crores for many years, indicating clearly that the Finance Ministry officials are not bothered about this tax. It is better to abolish wealth tax as the collection is disgracefully low.

Estate Duty

Formerly, Estate Duty was imposed on the estate of a person which was inherited by his heirs. The duty was imposed and collected by the Central Government but the proceeds were passed on to the States.

The rate of estate duty ranged between 4 per cent to 40 per cent of the value of the estate left behind. The tax was, thus, a highly progressive tax on paper, and the burden was supposed to fall heavily on the larger properties. It was meant to reduce large fortunes through inheritance. However, the amount of revenue collected was pitiably low for such a huge country indicating that there was extensive evasion of the tax – the rich, obviously did not die. The Government collected around ₹ 15 crores from this source; almost the entire amount was transferred to the States. As the tax yield was too low while the cost of administration was relatively high, V.P. Singh, when he was the finance minister, abolished the estate duty from the middle of March, 1985. This was indeed a sensible decision. There is no sense or purpose in imposing a tax if it cannot bring in a decent revenue to the exchequer.

Gift tax

The Government imposed the gift tax in April 1958 as a complement to the estate duty, wealth tax and the expenditure tax – the gift tax was necessary to prevent evasion of the other three taxes. The gift tax was charged and collected every financial year on gift made during the previous year. A basic weakness of the gift tax was that it was imposed on the donor and the rate was highly progressive according to the value of the gift. This had led to extensive evasions.

The 1990-91 budget introduced major changes in the taxation of gifts - e.g. the gift tax would fall on the donee and not on the donor; the exemption limit was raised and the rate of gift tax was reduced but these changes could not be implemented.

Unfortunately, the gift tax continued to be in the Central list of taxes bringing in a ridiculously low income of ₹ 10 crores per year. In his budget speech for the year 1998-99, Mr. Yashwant Sinha finally abolished the gift tax on the ground of its ridiculously low yield. Gifts are now clubbed with income in the hands of their beneficiaries.

Now, the original purpose of imposing taxes on property and on transfer of property was to reduce the growing inequalities of income and wealth. This purpose was never achieved because of unimaginatively high rates of wealth tax in the beginning, the various exemptions allowed over the years and the corrupt direct tax administration – the income tax department is one of the most corrupt departments of the Central Government – which has always colluded with the rich and the powerful in helping them evade the income and property taxes.

The wealth tax, for instance, is extensively evaded and brings in ridiculously low revenue. There is no purpose served in retaining such taxes which should have been dropped long ago. The wealth tax, however, has been retained because every Finance Minister has been under pressure from the left parties, and wants to give the impression that the rich are taxed heavily. Till now, no finance minister at the Centre has had the courage to drop the wealth tax.

Taxes on Commodities and Services

Commodity taxes have been important sources of revenue for the Central Government. Central excise duties and customs duties are two important taxes of the Central Government.

Cutoms Duties

These are duties or taxes imposed on commodities imported into India (import duties, or on those goods exported from India (export duties). As export duties reduced the competitive position of Indian goods in international markets, the Government has removed export duties.

Import duties have been relatively very productive. There has been considerable increase in revenue from customs duties because of heavy imports of iron and steel, chemicals, drugs and medicines, fertilisers, petroleum products, etc.

In 1980-81, the Central Government collected over ₹ 3,410 crores by way of customs duties. The Government hopes to collect ₹ 1,86,694 crores from customs duties during 2012-2013 (budget).

From Table 5 it should be clear that customs duties were more important than excise duties in 1950-51 but in course of time they lost their pride of place to excise duties. In the last few years, the Government of India has steadily reduced and rationalised import duties. Even then, customs duties are still quite significant in India's tax structure and it is the third largest source of tax revenue to the Centre after corporation tax and excise duties.

Central Excise Duties

Soon after Independence, the Government felt the need for additional revenue for purposes of economic development and it found in excise duties a very good source of revenue. These duties are levied by the Centre on commodities which are produced within the country. But commodities on which State Governments impose excise duties (as for instance, on liquor and drugs) are exempted from Central Excise Duties. Initially sugar, cotton, mill cloth, tobacco, motor spirit, matches, cement, etc., were the goods which yielded the most by way of excise duties. In recent years, excise duties have been extended to a large number of goods and the duties already levied have been raised. Gross Revenue from Central Excise duties has risen from about ₹ 70 crores in 1950-51 to ₹ 6,500 crores in 1980-81; the budget estimates for 2012-2013 anticipate gross excise tax collection at ₹ 1,94,350 crores. In the last few years, the excise duty rates have been rationalised and generally reduced.

Table 5 : Central Revenue from Taxes on commodities and services

(₹ crores)

Items	1950-51 *Actual*	1980-81 *Actual*	2001-02 *Actual*	2012-13 *Budget*
1. Central Excise Duties	70	3,720	68,530	1,94,350
2. Customs Duties	160	3.410	47,540	1,86,694
3. Service Tax	—	—	2,610	1,24,000
4. Other Commodity Taxes*	—	310	2,310	1,651
Total Revenue from Commodity Service Tax	**230**	**7,440**	**1,20,270**	**5,07,354**

Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

*Other commodity taxes relate to (a) Sales tax, State excise duties, taxes on vehicles etc., of Union Territories; and (b) proceeds of Foreign Exchange Conservation (Travel) Tax, Foreign Travel Tax and Inland Air Travel Tax. This source was unimportant in 1950-51 (the collection was only ₹ 4 crores).

In the past, the Central Government had to share the proceeds of central excise duties with the States according to a formula determined by the finance commission from time to time. For instance, under the terms of the Tenth Finance Commission, 47.5 per cent of the proceeds of excise duties were transferred to the States. This arrangement has now been discontinued. As already explained, the Constitution 80th Amendment Act, 2000 has prescribed the sharing of all Central taxes with the states.

Service Tax

Till 1995-96, the Government of India had imposed taxes only on commodities leaving out services. There was a growing realization in the Central Finance Ministry that if commodities could be taxed – on their production and sale – services too could be taxed. Besides, in the last few decades, the services component in GDP was increasing rapidly.

Accordingly, the Government decided to impose service taxes on electricity services, telephone services, brokerage, etc. With every passing year, new services are brought under service tax – there are now 81, service taxes. Actually, this tax is one of the fastest growing taxes for the Central Government. For instance, the yield from service tax had risen from ₹ 407 crores in 1994-95 (the first year of collection) to ₹ 2,610 crores in 2001-02. The current budget for 2012-13 expects the service tax to yield ₹ 1,24,000 crores.

Gross Tax Revenue and Net Tax Revenue of the Central Government

Under Article 270 of the Indian Constitution, the Central Government had to share the proceeds of personal income tax and Central excise duties with the State Governments. Besides, the entire collection of Central sales tax was passed on to the states under some formula devised by the Finance Commissions. Accordingly, the net revenue to the Centre was much less than the gross revenue collected by it. This system, however, was given up. With the Constitution 80th Amendment Act, 2000, a prescribed percentage of the net proceeds of all Central taxes (except Union surcharge, cess levied for specific purpose, etc.) is to be assigned to the states. This new system of tax-sharing between the Centre and the States came into effect with the recommendations of the Eleventh Finance Commission (EFC).

Under the Eleventh Finance Commission 28 per cent of the total tax revenue collection of the Centre was transferred to the States. In addition, 1.5 per cent of the tax proceeds of the Centre was to be distributed among such states, which did not levy and collect sales tax on sugar, textiles and tobacco. Thus, the total share of the states in the net proceeds of Union taxes and duties was to be 29.5 per cent (for the period 2000 to 2005).

The 12th Finance Commission, however, raised the States' share to 30.5 per cent of the total collection (from 29.5 %) for the period 2005-10. The 2011-12 budget shows the gross tax collection, the share of the States, and net tax receipts for the Centre:-

Table 6 : Calculation of gross and net tax revenue (2012-13 budget)

	₹crores
1. Taxes on Income	5,69,013
2. Taxes on Wealth	1,244
3. Taxes on commodities and services	5,07,354
Gross Tax Revenue	**10,77,612**
Less States' share of all taxes	3,01,921
Less Amounts transferred to the National Calamity Contingency Fund (NCCF)	4,620
Net Tax Revenue	**7,71,071**

SOURCE: Government of India, Budget as a Glance, 2012-13 and earlier issues.

It is clear that in 2012-13 (budget estimate), the gross revenue of the Centre is expected to be ₹ 10,77,612 crores but after deducting contribution to National Calamity Fund and giving a share to the states, its net revenue will be only ₹ 7,71,071 crores.

Magnitude of Direct and Indirect Taxes

We can now make a comparative study of the various types of taxes of the Union Government. Direct taxes are taxes on income and property. They are direct as the assessees have to pay them and cannot shift to others. Indirect taxes are taxes on commodities and services and the burden can be shifted to others. Direct taxes as a share in the total tax revenue was coming down over the years from 36 per cent to 16 per cent between 1951 and 1991, while the share of indirect taxes i.e. taxes on commodities and services, has been correspondingly increasing from 64 per cent to 84 per cent. The over-riding importance of commodity and service taxes in the tax structure of the Central Government in the past, was a clear indication that the Central Government found it easy to impose indirect taxes rather than direct taxes. Naturally, the burden of taxation fell more heavily on lower and middle income groups than on the richer sections of the community.

Since the 1990s, however, direct taxes are gradually growing in importance again. For example, in 2001-2002, the ratio between direct and indirect taxes was 37:63. The 2012-13 budget estimates indicate the relative share of direct and indirect taxes at 53 : 47. What is the cause for this change in trend ?.

With liberalization and a rising rate of growth of the Indian economy, both personal income tax and corporation income tax – specially the latter – are rising fast. Accordingly, the gross revenue from direct taxes has been growing rapidly and and has overtaken the growth of indirect taxes. Let us consider Table 7.

TABLE 7: Comparative Position of Direct and Indirect Taxes of the Central Government

₹ crores

Year	Direct Taxes	Indirect Taxes	Gross Tax Revenue
1950-51	174(43)	227(57)	401
1990-91	11,030(16)	57,470(84)	68,500
2001-02	69,230(37)	1,20,270(63)	1,89,500
2012-13(BE)	5,70,257(53)	5,07,354(43)	10,77,612

Note: Figures in brackets are percentages of Total Tax Revenue.
Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

Non-tax Revenues of the Central Government

Besides taxes on income, property and commodities, the Central Government gets revenue from other sources also, which are ***collectively called non-tax revenue***. These non-tax revenues include receipts from fiscal services, interest receipts, dividends and profits of government enterprises, general services, etc. The growth of non-tax revenue in recent years can be seen from Table 8.

In 1950-51, non-tax revenue of the Centre amounted to ₹ 49 crores but in 1970-71 it went up to ₹ 890 crores. The budget for 2012-2013 places it at ₹ 1,64,614 crores.

Table 5 : Analysis of non-tax revenue

(₹ crores)

	1970-71 *Actual*	2012-2013 *Budget*
1. Interest Receipt	590	19,231
2. Dividends and Profits	120	50,153
3. Fiscal and other Services*	180	95,230
Total	**890**	**1,64,614**

* Include grants-in-aid from external sources and receipts of Union territories without legislature (such as Chandigarh)

Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

Interest receipts which constitute an important source of non-tax revenue comprise of interest on loans to states and Union territories, interest payable by Railways and Postal services, and other interest receipts (such as loans to public enterprises etc.)

Profits and dividends relate to profits of RBI, profits of nationalised banks, LIC, public enterprises etc.

Fiscal services relate to revenue received by the Central Government from (a) currency, coinage and mint, (b) other fiscal services relating to India Security Press, Nasik, Hyderabad, etc. and (c) general Services include social community services, economic services and grants-in-aid and contributions.

Trends of Revenues of the Central Government

Revenue of the Central Government in India, as in the case of other countries, has shown a rising tendency. This is but natural because with the growth of national income and per capita income, the sources of revenue available to the Government are increasing. New taxes have been imposed; rates of taxes have been altered. There has been alround increase in tax receipts.

Another trend to be noted is the relative increase in the revenue of the Central Government in the combined revenues of both federal and state Governments. In 1953-54, the share of the Central Government in the total revenues of all Governments was 48 per cent; and by 2005-06 it had increased to 60 per cent. This is due to the fact that the revenues of the Central Government have been rising much faster than those of the State Governments. This is also because the Central Government taxes – particularly income tax, corporation tax, excise duties and customs duties– are highly productive and elastic.

Although the relative composition of taxes has been undergoing significant changes, the predominance of taxes on commodities had continued in the tax system of the Central Government. According to the 2012-13 budget, Commodity taxes, (now taxes on services are also included) contribute 47 per cent of the Central gross revenue (their contribution was as high as 84 percent in 1990-91) and taxes on income and property (direct taxes) contribute about 53 per cent in 2012-13. This clearly shows that till the middle of 1990's the burden of Union taxation was being borne largely by the lower and middle income groups. This was despite the declared objective of the Government that the rich would be taxed more heavily and that the poor would be let off lightly. This trend, however, is changing quite fast in recent years.

At one time, personal income tax was the most important single tax for the Central Government closely followed by the customs duties. Union excise duties were a poor third. But, at present, the most important source of revenue for the Central Government is the corporation tax followed by central excise duties, personal income tax and customs duties. If the present trend continues, corporation income tax will overtake Central excise collections.

Finally, reference should be made to non-tax revenues, which are becoming increasingly important — from ₹ 890 crores in 1970-71, non-tax revenue is likely to be to ₹ 1,64,617 crores in 2012-2013. Nearly 60 per cent of non-tax revenue in 1970-71 came from interest on loans granted by the Centre to the States. This trend has changed in recent years. The public enterprises make reasonable returns in the form of profits, – making up nearly 30 percent of non-tax revenue.

3. EXPENDITURE OF THE CENTRAL GOVERNMENT

Table 9 summarizes the revenue expenditure of the Central Government for selected years.

There has been tremendous increase in the expenditure of the Central Government, particularly in revenue expenditure financed through current taxation and other current non-tax revenues.

Table 9. Expenditure of the Central Government

(₹ crores)

Year	*Revenue Expenditure*	*Capital Expenditure*	*Total Expenditure*
1950-51	350	180	530
1980-81	14,540	9,630	24,170
2001-02	3,01,610	60,840	3,62,450
2012-13	12,86,109	2,04,816	14,90,925

Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

Before 1987-88, the revenue expenditure of the Central Government was broadly classified into three types, viz., civil expenditure (which included general services, social and community services, and economic services), defence expenditure and grants-in-aid to States and Union territories. At the same time, the Central Government also had adopted another classification of expenditure, viz., development expenditure, defence expenditure and other expenditure.

(*a*) Under development expenditure, the Central Government included: expenditure on social and community services, on economic services and grants-in-aid to the States and Union territories for development purposes.

(*b*) Defence expenditure of the Central Government was on armed forces and it included pensions given to the retired armed personnel.

(*c*) Other expenditure of the Central Government consists of collection of taxes and duties, administrative services, interest payments, pension and other retirement benefits, other grants to the States, etc.

If we add defence expenditure and other expenditure together, we could obtain non-development expenditure.

New classification of expenditure

The Central Government adopted a new classification of public expenditure from 1987-88 budget. Under this new classification, all public expenditure is classified into (a) non-Plan expenditure and (b) Plan expenditure.

Non-Plan Expenditure. Non-Plan expenditure of the Central Government is further divided into revenue expenditure and capital expenditure.

Revenue expenditure is financed out of revenue receipts, both tax revenue and non-tax revenue. Under revenue expenditure, we include :

(*a*) Interest payments, defence revenue expenditure, major subsidies (food, fertilisers and export promotion), other subsidies, debt relief to farmers, postal deficit, police, pensions, other general services (organs of state, tax collection, external affairs, etc),

(b) social services (education, health, broadcasting, etc.),

(c) economic services (agriculture, industry, power, transport, communications, science and technology, etc) and

(*d*) grants to states and Union territories and grants to foreign governments.

Capital non-Plan expenditure includes such items as defence capital expenditure, loans to public enterprises, loans to States and Union territories and loans to foreign Governments.

It will be seen from Table 10 that non-Plan expenditure, both on revenue and capital accounts, has increased from ₹ 64,500 crores in 1989-90 to ₹ 9,69,900 crores in 2012-2013 (Budget) – increase by nearly 15 times in 13 years.

Plan Expenditure. The second major item of Central Government expenditure is Plan expenditure which is composed of :

(a) Central Plans, such as on agriculture, rural development, irrigation and flood control, energy, industry and minerals, transport, communications, science and technology and environment, social services and others; and

(b) Central assistance for Plans of the States and Union Territories.

It will be clear from Table 10 that Plan expenditure on both revenue and capital accounts was ₹ 28,400 crores in 1989-90 but is expected to touch ₹ 5,21,025 crores in 2012-2013 (budget) — a rise by nearly 18.3 times in 13 yars.

Table 10 : Total Expenditure of the Central Government
(Revenue and Capital Accounts)

(₹ crores)

	1989-90 (Actual)	2012-2013 Budget
1. Non-Plan Expenditure	**64,500**	**9,69,900**
On revenue account	52,130	8,65,596
On capital account	12,370	1,04,304
2. Plan Expenditure	**28,400**	**5,21,025**
On revenue account	12,070	4,20,513
On capital account	16,330	1,00,512
Total, Expenditure	**92,900**	**14,90,925**

SOURCE: Government of India, Budget as a Glance, 2012-13 and earlier issues.

Capital Expenditure and Capital Receipts

Capital expenditure of the Central Government consists of plan expenditure and non-plan expenditure, it is financed out of capital receipts.

The **capital expenditure** of the Central Government consists of:

(a) loans to states and Union territories for financing Plan projects, and loans to foreign governments;
(b) capital expenditure on economic development;
(c) capital expenditure on social and community development;
(d) capital expenditure on defence; and
(e) capital expenditure on general services.

The **capital receipts** of the Central Government are composed of:

(i) net recoveries of loans and advances to State Governments and Union Territories and public sector enterprises;

(ii) net market borrowings (i.e. gross borrowings less repayments);

(iii) net small savings collections (gross small savings less States' share); and

(iv) other capital receipts which include provident funds, special deposits, etc.

Trends in Expenditure of the Central Government

Public expenditure in a developing economy has certain notable trends, and Indian public expenditure has shown those trends in a marked manner. Government expenditure in India has been growing very rapidly after 1950-51. Before Independence, there was no planning in India and no effort on the part of Government to establish a welfare state. Public expenditure was, therefore, comparatively small. During the Second World War, government expenditure increased because of the war effort. In the post-war period introduction of planning and the provision by the Government of welfare services in a big way caused public expenditure, both at the Centre and in the States, to increase rapidly.

Moreover, the complexion of expenditure has also been changing very conspicuously. Before Independence, the British Government in India was interested primarily in the defence and civil administration of the country. Therefore, a large part of the expenditure of the Central and State Governments was on these services. Since Independence, increasing participation of the government in economic life has caused the proportion of development expenditure to the total expenditure to increase rapidly. Defence expenditure has also been rising rapidly due to threat to India's security.

(i) The first major trend in public expenditure which we observe in India (Consult Table 9) is the ***growing revenue expenditure of the Government.*** From over ₹ 350 crores in 1950-51, the revenue expenditure of the Government of India is over ₹12,86,109 crores in 2012-2013 (budget). Increased defence commitments, expansion of administration, the working of democratic institutions like the Parliament, the Government's international commitments, increase in Government's participation in nation-building activities like education and public health, rise in prices, etc.—all these are responsible for increased revenue expenditure of the Central Government.

(ii) Non-development expenditure still continues to be a large proportion of the total expenditure. Defence, debt services and administrative expenses are so large and so significant that they are responsible for keeping non-development expenditure at a high level.

(iii) Non-plan expenditure has been rising very fast in recent years—in the 1980's, the annual increase in non-plan expenditure was about ₹ 5,000 crores and in the 1990's the annual increase was over ₹ 10,000 crores. Interest payments, defence expenditure, subsidies and general services—these together form over 90 per cent of non-plan expenditure. What is really serious is that there is absolutely no chance of these four items being kept under check. For instance:

(a) with ever-growing public debt and other liabilities, interest burden of the Central Government is bound to increase over the years, as for example, ₹ 9,250 crores in 1986-87 to ₹ 21,500 crores in 1990-91 and ₹ 3,19,759 crores in 2012-2013 budget.

(b) defence expenditure is shooting up because of growing tensions in the Indian Ocean region and in Kashmir and the use of highly expensive technology in war equipment —defence expenditure on the revenue account has increased from ₹ 10,870 crores to ₹ 1,13,829 crores between 1991 and 2013.

(c) subsidies on food, fertilisers and on export promotion, have become an integral part of Central Government expenditure and despite Government's frequent promise to reduce them, they are continuing to rise, year after year. Total subsidies rose from ₹ 4,900 crores in 1985-86 to ₹ 12,160 crores in 1990-91 and will be over ₹ 1,90,015 crores in 2012-2013 (budget estimates);

(d) the expenditure on general service of the Central government consisting of expenditure on organs of state, tax collection, external services, police, pensons etc. rises every year with wage revisions and periodic increase in dearness allowance. Besides, the Centre has to assist States and Union Territories with grants and assistance for national calamities, The tremendous rise in expenses on administration is a matter of great concern. Consider the following figures (Table 11).

Table 11 : Non-plan revenue expenditure on major selected items

(₹ crores)

	1985-86 *Actual*	1990-91 *Actual*	2012-2013 *Budget*
1. Interest payments	7,500	21,500	3,19,759
2. Defence	7,000	10,870	1,13,829
3. Subsidies	4,900	12,160	1,90,015
4. General, economic and social services	2,060	6,850	2,41,993
Total	**24,460**	**51,380**	**8,65,596**

Source: Government of India, Budget as a Glance, 2012-13 and earlier issues.

As mentioned earlier, the total expenditure on these four items alone account for about 80 per cent of the current non-plan expenditure. Unless non-plan expenditure is

carefully monitored and controlled, or unless current revenue is increased proportionally, the Central Government would be *forced to borrow to meet the revenue gap* increasingly and get into a hopeless debt trap.

(iv) Since 1950-51, despite the professed objective of the Government to be interested in economic development and establishment of a Welfare State, the single largest item of expenditure of the country till a few years ago was the defence expenditure. For instance, defence expenditure (revenue and capital) was ₹ 160 crores in 1950-51 and ₹ 2,38,206 crores in 2012-2013 (budget). However, defence expenditure has gone down from 47 per cent of the total expenditure in 1950-51 to 16.0 per cent in 2011-2012 (budget).

(v) Finally, interest payment has now become the single largest item of expenditure (₹ 3,19,759 crores). This is directly due to extensive borrowing from the market, banks and financial institutions for purposes of development and other needs, and consequent growing burden of debt services. Interest payment was only 11 per cent of current revenue expenditure in 1950-51; it increased to 20 per cent in 1985-86; it is expected to rise to 25 per cent in 2012-13 (budget).

Even though debt services i.e interest payments – are brought under non-development expenditure, we should recognise their relation to economic development in the country. Since economic planning was initiated in 1950-51, the Government has been borrowing extensively from the market and also from other countries to finance economic development. This was the position till about a decade ago. Since then the Government has been borrowing even to meet its current revenue expenditure. The total public debt and other liabilities of India has gone up from ₹2,860 crores in 1950-51 to over ₹50,25,072 crores by the end of March 2013. ***The increase in debt services is, therefore, the price the country is paying partly for economic growth and partly for wasteful current expenditure.***

To conclude: The expenditure of the Central Government since 1950-51 has been influenced largely by two considerations, viz., the necessity to speed up the economic development of the country and keep the country prepared to face threats to its security from foreign aggression. But defence and development are contradictory objectives to follow. To a very large extent India's development effort has been stunted because of the necessity to divert scarce resources for defence needs. In recent years, the Government is burdened with ever-increasing burden of subsidies and general administration.

2. Tables of this section (viz. Tables 12 to 16 have been prepared from ***RBI Handbook of Statistics on State Government Finances*** (2004) and RBI Bulletin February 2008.

4. BUDGETS OF STATE GOVERNMENTS[2]

In India, each State Government prepares its own budget of income and expenditure every year. Table 12 summanses the budgetary position of the states since 1951-52.

An important fact revealed by Table 12 is that the receipts and expenditure of the States on the revenue account have been continuously increasing. For instance, in 1951-52, the current revenue of the States was a mere ₹ 396 crores, but it went upto ₹ 16,290 crores in 1980-81 and finally it is expected to exceed ₹8,04,943 crores in 2009-2010 (Budget estimates).

The basic reason for this huge increase in state revenues is the necessity to finance the continuously rising expenditure of States which has gone up from ₹ 392 crores in 1951-52 to ₹ 9,37,408 crores in 2010-2011 (Budget). Increase in state revenues over the last five decades are : imposition of new taxes, specially on commodities, rise in the rates of taxes, greater share in Central Government taxes and increasing receipts from the Central Government by way of general and particular grants, etc.

There are many reasons for the increase in the expenditure of the States over the years. The most important reasons are: expansion in civil administration, higher salaries and wages due to rise in prices and cost of living, increase in the provision of government services in the form of education, public health, etc., as well as increased development expenditure.

TABLE 12 : Budgets of State Government

(₹ crores)

Items	1951-52 Actuals	1980-81 Actuals	2000-01 Actuals	2010-11 Budget
A. Revenue Account				
Receipts	396	16,290	2,37,950	9,13,038
Expenditure	392	14,810	2,91,520	9,37,408
Surplus(+)Deficit(-)	+4	+1,480	-53,570	–24,370
B. Capital Account				
Receipts	137	5580	1,11,590	2,42,360
Disbursements	189	7960	55680	2,37,176
Surplus / Deficit	– 52	– 2,380	+55,910	+5,684
Over all surplus / Deficit	- 48	– 900	+ 2,340	–18,686

Source: RBI, Handbook of Statistics on the Indian Economy 2010-11. RBI, State Finances. A Study of Budgets of 2010-11.

The first part of States' Budgets is revenue receipts and revenue expenditures. A very interesting point was the surplus revenue over current expenditure which States made regularly for many years in the past. In table 12, current account surplus was ₹ 4 crores in 1951-52 and it rose to ₹ 1,480 crores in 1980-81.

Since 1986-87, however, States too, like the Centre, have started incurring heavy deficits in their current account. The 2001-2002 state budgets incurred a revenue deficit of ₹ 53,570 crores. Finance Commissions have transferred huge funds from the Centre to the States. Accordingly, states have avoided revenue deficits in recent years. In 2010-11, states expected a revenue deficit ₹ 24,370 crores.

The second part of State Budgets consists of capital receipts of states and disbursements out of them. Capital receipts consist of market loans, borrowings from the Central Government, collecting small savings of the public and provident fund contributions. Capital outlay or disbursements are on various development projects like river valley projects, schemes for agricultural development, etc. As capital revenue was less than capital disbursement, State Governments had experienced deficit in the capital account in the first four decades since 1951-52. Later, they had budgeted for larger surpluses in the capital account.

We take revenue deficits and surpluses and capital deficities surpluses together and calculate the over-all surplus/deficit of the states. In 2010-11 budget, states anticipate a revenue deficit of ₹ 24,370 crores, but a capital surplus of ₹ 5,684 crores – the net over – all deficit is ₹ 18,686 crores.

It would be clear from Table 12 that States have generally managed to get over-all budget surpluses meaning that the aggregate disbursements are below aggregate receipts.

Current Revenue of State Governments

State Governments in India collect revenue from different sources to meet their revenue expenditure. Table 13 shows that the important sources of revenue for the States are:

(a) States own taxes states' share in Central taxes,

(b) States' share in the tax proceeds of the Central Government;

(d) grants-in-aid and other contributions from the Centre, and

(e) States' own non-tax revenue.

Table 13 : Revenue of the State Governments on Revenue Account

(₹ crores)

Items	1951-52 Actuals	1980-81 Actuals	2000-01 Actuals	2010-11 Budget
1. Tax Revenue	280	10,400	168,710	6,27,148
2. Non-tax revenue	120	5,890	69,240	2,85,891
of which				
(a) Grants from the Centre	30	2,620	37,780	1,83,282
(b) States' own non-tax revenue	90	3,270	31,460	1,02,609
Total Receipts (1+2)	400	16,290	237,950	9,13,038

Source: RBI, Handbook of Statistics on the Indian Economy 2007-08. State Finances : A Study of Budgets 2010-11.

The tax revenue of the States consists of two parts; viz. (a) revenue from States' taxes, comprising broadly taxes on income, taxes on property and capital transactions and taxes on commodities and services, and (b) share in Central taxes.

In the 2010-2011 budget, the tax revenue of States is placed at ₹ 6,27,148 crores, of which

(a) Revenue from States' own taxes would be ₹ 4,18,151 crore and

(*b*) the Sates' share in Central taxes would be ₹ 2,08,997 crores.

The second source of current revenue to the states is known as **non-tax revenue. This consists of :**

(a) Grants from the Central Government and

(b) States' own non-tax revenue, consisting of interest receipts, dividends and profits, general services (of which State lotteries are the most important for some states), social services and economic services. Under which the states are given a per centage share of the total tax proceeds of the centrol

Now, the State Governments depend heavily upon the Centre for their revenue receipts :

(a) They received their share in taxes — till 1999-2000, from personal income tax and excise duties, imposed and collected by the Centre but the proceeds were shared with the States; This method of sharing has now been given up under Constitution Amendment Act 2000 under which the states are given a per centage share of the total tax proceeds of the Centre.

Between 2000 and 2005, States got 29.5 per cent of all the tax collections of the Centre. For instance, the states received ₹ 50,730 crores in 2000-01 from the Centre as their share of taxes. The share of states in Central taxes was raised to 30.5 per cent of all Central taxes for the five year period 2005-10. This was the recommendation of the 12th Finance Commission. Accordingly, states expect to receive ₹ 2,08,997 crores during 2010-11 (Budget) as their share from Central taxes.

(b) Besides a share in Central taxes, the states receive grants from the Central Government on the basis of the recommendations of the finance commissions. Grants-in-aid from the Centre are anticipated to be ₹ 1,83,282 crores in 2010-11 (Budget). Grants from the Centre are made for State Plan schemes, Central Plan schemes, Centrally sponsored schemes, special plan schemes and non-plan grants which consist of

(a) statutry grants;

(b) grants for natural calamaties; and

(c) non-plan no-statutory grants.

Thus, the States hope to receive from the Central Government during 2010-11:

(i) Share in taxes: ₹ 2,08,997 crores
(ii) Grants-in-aid: ₹ 1,83,282 crores
(iii) Total transfers from the Centre: ₹ 3,92,279 crores.

This would amount to 57.5 percent of the total revenue receipts of the Central Government. This is the extent of States' dependence on the Centre for their current revenues.

Let us now consider states own sources of tax revenue. As mentioned above, states impose (a) taxes on income of the people (b) on properly and on property transaction and (c) on commodities and services.

States Taxes on Income

The State Governments have been getting revenue from taxes on income in two ways— agricultural income tax and profession tax.

Agricultural income tax and profession tax are the two taxes imposed and collected by the States themselves. The proceeds from these two taxes are relatively insignificant. Agricultural income tax, for instance, yields a pitiable ₹ 20 crores to ₹ 22 crores in a year for all the states.

Tax on professions, callings, trades and employment yield more revenue as for e.g. about ₹ 3,000 crores in 2007-08 (budget). When we consider all the states and union territories, this amount of collection is almost insignificant.

Before the year 2000 States had a large share in the personal income tax imposed and collected by the Centre—as much as 85 per cent of the proceeds of the personal income tax was transferred to the states at one time. This share was the most important item of revenue for the states under this head. However, this system of transfer of the proceeds of the Central income tax to the states was given up since 2000. Instead, a certain percentage — 29.5 per cent of *all tax collections of the Centre* was transferred to the states during the five year period, 2000-05. Under the Eleventh Finance Commission (EFC) recommendations this has been raised to 30.5 per cent for the period 2005-10.

States Taxes on Property and Property Transactions

State Governments raise revenue from taxes on property and capital transactions. The main sources are land revenue, stamps and registration, and tax on urban immovable property.

Land revenue was the most important source of revenue of States in 1951-52; it is no longer so. The basis of land revenue and the rates of land revenue vary from State to State (though the variations are now very much reduced because of the land reforms). The basis of assessment of land revenue is: (a) net assets of the land, or (b) value of the produce, or (c) gross produce.

The rate of land revenue also differs from State to State. The rate of tax ranges between 25 and 50 per cent of the net produce or net assets; where gross produce is the basis, it is generally one-sixth of the gross-produce.

Sometimes land revenue may be suspended or remitted in those areas where there is a continuous failure of crops. Such suspensions and remissions are granted in times of distress. Moreover, the receipts of land revenue have been comparatively inelastic, as settlement of land revenue is done once in 30 or 40 years. The land revenue is highly inequitable as it falls more heavily on the poor farmers than on the bigger landlords. It is assessed on the basis of net assets or annual value, without any reference to the capacity of the farmers to pay. The rate of tax is proportional and not progressive and there is no minimum exemption limit. During 2007-08, land revenue was expected to yield ₹ 3,290 crores.

At present, stamps and registration on transfer of property occupy a very important position in this group. It may be observed that collections from stamps and registration have been steadily increasing because property transactions are extensive in these years. The amount expected to be collected is about ₹ 36,860 crores in 2007-08. The amount could be twice or even three times the amount collected — i.e. the amount of property registration tax could be around ₹ 60,000 crores if only the tax is reasonably low and is properly collected. However, there is extensive evasion of stamp duties as the rates are high and most property transactions are heavily under-valued to escape paying high stamp duties and are the most important source of blank money in the country.

Some State Governments impose urban immovable property tax. The collection from this tax is also meagre—as for instance, ₹ 22 cross in 1990-91 and a little more than ₹ 160 crores in 2007-08. This is indeed a miserably low collection. In fact, such taxes should scrapped.

Till 1985, the Centre had imposed and collected a tax on the inheritance of property known as the estate duty and the proceeds were transferred to the states. The tax was intended to reduce inequality of income and wealth and also to raise revenue for the State Governments. The tax was discontinued as there was extensive evasion and consequently the tax proceeds were meagre (less than ₹ 10 crores a year).

States Taxes on Commodities and Services

Like the Union Government, the State Governments too have found commodity taxes as the best source of revenue. The commodity taxes are: general sales tax, States Excise duties, motor vehicles tax, electricity duties, entertainment tax etc.

The relative growth of sales tax and state excise duties in recent years can be understood from table 15.

TABLE 14. States, Taxes on Commodities and services ₹ *crores*

Year	*Sales Taxe/Vat*	*States Excise Duties*	*Other taxes and duties*	*Total*
1990-91	17,670	4,800	4,500	26,970
2000-01	73,360	16,040	15,420	1,04,820
2008-09	203624	39,464	41,065	2,84,153
2010-11(BE)	2,64,848	55,478	49,633	3,69,959

Source: RBI, Handbook of Statistics on the Indian Economy 2008-09, State Finances : A Study of Budgets (2010-11)

As far as the States are concerned, sales tax is the most important source of the revenue raised by them. The sales tax accounted for 65 per cent of all state tax revenues in 1990-91 and approximately 71.6 per cent in 2010-11.

Under sales tax, we include proceeds from general sales tax, Central sales tax, sales tax on motor spirit and purchase tax on sugarcane.

Sales Tax. The general sales tax has become the most important source of revenue to the States. With increased production and internal trade, sales tax will continue to be the most important source of revenue.

The first general sales tax was introduced in pre-independence period Madras State in 1939, other States followed suit. The sales tax is imposed on all goods which are sold within a country, except newspapers. It is levied on the dealers (who include manufacturers, processors, traders, etc.). Distinction is made between general sales tax and selective sales tax. The general sales tax is imposed on all goods passing through the hands of a dealer on his total turnover. If, on the other hand, only some selective articles are subjected to the tax, it is selective sales tax. There is no general sales tax in any of the States, in the real sense of the term; everywhere some commodities are excluded. But then all the States in India have levied what they call a general sales tax. In addition, however, some States have selective sales tax on motor spirits, raw jute and sugarcane. The rates at which sales taxes are imposed vary from less than 1 per cent to more than 14 per cent. It will be seen from table 15 that sales tax is the single largest tax for the states since 1951. The sales tax revenue had increased from ₹ 59 crores in 1951-52 to ₹ 17,670 crores in 1990-91 and was expected to exceed ₹ 2,64,848 crores during 2010-2011. (budget estimate) The sales tax collection could at least be three on four times this amount. It is well-known that the sales tax administration of the states is the least efficient and the most corrupt and that there is extensive evasion of sales tax in India.

The Central Sales Taxes. The Union Government passed the Central Sales Tax Act of 1956 and imposed additional excise duties tax at special rates on sale of goods in inter-state trade viz sugar, tolacco and fabrics. The proceeds of the tax are collected and retained by the State in which the movement of the goods in inter-State trade commences. With the introduction of Value - added tax (VAT) in the place of sales tax, the Central Government aims to reduce and finally abolish the Central Sales Taxes.

There has been considerable opposition to levy of sales tax in India. The tax rates are different in different States. The burden of sales taxes may be heavy if they are imposed on goods moving from one State to another. The tax collection has been quite poor since there is common collusion between the retailers and the consumers. Finally, the sales tax machinery itself is notoriously inefficient and corrupt.

There was thus considerable criticsm and much confusion in the levy and collection of sales taxes in different states – general sales tax, specific sales tax and Central sales tax. As far back as 1977, the Janata Party, in its election manifesto promised to abolish sales taxes and replace them with value-added tax. However, the Janata Party failed to carry out its promise. The sales tax continued to be the biggest source of revenue to the States.

States' Excise Duties. State Governments are empowered to levy excise duties on alcoholic liquors, opium, Indian hemp and other narcotics. These duties are levied by the State when the drugs are produced in the State or enter the State's jurisdiction from another State. The taxes are levied at varying rates in different States. Alcoholic liquors are subject to excise duty at fairly high rates, in . all those States which have not adopted a policy of prohibition. But many states have adopted complete or partial prohibition, and as a result, they were losing revenue heavily. However, in recent years, almost-all states have given up prohibition and are riasing large resourcs from State excise duties.

Other important taxes on commodities and services include taxes on vehicles, taxes on passengers and goods, taxes on electricity, and entertainment tax. In fact, electricity duties have been a significant source of revenue to states.

Value Added Tax

Under the Indian Constitution, the States have exclusive power to tax sales and purchases of goods other than newspapers. The Central Government, on the other hand has exclusive power to tax sales and purchase of goods in the course of inter-state trade but the proceeds of such a tax will be collected and retained by the States in which the movement of the goods in inter-state commences.

The supporters of sales tax in India argue that sales tax is the easiest to pay and collect and the least hard on incentives to work and save. Besides, the sales tax makes every one to pay to the Government exchequer. The sales tax – like all other commodity taxes – is hidden in the prices of goods purchased and is paid automatically. One of the primary reasons for the rapid rise in sales tax collection is the relative ease and effectiveness of administration of sales tax as compared to personal income tax.

Finally, sales tax has an important role to play in federal structure like U.S.A. or India. While the Centre in India relies heavily on income taxes, the States depend upon sales tax in order to obtain a considerable portion of their income.

The basic defect of sales tax is that it is regressive – paid by people with low and middle incomes and more by large families – lower income families spend a large percentage of their income on consumption. If sales tax is levied on food items and necessaries, the sales tax becomes much more regressive.

Another serious defect is that sales tax often tends to have a cascading effect – the tax is collected at all stages and at every time, a commodity is bought and sold.

Finally, sales tax on high priced goods is easily evaded by the consumers – by not insisting for cash receipts. The State Governments lose tax revenue because of extensive corruption in the sales tax department.

It was to overcome these defects that the Government proposed to introduce a value-added-tax (VAT) in the place of States sales taxes. After the European Economic Community (EEC) adopted VAT as the major sales tax in the EEC countries, India showed a great interest in replacing States sales taxes with VAT.

How is value-added calculated?

When a bookseller buys a book from a publisher for ₹ 100 and sells it for ₹ 120, he (the bookseller) has added ₹ 20 to the value of the book. In other words, the value of the bookseller's service is ₹ 20. The value added by a firm is the difference between the price of its product and the cost of the product to the firm. A firm can calculate the value added by it in one of two ways:-

(a) Subtract the cost of goods purchased from sales;

(b) Add together the various elements that make up the value-added, viz., payment of wages, rent, interest and profit.

The value added tax (VAT), as the name indicates, is a tax on the value added to goods in the process of production and distribution. For instance, if the Government wants to tax the sale of a TV, it can do so at the manufacturing stage, at the wholesale stage or as retail sales tax at the final stage of sale to the consumer. An alternative is to levy a tax of say 10 percent of the value-added at each stage on the chain of production. The value-added in each stage adds upto the total value added (i.e. the final price). Likewise a tax on the value added at each stage will add up to the same as a tax on the final stage. So basically, a value added tax is simply another way of levying a sales tax. Let us take an imaginary example. Let us assume that VAT is 12 percent. Firm A has a total tax revenue of ₹ 1 crore and has input cost of ₹ 60 lakhs. The VAT liability of the firm A is:

Sales revenue	₹ 1,00,00,000
Cost of input	₹ 60,00,000
Value added by firm A	₹ 40,00,000
VAT (at 12%)	₹ 4,80,000

This method of calculating (VAT) is known as deduction of cost method or substitution method. The weakness of this method is evasion of taxation *through exaggeration of cost.*

For instance, firm A can state its cost of input at ₹ 80 lakhs, and accordingly value of output added by Firm A will come down to ₹ 20 lakhs and VAT will then come down to ₹ 2,40,000 (i.e. 12% of ₹ 20 lakhs).

The second variant or method of calculation of VAT is known as "tax credit" method or "invoice" method. Taking the same example given above.

Firm A calculates:

Sales revenue	₹ 1,00,00,000
Cost of input	₹ 60,00,000
Total tax liability (at 12% of sales revenue)	₹ 12,00,000
Less Tax paid on input of ₹ 60,00,000	₹ 7,20,000
Net tax liability	₹ 4,80,000

In this method, firm A has *to produce vouchers of tax paid already* viz., ₹ 7,20,000 to those from whom firm A has purchased the input valued at ₹ 60 lakhs; there is no possibility of tax evasion. The tax credit method is therefore, better and is used in EEC countries and in England. This is being adopted in India.

The merits of VAT are given below: -

i. VAT is a neutral tax since it does not influence the organization of production.

ii. It is spread over a large number of firms, instead of being concentrated on a single point in the chain of production as is the case of sales tax.

iii. VAT cannot be easily evaded and there is minimum loss of revenue. In a single point sales tax, successful evasion means that the total tax is lost by Government.

iv. VAT is easier to enforce through cross-checking since tax paid by one firm is reported as a deduction by a subsequent firm.

v. Producer goods can be easily excluded under VAT and, therefore, there is incentive to invest and produce more. In fact, manufacturers associations in India have welcomed imposition of VAT.

vi. VAT system encourages exports since VAT is identifiable and is fully rebated on exports. Goods under VAT are exported tax-free and are,

therefore, more competitive internationally.

There are, however, some basic difficulties in the application of VAT in India.

In the first place, the collection of VAT demands that all producers, distributors, traders and everyone in the chain of production and distributors undertake (a) to keep accounts and (b) keep proper accounts of all their transactions and (c) they also undertake to calculate the gross revenue, assess the tax already paid and calculate the tax liability.

All this involves certain accounting discipline. Unfortunately, traders and intermediaries do not keep accounts and so far have managed by bribing sales tax officers. Hence, their vigorous opposition to the introduction of VAT. Besides, the government has to simplify VAT procedures for small traders and artisans.

From the very beginning, the BJP-led NDA government at the Centre had shown keen interest in implementing VAT through setting up an Empowered Committee of State Finance Ministers, with Asim Gupta, the Finance Minister of West Bengal as chairman.

States had agreed in principle to convert sales taxes to a uniform value-added-tax (VAT) by the end of March 2001. This decision could not be implemented. In January 2002, at the meeting of the Empowered Committee of State Finance Ministers, a final decision was taken that all States and Union Territories would introduce VAT from April 2003. It was decided that every State legislation on VAT should have a minimum set of common features. Accordingly, a model VAT Bill was circulated to all the States. In the meeting of the Finance Minisers in January, 2003. It was decided that:

(a) The VAT legislations of all States and UTs would have common provisions in respect of all important matters and that a simple VAT legislation with maximum convergence would be implemented;

(b) With the introduction of VAT, the origin based Central Sales Tax would be phased out;

(c) The Additional Duties of Excise (Goods of Special Importance) Act would be suitably amended to empower States to levy sales tax / VAT on sugar, textiles and tobacco with a ceiling rate of 4 per cent. This would be done without affecting the existing levy of Additional Duties of Excise on these items by the Governments.

(d) As many States expresed possible revenue losses in the initial yeas of introduction of VAT, the Central Government agreed to compensate the States to the extent of 100 per cent of revenue loss in the first year, 75 per cent in the second year and 50 per cent in the third year.

The Empowered Committee of State Finance Ministers finally succeeded in passing a model VAT legislation and getting the approval of the President of India. The VAT was finally introduced on April 1 2005. Even though initially the five BJP ruled states did not join the VAT system, by 2006-07, as many as 27 out of the 28 States and Union territories had replaced sales tax with VAT (the exception was Uttar Pradesh which also adopted VAT later).

In the last three years, states implementing VAT have taken measures to

(a) streamline the procedures

(b) rationalise tax rates; and

(c) address other issues so as to enable a smooth transition to VAT in their respective states.

In general, in recent years, State Governments have expanded the taxpayer base, better compliance, rationalisation of tax rates, improving the efficiency of tax administration, simplification of tax laws and introducing a modern and improved tax system. All these are the direct results of the enachment of Fiscal Responsibility Legislation, under which states have committed to pursue the process of fiscal correction and consolidation.

States share in Central Excise Duties

At one time, the share of the States in the Central excise duties was not much; it was less than ₹ 1 crore in 1951-52. But since 1956-57, the Central excise duties had become a very important source of revenue to the States—in fact, it had become the second most important source of revenue to the States, after sales tax. There were two reasons for this. First, more commodities were brought under the central excise tax net, and, accordingly, the central excise revenue collection had risen manifold. Second, the share of states in Central excise was raised (by successive finance commissions) from 20 per cent to 45 per cent.

Accordingly, States share in Central excise duties touched ₹ 26,960 crores in 1999-2000 (the last year where States received their share in income tax and excise duties under the old dispensation).

Under the recommendation of the Eleventh Finance Commission, States do not get a share in Central excise duties (or, for that matter in the personal income tax levied and collected by the Central Government), but they get a share in the total tax revenue of the Centre (it was 29.5 per cent during 2000-05) and is 30.5 per cent during 2005-10).

The share of the states in Central taxes came to ₹ 94,020 crores in 2005-06. The states hope to collect as much as ₹ 2,08,997 crores during 2010-11 (budget). This is only the share of the states in the Central taxes. The states are also entitled to get general and special grants from the Centre.

Non-tax Revenue of the States

As indicated earlier, States have two non-tax revenue sources, viz. (a) grants-in-aid from the Central Government and (b) other non-tax revenue.

The Grants-in-aid from the Central Government come in two ways—statutory grants awarded by the Finance Commission and discretionary grants sanctioned by the Planning Commission to finance plan outlays. These grants were expected to mount to ₹ 1,83,282 crores in 2010-2011 (budget).

States own non-tax revenues include interest receipts, dividends from state enterprises and income from general services, social, community and economic services. In 2010-2011 the states' own non-tax revenue would come to ₹ 1,02,609 crores.

Trends in Revenues of the State Governments

Intially, after Independence, states were largely irresponsible in the matter of their financial receipts and expenditure. There were huge imbalances, reckless overdrafts from RBI later converting them as loans from the Central Government, accumulation of public debt and extreme dependence on the Centre. The various Finance Commissions have not only increased the financial resources of the states but have advised them to commit themselves to a process of fiscal correction and consolidation through the progressive enactment of Fiscal Responsibility Legislation.

Recognising that the sustained fiscal correction lies partly in angmenting revenue, the states have, from the year 2000-01, gone for broadening and rationalising tax system, toning up the tax machinery and reducing corruption whereven it is possible. The replacement of sales tax and shift to VAT is part of the tax reform of the states.

The important trends in the revenues of the States may be summarised as follows :

(i) Revenues of the State Governments, as in the case of the Central Government, have shown a continuous and steadily rising tendency. As the functions of the States have expanded and as their responsibilities too have increased with rising population, their need for funds has increased considerably. New taxes have been imposed and the rates of old taxes have been raised. Between 1952 and 2011, the tax revenues of the States have increased from ₹ 280 crores to ₹ 6,27,148 crores.

(ii) Part of the above tax revenue of the States was in the form of taxes imposed and collected by the Centre but the proceeds of which were earlier shared with the States; i.e., the personal income tax and the Central excise duties. As mentioned earlier, the states now get a share of all the Central taxes (from 2000-01).

In 1951-52 the States' share of the Central taxes came to ₹ 53 crores or about 19 per cent of the total tax revenue of the states in that year but in 2009-10 (budget), it would come to ₹ 2,08,997 crores or 33.3 per cent of the total tax revenue. In other words, at present, ***33.3 per cent of the tax revenue of the States consists of their share in the Central taxes.***

(iii) Commodity and service taxes have always been important in states' own revenues; and their dominance has increased considerably since Independence. For example, in 1951-52, taxes on income and property (direct taxes), accounted for 38 per cent of the total tax revenue of the States, and taxes on commodities and services (indirect taxes) accounted for 62 per cent. But in 2010-2011 direct taxes would account for only 25.6 per cent and indirect taxes 74.4 (₹ 317390 crores) per cent of the total tax revenue. This shows how

(a) the States depend upon the general masses for their finance;

(b) they find it inconvenient to go for direct taxes, as these are resisted by the people and are extensively evaded, as in the case of property taxes and transactions of property; and

(c) the States' own tax revenues are also predominantly regressive, falling heavily upon the middle and lower income groups.

(iv) In 1951-52, sales tax brought in the largest revenue to the States followed closely by the State excise and land revenue. Even now, the sales tax is the single largest source of tax revenue to the States. Sales taxes are also extensively evaded by the trading community through active collusion of the sales tax department on the one side and consumers on the other. Accordingly, sales taxes are being replaced by VAT.

(v) Besides tax revenue, States have two other sources of income, viz., (a) non-tax revenue which consists of income from administrative services, profits of State-run enterprises, etc., and (b) grants from the Centre. While states' own non-tax revenue has expanded from ₹ 90 crores to over ₹ 1,02,609 crores during 1952-2011, grants from the Centre have expanded and multiplied much faster from ₹ 30 crores to ₹ 1,82,282 crores during the same period—another indication of the growing dependence of States on the Centre.

5. REVENUE EXPENDITURE OF STATE GOVERNMENTS

Under the Indian Constitution, the State Governments have been entrusted with the important function of maintaining law and order and also with many nation-building activities such as education, public health and medicine, irrigation, agriculture, etc. Like the Union

Government, the State Governments too have adopted the policy of building up Welfare States, i.e., raising agricultural and industrial prosperity of the States and looking after the needs of the poor and the downtrodden. A study of the expenditure of the States since Independence reveals the importance given by them to development as well as to other requirements.

For a long time, since 1951-52, development and non-development expenditure of the states accounted for 50 per cent each of the total expenditure. (Table 16) But in the last few years, development expenditure exceeded non-development expenditure. For example, in 2010-11 (budget) development expenditure of the states accounted for nearly 59.7 per cent of the total expenditure and non-development expenditure constituted only 37.5 per cent. Let us now consider the two broad categories of expenditure separately, starting with non-development expenditure, first.

Non-Development Expenditure

Non-development expenditure of the States consists of expenditure on —

(a) the organs of States;

(b) fiscal services (of which collection of taxes and duties are the most important);

(c) interest payments, and servicing of debt which include appropriations for reduction or avoidance of debt;

(d) administrative services;

(e) pensions and miscellaneous general services.

Internal order and security is the responsibility of the State Government and is maintained through the police, judiciary and jails. The police force has been expanded and improved in quality in recent years. Problems of law and order such as communal disturbances, dacoities, industrial disputes, etc., have been serious problems and have to be handled carefully. Expansion in governmenttal activities has led to increase in corruption, which in turn has necessitated the setting up of a special police establishment, the main task of which is to detect and investigate such cases.

Table 15 : Revenue Expenditure of the States

(₹ *crores*)

Item	1951-52 *Accounts*	1980-81 *Accounts*	2010-11 *Budget*
1. Non-development Expenditure	196	4,090	3,51,479
2. Development Expenditure	196	10,510	5,59,713
3. Grants in Aid of Contribution	--	--	26,219
Total Expenditure	**392**	**14,600**	**9,37,408**

Source: RBI, Handbook of Statistics on the Indian Economy 2009-10. State Finances, A Study of Budgets of 2010-11

The single largest non-development expenditure of the states is payment of interest – for example, in 2010-11 (budget), the states were expected to pay ₹ 1,28,656 crores or 36.6 per cent of the total non-development expenditure on interest payments. These payments are made partly to the Central Government and partly to the market for loans raised.

The second largest item of non-development expenditure is 'pensions'. If was expected to be ₹ 1,00,357 crores or 31.7 per cent of the non-development expenditure.

The third largest item of non-development expenditure of the states is on administrative services which included.

(a) Secretarial general services, (b) District administration (c) Police (d) Public works, and (c) others (such as public service commission Treasury and administration, jails, etc)

The expenditure on administration services was expected to be ₹ 74,379 crores or 23.5 percent of the total non-development expenditure.

The expansion of non-development expenditure from ₹ 196 crores in 1951-52 to ₹ 3,51,479 crores in 2010-11 reflects the expansion in governmental activities, problems of law and order and the consequent increase in the police force and continuous upward revision of salaries and dearness allowances (due to rise in price level and cost of living).

Development Expenditure

Development expenditure is divided into two parts, viz., (a) social and community services, and (b) economic services.

On social and community services. Expenditure on social and community services is incurred on such services as education, family planning and public health, housing, labour employment, social security and welfare and natural calamities. These form an essential part of the expenditure of the States. Social services confer a positive advantage on the community, and the more developed these services are the happier and better off would be the people in the country. The States provide free primary education; they also provide facilities for higher education, both school and college. Technical and vocational education also got the attention of authorities because economic development depends a great deal on the availability of trained personnel for industrial undertakings. The expenditure on education has been increasing quite rapidly. Provision of medical facilities and public health is another necessary responsibility of the States. To maintain people in good health will mean keeping the standard of efficiency of workers at a high level and increasing the national income. Establishment and maintenance of dispensaries, hospitals, training and keeping a large staff of doctors,

nurses and compounders, public health services for the prevention of disease and similar facilities have to be provided by the States.

On economic Services. Expenditure on economic services consists of expenditure on agriculture, veterinary and co-operation, irrigation, electricity, rural and community development projects, civil works, industries and minerals, etc. Agriculture is the most important economic activity in the country providing employment to nearly 70 per cent of the population. Large outlays on it are, therefore, for the economic development of the country. Since 1951, community development projects have been implemented with the objective of improving rural life. Civil works include road development, construction of public buildings, etc. A network of roads is essential for trade and economic prosperity. Civil works are sometimes undertaken to provide employment to persons during periods of famine or business depression.

The single most important item of development expenditure is education which accounts for about 34 to 35 per cent of the total development expenditure. The next important item of development expenditure is agriculture and allied services including irrigation.

Trend in Revenue Expenditure of States

We may note some broad trends regarding expenditure of States. Some of these trends are observed in the case of the Union Government also.

In the first place, there has been rapid increase in current or revenue expenditure. From ₹ 392 crores in 1951-52, revenue expenditure of states went up to ₹ 14,800 crores in 1980-81. The budget for 2009-10 has placed revenue expenditure of states at ₹ 8,37,238 crores. This rapid expansion is to be expected — with rise in salaries, expansion in government activities, growing interest payments, pensions, etc.

Secondly, there has been a change in the composition of public expenditure of states. For one thing, development expenditure has become more important than non-development expenditure. In 1951-52, both types of expenditures were exactly equal, i.e., 50:50. But in the 2009-10 budget, development expenditure was about 63.8 per cent and non-development expenditure was about 30 per cent of the total expenditure. Moreover, some items of development expenditure have increased much more than others. For instance, expenditure on education has increased the most.

Thirdly, State Governments finance economic development partly through capital receipts which consist of market loans, borrowings from the Central Government, small savings etc. The items included in the development projects of States are multi-purpose river-valley projects, irrigation and navigation, schemes for agricultural development and research, electricity schemes, road transport, roads and water works, industrial development, etc.

As we have mentioned earlier, State Governments have taken many policy initiatives to augment revenues as well as control and curtail their non-development expenditure. Important steps taken by them since 2000-01 are as follows : –

(a) Some states have proposed curtailment of non-development expenditure by not filling vacated posts, adoption of austerity measures and reduction of non-plan expenditure.

(b) Many states have introduced new pension schemes based on defined contribution – the objective is to restrict rising pension obligations.

(c) In terms of expenditure, many states have raised expenditure on education and health sectors and on implementing Centrally sponsered rural employment guarantee scheme.

(d) Several state Governments have proposed substantial enhancement of outlays for social schemes, particularly for the weaker sections.

6. TRENDS IN REVENUE AND EXPENDITURE OF CENTRAL AND STATE GOVERNMENTS

We have explained the trends in revenues and expenditure of Union and State Governments separately. We may, however, give a combined picture of the total revenue and expenditure of the Centre and the States Union Territories. (Table 16).

Table 16 : Budgetary Transactions of the Central and State Governments and Union Territories

(₹ crores)

	1960-61	2009-10 *(RE)*
1. Development Expenditure	24,430	1178770
2. Non-development Expenditure*	12,420	871148
3. Total Expenditure **	36,850	1892880
4. Total Revenue	24,570	1285845
5. Gross Fiscal Deficit	12,280	607035
6. Net Capital Receipts	8,830	581314
7. Over-all deficit	-3,450	-25721

Source : Handbook of Statistics on Indian Economy 2009-10 and earlier issues.

** Total expenditure includes total revenue expenditure and capital expenditure.

* This includes disbursements as compensation and assignments to local bodies and Panchayati Raj institutions and other adjustments.

In less than five decades between 1960-61 and 2009-10, the combined total expenditure of the Centre and the States had risen from ₹ 36,850 crores to ₹ 18,92,880 crores, that is, by over 40 times. Now, the combined total expenditure of the Centre and the States consists of

(a) Developmental expenditure

(b) Non-developmental expenditures of all types; and

(c) Compensation and assignments made by the States to local governments and Panchayati Raj institutions.

During the same period, the combined current revenue receipts of the Centre and the States rose from ₹ 24,570 crores to ₹ 12,08,804 crores.

Total revenue consists of

(a) Tax revenue of the Centre and of the States,

(b) non-tax receipts of the Centre and the States, and

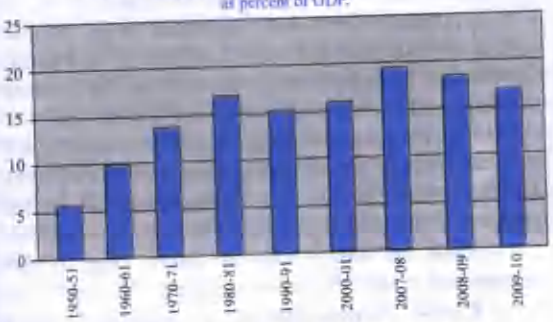
(c) non-debt capital receipts consisting of loans and advances.

Now, the combined total expenditure always exceeded the combined total current receipts, resulting in a gap, known as ***gross fiscal deficit***. The 2009-10 budget estimated gross fiscal deficit at ₹ 6,07,035 crores. This gap is financed largely through capital receipts i.e.

(a) Internal receipts: Borrowings from the market, mobilisation of small savings, provident fund collections, etc.; and

(b) External loans and grants from foreign governments, international institutions and commercial borrowings.

Taxes in India (Central and States and Union Territories.) as percent of GDP.



When even these capital receipts were found inadequate to meet the gap, (fiscal deficit) the Government left it uncovered; this was formerly designated as over-all budget deficit. This was taken as the extent of deficit financing by the Government for a long time.

This concept of deficit was given up. Since April 1997, the Finance Ministry, of the Government of India discontinued the system of ad hoc Treasury Bills and 91-day tap treasury bills and with that the concept of conventional budget deficit lost its relevance. ***The amount of fiscal deficit of the Government is fully covered by an equal amount of capital receipts***, as far as the Centre is concerned. Accordingly, there is no over-all budget deficit for the Centre. And in the year 2009-10 there is a small deficit in the budgetary transaction of the central and state governments. This deficit belongs to the state governments.

During this period both development expenditure and non-development expenditure have increased quite fast, partly because of expansion in government activities and partly because of inflation. However, the increase in non-development expenditure is much faster. The increase in defence expenditure, major subsidies and expenditure on administration may be specially mentioned here. Despite much boasting by the Government about the use of budget for development purposes, we find that the ratio of non-development expenditure to development expenditure is around 48 : 52.

Another important trend is the growth of taxes in recent years (Refer table 18). The ratio of tax to gross domestic product (GDP) has gradually risen from 6 per cent in 1950-51 to about 14 per cent in 1970-71 and 17.6 per cent in 2009-10 (budget).

Table 17 shows clearly that both direct taxes and indirect taxes have risen considerably since 1950-51. The ratio of direct to indirect taxes was 35 : 65 in 1950-51 but it was only 41 : 59 in 2009-2010. This fact shows how the proceeds of commodity taxes have increased both in volume and in importance. The burden of financing government activity in the country is largely borne by the middle and lower income groups—in other words, the Indian tax system is still regressive, despite the oft-repeated claim made by the Government to the contrary. However, this situation is changing fast in the country.

TABLE 17 : Taxes in India (Central and States and Union Territories.)

(₹ crores)

Year	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Total taxes as percentage of GDP*
1950-51	230	430	660	6
1960-61	420	1,040	1,460	10
1970-71	1,100	3,590	4,690	14
1980-81	3,690	16,100	19,790	17
1990-91	14,267	73,297	87,564	15.4
2000-01	80,947	2,24,683	3,05,630	16.1
2007-08	3,55,607	5,21,889	8,77,496	19.4
2008-09(R)	3,93,125	5,76,723	9,69,848	18.6
2009-10(B)	4,23,683	6,02,777	10,26,460	17.6

SOURCE: RBI, Handbook of Statistics on the Indian Economy 2008-09, Economy survey and Union Budget various issues.

(a) huge scope for tax evasion and avoidance of direct taxes specially personal income tax by the higher income groups; and (b) the benefits of public expenditure (both Central and of the States) generally accrue to more affluent classes.

7. INDIA'S PUBLIC DEBT

The Government of India, like all Governments, has borrowed in the past and does so now. But Union and State Governments are empowered to borrow under certain conditions and within certain limits. In the British days, the Government borrowed mainly for war purposes. But a large part of Indian public debt was productive as it was incurred to meet such capital expenditures as railway construction, irrigation works, etc. In 1939, the total Indian public debt stood at over ₹ 1,200 crores out of which nearly ₹ 925 crores of debt was covered by interest-yielding assets and other

securities and the balance was uncovered or unproductive. Of the total public debt, about ₹ 730 crores represented internal debt, and about ₹ 470 crores represented India's external debt of India's sterling debt.

Public Debt of the Central Government during the Second World War

During the Second World War, the Indian Government was able to pay off its commitments in England. India's sterling debt was paid off and, in fact, India accumulated sterling balances. Through favourable trade balances, through sale of silver in London and through making purchases of raw materials and food-stuffs in India on behalf of the British Government, India accumulated sterling balances equivalent to ₹ 2,300 crores by 1945-46. A part of these sterling assets was utilised by the Government of India to pay off its sterling debt in London.

During World War II the total rupee debt increased from ₹ 730 crores to ₹ 1,940 crores—an increase of ₹ 1,210 crores. The increase in public debt was due to war expenditure, including capital expenditure on defence and the creation of rupee counterparts for the repatriated sterling debt. The Government was able to borrow a large part of these loans at low rates of interest—about 3 per cent.

Public Debt in the Post-Independence Period

Vigorous efforts were made to achieve the target and Government could nearly get the targeted amounts in all the Plans. Borrowing from the market and mobilising small savings from the people were used since 1951 as a method of financing economic development in India. The Planning Commission liked ambitious targets to raise large funds from the market and through small savings schemes. This was how public borrowing and public debt came to be used to finance development. Thus, the basic reason for expansion of public debt was the need for raising funds for rapid economic development. In recent years, however, the Government is borrowing to meet its current expenditure.

Table 18 : Public Debt and other Liabilities of the Central Government

As at the end of (₹ crores)

	1950-51	*2002-03*	*2012-13(BE)*
A. Public Debt	**2,054**	**10,80,300**	**39,21,756**
(a) Internal	2,022	10,20,690	37,43,658
(b) External	32	59,610	1,78,096
B. Other Liabilities*	**511**	**4,78,600**	**11,03,616**
Total Public Debt & other liabilities	**2,565**	**15,58,900**	**50,25,072**

* Excludes ₹ 300 crores which is the amount due from Pakistan on account of its share of pre-partition debt.

Source: Government of India, Receipts Budget, Union Budget 2012-13 and (previous issue).

The public debt of the Government of India is composed of (a) internal debt and (b) external debt.

"Internal debt" comprises of market loans, compensation bonds, prize bonds and 15-year annuity certificates. It also includes borrowings of a temporary nature, viz., treasury bills issued to the RBI, commercial banks, etc., and also non-negotiable, non-interest bearing securities issued to international financial institutions like the IMF, World Bank and the Asian Development Bank (A.D.B).

External debt figures represent borrowings by Central Government from external sources and are based upon historical rates of exchange.

Table 19 summarizes India's public debt position since 1950-51. Four significant points may be noted as regards the public debt of India.

(i) Initially, the Central Government borrowed mainly for financing development schemes. What is really alarming now is that the Central Government is forced to borrow even to meet its current revenue expenditure. In other words, the Government has been living beyond its means.

(ii) External debt had increased from 1.0 per cent of the total debt and other liabilities of the Central Government in 1950-51 to 3 per cent now. The increase in the share of external debt is explained by the rapid rate at which external assistance had been obtained and utilised in recent years. By far the largest share of India's external debt is provided by the United States of America. Dollar loans constitute over 30 per cent of India's external debt.

Table 18 shows how the public debt of the Government of India had increased from

₹ 2,054 crores in 1950-51

₹ 10,80,300 crores in 2002-03

₹ 37,43,658 crores in 2012-13

(iii) In addition to the public debt, the Government of India has certain other liabilities for instance, the Government owes to the general public for funds raised through small savings schemes, provident funds, deposits under the Compulsory Deposit Schemes, Income Tax Annuity Deposit Schemes, Reserve Funds of the Railways and Posts and Telegraphs, etc. All these constitute the "other" liabilities of the Central Government.

The Government has to pay interest on its other liabilities – often quite high as in the case of public provident fund. The Central Government's other liabilities have also been increasing fast in recent years, as for example :

₹ 511 crores in 1950-51

₹ 4,78,600 crores in 2002-03

₹ 11,03,616 crores in 2011-12

The total public debt and other liabilities of the Indian Government would come to ₹ 50,25,072 crores by end March 2012; it was only ₹ 2,30,000 crores in March 2003 – *in just 10 years*, Central Government's public debt

and other liabilities had increased by nearly 10.5 times. The annual compound rate of growth of public debt between 2003 and 2013 works out to be 26.5 per cent.

(iv) The outstanding liabilities of the Central Government, comprising internal and external liabilities, as a proportion of GDP were 55 per cent in 1990-91: It showed a declining trend till 1998-99 when it touched 51 per cent. Since then, they have started rising—as, for instance, 58 per cent in 2001-02 and around 60 per cent in 2011-12.

The increasing trend in internal liabilities is a matter of serious concern. This has not only raised the interest burden but also raised concerns about the sustainability of the growing internal debt. At persent, net borrowings from the market finances 70 per cent of the gross fiscal deficit.

(v) The burden of servicing of public debt and other liabilities is becoming heavier with every passing year. Interest payment of the Centre was ₹ 90,250 crores in 1999-2000 and is likely to touch ₹ 3,19,759 crores in 2012-13.

According to an agreement concluded in December 1947, all the public debt of undivided India was taken over by the Indian Government. Pakistan was allotted a share, estimated at ₹ 300 crores but it was permitted to return the amount in 50 equal instalmants starting from 1952. Pakistan has not returned even one instalment of its share of public debt. Considering the political relations between the two countries, there is no chance of India receiving Pakistan's share of undivided public debt. However, for certain reasons, this amount is always included as part of the total liabilities of the Government of India; it would be better if it is written off.

Debt Position of the States

Earlier, the total debt of the States was classified into public debt and unfunded debt. This classification has now been given up and, in the new classification, the major heads of debt are :

(i) Internal Debt. This comprises (a) current market loans and bonds issued in connection with the zamindari abolition, (b) ways and means advances and overheads repayable within seven days from the RBI, and (c) loans from banks, other institutions such as loans from State Bank of India, and other commercial banks, National Credit (Long-term Operations) Fund of NABARD, Employees' States Insurance Corporation, etc.

(ii) Loans and advances from the Central Government. These comprise loans and advances from the Central Government for Plan and non-Plan purposes.

(iii) Provident Funds, etc. These include State provident funds, Insurance and Pension Fund, Trusts and Endowments, etc.

(i) In a matter of 4 decades, total debt of the States has risen from about ₹ 2,740 crores in end-March 1961 to over ₹ 18,20,155 crores in end-March 2011. The aggregate public debt of State Governments as ratio of GDP is now around 28 per cent. The increasing trend in state debt-GDP ratio has been significant since 1997.

TABLE 19 : Debt Position of the States

(₹ crores)

Items	*As at the end of March*			
	1961	1971	2008	2011 (BE)
1. Internal Debt.	590	1,850	181623	12,17,959
2. Loans and Advances from the Central Government	2,020	6,360	238655	1,55,698
3. Provident fund and other liabilities	130	540	173869	4,46,498
4. Total liabilities (1+2+3)	2,740	8,750	579147	18,20,155

SOURCE: RBI, Handbook of Statistics on Indian Economy 2008-09 and RBI Bulletin, June 2009, State Finances : A Study of Budgets 2010-11

From Table 19, the following observations can be made :

(ii) Internal debt of States was around 22 per cent of all states' total liabilities in the 1960s. It has grown, however, over the years, and was around 67 per cent in 2011-12.

(iii) The share of Central loans and advances in the total debt of State Governments has been steadily declining — from about 74 per cent in 1961 to 8.6 per cent in 2011. The heavy indebtedness of States to the Centre was due to such diverse factors as block loans for State development plans, special accommodation, clearing overdrafts of States with RBI, etc.

(iv) State Governments were gradually shifting towards higher-cost sources. The interst burden (i.e. ratio of interest payments to revenue receipts) of States had steadily risen from about 15 per cent during 1960-61 to about 30 per cent during the 2009-10 (budget).

(v) Ways and means advances from RBI which include normal and special ways and means advances and overdraft from RBI repayable within seven working days frequently assumed serious proportions. Often State Governments request the Central Government to convert their overdrafts into loans.

The Crisis of State Public Debt

In the last few years, heavy public debt and large interest payments have crippled many states which are unable to undertake socially necessary expenditure. The states have the responsibility to maintain law and order, build and maintain infrastructure, provide health and sanitation, education and other essential services. Many states are unable to incur these necessary types of public expenditure. Many others are in a serious financial crisis and are literally limping along.

On the one hand, public debt is mounting and on the other, states have been forced to pay high rates of interest. There are many reasons for this sad state of affairs. Till

1997-98, the fiscal deficit of the States as a proportion of GDP was around 3 percent and was under control. Since then, states were forced to run into huge fiscal deficits essentially because of rise in revenue deficits – state expenditure on salaries and pensions sky-rocketed directly due to Central Government measures arising out of the salary hikes on the basis of recommendations of the Fifth Pay Commission.

Secondly, the Centre has been directly responsible for the high interest rates of States public debt. Under the Indian Constitution, the Centre has the power to determine both the extent and the terms of borrowing by States from all sources, including the Centre itself. This power has been used/abused by the Centre against the states for the last many decades in various ways. One way is that the Centre charges high rates of interest on debt which it issues to the states – in fact, invariably the rate of interest for the states is higher than the rate at which the Centre itself has been paying.

Further, when State Governments raise debt provided by multi-national institutions like World Bank and ADB, they are charged a higher rate by the Central Government which is the intermediary – than the rate of interest charged by the international institutions.

Again, the Central Government has abused its constitutional powers to limit the ability of States to borrow from the market and from commercial banks and financial institutions.

Finally, State Governments which have a revenue deficit have to seek special permission from the RBI to borrow from commercial banks.

The result of these factors is that the average rate of interest which the States have to pay on their debt has remained relatively high – around 10 to 11 percent. At the same time, the average rate of interest paid by the Centre on its own debt has come down from about 9 percent to 6.5 percent. In other words, the Centre has always played the usurious moneylender to the States.

In the past, Finance Commissions have recommended schemes to reduce the volume of Central Government loans to the States.

The growing debt burden of the States has been a source of serious concern for the States and the Centre. With the active help of the Government of India, a Debt Swap Scheme was been formulated to liquidate high cost loans given by the Government of India to the States. The States have agreed to utilise 20 per cent of net small savings proceeds released from September 2002 to pre-pay high cost Government of India loans and advances.

The Twelfth Finance Commission has recommended a scheme of Debt Relief for the period 2005-10. The scheme envisages the rescheduling of all Central loans contracted till end-March 2004 and outstanding as on end-March 2005 into fresh loans for 20 years carrying 7.5 percent interest. This provision is conditional to a State enacting the Fiscal Responsibility Legislation. The implication are : (a) the States are irresponsible in their expenditure, (b) they do not mobilize resources themselves and (c) they themselves are responsible for their mounting public debt.

Problems of Public Debt Policy

The Union Government is in a position to raise loans at slightly more favourable terms than the States. It is able to offer a lower rate for loans of longer maturity than the States. Further, there is a slight disparity in the terms at which different States can borrow. It has been suggested that the Union Government alone should raise loans from the market and should distribute the proceeds among the States according to their requirements.

Since Independence, the Central Government has set up a series of banking and financial institutions which indeed constitute a captive market for Government loans. We mean here the nationalised banks, statutory and public provident funds, LIC, GIC etc. This captive market is forced to absorb the huge amount of loans raised by the Centre.

8. DEFICIT FINANCING IN INDIA

Deficit financing has been used by the Government of India for acquiring funds to finance economic development. When the Government cannot raise enough financial resources through taxation, it finances its development expenditure through (a) by running down its cash balances with the Reserve Bank of India (b) borrowing from the market, and (c) borrowing from R.B.I. In this way, the Government acquires necessary finance to secure real resources for economic development.

The basic mistake the Finance Ministry formerly made was to regard borrowing from the market, and collection of small savings etc. as part of its capital receipts. It regarded borrowing from RBI alone as deficit financing. This mistake was committed since 1950-51, but it was rectified in recent years. At the outset, let us have a clear idea of different kinds deficits and financing of these deficits.

(a) Revenue Deficit

Since 1950-51 the Government of India recognised only two types of deficits, viz., revenue deficit and overall budgetary deficit.

Revenue Deficit = Revenue Receipts – Revenue Expenditure

The concept of revenue defecit is a simple and straight one. Current revenue expenditure of the Central Government is composed of Plan and non-Plan expenditure of the Government, and is met out of current revenue receipts (which include net tax revenue[3] and non-tax

3. Net tax revenue and not gross tax revenue because part of the proceeds of the tax revenue is transferred to the States.

revenue of the Central Government). In Table 21, we have calculated that, in 1990-91:

Total revenue receipts = ₹ 54,950 crores
Total revenue expenditure = ₹ 73,510 crores
Revenue deficit = Revenue Receipts – Revenue Expenditure
= ₹ 54,950 crores – ₹ 73,510 crores
= ₹ – 18,560 crores

Let us calculate revenue deficit for the year 2011-12 :
Revenue Receipts of 2012-13 : ₹ 9,35,685 crores
Revenue Expenditure of 2012-13 : ₹ 12,86,109 crores
Revenue deficit for 2012-13 = 9,35,685 – 12,86,109
= ₹ – 3,50,424 crores

Revenue deficit (deficit is indicated by minus symbol) reflects the failure of the Government of India to meet its current expenditure from its current revenues.

Till the middle of the 1970's , the revenue receipts of the Central Government exceeded its revenue expendidture; accordingly, the Central Government enjoyed revenue surplus. Actually, on the recommendations of the Taxation Enquiry Commission (V T Krishnamachari Commission), the Government of India had adopted, at the time of the First Plan, a ***deliberate budgetary policy of revenue suplus*** which meant, creating excess of current receipts over current expenditure. This revenue surplus was to be achieved through deepening and widening of the tax base and thus increasing tax revenue on the one side and strict control of revenue expenditure on the other (in other words, keeping the public expenditure under check). This surplus revenue was to be used to finance economic development under the Five Year Plans. Surplus budgeting was a laudable objective.

TABLE 20 : Calculation of Fiscal and other Deficits
(₹ crores)

	1990-91 *Actual*	2012-13 Budget
1. Revenue Receipts	54,950	9,35,685
2. Capital Receipts	39,010	5,55,241
of which		
(a) Loan recoveries and other receipts	5,710	41,650
(b) Borrowings and other liabilities	33,300	5,13,590
3. Total Receipts (1+2)	93,960	14,90,925
4. Revenue Expenditure	73,510	12,86,109
5. Capital Expenditure	31,800	2,04,816
6. Total Expenditure	1,05,310	14,90,925
7. *Revenue Deficit* (1–4)	18,560	3,50,424
8. *Budgetary Deficit* (3–6)	11,350	NIL
9. Fiscal Deficit {6–(1 +2 (a)} or 2(b)	44,650	5,13,590

Note: Budget figures are rounded.
Source : *Budget at a Glance*, 2012-2013.

In a period of about two decades or so (1951-75), however, the objective of revenue surplus was gradually eroded because of ***continuous expansion of current expenditure***, particulary of the non-Plan category i.e., general administration, defence, interest payments and major and minor subsidies. This was, in spite of the enormous increase in tax receipts during the period. Accordingly, revenue deficit became a special feature of Central Government budgeting from the middle of the 1970s.

(b) Budget Deficit

(b) Budget Deficit =
Total Receipts – Total Expenditure

Here total receipts include total revenue receipts and total capital receipts. In the same way, total expenditure is the addition of total current expenditure and total capital expenditure (or disbursements). In table 21, we have mentioned that in the year 1990-91 :

Total Receipts = ₹ 93,960
Total Expenditure = ₹ 105,310
Budget deficit = (–) 11,350

For the year 2012-13, we have calculated as follows

Budget Deficit = Total Receipts
(₹ 14,90,925 crores)
– Total Expenditure
(₹ 14,90,925 crores)
= Nil

Budget deficit , sometimes also referred to as over-all budget deficit, occurs when total expenditure exceeds total receipts, this was called deficit financing by the ministry of finance.. The Central Government met its over-all budgetary deficit by net sale of Treasury bills to the RBI, This led to printing of additional currency by RBI against Governments IOU, RBI gave the Govoernment its IOU, namely, its currency notes.

The whole concept of budget deficit or over-all budget deficit since 1950-51 and the method of covering it by borrowing from RBI through the sale of Treasury Bills was wrong. The basic mistake was the calculation of "capital receipts" by the Finance Ministry of the Government of India. According to the Finance Ministry, capital receipts are the sum of

(a) Recoveries of loans,
(b) other receipts, and
(c) borrowings and other liabilities

Really speaking, the third source – i.e. borrowing and other liabilities – are not receipts of the Government and should not be included under capital receipts. They are the liabilities of the Government, payable to the public. In other words, they also form part of the over-all budget deficit.

Accordingly the traditional concept of budget deficit

financing was restrictive and it could just indicate only the extent of monetary deficit. B.R. Shenoy was the first economist to point out, as far back as 1954-55, ***the dangerous implications of regarding market borrowings and other capital receipts as part of Government receipts*** and taking only over-all budget deficit as deficit financing. The actual extent of deficit financing in any given year should include

(a) over-all budgetary deficit, *plus*

(b) market borrowings, small savings collections and other capital receipts which are actually liabilities.

B.R. Shenoy's warning was brushed aside by other economists and by the Government of India for a long time. It was finally left to the Sukhmoy Chakravarty Committee on the Working of the Monetary System in India to point out the inherent weakness of the definition of the budgetary deficit as deficit financing and the necessity to change the concept. The real deficit of the fiscal operations, the Committee emphasised, should ***include not only budgetary deficit but also market borrowings and other liabilities***. The Government of India accepted this recommendation of Sukhmoy Chakravarty Committee, (*a*) gave up the conventional concept of deficit financing and (*b*) started the calculation of a third concept of deficit, known as fiscal deficit from the year 1997-98.

(c) Fiscal Deficit

In simple terms, ***fiscal deficit is budgetary deficit plus market borrowings and other liabilities of the Government of India***. In more clear terms,

Fiscal deficit = Revenue Receipts
+ Capital receipts (only recoveries of loans and other receipts)
—Total expenditure

OR

= Budget deficit + Government's market borrowings and liabilities

Let us illustrate the calculation of fiscal debt for the year 1990-91.

(₹ crores)

Fiscal deficit in 1990-91

= Revenue receipts for the year 1990-91 = 54,950
+ Capital Receipts in the form of recoveries of loans and other receipts in 1990-91 = 5,710
Total revenue in 1990-91 60,660
– Total Expenditure in 1990-91: 1,05,310
Fiscal deficit = 44,650

In the alternative formulation,

Fiscal deficit in 1990-91

= Budget deficit in 1990-91,
i.e. ₹ 11,350 crores + Market borrowing and other liabilities in 1990-91, i.e. ₹ 33,300 crores
= ₹ 44,650 crores

Calculation of fiscal deficit for the year 2012-13,

Fiscal deficit = Total expenditure for 2012-13, i.e. ₹ 14,90,925 crores – Total receipts (Revenue Receipts + Recoveries of loans and other receipts) ₹ 9,35,685 crores + ₹ 41,650 crores)
i.e. ₹ 9,77,335 crores
= 5,13,590 crores

OR **Fiscal deficit** = Budget deficit (Nil)
+ Market Borrowings and liabilities
(₹ 5,13,590 crores)

Fiscal deficit thus indicates ***the total borrowing requirements of the Government from all sources***. From the point of view of the economy, fiscal deficit is the most significant, since ***it shows the gap between Government receipts and Government expenditure***. It reflects the ***true extent of borrowing*** by the Government in a fiscal year. On the other hand, the conventional concept of budgetary deficit reflects only the Government's borrowing from RBI.

Primary Deficit

In recent years the Finance Ministry has introduced one more concept of deficit known as "primary deficit" which does not have any policy significance.

Primary deficit = Fiscal deficit – Interest payments

In 2012-2013 budget, fiscal deficit was put at ₹ 5,13,590 crores and interest payments at ₹ 3,19,759 crores.

Accordingly

Primary deficit during 2012-13

= ₹ 5,13,590 crores – 3,19,759 crores

= ₹ 1,93,831 crores.

Deficit Trends in recent years

Table 22 brings out the deficit trends in India in recent years.

(a) Revenue deficit has been rising quite fast — from ₹ 18,560 crores to ₹ 3,50,424 crores between 1991 and 2013. As percentage of GDP, revenue deficit had ranged between 3.5 to 5.3 per cent which was regarded as quite high. Such huge revenue deficit indicated clearly that the Government had been living beyond its means and that it had to cut its current expenditure – specially its non-plan expenditure — instead of looking for sources of additional taxation.

(b) Originally, budget deficit was calculated to show RBI lending to the Government. Since 1997 RBI lending

to Government through *ad hoc* Treasury Bills was given up. The concept of budget deficit has lost its relevance.

(c) The Finance Ministry has so estimated the capital receipts that the ***total receipts of the Government are exactly equal to the total expenditure;*** there is, therefore, no over-all budget deficit.

(d) The Government has discontinued the issue of ***ad hoc treasury bills to*** RBI, but instead, it will tap 91 days treasury bills from the market. This would be ***part of the capital receipts*** under the heading "borrowings and other liabilities."

(e) Fiscal deficit has been growing rapidly and dangerously -- from ₹ 27,040 crores in 1988-89 to ₹ 44,630 crores in 1990-91 and to ₹ 5,13,590 crores in 2012-13 budget. The international financial institutions such as the World Bank and the IMF objected to the high rate of fiscal deficit (7.7 % of GDP) in 1990-91 and asked the Government of India to reduce it over the next few years. Accordingly, the Government reduced fiscal deficit as a percentage of GDP to 5.9 and 5.7 per cent in 1991-92 and 1992-93 respectively. During 1993-94, however, fiscal deficit rose to 7.4 per cent of GDP.

TABLE 21: Deficit Trends

(₹ crores)

Year	*Revenue deficit*	*Fiscal deficit*	*Primary deficit*
1990-91	18,560 (3.2)	44,630 (7.7)	23,130 (4.0)
2007-08	52,569 (1.1)	1,26,912 (2.5)	-44,118 (-0.9)
2008-09*	2,53,439 (4.5)	3,36,992 (6.0)	1,44,788 (3.2)
2010-11(Actual)	2,52,252 (3.3)	3,73,591 (4.9)	1,39,569 (1.8)
2011-12(RE)	3,94,951 (4.4)	5,21,980 (5.9)	2,46,362 (2.8)
2012-13(B.E)	3,50,424 (3.4)	5,13,590 (5.1)	1,93,831 (1.9)

Note: Figures in brackets are estimated percentages of GDP.
SOURCE: ***Economic Survey***, 2007-08, and previous issues ***Budget at a Glance***, 2012-13.

For many years, the Finance Ministers of the Government of India were not worried, as they could raise funds from the market, from the captive banks and other financial institutions. The RBI, however, has been warning the Government regularly of the impending debt trap. It was only when the World Bank and International institutions refused to bail out India in 1990-91 unless it reduced its fiscal deficit, that the Government was forced to take stringent measures to control non-plan expenditure.

The uncontrolled growth of revenue deficit is due to the sharp rise in non-plan expenditure, mainly on account of higher interest payments, rise in major subsidies and increase in pensions payments. It was the NDA Government that made a two-pronged attack in reducing revenue and fiscal deficits through augmenting revenue on the one side and controlling non-plan expenditure on the other. According to 2008-09 budget, fiscal dificit was projected to be 2.5. per cent of GDP. But in revised estimates for 2011-12, fiscal deficit turned out to be 5.9 percent of GDP. For Budget 2012-13, Fiscal Deficit has been kept at 5.1 percent of GDP.

The Purpose of Deficit Financing in India

Deficit financing in India in the proper sense of fiscal deficit — was mainly adopted to enable the Government of India to obtain necessary resources for the Five-Year Plans. The levels of outlay laid down were of an order which could not be met only by taxation or through a revenue surplus.

The gap in resources is made up partly through external assistance but when external assistance is not enough to fill the gap, increased resort to borrowing has to be undertaken. The targets of production and employment in the plans are fixed primarily with reference to what is considered as the desirable rate of growth for the economy. When these targets cannot be achieved through resources obtained from taxation and external borrowing, additional resources have to be found. Borrowing from the market and from RBI comes in handy.

This was the position in India till the middle of 1970s. Since then, the Central Government gradually started incurring fiscal deficit i.e., market borrowings and borrowings from RBI (i.e., budgetary deficit) had to be used to cover current revenue deficit also. This is the dangerous aspect of the situation since it is bound to force the Government to land into a debt trap.

It is important to emphasise the fact that deficit financing cannot create real resources which do not exist in the economy. It is only a device which helps in the transfer of resources to the Government. The real resources required for economic development must exist in the form of raw materials, equipment, skill and labour. These things cannot be created by printing money or issuing bank credit.

Effects of Deficit Financing

(*i*) ***Fiscal deficit and expansion in public debt and other liabilities*** — In the last decade, fiscal deficit was rising very fast and consequently, the public debt and other liabilities of the Government of India were literally multiplying. For instance, the total amount of public debt and other liabilities of the Government of India were :

₹ 3,14,560 crores in 1990-91
₹ 9,90,260 crores in *1999-2000*
₹ 50,25,072 crores in 2012-13

In a matter of just 22 years, the volume of public debt and other liabilities of the Government of India has risen nearly 15.97 times or 1597 per cent. As a direct result of this growth of Government's total liabilities, the annual interest burden of the Government of India is also mounting, as for instance.

Interest Burdent of the Governments of India

1980-81	₹ 3,500 crores
1990-91	₹ 21,500 crores
1999-00	₹ 88,000 crores
2012-13	₹ 3,19,759 crores

The annual average growth rate of public debt was around 12.5 per cent during 1990-91 and 2012-13.

Nearly 47 percent of the current tax revenue of the Central Government goes towards payment of interest burden only. No wonder, the Government has to borrow heavily to meet revenue deficits.

(ii) Inflationary rise in prices. The most serious disadvantage of deficit financing is the inflationary rise of prices. Deficit financing increases the total volume of money supply in the country and, therefore, raises the aggregate demand for goods and services. In the absence of a corresponding increase in aggregate supply of goods and services, deficit financing leads to rise in the price level. It has been argued that deficit financing has been adopted in India for the purpose of development and that, therefore, increase in production will eventually check rise in prices. Besides, an appropriate policy of checking undue rise in prices may also help in bringing about economic stability.

When deficit financing goes too far, it becomes self-defeating. The rising prices are followed by rising costs and the latter cause further rise in prices, so that a spiral of inflation is set up. If in such conditions prices are not prevented from rising, the costs continue going up and the profitability of investment declines, so that investment stops or decreases. Only in the case of a moderate rise in prices is this spiral avoided and investment encouraged. Therefore, price rise due to deficit financing must be prevented from becoming inflationary.

(iii) Forced savings. When inflation occurs as a result of deficit spending, consumption must decline as a result of rising prices and, therefore, savings become forced. But it is important to remember that inflation reduces compulsorily the consumption of only fixed income earners; the consumption of higher income groups generally increases during the same period.

(iv) Change in the pattern of investment. Investment caused by inflation may not be of the pattern sought under the Plan. There are certain fields of investment which receive strong encouragement from inflation. Three such fields are : inventory holding, luxury, urban construction and foreign assets. These are not necessarily the best fields in planned development. Moreover, the tendency to speculation is also strengthened. Thus, deficit financing leading to inflation may encourage types of investment which are not desirable for a developing economy.

(v) Credit creation by banks. Inflationary forces created by deficit financing are reinforced by increased credit creation by banks, increase in government spending without a corresponding decrease in private spending raises the bank deposits with the Central bank. The commercial banks, therefore, find their liquidity increased and are in a position to make extra advance. Boom conditions in the economy and considerable scope for speculative gains increase the demand for bank credit.The increased bank credit then adds to the inflationary pressures started by deficit financing.

Deficit financing could be a helpful device and a valuable instrument in promoting economic development in an under-developed country in the initial stages. The increase in the volume of money (because of deficit financing) results in higher demand for labour and other resources. As such, deficit financing is regarded as a good tool to activise a backward and developing economy. But, extreme caution is necessary in using deficit financing for economic development. For, it is intrinsically inflationary in character, and hence, proper controls are necessary. Besides, experience of other countries clearly shows that deficit financing may lead to excessive printing of currency notes which will greatly reduce the value of money. Deficit financing, like fire, is a good servant but a bad master. This is exactly what has happened in our country. With the lone exception of B.R. Shenoy, (during the formulation of the Second Plan). Indian economists at one time praised the virtues of deficit financing.

9. CENTRAL GOVERNMENT BUDGET (2011-12)

Report card of the Indian Economy

Recently Central Statistical Organisation (CSO) has published statistical data for the last quarter of the year 2011-12. According to the results published, CSO has reduced the growth estimates for the year 2011-12 to 6.5 percent. In each of the preceding two years, GDP growth rate was recorded at 8.4 percent annually. No eyebrows were raised, as CSO reduced the estimates of growth rate as results were not encouraging in the last two quarters. Almost all sectors of the economy have shown decline in growth rate. As compared to 7 percent growth in 2010-11, agriculture has shown only 2.8 percent growth rate in 2011-12. In mining sector rate of growth has turned negative one percent, which was 5 percent last year. Manufacturing sector has been showing discouraging result in each successive quarter and annual growth has been estimated at 2.8 percent for 2011-12. Better growth is recorded in electricity, gas, water supply etc. Service sector has maintained good results even this year. Statistics of GDP growth indicates clearly towards spoiling health of the economy.

Economic Survey 2011-12 states, "managing growth and price stability are the major challenges of macroeco-

Table 22: Per capita income and consumption at 2004-05 prices

Year	Income		Consumption	
	₹	(%) Growth	₹	(%) Growth
2004-05	29,745		17,620	
2005-06	32,012	7.8	18,909	7.3
2006-07	34,533	7.9	20,168	6.7
2007-08	37,328	8.1	21,841	8.3
2008-09	38,673	4.8	23,012	5.4
2009-10	40,856	5.6	24,287	5.5
2010-11	44,155	8.0	25,903	6.7
2011-12	46,554	5.4	26,967	4.1

Source: Economic Survey, 2011-12; original source CSO.
Note: Income is taken as GDP at market prices, consumption in PFCE.

nomic policymaking. In 2011-12, India found itself in the heart of these conflicting demands." Survey also states that this slowdown is not only in contrast with the previous two years but all along 2003 to 2011 (except 2008-09). At the same time, sight must not be lost of the fact that, by any cross-country comparison, India remains among the front-runner. With agriculture and services continuing to perform well, India's slowdown can be attributed almost entirely to weakening industrial growth. The Manufacturing sector grew by 2.7 percent, 0.4 percent and -0.3 percent in the second, third and fourth quarter respectively in 2011-12. Inflation as measured by the wholesale price index (WPI) was high during most of the current fiscal year, though by the year's end there was a clear slowdown. Food inflation, in particular, has come down to around zero, with most of remaining WPI inflation being driven by non-food manufacturing products. Monetary policy was tightened by the Reserve Bank of India (RBI) during the year to control inflation and curb inflationary expectations. The slowing inflation reflects the lagged impact of actions taken by the RBI and the government. Reflecting the weak manufacturing activity and rising costs, revenues of the centre have remained less than anticipated; and, with higher than budgeted expenditure outgo, a slippage is expected on the fiscal side. The global economic environment, which has been tenuous at best throughout the year, turned sharply adverse in September 2011 owing to the turmoil in the euro-zone, and questions about the outlook on the US economy provoked by rating agencies.

The growth rates in per capita income and consumption, which are gross measures of welfare in general, have both declined in the past one year. This is a reflection of the slowdown in the overall GDP growth. While the growth in per capita income, measured in terms of GDP at market prices has declined from 8.0 percent in 2010-11 to 5.4 percent in 2011-12. Per Capita Consumption growth has been gradually going up from 5.4 percent in 2008-09 to 6.7 percent in 2010-11 (Table 22). Per capita consumption growth has suddenly fallen to only 4.1 percent in 2011-12. The growth rates of per capita consumption was lower than that of per capita income after 2008-09. The average growth in per capita consumption over the period 2004-05 to 2011-12 was slower at 6.26 percent than that in per capita income at 6.51 percent. These year to year differences in growth rates can be explained by the changing savings rate and also the rise in tax collections that have been observed in some of these years.

Performance of agriculture was disappointing in the year 2008-09, in which production of almost all crops showed a downward trend, Agriculture had shown a negative growth of 0.2 percent in the year 2009-10. However, we find an improvement in agriculture growth to 7 percent in 2010-11. In 2011-12 rate of growth of agriculture has again fallen to 2.8 percent as per the revised estimates, given by CSO. Though agricultural growth does not seem to be very impressive, but the year 2011-12 could be considered a good year from the point of view of production of food grains and other agricultural produce. As per the second advance estimates, production of food grain is going to surpass 250 million tonnes in 2011-12.

Industrial growth has been the worst sufferer in 2011-12, as manufacturing growth dipped to only 2.8 percent. In fact manufacturing grew at 7.3 percent in the first quarter of 2011-12, however the growth rate gradually declined to 2.9 percent, 0.6 percent and -0.3 percent in the second, third and fourth quarter respectively. As usual the services sector did grow at a much faster rate and ultimately the share of services in GDP jumped from 57.7 percent in 2010-11 to 59.0 percent in 2011-12.

Table 23 : Sectoral Composition of GDP

Year	Agriculture	Industry	Services
1950-51	53.1	16.6	30.3
1960-61	48.7	20.5	30.8
1970-71	42.3	24.0	33.8
1980-81	36.1	25.9	38.0
1990-91	29.6	27.7	42.7
2000-01	22.3	27.3	50.4
2010-11[QE]	14.5	27.8	57.7
2011-12[AE]	13.9	27.0	59.0

Source : Calculated from CSO data.

10. MAJOR CHALLENGES AND THE BUDGET

Economic Survey 2011-12, gives a detailed analysis of the economy over the past 12 months. Later CSO's estimates published on May 31, 2012, show that India's GDP growth would be 6.5 percent in real terms during 2011-12. The growth is estimated to be 2.8 percent in agriculture, 3.4 percent in industry and 8.9 percent in services. There is a significant slowdown in comparison to the preceding two years, primarily due to deceleration in industrial growth, more specifically in private investment. Rising cost of credit and weak domestic business sentiment, contributed to this decline.

I. Inflation

The headline inflation remained high for most part of the year. It was only in December 2011 that it moderated to 8.3 percent followed by 6.6 percent in January 2012. Monthly food inflation declined from 20.2 percent in February 2010, to 9.4 percent in March 2011 and turned negative in January 2012. Though the February 2012 inflation figure has gone up marginally, it is expected that the headline inflation may moderate further and remain stable thereafter.

India's inflation is largely structural, driven predominantly by agricultural supply constraints and global cost push. In his budget the Finance Minister claimed that steps taken to bridge gaps in distribution, storage and marketing systems to strengthen food supply chains have helped in a more effective management of inflation and led to a decline in food inflation.

II. Growth

Country's fiscal balance deteriorated in 2011-12 due to slippage in direct tax revenue and increased subsidies. Finance Minister stated that on both counts, underlying assumptions at the time of Budget presentation last year were belied by subsequent developments. The profit margins came under pressure due to higher interest rates and material costs. This impacted growth in corporate taxes. Further, as against an assumption of $ 90 a barrel, the average price of crude oil in 2011-12 is likely to exceed $ 115. This has necessitated higher outlay on subsidies than projected. The continuing uncertainty in the global environment makes it necessary for us to strike a balance between fiscal consolidation and strengthening macroeconomic fundamentals to create adequate headroom to deal with future shocks.

Fiscal Consolidation

FRBM Act

- The implementation of the Fiscal Responsibility and Budget Management Act, 2003 (FRBM Act) at Centre and the corresponding Acts at State level was the pivot in the successful consolidation of our fiscal balance prior to the global financial crisis of 2008. The outbreak of the crisis coincided with the year when the mandated targets of 3 percent fiscal deficit and elimination of revenue deficit were to be achieved. The Government deviated from these targets due to injection of fiscal stimulus at that time. Budget 2012-13 has introduced new amendments to the FRBM Act as part of Finance Bill, 2012.

Expenditure Reforms

- First, the concept of Effective Revenue Deficit is being brought in as a fiscal parameter. Effective Revenue Deficit is the difference between revenue deficit and grants for creation of capital assets. Focusing on this will help in reducing the consumptive component of revenue deficit and create space for increased capital spending.

  Second, a provision for "Medium-term Expenditure Framework Statement" is being introduced in the Act. This statement shall set forth a three-year rolling target for expenditure indicators. It would help in undertaking a de-novo exercise for allocating resources for prioritised schemes and weeding out others that have outlived their utility. This would provide greater certainty in multi-year budgeting framework. It would also encourage efficiencies in expenditure management.

Subsidies

- Fiscal consolidation calls for efforts both to raise the tax-GDP ratio and to lower the expenditure. In this context, we need to take a close look at the growth of our revenue expenditure, particularly on subsidies. The major subsidies at the Centre are for food, fertilisers and petroleum products. Some subsidies at this juncture in our development are inevitable. But they become undesirable if they compromise the macroeconomic fundamentals of the economy, more so, when they don't reach the intended beneficiaries.
- Budget states that from 2012-13 subsidies related to food and for administering the Food Security Act will be fully provided for. All other subsidies would be funded to the extent that they can be borne by the economy without any adverse implications. Further the expenditure on Central subsidies will be restricted under 2 percent of GDP in 2012-13. Over the next three years, it would be further brought down to 1.75 percent of GDP. Effort now will be directed towards better targeting and leakage proof delivery of the subsidies.
- The recommendations of the task force headed by Shri Nandan Nilekani on IT strategy for direct transfer of subsidy have been accepted. Starting from 2012, on scheme of direct transfer of subsidy to the retailer could be rolled out, and eventually

to the farmer will be implemented in subsequent phases. This step will benefit 12 crore farmer families, while reducing expenditure on subsidies by curtailing misuse of fertilisers.

- All the three public sector Oil Marketing Companies have launched LPG transparency portals to improve customer service and reduce leakage. A pilot project for selling LPG at market price and reimbursement of subsidy directly into the beneficiary's bank account is being conducted in Mysore. A similar pilot project on direct transfer of subsidy for kerosene into the bank accounts of beneficiaries has been initiated in Alwar district of Rajasthan. The Aadhaar platform has also been successfully used to validate PDS ration cards in Jharkhand.
- These pilot projects show that substantial economies in subsidy outgo can be achieved by the use of Aadhaar platform. A roll out of these Aadhaar enabled payments for various government schemes in at least 50 selected districts has been planned within the next six months.

Tax Reforms

- The Direct Taxes Code (DTC) Bill was introduced in Parliament in August 2010. It was expected that DTC will come into effect from April 1, 2012. Report of the Parliamentary Standing Committee came on March 9, 2012. Finance minister reported that the same would be examined expeditiously and steps would be taken for the enactment of DTC at the earliest.
- Similarly, the Constitution Amendment Bill, a preparatory step in the implementation of Goods and Services Tax (GST) was introduced in Parliament in March 2011 and is before the Parliamentary Standing Committee. Drafting of model legislation for Centre and State GST in concert with States is under progress.
- The structure of GST Network (GSTN) has been approved by the Empowered Committee of State Finance Ministers. GSTN will be set up as a National Information Utility and will become operational by August 2012.

Disinvestment Policy

- In 2011-12, as against a target of ₹ 40,000 crore, the Government is expected to raise about ₹ 14,000 crore from disinvestment. For 2012-13, it is proposed to raise ₹ 30,000 crore through disinvestment. Though people's ownership of CPSEs will go up, at least 51 percent ownership and management control will remain with the Government.

Strengthening Investment Environment

Foreign Direct Investment

- Finance Minister claimed that organised retail helps in reducing cost of intermediation due to economies of scale, benefiting both consumers and producers. At present, FDI in single brand and in cash and carry wholesale trade is permitted to the extent of 100 percent. The decision in respect of allowing FDI in multi-brand retail trade up to 51 percent, subject to compliance with specified conditions, has been held in abeyance due to opposition from various quarters.

Advance Pricing Agreement

- In a globalised economy with expanding cross-border production chains and growing trade within entities of the same group, Advance Pricing Agreement (APA) can significantly bring down tax litigation and provide tax certainty to foreign investors. Implementation of APA is introduced it in the Finance Bill, 2012.

Financial Sector

- To encourage flow of savings in financial instruments and improve the depth of domestic capital market, budget proposed to introduce a new scheme called Rajiv Gandhi Equity Savings Scheme. The scheme would allow for income tax deduction of 50 percent to new retail investors, who invest up to ₹ 50,000 directly in equities and whose annual income is below ₹ 10 lakh. The scheme will have a lock-in period of 3 years.

Capital Markets

- During the year 2011-12, a series of steps were taken to deepen the capital market and encourage investment in infrastructure sector. These steps included raising of FII investment limit in long-term infrastructure bonds, corporate bonds and government securities. The limit on External Commercial Borrowings (ECB) was also raised and qualified foreign investors were allowed to invest in specified Indian mutual funds and directly in equities. Budget proposed to take the next steps in deepening the reforms in Capital market by:
- Allowing Qualified Foreign Investors (QFIs) to access Indian Corporate Bond market;
- Simplifying the process of issuing Initial Public Offers (IPOs), lowering their costs and helping companies reach more retail investors in small towns.

Legislative Reforms

- On the basis of the recommendations of the Standing Committee on Finance on "The Pension Fund Regulatory and Development Authority Bill, 2011", "The Banking Laws (Amendment) Bill, 2011" and "The Insurance Laws (Amendment) Bill, 2008", the official amendments to these Bills are expected.
- To take forward the process of financial sector legislative reforms, the Government proposes to move the following Bills in the Budget Session of

the Parliament:

- The Micro Finance Institutions (Development and Regulation) Bill, 2012;
- The National Housing Bank (Amendment) Bill, 2012;
- The Small Industries Development Bank of India (Amendment) Bill, 2012;
- National Bank for Agriculture and Rural Development (Amendment) Bill, 2012;
- Regional Rural Banks (Amendment) Bill, 2012;
- Indian Stamp (Amendment) Bill, 2012; and
- Public Debt Management Agency of India Bill, 2012.

- The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2011 has already been introduced in Parliament.

Financial Inclusion

- In 2010-11, "Swabhimaan" campaign was launched to extend banking facilities through Business Correspondents to habitations having population in excess of 2000. Out of 73,000 identified habitations that were to be covered by March, 2012, about 70,000 habitations have been provided with banking facilities. With this, over 2.55 crore beneficiary accounts would have been operationalised. The remaining habitations are likely to be covered by March 31, 2012. As a next step, Ultra Small Branches are being set up at these habitations, where the Business Correspondents would deal with cash transactions. It is proposed to extend the "Swabhimaan" campaign to habitations with population of more than 1000 in North Eastern and hilly States and to other habitations which have crossed population of 2,000 as per Census 2011.

Regional Rural Banks

- The Government had initiated the process of capitalisation of 40 financially weak RRBs, which has been completed in respect of 12 RRBs by the end of February, 2012. This scheme is extended to capitalisation of weak RRBs by another 2 years to enable all the States to contribute their share.

III. Infrastructure and Industrial Development

- Lack of adequate infrastructure is a major constraint on our growth. The strategy we have followed so far is to increase investment in infrastructure through a combination of public investment and public private partnerships (PPP). During the Twelfth Plan period, infrastructure investment will go up to ₹ 50 lakh crore. About half of this is expected to come from private sector.
- Viability Gap Funding (VGF) under the Scheme for Support to PPP in infrastructure is an important instrument in attracting private investment into the sector. Government has decided to make irrigation (including dams, channels and embankments), terminal markets, common infrastructure in agriculture markets, soil testing laboratories and capital investment in fertiliser sector eligible for VGF under this scheme. Oil and Gas/LNG storage facilities and oil and gas pipelines, fixed network for telecommunication and telecommunication towers will also be made eligible sectors for VGF.
- The Government has approved guidelines for establishing joint venture companies by defence Public Sector Undertakings in PPP mode.
- A new Infrastructure Debt Fund with an initial size of ₹ 8000 crore, has been launched in March 2012.
- For the year 2011-12, tax-free bonds for ₹ 30,000 crore were announced for financing infrastructure projects. In year 2012-13 it is proposed this figure to ₹ 60,000 crore. This includes ₹10,000 crore for NHAI, ₹10,000 crore for IRFC, ₹10,000 crore for IIFCL, ₹ 5,000 crore for HUDCO, ₹ 5,000 crore for National Housing Bank, ₹ 5,000 crore for SIDBI, ₹ 5,000 crore for ports and ₹ 10,000 crore for power sector.

National Manufacturing Policy

- The Government has announced a National Manufacturing Policy on October 25, 2011 with the objective of raising, within a decade, the share of manufacturing in GDP to 25 percent and creation of 10 crore jobs. The Policy encourages the setting-up of National Investment and Manufacturing Zones (NIMZs) across the country.

Power and Coal

- In power generation, fuel supply constraints are affecting production prospects. To address this concern, Coal India Limited (CIL) has been advised to sign fuel supply agreements, with power plants that have entered into long-term Power Purchase Agreements with DISCOMs and would get commissioned on or before March 31, 2015. An inter-ministerial group is being constituted to undertake periodic review of the allocated coal mines and make recommendations on de-allocations, if so required.

Transport: Roads and Civil Aviation

- The Ministry of Road Transport and Highways is set to achieve its target of awarding projects covering a length of 7,300 km under NHDP during 2011-12. This would be 44 percent higher than the best ever length of 5,082 km awarded in 2010-11. It is proposed to set a target of covering a length

of 8,800 kms under NHDP next year. The allocation of the Ministry has been enhanced by 14 percent to ₹ 25,360 crore in 2012-13.

- The airline industry is facing financial crisis. The high operating cost of the sector is largely attributable to the cost of Aviation Turbine Fuel (ATF). To reduce the cost of ATF, Government has permitted direct import of ATF by Indian Carriers, as actual users.
- To address the immediate financing concerns of the Civil Aviation sector, It is proposed to permit ECB for working capital requirements of the airline industry for a period of one year, subject to a total ceiling of US Dollar 1 billion.
- A proposal to allow foreign airlines to participate up to 49 percent in the equity of an air transport undertaking engaged in operation of scheduled and non-scheduled air transport services is under active consideration of the Government.

Delhi Mumbai Industrial Corridor

- The Delhi Mumbai Industrial Corridor (DMIC) is being developed on either side along the alignment of the Western Dedicated Rail Freight Corridor. The project has made significant progress. In September 2011, Central assistance of ₹18,500 crore spread over a period of 5 years has been approved. The Japanese Prime Minister has announced US$ 4.5 billion as Japanese participation in DMIC project.

Housing sector

- In view of the shortage of housing for low income groups in major cities and towns, It is proposed to:
- Allow ECB for low cost affordable housing projects;
- Set up Credit Guarantee Trust Fund to ensure better flow of institutional credit for housing loans;
- Enhance provisions under Rural Housing Fund from ₹ 3000 crore to ₹ 4000 crore;
- Extend the scheme of interest subvention of 1 percent on housing loan up to ₹15 lakh where the cost of the house does not exceed ₹25 lakh for another year; and
- Enhance the limit of indirect finance under priority sector from ₹ 5 lakh to ₹ 10 lakh.

Fertilisers

- To reduce India's import dependence in urea, Government has taken steps to finalise pricing and investment policies for urea. It is expected that with the implementation of the investment policy, country will become self sufficient in manufacturing urea in the next five years. In case of the potassic-phosphatic (P&K) fertiliser, use of single super phosphate (SSP) will be encouraged through greater extension work. This fertiliser is manufactured entirely in the domestic sector. Enhanced production would bring down our dependence on imports in the P&K sector.

Textiles

- The Government has recently announced a financial package of ₹ 3,884 crore for waiver of loans of handloom weavers and their cooperative societies.
- In addition to 4 mega handloom clusters already operationalised, two more mega clusters, one to cover Prakasam and Guntur districts in Andhra Pradesh and the other for Godda and neighbouring districts in Jharkhand. Assistance would be provided in setting up of dormitories for women workers in the 5 mega clusters relating to handloom, power loom and leather sectors.
- The Ministry of Textiles runs Weavers' Service Centres in different parts of the country for providing technical support to poor handloom weavers. It is proposed to set up three such Centres, one each in Mizoram, Nagaland and Jharkhand. ₹ 500 crore pilot scheme in the Twelfth Plan for promotion and application of Geo-textiles in the North East Region will also be started.
- To address the need of the local artisans and weavers, It is proposed to set up a powerloom mega cluster in Ichalkaranji in Maharashtra with a Budget allocation of ₹ 70 crore.

Micro, Small and Medium Enterprises

- In order to enhance availability of equity to MSME sector, it is proposed to set up a ₹ 5,000 crore India Opportunities Venture Fund with SIDBI.

Public Procurement Policy for Micro and Small Enterprises

- With the objective of promoting market access of Micro and Small Enterprises, Government has approved a policy, which requires Ministries and CPSEs to make a minimum of 20 percent of their annual purchases from MSEs. Of this, 4 percent will be earmarked for procurement from MSEs owned by SC/ST entrepreneurs.

IV. Agriculture

- The total plan outlay for the Department of Agriculture and Cooperation has been increased by 18 percent from ₹ 17,123 crore in 2011-12 to ₹ 20,208 crore in 2012-13.
- The outlay for Rashtriya Krishi Vikas Yojana (RKVY) has been increased from ₹7,860 crore in 2011-12 to ₹ 9,217 crore in 2012-13. The initiative of Bringing Green Revolution to Eastern India (BGREI) has resulted in a significant increase in production and productivity of paddy. States in eastern India have reported additional paddy production of seven million tonnes in Kharif 2011. It is proposed to increase the allocation for this scheme from ₹400 crore in 2011-12 to ₹1000 crore in 2012-13.
- This year, under RKVY, It is also proposed to allocate ₹300 crore to Vidarbha Intensified Irrigation Development Programme. This Scheme seeks to bring in more farming areas under protective irrigation.

National Mission for Protein Supplement

- Mission for Protein Supplement is being strengthened. To improve productivity in the dairy sector, a ₹2,242 crore project is being launched with World Bank assistance. To broaden the scope of production of fish to coastal aquaculture, apart from fresh water aquaculture, the outlay in 2012-13 is being stepped up to ₹500 crore. Suitable allocations are also being made for poultry, piggery and goat rearing.

Agriculture Credit

- Farmers need timely access to affordable credit. It is proposed to raise the target for agricultural credit in 2012-13 to ₹5,75,000 crore. This represents an increase of ₹ 1,00,000 crore over the target for the current year.
- The interest subvention scheme for providing short term crop loans to farmers at 7 percent interest per annum will be continued in 2012-13. An additional subvention of 3 percent will be available to prompt paying farmers. In addition, the same interest subvention on post harvest loans up to six months against negotiable warehouse receipt will also be available. This will encourage the farmers to keep their produce in warehouses.
- A Short term RRB Credit Refinance Fund is being set-up to enhance the capacity of Regional Rural Banks to disburse short term crop loans to the small and marginal farmers. It is proposed to allocate ₹ 10,000 crore to NABARD for refinancing the RRBs through this fund.
- Kisan Credit Card (KCC) is an effective instrument for making agricultural credit available to the farmers. KCC scheme will be modified to make KCC a smart card which could be used at ATMs.

Irrigation

- Unless we recognise water as a resource, the day is not far when water stress will start threatening our agricultural production. Focus on micro irrigation schemes to dovetail these with water harvesting schemes is necessary. To maximise the flow of benefits from investments in irrigation projects, structural changes in Accelerated Irrigation Benefit Programme (AIBP) are being made. The allocation for AIBP in 2012-13 is being stepped up by 13 percent to ₹14,242 crore.
- To mobilise large resources to fund irrigation projects, a Government owned Irrigation and Water Resource Finance Company is being operationalised. The Company would start its operations in 2012-13 by focusing on financing sub-sectors like micro-irrigation, contract farming, waste water management and sanitation.

National Mission on Food Processing

- The food processing sector has been growing at an average rate of over 8 percent over the past 5 years. In order to have a better outreach and to provide more flexibility to suit local needs, it has been decided that a new centrally sponsored scheme titled "National Mission on Food Processing" would be started, in cooperation with the State Governments in 2012-13.
- The Government has taken steps to create additional foodgrain storage capacity in the country. Creation of 2 million tonnes of storage capacity in the form of modern silos has already been approved. Nearly 15 million tonnes capacity is being created under the Private Entrepreneur's Guarantee Scheme, of which 3 million tonnes of storage capacity will be added by the end of 2011-12 and 5 million would be added next year.

V. Inclusion

Scheduled Castes and Tribal Sub Plans

- From the year 2011-12, allocations are being made for Scheduled Castes Sub Plan (SCSP) and Tribal Sub Plan (TSP) under separate minor heads as part of the Plan allocations. In 2012-13, the allocation for SCSP is ₹37,113 crore which represents an increase of 18 percent over 2011-12. The allocation for TSP in 2012-13 is ₹21,710 crore representing an increase of 17.6 percent over 2011-12.

Food Security

- Government has taken definite steps to create food security at the household level by making food a legal entitlement for all targeted people, especially for the poor and vulnerable segments of our population. The National Food Security Bill, 2011 is before the Parliamentary Standing Committee.

- To ensure that the objectives of the National Food Security Bill are effectively realised, a Public Distribution System Network is being created using the Aadhaar platform. A National Information Utility for the computerisation of PDS is being created. It will become operational by December 2012.

Multi-sectoral Nutrition Augmentation Programme

- Integrated Child Development Services (ICDS) scheme is being strengthened and re-structured. For 2012-13, an allocation of ₹15,850 crore has been made as against ₹10,000 crore in 2011-12. This amounts to an increase of over 58 percent.
- National Programme of Mid Day Meals in Schools has enhanced enrolment, retention, attendance, and also helped in improving nutrition levels among children. In 2012-13, it is proposed to allocate ₹11,937 crore for this scheme as against ₹10,380 crore in 2011-12.
- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls, SABLA, has been introduced last year with a view to address the nutritional needs and other educational and skill development initiatives for self development of adolescent girls in the age group of 11 to 18 years. For 2012-13, an allocation of ₹750 crore has been proposed for the scheme.

Rural Development and Panchayati Raj

- Along with water quality, poor sanitation is one of the factors contributing to malnourishment. It is proposed to increase the budgetary allocation for rural building-cum-sewer sanitation from ₹11,000 crore in 2011-12 to ₹14,000 crore in 2012-13. This is an increase of over 27 percent.
- Pradhan Mantri Gram Sadak Yojana (PMGSY) has been a successful programme. In 2012-13, it is proposed to raise the allocation by 20 percent to this scheme by providing ₹24,000 crore. It will accelerate connectivity in the States.
- A major initiative has been proposed to strengthen Panchayats across the country through the Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA). This programme will expand on the existing schemes for Panchayat capacity building.
- Allocation of ₹12,040 crore has been made in 2012-13 for Backward Regions Grant Fund scheme, an increase of about 22 percent over BE of 2011-12. This includes the State component which covers projects in backward areas in Bihar, West Bengal and the Kalahandi-Bolangir-Koraput region of Odisha, development projects for drought mitigation in the Bundelkhand region and projects under the Integrated Action Plan to accelerate the pace of development in selected tribal and backward districts.

Rural Infrastructure Development Fund

- It is proposed to enhance the allocation under Rural Infrastructure Development Fund (RIDF) to ₹20,000 crore. Further in view of the warehousing shortage in the country, it is proposed to earmark an amount of ₹5,000 crore from the above allocation exclusively for creating warehousing facilities under RIDF.

Education

- The Right to Education (RTE) Act is being implemented with effect from April 1, 2010 through the Sarva Shiksha Abhiyan (SSA). For 2012-13, it is provided ₹25,555 crore for RTE-SSA. This is an increase of 21.7 percent over 2011-12.
- In the Twelfth Plan, 6,000 schools have been proposed to be set up at block level as model schools to benchmark excellence. Of these, 2500 will be set up under Public Private Partnership.
- A scheme for education loans is being implemented by banks. To ensure better flow of credit to deserving students, it is proposed to set up a Credit Guarantee Fund for this purpose.

Health

- No new case of polio was reported in the last one year. By modernising existing units and setting up a new integrated vaccine unit near Chennai, the country destined to achieve vaccine security and keep the pressure on disease eradication and prevention.
- National Rural Health Mission (NRHM) is being implemented through 'Accredited Social Health Activist - ASHA'. The scope of ASHA's activities is being enlarged to include prevention of Iodine Deficiency Disorders, ensure 100 percent immunisation and better spacing of children. At the community level, a more active role is envisaged for ASHA as the convenor of the Village Health and Sanitation Committee, as also to support the initiative on malnutrition. Since ASHAs receive activity-wise, performance-based payments, this will also enhance their remuneration. It is proposed to increase the allocation to NRHM from ₹18,115 crore in 2011-12 to ₹20,822 crore in 2012-13.
- National Urban Health Mission is being launched to encompass the primary healthcare needs of people in the urban areas. The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) aimed at setting up of AIIMS-like institutions and upgradation of existing Government medical colleges is being expanded to cover upgradation of 7 more Government medical colleges. It will enhance the availability of affordable tertiary health care.

Employment and Skill Development

- The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has had a positive impact on livelihood security. For the first time, there is an effective floor wage rate for rural workers. Distress migration has come down. Community assets have been created. Productivity of barren and fallow lands has gone up. The need for improving quality of assets and bringing about greater synergy between MG-NREGA and agriculture and allied rural livelihoods is being addressed.
- 'Women's SHG's Development Fund' has been set up in NABARD this year. In 2012-13, it is proposed to provide ₹ 200 crore to enlarge the corpus to ₹ 300 crore. This Fund will also support the objectives of Aajeevika i.e. the National Rural Livelihood Mission. It will empower women SHGs to access bank credit. It is proposed to provide interest subvention to Women SHGs to avail loans up to ₹3 lakh at 7 percent per annum. Women SHGs that repay loans in time will get additional 3 percent subvention, reducing the effective rate to 4 percent. The initiative, in the first phase, would focus on selected 600 Blocks of 150 districts, including the Left Wing Extremism affected districts.

Skill Development

- In 2011-12 National Skill Development Corporation (NSDC) approved 26 new projects, thereby doubling the number of projects sanctioned since 2009 to 52, with a total funding commitment of ₹ 1,205 crore. At the end of 10 years, these projects are expected to train 6.2 crore persons and augment vocational training capacity by 1.25 crore per year in the private sector.
- The NSDC partners have opened 496 permanent and 2429 mobile centres in 220 districts across 24 states. More than 89,500 persons have been trained and almost 80 percent employed. Under NSDC, 10 Sector Skill Councils have been sanctioned. Of these, 3 Skill Councils for Automobile, Security and Retail sectors have become operational. For 2012-13, it is proposed to allocate ₹ 1000 crore to National Skill Development Fund (NSDF).
- In order to improve the flow of institutional credit for skill development, it is proposed to set up separate Credit Guarantee Fund. This will benefit youth in acquiring market oriented skills.
- A new scheme titled "Himayat" was introduced in Jammu and Kashmir from 2011-12. It aims to provide skill training to one lakh youth in the next five years. The entire cost of this programme is being borne by the Centre.

Social security and the needs of weaker sections

- Allocation for National Social Assistance Programme (NSAP) has been increased by 37 percent from ₹ 6,158 crore in 2011-12 to ₹ 8,447 crore in 2012-13. Under the ongoing Indira Gandhi National Widow Pension Scheme and Indira Gandhi National Disability Pension Scheme for BPL beneficiaries, the monthly pension amount per person is being raised from ₹ 200 to ₹ 300.
- On the death of the primary breadwinner of a BPL family, in the age group 18 to 64 years, a lumpsum grant of ₹10,000 is presently provided under the National Family Benefit scheme. It is proposed to double this amount to ₹ 20,000 and expect a matching contribution by the State Governments.
- In order to promote voluntary savings towards pensions, a co-contributory scheme SWAVALAMBAN was started in September, 2010. Over 5 lakh subscribers have been enrolled by February 2012. In order to enhance access to this scheme, LIC has been appointed as an Aggregator and all Public Sector Banks have also been appointed as Points of Presence (PoP) and Aggregators.

Security

- In the Budget for 2012-13, a provision of ₹ 1,93,407 crore has been made for Defence Services which include ₹79,579 crore for capital expenditure. This allocation is based on present needs and any further requirement would be met.
- Government is making efforts to increase the availability of residential quarters to forces. In 2012-13, it is envisaged to construct nearly 4,000 residential quarters for Central Armed Police Forces for which ₹ 1,185 crore is proposed to be allocated. A provision of ₹ 3,280 crore for 2012-13 has also been made for construction of office buildings including land acquisition and barracks to accommodate 27,000 personnel.
- The scheme to create the National Population Register (NPR) is progressing well. It is likely to be completed within the next two years. The Government is also considering a proposal of issuing Resident Identity Cards bearing the Aadhaar numbers to all residents who are of age 18 years and above to help in the e-governance initiatives.

VI. Governance

UID-Aadhaar

The enrolments into the Aadhaar system have crossed 20 crore and the Aadhaar numbers generated upto date have crossed 14 crore. It is proposed to allocate adequate funds to complete another 40 crore enrolments

starting from April 1, 2012. The Aadhaar platform is now ready to support the payments of MG-NREGA; old age, widow and disability pensions; and scholarships directly to the beneficiary accounts in selected areas.

Black Money

- In continuation with five pronged strategy announced in the last budget, to tackle the malaise of generation and circulation of black money and its illegitimate transfer outside India, various steps have been taken, as claimed by the Government. As a result:
- 82 Double Taxation Avoidance Agreements (DTAA) and 17 Tax Information Exchange Agreements (TIEA) have been finalised and information regarding bank accounts and assets held by Indians abroad has started flowing in. In some cases prosecution will be initiated;
- Dedicated exchange of information cell for speedy exchange of tax information with treaty countries is fully functional in CBDT;
- India became the 33rd signatory of the Multilateral Convention on Mutual Administrative Assistance in Tax Matters; and
- Directorate of Income Tax Criminal Investigation has been established in CBDT.
- *After the budget was presented, a white paper on* Black Money was laid on the table of the Parliament.

Public Procurement Legislation

- A bill with regard to enactment of Public Procurement legislation, a bill is proposed to enhance confidence in public procurement and to ensure transparency and efficiency in the process.
- The following legislative measures for strengthening anti-corruption framework are in various stages of enactment:
- Prevention of Money Laundering (Amendment) Bill, 2011 introduced in Parliament with a view to bring certain provisions of the Act in line with global standards;
- Benami Transactions (Prohibition) Bill, 2011 is currently being examined by the Standing Committee on Finance. It would replace the 'Benami Transactions (Prohibition) Act, 1988'; and
- National Drugs and Psychotropic Substances (Amendment) Bill, 2011 introduced in Parliament with a view to strengthen legal provisions for implementation of the national policy on Narcotic Drugs and Psychotropic Substances.

11. BUDGET ESTIMATES (2012-13) AT A GLANCE

Plan Expenditure for 2012-13 is placed at ₹ 5,21,025 crores. This is higher than the Plan Expenditure in 2011-12 (RE) estimated at ₹ 4,26,604 crores by 22.1 percent.

Non-Plan Expenditure of 2012-13 is estimated at ₹ 9,69,900 crores as against ₹ 8,92,116 crores for 2011-12 (RE) – an increase by 8.7 percent.

Revenue Deficit and Fiscal Deficit : The budget provides for 2012-13 total revenue expenditure (Plan plus non-plan) of ₹ 12,86,109 crores. Total revenue receipts are estimated at ₹ 9,35,685 crores. Consequently, revenue deficit is estimated at ₹ 3,50,424 crores which amounts to 3.4 percent of GDP. The fiscal deficit for 2012-13 is estimated at ₹ 5,13,590 crores which is 5.1 percent of GDP. It seems that it will take some more time to bring down fiscal deficit as per the FRBM Act due to recessionary *trends prevailing.*

Analysis of Expenditure of Central Government

Non-plan expenditure for 2012-13 is estimated at ₹ 9,69,900 crores as against ₹ 8,92,116 crores in 2011-12 (RE), marking an increase by *8.7* percent.

A break up of the non plan expenditure reveals that four items viz, interest payments, defence, subsidies and general administration (including police and pensions) accounted for 7,05,595 crores in 2011-12 (RE) which was 92 percent of total revenue receipts estimated at 7,66,989 crores. This year budget keeps allocation for these items at ₹ 7,43,779 crores which is 79.5 percent of total revenue receipts of 9,35,684 in budget 2012-13. Allocation of capital outlay for agriculture is around one percent of the total budget.

Table 24 : Budget at a Glance(Union Budget 2012-13)

(In Crore of Rupees)

	2010-2011 Actuals @	*2011-12 Budget Estimates*	*2011-2012 Revised Estimates*	*2012-2013 Budget Estimates*
1. Revenue Receipts	788471	789892	766989	935685
2. Tax Revenue (net to Centre)	*569869*	*664457*	*642252*	*771071*
3. Non-tax Revenue	*218602*	*125435*	*124737*	*164614*
4. Capital Receipts (5+6+7) $	408857	467837	551730	555241
5. Recoveries of Loans	*12420*	*15020*	*14258*	*11650*
6. Other receipts	*22846*	*40000*	*15493*	*30000*
7. Borrowings and other Liabilities $	*373591*	*412817*	*521980*	*513590*
8. Total Receipts (1+4) $	1197328	1257729	1318720	1490925
9. Non-plan Expenditure	818299	816182	892116	969900
10. On Revenue Accounts of which,	726491	733558	815740	865596
11. Interest Payments	234022	267986	275618	319759
12. On Capital Account	91808	82624	76376	104304
13. Plan Expenditure	379029	441547	426604	521025
14. On Revenue Account	314232	363604	346201	420513
15. On Capital Account	64797	77943	80404	100512
16. Total Expenditure (9+13)	1197328	1257729	1318720	1490925
17. Revenue Expenditure (10+14)	1040723	1097162	1161940	1286109
18. Of Which, Grants for creation of Capital Assets	87487	146853	137505	164672
19. Capital Expenditure (12+15)	156605	160567	156780	204816
20. Revenue Deficit (17-1)	252252(-3.3)	307270(-3.4)	394951(-4.4)	350424(-3.4)
21. Effective Revenue (17 – 18) #	164765(-2.1)	160417(-1.8)	257446(-2.9)	185752(-1.8)
22. Fiscal Deficit[16-(1+5+6)]	373591(-4.9)	412817(-4.6)	521980(-5.9)	513590(-5.1)
23. Primary Deficit (20-11)	139569(-1.8)	144831(-1.6)	246362(-2.8)	193831(-1.9)

* Includes draw-down of Cash Balance.

$ Does not include receipts in respect of Market Stabilization Scheme.

@ Actuals for 2010-11 are provisional.

Excluding Grants for creation of Capital Assets.

Note : 1. GDP for BE 2012-2013 has been projected at ₹ 10159884 crore assuming 14% growth over the Advance Estimates of 2011-2012 (₹ 8912179 crore) released by CSO.

2. Individual items in this document may not sum up to the totals due to rounding off.

Source: Government of India, Budget as a Glance, 2012-13.

Table 25: Expenditure

(In Crore of Rupees)

	2010-2011 Actuals	2011-2012 Budget Estimates	2011-2012 Revised Estimates	2012-2013 Budget Estimates
I. Non-Plan Expenditure (A+B)				
A. Total Revenue Non-Plan Expenditure (1 to 14)				
1. Interest Payments and Prepayment Premium	234022	267986	275618	319759
2. Defence	92061	95216	104793	113829
3. Subsidies	173420	143570	216297	190015
4. Grants to State and U.T. Governments	49790	66311	55322	64211
5. Pensions	57405	54521	56190	63183
6. Police	27339	30595	33302	35611
7. Assistance to States from National Calamity Contingency Fund	4179	4525	4525	4620
8. Other General Services (Organs of State, tax collection, external affairs etc.)	16917	18195	19395	21382
9. Social Services (Education, Health, Broadcasting, etc)	35014	20862	19709	20784
10. Economic Services (Agriculture, Industry, Power, Transport, Communications, Science and Technology etc.)	28051	25391	23702	24105
11. Postal Deficit	6162	5018	5573	5727
12. Expenditure of Union Territories without Legislature	3775	3592	3735	3875
13. Amount met from National Calamity Contingency Fund	-3900	-4525	-4525	-4620
14. Grantsw to Foreign Governments	2256	2301	2105	3114
Total Revenue Non-Plan Expenditure	726491	733558	815740	865596
B. Total Capital Non-Plan Expenditure				
1. Defence	62056	69199	66144	79579
2. Other Non-Plan Capital Outlay	23618	13212	9617	23971
3. Loan to Public Enterprises	5834	496	593	465
4. Loans to State and U.T. Governments	85	85	75	85
5. Loans to Foreign Governments	...	...	250	550
6. Others	215	-368	-303	-346
Total Capital Non-Plan Expenditure	91808	82624	76376	104304
Total Non-Plan Expenduiture	818299	816182	892116	969900
II. Plan Expenditure (C+D)				
C. Revenue Expenditure (1+2)				
1. Central Plan	232454	268287	252597	303528
2. Central Assistance for State & Union Territory Plans	95317	93604	116985	95317
State Plan	92168	91038	113170	92168
Union Territory Plan	3149	2566	3815	3149
Total Revenue Plan	**363604**	**346201**	**420513**	**363604**
D. Capital Expenditure (3+4)				
3. Central Plan	67234	68809	87499	67234
4. Central Assistance for State & Union Territory Plans	10709	11595	13013	10709
State Plan	9067	10067	11079	9067
Union Territory Plan	1642	1528	1934	1642
Total Capital Plan Expenditure	77943	80404	100512	77943
Total – Plan Expenditure	441547	426604	521025	441547
Total Budget Support for Central Plan	335521	321406	391027	335521
Total Central Assistance for State and UT Plans	106026	105199	129998	106026
Total Expenditure* (I+II)	**1197328**	**1257729**	**1318720**	**1490925**

Debt Servicing				
1. Repayment of Debt**	104927	123929	124302	104927
2. Total Interest Payments	267986	275618	319759	267986
3. Total debt servicing (1+2)	372913	399547	444061	372913
4. Revenue Receipts	789892	766989	935685	789892
5. Percentage of 2 to 4	33.90%	35.90%	34.20%	33.90%

*Excludes expenditure matched by receipts.
** The figures exclude discharge of all Treasury bills, discharge of Cash Management Bills, discharge of Ways and Means Advances including Overdraft repayment under MSS and all Public Account Disbursements.
Source : Government of India, Budget as a Glance, 20012-13.

It may be noted that interest payment accounted for 35.9 percent of revenue receipts in 2011-12 (RE), which will be 34.2 percent in 2012-13 (BE). The other three items viz defence, subsidies and general administration show a decline in terms of percentage of total revenue receipts, during 2012-13 as compared to 2011-12 (RE). Sudden sport is subsidies is the year 2011-12 has been the major reason for increase in revised estimates for expenditure on these items.

Central Plan Expenditure

The Budget support for Central, State and UT plans has been placed at ₹ 5,21,025 crores for 2012-13 as against ₹ 4,26,604 crores in 2011-12 (RE). This makes an increase by 22.1 percent. Out of this central plan support is kept at ₹ 3,91,027 crores for 2012-13. By adding the internal and extra budget (IEBR) of public sector enterprises (PSEs) at ₹ 2,60,482 crores, the total central plan outlay is expected at ₹ 6,51,809 crores for 2012-13 as against ₹ 5,58,172 crores for 2011-12 (RE), making an increase of 16.7 percent. It may be noted that the share of IEBR in total central plan outlay is 40.0 percent in 2012-13 and 42.4 percent in 2011-12 (RE). This indicates good performance of central PSEs and their contribution to central plan outlay (refer Table 26). The state and UT plan have been provided ₹ 1,29,998 crores in 2012-13 as against ₹ 1,05,199 crores in 2011-12 (RE). This has meant an increase of 26.6 percent in budget support for state and UT plans

An analysis of the central plan outlays for 2012-13 reveals that three items energy, transport and communication accounts for ₹ 2,95,610 crores, i.e. 45.4 percent of total outlay, and consequently, very little is left for education, health and women and child development.

Table 26: Central Plan outlay

(In Crore of rupees)

	20010-2011 Budget Estimates	*2010-2011 Revised Estimates*	*2011-2012 Budget Estimates*
Agriculture and Allied Activities	14744	14855	17692
Rural Development*	55288	48128	50729
Irrigation and Flood Control	565	489	1275
Energy	155495	147190	154842
Industry and Minerals	45214	40581	57227
Transport**	116861	109205	125357
Communications	20256	11994	15411
Science Technology & Environment	16186	12713	16592
General Economic Services	15802	19420	24777
Social Services***	144816	148060	178906
General Services	7230	5536	8701
Grand Total	592457	558172	651509

* Includes provision for rural housing but excludes provision for rural roads.
**Includes provision for rural roads.
***Excludes provision for Rural Housing.
Source: Government of India, Budget as a Glance, 2012-13.

which together account for ₹ 1,10,404 crores, i.e. 16.9 percent of total plan outlay (refer Table 26). As against this, revised estimates for 2011-12 for these items show an expenditure of ₹ 92,187 crores. Looking at the past experience, there is a need to ensure that the utilizations rate of budgeted resources to education, health, women and child development is kept at cent percent basis so that the intended benefits of higher resource allocation can be reaped.

Analysis of Revenue Receipts

Union Budget 2012-13, hopes to realize ₹ 10,77,612 crores as Gross tax revenue against ₹ 9,01,664 crores in 2011-12 (RE). This makes a small increase of 19.5 percent. Gross Tax Revenue (GTR) is collected mainly from five major taxes, viz, corporation tax, income tax, customs, union excise duties and service tax. Most important of them is corporation tax which provided 36.3 percent (₹ 3,27,680 crores) of GTR in 2011-12 (RE), followed by income tax which provided 19.1 percent (₹ 1,71,879 crores) in 2011-12 (RE). These two direct taxes accounted for 55.4 percent of GTR in 2011-12 (RE), which highlights the fact that direct taxes have surpassed the yield from indirect taxes. This certainly indicates higher tax compliance. Wealth tax is yet another direct tax, which does not yield very significant revenue.

Table 27: Receipts of the Central Government

(In Crore of Rupees)

	2010-2011 Actuals	2011-2012 Budget Estimates	2011-2012 Revised Estimates	2012-2013 Budget Estimates
I. Revenue Receipts				
A. Gross Tax Revenue (1 to 7)	793072	932440	901664	1077612
1. Corporation tax	298688	359990	327680	373227
2. Income tax	146587	172026	171879	195786
3. Wealth Tax	687	635	1092	1244
4. Customs	135813	151700	153000	186694
5. Union Excise Duties	138299	164116	150696	194350
6. Service Tax	71016	82000	95000	124000
7. Taxes of the Union Territories	1982	1973	2317	2310
B. Less – NCCD transferred to the National Calamity Contingency Fund	3900	4525	3998	4620
C. Less States' Share	219303	263458	255414	301921
D. Net Tax Revenue	569869	664457	642252	771071
E. Non-Tax Revenue (8 to 12)	218602	125435	124737	164614
8. Interest Receipts	19734	19578	20125	19231
9. Dividend and Profits	47992	42624	50122	50153
10. External Grants	2673	2173	3477	2887
11. Other Non-Tax Revenue	147107	59891	49909	91207
12. Receipts of Union Territories	1097	1169	1105	1136
II. Capital Receipts (F+G) **				
F. Non-debt Receipts (13+14)				
13. Recoveries of Loans and Advances@	12420	15020	14258	11650
14. Miscellaneous Capital receipts	22846	40000	15493	30000
Total	35266	55020	29751	41650
G. Debt Receipts to finance Fiscal Deficit				
15. Market Loans	325414	343000	436414	479000
16. Short term borrowings	7759	15000	116084	9000
17. External assistance (Net)	23556	14500	10311	10148
18. Securities issued against Small Savings	11233	24182	-10302	1198
19. State Provident Funds (Net)	12514	10000	10000	12000
20. Other Receipts (Net)	-13315	-13866	-15862	2245
Total	367162	392816	546644	513590
Total Capital Receipts (F+G)	402427	447836	576395	555241
21. Draw-down of cash Balance	6430	20000	-24664	...
Total Receipts (1 + 2 + 3 + 4)	1197328	1257729	1318720	1490925
Financing of Fiscal Deficit (3B + 4)	373591	412817	521980	513590
Receipts under MSS (Net)	-2737	20000	...	20000
@ Excludes recoveries of short-term loans and advances from States and loans to Government servants, etc.	16833	11490	13745	11445

*The receipts are net of repayments.

Source : Compiled and computed from Budget at a Glance (2012-2013).

Among the indirect taxes are union excise duties, customs and service tax. Taken together, they accounted for 44.5 percent of gross tax revenue in 2011-12 (RE). The share of union excise duties was 16.7 percent (₹ 1,50,696 crores), followed by customs 16.9 percent (₹ 1,53,000 crores). Although service tax was introduced recently, its coverage has been expanding gradually. The share of service tax in 2011-12 (RE) was 10.5 percent (₹ 95,000 crores). This is expected to be ₹ 1,24,000 crores again in 2012-13(BE).

In case of corporation tax, the expected increase in revenue would be of the order of 13.9 percent in 2012-13 over the previous year (from ₹ 3,27,680 crores to ₹. 3,73,227 crores).

Budget has also classified capital receipt under two heads – (a) Non debt receipts comprising of recoveries of loans and advances and miscellaneous capital receipts, and (b) Debt receipts to finance fiscal deficit comprising of market loans, short-term borrowings, external assistance, securities issued against small savings, state provident funds and other receipts. Besides these items, if the finance minister finds that enough resources could not be mobilized, then he may resort to draw down of cash balances.

Out of the total capital receipts expected in 2012-13 (BE) of the order of ₹ 5,55,241 crores, only ₹ 41,650 crores are expected from non-debt receipts (i.e. 7.5 percent of total) and balance ₹ 5,13,590 crores in expected to be raised from debt receipts. During 2011-12 (RE) the fiscal deficit was of the order of ₹ 5,21,980 crores, i.e. 5.9 percent of GDP. In budget 2012-13, the finance minister has intended for a fiscal deficit of ₹ 5,13,590 crores, which would be 5.1 percent of GDP.

12. TAX PROPOSALS IN THE BUDGET

Tax reforms

While presenting his tax proposals, the finance minister claimed that while formulating his tax proposals, the government's priorities were directed towards making taxes moderate, payments simple for the taxpayer and collection of taxes easy for the tax collector.

TAX PROPOSALS

Direct Taxes

- Income tax slab for individual tax payers to be as follows:

Income upto ₹ 2.0 lakh	Nil
Income above 2.0 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

- For women assesses it would be as follows

Income upto ₹ 2.0 lakh	Nil
Income above 2.0 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 percent

- For senior citizens (60 years and above below 80 years) it would be as follows

Income upto ₹ 2.5 lakh	Nil
Income above 2.5 lakh and upto ₹ 5 lakh	10 per cent
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

- Very Senior Citizens (80 years and above)

Income upto ₹ 5 lakh	Nil
Income above ₹ 5 lakh and upto ₹ 8 lakh	20 per cent
Income above ₹ 8 lakh	30 per cent

- Reduction in the surcharge on corporate income tax from 7.5 percent to 5.0 percent on Indian companies.
- Increase in the rate of Minimum Alternate Tax (MAT) from the current rate of 18 per cent to 18.5 per cent of book profits to keep the effective rate of the MAT at the same level. Further to ensure equal sharing of the corporate tax liability, budget proposed to levy MAT on developers of Special Economic Zones as well as units operating in SEZs.
- For attracting foreign funds for financing of infrastructure, the budget proposed to :
  - Create special vehicles in the form of notified infrastructure debt funds;
  - Subject interest payment on the borrowings of these funds to a reduced withholding tax rate of 5 per cent instead of the current rate of 20 per cent;
  - Exempt the income of the fund from tax.
- To promote savings and raise funds for infrastructure, an additional deduction of ₹ 20,000 for investment in long-term infrastructure bonds was notified by the Central Government in 2010-11. This was extended for one more year.
- To do away with disincentive for repatriation of foreign dividends in the hands of resident taxpayers, as recipients of such incomes would prefer them to keep abroad, a lower rate of 15 per cent tax on dividends received by an Indian company from its foreign subsidiary has been proposed in the budget.
- In order to give a boost to production in the agriculture

sector, budget proposed to extend the benefit of investment linked deduction to businesses engaged in the production of fertilisers.

- Considering the importance of housing, the budget proposed investment linked deduction to businesses which develop affordable housing under a notified scheme.
- In order to strengthen our system of collection of information from foreign tax jurisdictions, the budget proposed to provide a toolbox of counter measures to discourage transactions with entities located in non-cooperative jurisdictions as may be notified by the Government.
- Budget proposals on direct taxes are estimated to result in a net revenue loss of 11,500 crore for the year.

Indirect Taxes

- The Finance Minister proposed to maintain the standard rate of Central excise duty at 10 per cent.
- Budget proposed certain changes in the Central Excise rate structure to prepare the ground for the transition to GST, beginning with a reduction in the number of exemptions. At present, there are about 100 items that are exempt from Central Excise as well as State VAT. In addition, there are as many as 370 items that enjoy exemption from Central Excise duty but are chargeable to VAT. The budget proposed to withdraw the exemption on 130 of these items that are mainly in the nature of consumer goods. The remaining 240 items would be brought into the tax net when GST is introduced.
- A nominal Central Excise duty of 1 per cent is imposed on the 130 items that are entering the tax net. No Cenvat credit would be available for the manufacture of these items. Basic food and fuel would continue to be exempt. This levy would also not apply to precious metals and stones. In case of jewellery and articles of gold, silver and precious metals, the levy would apply only to goods sold under a brand name.
- Most of the States have increased their merit rate of VAT from 4 per cent to 5 per cent. In line with this, the budget proposed to enhance the lower rate of Central Excise duty from 4 per cent to 5 per cent.
- Ready-made garments and made-ups of textiles were currently under an optional excise duty regime. A manufacturer is required to pay duty only if he wishes to avail of Cenvat credit. Our garment and made-ups industry has come of age and has shown handsome growth in recent years. As part of base expansion, the budget proposed to convert the optional levy into a mandatory levy at a unified rate of 10 per cent. The levy would however, apply only to branded garments or made ups and not to those tailored or made to order for a retail customer. Credit of tax paid on inputs, capital goods and input services would be available to manufacturers of these products. Keeping in mind the fragmented nature of this industry, full SSI exemption is also being extended to these products. Export of these items would continue to be zero-rated.
- We have a long term commitment to align our customs duty rates to those prevailing in ASEAN countries. The peak rate of customs duty has been reduced over the years and has settled at 10 per cent. In view of continued uncertainties in the global economy, the budget proposed to hold the peak rate at its current level. However, some rationalization is being done to unify three rates namely, 2 per cent, 2.5 per cent and 3 per cent at the middle level of 2.5 per cent.

Agriculture & Related Sectors

- Last year budget proposed a package of measures to improve the availability of storage and warehouse facilities for agricultural produce as well as to incentivize food processing. This was received positively. This year budget proposed to enlarge the scope of these exemptions by:
  - Extending full exemption from excise duty to air-conditioning equipment and refrigeration panels for cold chain infrastructure;
  - Including conveyor belts in the full exemption from excise duty to equipment used in cold storages, mandis and warehouses.
- A concessional rate of basic customs duty of 5 per cent was provided to specified agricultural machinery in the last budget. This duty was reduced further to 2.5 per cent and the concession was also extended to parts of such machinery to encourage their domestic production.
- Micro-irrigation is an environment-friendly and efficient means of irrigation especially for dry land farming. the budget proposed to reduce the basic customs duty on micro-irrigation equipment from 7.5 per cent to 5 per cent.
- De-oiled rice bran cake constitutes an important ingredient of cattle feed and its improved availability would have a positive impact on milk production. The budget proposed to provide full exemption from basic customs duty to this item. Simultaneously, an export duty of 10 per cent would be levied to discourage its export.

Manufacturing Sector

- For the manufacturing sector, budget proposals sought to encourage domestic value addition vis-a-vis imports, to remove duty inversions and anomalies and to provide a level playing field to the domestic industry. The major proposals are to:
  - Reduce basic customs duty on raw silk (not thrown) from 30 to 5 per cent;
  - Reduce basic customs duty from 5 per cent to 2.5 per cent on certain textile intermediates and inputs for chemicals, ferro-alloys and paper;
  - Reduce basic customs duty on certain specified inputs for manufacture of certain technical fibre and yarn from 7.5 per cent to 5 per cent;

- Fully exempt stainless steel scrap from basic customs duty;
- Reduce import duties on specified raw material for the manufacture of syringes and needles to 5 per cent basic and 4 per cent CVD;
- Extend the concession available to parts, components and accessories for manufacture of mobile handsets till 31st March, 2012 and to include few more items in its ambit;
- Expand the raw material list for manufacture of specified electronic components that are fully exempt from basic customs duty;
- Reduce excise duty (and hence CVD) on parts of ink-jet and laserjet printers from 10 per cent to 5 per cent.

- Iron ore attracts an export duty of 15 per cent in the case of lumps and 5 per cent in the case of fines. This is a natural resource which needs to be conserved. The budget proposed to enhance the rate of export duty for all types of iron ore and unify it at 20 per cent ad valorem. Iron ore is also exported in a value-added, pelletized form. Full exemption from export duty was provided to iron ore pellets to encourage the value addition process.
- As a measure of relief to cement industry, the budget proposed to replace the existing excise duty rates with composite rates having an ad valorem and specific component with some rationalization. The basic customs duty on two critical raw materials of this industry viz. pet coke and gypsum was proposed to be reduced to 2.5 per cent.
- To drive the financial inclusion agenda of the Government, the budget proposed to fully exempt cash dispensers from basic customs duty. Full exemption was also extended to parts of such machines to encourage their domestic production.

Environment

- Full exemption from basic customs duty and a concessional rate of Central Excise duty of 4 per cent was provided to specified parts of electrical vehicles in the last Budget on actual-user basis. This year budget proposed to extend the concession to batteries imported by such manufacturers for the replacement market.
- Fuel cell or Hydrogen cell technology is a promising green technology for the automobile sector. The budget proposed to extend the concessional excise duty of 10 per cent to vehicles based on this technology.
- Hybrid vehicles enjoy a concessional excise duty rate of 10 per cent. However, import dependence for their critical parts/ sub-assemblies is still quite high. It was proposed to grant specified parts of such vehicles full exemption from basic customs duty and special CVD. In addition, a concessional rate of excise duty of 5 per cent was prescribed to incentivise their domestic production.
- In response to the growing demand for green products, a technology has been developed indigenously for the conversion of fossil fuel vehicles into Hybrid vehicles through the fitment of a kit. The budget proposed to reduce the excise duty on such kits and their parts from 10 per cent to 5 per cent.
- The excise duty on LEDs reduced to 5 per cent and special CVD is being fully exempted.
- The basic customs duty on solar lanterns is being reduced from 10 per cent to 5 per cent. Basic customs duty on a few more inputs used in the manufacture of solar modules/ cells is being reduced to Nil.
- Full exemption from basic customs duty is being provided to Crude Palm Stearin for use in the manufacture of laundry soap.
- Full exemption from basic excise duty is being granted to enzyme based preparations for pre-tanning in leather industry.

Infrastructure

- Capital goods imported for the expansion of existing mega or ultra mega power projects enjoy a concessional basic customs duty of 2.5 per cent and full exemption from CVD. This creates a disability for the domestic suppliers who are required to pay Central Excise duty on supplies to such projects. Budget proposed to correct this anomaly by providing a parallel excise duty exemption.

Other Proposals

- Full exemption from import duty is available to spares and capital goods required for ship-repair units. This exemption has been extended to imports by ship owners too.
- The concessional basic customs duty of 5 per cent and CVD of 5 per cent, presently applicable to high-speed printing presses imported by newspaper establishments is being extended to mailroom equipment.
- Proposals relating to customs and Central excise are estimated to result in a net revenue gain of ₹7,300 crore for the year 2011-12.

Service Tax

- The actual collections of Service Tax do not reflect the full potential of this sector. While retaining the standard rate of service tax at 10 per cent, the budget seeks to achieve a closer fit between the present service tax regime and its GST successor by:
  - Bringing in a few new services into the tax net to expand the tax base while ensuring that the impact is predominantly on sections of society that have the ability to pay;
  - Suitably expanding or rationalizing the scope of existing service categories;
  - Rationalizing certain provisions relating to import of services and valuation;
  - Modifying provisions of the Cenvat Credit scheme to achieve a more realistic balance between input credits and output tax and harmonising the provisions of the scheme across goods and services;
  - Rationalizing penal provisions to reinforce the

message that honest taxpayers would be facilitated and deviants would be dealt with severely; and

- Adoption of Point of Taxation rules for services which would shift the basis for tax collection from "cash" towards "accrual" basis as with Central Excise duty.

The budget proposed to levy service tax on the following new services:

- Hotel accommodation, in excess of declared tariff of ₹ 1,000 per day with an abatement of 50 per cent so that the effective burden is only 5 per cent of the amount charged;
- Service provided by air-conditioned restaurants that have license to serve liquor, by giving an abatement of 70 per cent. Thus, the effective burden will be 3 per cent of the bill.

- The budget proposed to impose service tax in 2010-11 on health check up or treatment. This levy has resulted in differential treatment between persons who make payments themselves and others where payments are made by an insurance company or a business entity. Thus, it is proposed to replace it with a tax on all services provided by hospitals with 25 or more beds that have the facility of central air-conditioning. Though the tax is on high- end treatment, it is proposed to sweeten the pill by an abatement of 50 per cent so that the actual burden is kept at 5 per cent of the value of service. It is also proposed to extend the levy to diagnostic tests of all kinds with the same rate of abatement. However, all Government hospitals shall be outside this levy.
- The budget proposed to raise the service tax on air travel by ₹ 50 in the case of domestic air travel and ₹ 250 on international journeys by economy class. It is also proposed to tax travel by higher classes on domestic sector at the standard rate of 10 per cent to bring it on par with journeys by higher classes on international air travel.

Services provided by life insurance companies in the area of investment are also proposed to be brought into tax net on the same lines as ULIPs. It is also proposed to expand the scope of legal services to include services provided by business entities to individuals as well as representational and arbitration services by individuals to business entities. There shall, however, be no tax on services provided by individuals to other individuals.

- There are certain other changes mainly by way of rationalisation or expansion in the scope of certain services or by plugging existing loopholes.
- The strength of a good value-added-tax lies in the free flow of the credit of the tax paid at the previous stage. Due to complexities, there have been many legal disputes on the availability of credit on a number of inputs or input services.
- These provisions are being rationalized by laying down clear definitions so that the scope of inputs and input services that are eligible and those that are not, is clear. Allocation of CENVAT credit to exempt and taxable goods and services is also being streamlined.
- It is proposed to free all individual and sole proprietor taxpayers with a turnover upto ₹ 60 lakh from the formalities of audit. This will give relief to a large number of taxpayers.
- Budget proposals relating to service tax are estimated to result in net revenue gain of ₹ 4,000 crore for the year.
- Many experts have argued that it will be desirable to tax services based on a small negative list, so that many untapped sectors are brought into the tax net. Such an approach will be very conducive for a nationwide GST. The budget proposed to initiate an informed public debate on the subject to help us finalise the approach to GST.
- Budget proposals on direct taxes are estimated to result in a revenue loss of ₹ 11,500 crore for the year. Proposals relating to indirect taxes are estimated to result in a net revenue gain of 11,300 crore, leaving a net loss of ₹ 200 crore in the Budget.

13. ASSESMENT OF THE BUDGET (2012-13)

Expanding on the Economic Survey, finance minister while presenting the Union budget, once again blamed the international turmoil, namely cut in USA's credit rating, sovereign crises in Europe and political uncertainty in the Gulf, for all the ills of Indian Economy. He made no mention of the mismanagement of the economy causing heavy fiscal deficit in the current year (2011-2012) reaching 5.9 per cent of GDP against only 4.6 per cent projected in the budget last year.

In absolute terms, this amounts, to increase from ₹ 4.13 lakh crore as per budget estimates of 2011-12, to ₹ 5.22 lakh crore in the revised estimates. Neither the finance minister was defensive about reducing the growth target to only 6.9 per cent against 9 per cent projected in his last budget. The failure is all round but more evident in agriculture and manufacturing. After presenting the budget, government was talking in terms of taking stern steps to bring the economy on track.

(a) No Reprieve from Inflation and High Cost of Credit

The finance minister fails to justify the decisions, which he claims to have caused heavy fiscal deficit and thus increase in the stock of money and thereby high rate of inflation, making life difficult for the 'common man'. Major problem facing the Indian economy is inflation. In fact, the RBI was forced to adopt tight money policy, raising interest rates. No doubt, rising fuel prices is also one major cause of increase in the cost of production in the industries, increase in interest cost too is multiplying the problem of domestic industry manifold and causing hardships for the masses by resulting cost-push inflation. Though budget proposes measures to reduce the cost of borrowing by industry and infrastructure sector, but these proposal are limited only to the few segments, where as major part of industry will continue to be under

stress due to high interest rates and thereby high cost of credit.

High interest rates are also not good for demand driven growth, claimed to be on finance minister's agenda. The country is facing shortfall in export demand due to recession and economic crisis in the developed world. Challenge of increase in demand is no less a challenge for the FM. No doubt, economy needs a big push by way of increase in domestic demand, both consumer and investment demand and none is possible without reducing the interest rates.

High interest rates are making the life difficult for middle class, whose EMIs are on the rise both on loans taken earlier and on new loans. Industry and infrastructure are also suffering due to high interest component. If we look back, period of low interest rates had coincided with high growth rate of the economy. However, the high interest rates, primarily due to hyperinflation, are pulling the growth down, especially the industrial growth, which have dipped to merely 0.4 per cent in the last two quarters.

(b) Heavy Dose of Additional Taxation

The attempt of the finance minister to raise the revenue by way of additional taxation may further fuel inflation in the country and dampen the demand, worsening the situation. Increase in the rate and inclusion of more services under service tax, increase in excise duties etc., though may add to the resources for the budget, will also burden the common man, who is already under severe stress due to inflation. It may look heartening to note that the size of the Union budget is reaching nearly ₹ 15 lakh crore in 2012-13, but increased burden of taxes and high fiscal deficit are destined to make the life difficult for commoners.

(c) Real Issues Neglected

The need of the hour is to look into the real problems of the economy, namely neglect of agriculture, lack of investment in the economy, especially infrastructure (roads, railways, electricity, ports, irrigation etc) and mismanagement due to excessive dependence on foreign investment. Even more worrying is the mindset of the policy makers that foreign investment is the solution to all ills.

In fact, excessive dependence of foreign investment is causing major problems in the economy, especially when foreign capital flies back, causing turmoil in the share markets and weakening of the rupee. Not learning from these experiences, the finance minister has announced major concessions and schemes to encourage FIIs.

The finance minister, if he had the interests of common people at heart, should have taken steps in the budget, to help contain prices and raise demand in the economy. We have to come out of the mindset that only foreign investment can do well for the country. We have problem of lack of infrastructure in the country. Road construction projects have slowed down and no significant capacity has been added in the electricity production. Speed of irrigation projects is also very slow. There is shortage of warehousing and cold storages.

However, some measures are suggested in the budget to encourage investment in infrastructure, but those are not sufficient. The finance minister has neither allocated sufficient funds for these projects, nor taken innovative initiatives to offer judicious tax-subsidy scheme to encourage private investment for these sectors. Encouragement to infrastructure investment brings two pronged benefits, as it adds to demand and it encourages development too.

Recently published results of a survey indicate the worrisome situation of malnutrition and hunger. After introduction of food security bill, the policy makers themselves are questioning its practicability. There is absolutely no attempt from the government to raise allocation for social services like health and education and for the last one decade, allocation for social services is at a low level of less than 10 per cent of the budget. Due to indifference of the government towards social services, process of human development is being disrupted. This may spoil our development dreams as well.

It is unfortunate that to keep fiscal deficit under control, plan and developmental expenditure are being curtailed to raise non-plan and unproductive expenditure. Though the government claims that food inflation is under control, slow growth of agriculture may lead to spiral in food prices again. It is unfortunate that a sector, which employs nearly 60 per cent of the work force, contributes hardly 13.9 per cent of GDP. Like in the previous budgets, agriculture continues to be neglected, which clearly demonstrates the priorities of this government.

(D) Social Sector in the Budget 2012-13

In every budget government talks high about provision of social services like education, health, drinking water, woman and child development, tribal welfare etc. But in the last so many years the government has not spent more than 9 percent of its total budgets on social sercices.

Table 28 makes an effort to understand the treatment of social sector in the budget. Since total expenditure of the budget has increased from ₹ 12,57,729 crores in 2011-12 (BE) to ₹ 14,90,925 crores in 2012-13 (BE), it implies 18.5 increase in overall expenditure. Social sector expenditure in the budget on Education, Health & Family Welfare, Drinking Water and Sanitation, Woman & Child Development, Welfare of SC and OBCs, Tribal welfare, minorities and welfare of disabled taken together has increased from ₹ 1,25,205 crores in 2011-12 (BE) to ₹1,49,644 crores in 2012-13 (BE) – an increase by 19.5 percent, which is little higher than overall increase in budget size. However this year's budget provides for a little higher allocation for social sectors, the experience so far is not good in terms of actual expenditure on these sectors. For instance last year's budget (2011-12) allocated 9.95 percent of total expenditure on social sectors, revised estimates show an expenditure of only 9.35 percent on all these items. Near constancy of allocation for social sector expenditure shows that despite lot of talk about importance of social sector expenditure, year after year government has failed to bring any significant improvement in social sector expenditure.

Table 28 : Social Sector Expenditure in the Budget

	2010-11 Actual	*2011-12 (B.E)*	*2011-12(R.E)*	*2012-13(B.E)*
Education				
Plan	43510	52057	51769	61407
Non- Plan	8394	11306	9596	12649
Total	**51904**	**63,363**	**61,365**	**74056**
Health & Family Welfare				
Plan	20211	24,460	22227	28117
Non- Plan	3564	3525	3855	3763
Total	**23,775**	**27,985**	**26,082**	**31,880**
Drinking Water and Sanitation				
Plan	10565	11000	10000	14000
Non- Plan	4	5	5	5
Total	**10569**	**11005**	**10005**	**14005**
Women & Child Development				
Plan	10617	12650	16100	18500
Non- Plan	71	83	83	84
Total	**10688**	**12733**	**16183**	18584
Welfare of Scheduled Caste and OBCs				
Plan	3620	4405	4340	4764
Non- Plan	15	16	17	19
Total	**3635**	**4421**	**4357**	**4783**
Tribal Welfare				
Plan	1931	2293	2126	2517
Non- Plan	.....	....	....	....
Total	**1931**	**2293**	**2126**	**2517**
Minorities				
Plan	2008	2850	2750	3135
Non- Plan	12	16	16	19
Total	**2020**	**2866**	**2766**	**3154**
Welfare of Disabled				
Plan	340	499	359	616
Non- Plan	39	40	47	49
Total	**379**	**539**	**406**	**665**
Total Social Sector Expenditure				
Plan	92802	110214	109671	133056
Non- Plan	12099	14991	13619	16588
Total	**104901**	**125205**	**123290**	**149644**
Total Plan & Non- Plan Expenditure				
Plan	379029	441547	426604	521025
Non- Plan	818299	816182	892116	969900
Total	1197328	1257729	1318720	1490925
Social Sector Exp. As % of Total Exp.				
Plan	24.48	24.96	25.71	25.54
Non- Plan	1.48	1.84	1.53	1.71
Total	**8.76**	**9.95**	**9.35**	**10.04**

Source : Complied and computed from expenditure Budget (2012-13). Vol. I & Vol. II.

14. KELKAR TASK FORCE PROPOSALS

The Finance Ministry set up a Task Force under the chairmanship of Mr. Vijay Kelkar on the implementation of the Fiscal Responsibility and Budget Management (FRBM). The Task Force was primarily to "fix annual targets, indicating the path of adjustment and required measures." However, a perusal of the recommendations of the Task Force reveals that it assumed the responsibility of a Tax Reforms Commission and thus made recommendations to bring about a radical transformation of the Indian Tax System. In this sense, it appears to have gone beyond its terms of reference.

Philosophy of the Task Force

The Task Force disagreed with the existing approach of the Government to reduce government expenditure to achieve fiscal consolidation. It has, instead favoured a 'Revenue-led' approach-to be accomplished by raising revenues more than by compressing expenditure. Justifying its stand, the Task Force states that reducing government spending "would be contractionary for the macro-economy", whereas "raising revenues is likely to be less contractionary." The Report even goes further to suggest that the Government should enhance capital expenditure "in order to counter-balance the contractionary effects of fiscal consolidation".

Secondly, the Report favoured revenue mobilisation through low and few tax rates, alongside widening of the tax base and shifting the incidence of taxation on consumption.

Arguing in favour of lower tax rates, the Task Force mentions:

"High tax rates distort economic decisions and fuel the deployment of resources into tax avoidance and tax evasion. A large number of rates of taxes generate problems of bracket creep, classification of disputes and political lobbying."

Instead of increasing tax rates to enhance revenue collections, the Task Force preferred the strategy of widening the tax base. "This (widening of tax base) would involve removing exemptions and broadening the scope of tax system to bring within its fold economic activities which are currently exempted."

The Task Force has strongly favoured a value-added tax (VAT) regime. To shift to a non-distortionary indirect tax structure, the Task Force argues: "The destination-based VAT on all goods and services is the best method of eliminating distortions and taxing consumption." Arguing against ad hoc and selective choice of sectors, the Task Force states: "It is always possible to pick sectors with easy enforceability—such as telecom, banking or oil—and impose taxes on them. However, such an approach is not a long-term foundation for a sound tax system." Thus, the Task Force recommends a Goods and Services Tax (GST) across the board.

Recommendations of the Task Force

The Task Force in order to bring about a radical transformation of the Indian Tax System has proposed radical changes both in direct taxes and indirect taxes.

Direct Taxes

For income taxpayers, the marginal rate of income tax would be nil on incomes up to ₹ 1 lakh against the then limit of ₹ 50,000. Only two slabs were proposed for higher incomes: 20 per cent for income level of ₹ 1 lakh to ₹ 4 lakhs and 30 per cent for incomes above ₹ 4 lakhs. At the same time, the standard deduction available to salaried taxpayers be done away with and all exemptions are abolished, except those relating to housing loans, senior citizens and women.

For corporates, the Task Force proposed a reduction in the rate of corporation tax from 35.875 per cent to 30 per cent for domestic companies, along with a lowering of the depreciation rate from 25 per cent to 15 per cent. It has also proposed to eliminate the tax on distribution of dividends, while preserving exemption from income-tax of dividends in the hands of the recipient.

Indirect Taxes

With regard to indirect taxes, the Task Force proposes what it describes as a "grand bargain" between the Centre and the States. The Centre as well as the states should have concurrent power to levy Goods and Services Tax (GST). This would require a change in the constitution so that both the Centre and the States are authorised to levy GST.

The Task Force asked both the Centre and the States to abide by certain principles. Firstly, the number of tax rates proposed is to be restricted to three ad-valorem rates, in addition to zero rate. Under the proposal, the Centre would have three rates—6 per cent (floor), 12 per cent (standard) and 20 per cent higher. Similarly, the States would have three rates—4 per cent (floor), 8 per cent (standard) and 14 per cent higher. The total burden on most goods and services works out to be 20 per cent-12 per cent by the Centre and 8 per cent by the States. The standard Central rate of 12 per cent, as proposed by the Task Force, was lower than the then CENVAT rate of 16 per cent. The Task Force considered this to be the revenue-neutral method to broaden the tax base.

TABLE 27 : Limiting the Number of Tax Rates

GST Rate	*Centre*	*State*
Floor	6	4
Standard	12	8
Higher	20	14

Secondly, the introduction of GST at the Central and State level should be accompanied by the withdrawal of all cascading taxes such as Central sales tax, octroi, State-level sales tax, entry tax, stamp duty, telecom licence fee, turnover taxes, tax on consumption of electricity, taxation on transportation of goods and passengers.

Thirdly, imports will be charged a two-part levy-representing the Central GST and State GST. However, exports are zero-rated obviously.

Both the Centre and States will bring about the necessary changes in legislation to implement in GST.

Fourthly, the Task Force made an attempt to win popular support for the proposed tax regime by seeking to exempt from VAT all small businesses, whether in manufacturing or services, with a turnover of up to ₹ 25 lakhs. This will certainly reduce the administrative burden in tracking small businesses. Task force projected an annual income in the hands of wage earners of ₹ 80,000 crores by 2008-09 and an incremental GDP growth of ₹ 1,31,000 crores purely on account of tax rejig.

The baseline projections of the Task Force show that the country's fiscal stress will increase under the present tax regime. They show that revenue deficit in 2008-09 will be 1.66 per cent of GDP and fiscal deficit will be 3.98 per cent of GDP. The revenue deficit of 1.66 per cent implies a shortfall by ₹ 51,540 crores. The proposals of the Task Force promised to eliminate this shortfall.

An Appraisal of the Kelkar Task Force Report

The proposals of the Task Force are considered very radical because they intend to transplant a new tax regime by overhauling the present tax regime. The basic question which needs to be answered is: Is the effort worth the candle? It would be of interest to examine the two major areas of Tax Reform.

The Task Force has suggested that a person earning upto ₹ 1,00,000 will not be taxed. At the same time, it proposed to withdraw the standard deduction of ₹ 30,000 of salaried taxpayers upto ₹ 5 lakhs and ₹ 20,000 for those with incomes over ₹ 5 lakhs. Besides, it also suggested withdrawal of tax exemption on interest income under Section 80L. Upto ₹ 1,00,000 income, there appears to be practically no change in tax liability, because raising the income tax limit on the one hand is neutralised by withdrawal of standard deduction of ₹ 30,000 and exemption of interest income up to ₹ 12,000. However, the reorganisation of tax slabs to only two does lower the tax liability among higher income groups. For a taxable income of ₹ 1,50,000, the then tax liability of ₹ 19,380 was to be reduced to ₹ 10,000. For a taxable income level of ₹ 3 lakhs, the tax liability will be reduced from the present level of ₹ 65,280 to ₹ 40,000 in the proposed tax structure. For those with income levels of ₹ 5 lakhs, the tax liability was supposed to get reduced from ₹ 1,26,840 to ₹ 90,000. The implies that the Task Force followed the inverted equity principle in which lower levels of income get practically no relief, but higher incomes get relatively bigger relief. Moreover, income taxpayers would also have to absorb the extra burden of 20% on goods and services under the new tax regime.

The second issue pertains to divergence between effective tax rate and statutory tax rate. Kelkar Task Force in its report brought out in 2002 revealed on the basis of a sample of 2,585 companies in 2001-02 that the effective rate of tax was 21.9% against the statutory rate of 39.55%. This has been further endorsed by the Task Force on the Implementation of FRBM. (Refer Table 28) To reduce the gap between the statutory and effective tax rate, the Task Force recommended three measures—to reduce the general rate of depreciation from 25% to 15% and to abolish all tax incentives on new units and lower the corporate tax rate from 35.875% to 30%. The UPA government is made an effort to increase investment in rural infrastructure and backward states and backward areas. If all tax exemptions for new units set up in rural areas and backward states are to be abolished, it would be well nigh impossible to attract private investment in such areas and thus the total burden of developing rural infrastructure and backward areas will fall on the public sector. This would certainly go against the policy of expanding the role of the private sector along with that of the public sector in infrastructure development. Redressal of regional imbalances among states will also become difficult. This seems to have escaped the attention of Kelkar Task Force.

TABLE 28 : Statutory and Effective Corporate Tax Rate

Year	*Statutory*	*Effective Corporate Tax Rate (%)*	
		Manufacturing	*Banking*
1996-97	43.00	21.36	26.82
1997-98	35.00	20.85	25.55
1998-99	35.00	21.40	21.55
1990-2000	38.50	21.29	24.75
2000-01	39.55	21.00	27.88
2001-02	35.70	19.62	30.22
2002-03	36.75	23.53	28.11

The third issue raised by several economists and taxation experts is to track the big spenders who are low Income Tax Payers. Finance Minister P. Chidambaram has drawn the attention of the Income Tax Commissioners to the fact that thousands of people in India incur expenditure far in excess of the income tax disclosed in their income tax returns. It is alleged that tax administration in India has not been able to bring them into the tax net. Even though one-by-six filing of return scheme has been in operation for the last six years, very little success has been achieved in forcing the big spenders but low income taxpayers to cough out more in the form of income tax. Among the large number of tax evaders can be included money lenders in rural India, suppliers of construction materials such as cement, steel and bricks, traders in fertilizers and pesticides, shopkeepers and retailers, transport operators and truck operators and other businessmen. Although the Income Tax Act (1961) has been amended to tax the amount of expenditure where the assessee is not able to offer a satisfactory explanation, yet the actual realisation under this head is very little. This is despite the fact that several court judgements have supported and vindicated the income tax department in adding unexplained expenditure as income of the individual. Mr. H.P. Ranina, a taxation expert, therefore, states: "If the Income Tax Department does its homework diligently and gathers credible information on unexplained expenditure, several thousands of tax payers who spend lavishly and far in excess of the income they declare in their returns can be brought within the tax net. In cases of litigation, courts would generally uphold the assessment if the assessee cannot discharge the onus of proving the source of funds, and the genuineness of such sources." (*The Hindu Business Line*, August 7, 2004)

Lastly, the proposal to impose goods ad services tax (GST) both at the level of the Centre and the States has come in for criticism. The Central Government has after a continuous effort extending over several years has been able to persuade the States to impose the Value-Added Tax (VAT) with effect from 1st April 2005. This was on the basis of an assurance by the Central Government that in case the States lose revenue in the initial years, the Central Government will provide compensation. For this purpose, an expert committee is to be set up. Kelkar Task Force intends to introduce goods and services tax (GST) with a 12% rate of the Central and 8 per cent rate in the States. This will be accompanied by the withdrawal of a number of taxes at the Central and State level like Central Sales Tax, State level Sales Tax, entry tax, stamp duties, octroi, telecom licence fee, turnover tax, tax on consumption of electricity and transportation of goods and passengers. There is no doubt that the Kelkar Task Force by its prescription of one-point taxation has presented a very simple system instead of a large number of taxes prevailing earlier, but what is the guarantee that GST will not be evaded. Are Indian businessmen ready to bear 20 per cent burden of GST across the board, is the moot question? It appears that the Task Force subsumes tax compliance as a natural outcome of the introduction of GST, which is an assumption of doubtful validity. There is considerable evidence available in the evasion of indirect taxes. A generalised GST in place of a number of taxes does not automatically ensure tax compliance. Tax evasion takes place in collusion with the taxation department and the political system. Merely, change of nomenclature cannot achieve the desired results. Moreover, it is very difficult to comprehend why businesses with turnover below ₹ 25 lakhs have been exempted from the purview of GST. In fact, a very large number of small traders, service providers and small and medium enterprises hardly pay any tax. Instead of bringing lakhs of such persons within the tax net, Kelkar Task Force exempts them altogether. This needs an explanation, more so in view of the fact that Dr. Manmohan Singh as Finance Minister (1991-95) has been making efforts to bring them in the tax net by the introduction of presumptive tax. When all the cascading taxes are abolished at the State level, will the State governments accept the formulation of the Task Force that the GST proposal at the State level is revenue neutral. The states may have a different view and may require compensation for loss of revenue due to the abolition of several state level taxes.

Mr. S. Venkitaramana a former finance secretary and former Governor of the RBI, after making an analysis of recommendations of Kelkar Task Force on Indirect Taxes concludes: "Tax reform is a difficult challenge at the best of times. All the more is it so in these days of fractious politics and of consensus with coalition partners. The fact that many states have to agree to the grand bargain proposed by Kelkar is all the more of a problem, in that the proposal may appear to dilute state powers." (*The Hindu Business Line*, August 2, 2004).

Thus, the basic question is: Is it necessary to introduce Kelkar proposals and thus again open the pandora's box of bringing about consensus between the Centre and the States? Or, would it not be better to build on the already achieved consensus on VAT and try to tackle the problem of tax evasion by improving tax administration, rather than fritter away time and energy to have another round of negotiations on the implications of GST?

15. DIRECT TAX CODE

The New Direct Tax Code (DTC) will now replace the existing Income Tax Act of 1961 in India. After cleasrance from the Cabinet, Direct Tax Code Bill was introducred in the monsoon session Parliament in 2010-11 and is expected to be enforced from 2012. During the

budget 2010-11 presentation, the Finance Minister Mr. Pranab Mukherjee reiterated his commitment to bring the new Direct Tax Code (DTC) into force from 1st of April, 2011, but same could not be fulfilled and now it will be applicable from 1st April, 2012.

DTC bill was tabled in parliament on 30th August, 2010. There are now much less benefits as compared to original proposal.

Salient Features and Highlights of the DTC :

- DTC removes most of the categories of exempted income. Unit Linked Insurance Plans (ULIPs), Equity Linked Mutual Funds (ELSS), Term deposits, NSCs (National Savings certificates), Long term infrastructures bonds, house loan principal repayment, stamp duty and registration fees on purchase of house property will loose tax benefits.
- Tax saving based investment limit remains 100,000 but another 50,000 has been added just for pure life insurance (Sum insured is atleast 20 times the premium paid) , health insurance, mediclaims policies and tuition fees of children. But the one lakh investment can now only be done in provident fund, superannuation fund, gratuity fund and new pension fund.
- The tax rates and slabs have been modified. The proposed rates and slabs for annual income are as follows:

Upto Rs 200,000 (for senior citizens ₹ 250,000)	Nil
Between ₹ 200,000 to 500,000	10%
Between ₹ 500,000 to 1,000,000	20%
Above ₹ 1,000,000	30%

Men and women are treated same now

- Exemption will remain same as 1.5 lakhs per year for interest on housing loan for self-occupied property.
- Only half of Short-term capital gains will be taxed. e.g. if one gains 50,000, add 25,000 to taxable income. Long term capital gains (From equities and equity mutual funds, on which STT has been paid) are still exempted from income tax.
- As per changes on 15th June, 2010, Tax exemption at all three stages (EEE) — savings, accretions and withdrawals—to be allowed for provident funds (GPF, EPF and PPF), NPS (new pension scheme administered by PFRDA), Retirement benefits (gratuity, leave encashment, etc), pure life insurance products & annuity schemes. Earlier DTC wanted to tax withdrawals.
- Surcharge and education cess are abolished.
- For incomes arising of House Property deductions for Rent and Maintenance would be reduced from 30% to 20% of the Gross Rent. Also all interest paid on house loan for a rented house is deductible from rent. Before DTC, if one owns more than one property, there was provision for taxing notional rent even if the second house was not put to rent. But, under the Direct Tax Code 2010 , such a concept has been abolished.
- Tax exemption on LTA (leave travel allowance) is abolished.
- Tax exemption on Education loan to continue.
- Corporate tax reduced from 34% to 30% including education cess and surcharge.
- Taxation of Capital gains from property sale : For sale within one year, gain is to be added to taxable salary. For long term gain (after one year of purchase), instead of flat rate of 20% of gain after indexation benefit, new concept has been introduced. Now gain after indexation will be added to taxable income and taxed at per the tax slab. Base date for cost of acquisition has been changed to 1st April, 2000 instead of earlier 1st April, 1981.
- Medical reimbursement : Maximum limit for medical reimbursements has been increased to 50,000 per year from current 15,000 limit.
- Tax on dividends: Dividends will attract 5% tax.
- As per the current laws, a NRI is liable to pay tax on global income if he is in India for a period more than 182 days in a financial year. But in new bill, this duration has been changed to just 60 days.

A Critique of Proposel DTC

The provisions in Finance Minister Pranab Mukherjee's proposed direct tax code seem to favour foreign nationals over the common man. The draft code would treat capital gains at par with incomes. When an asset is resold, the gain made in the process is called capital gain. Earlier, short term capital gains used to be taxed and long term capital gains were exempted from tax. The proposed code makes short term capital gains taxable at par with other incomes but if an asset is resold after one year of its purchase capital gain made in this process would be taxed at a lower rate.

While on one hand, the proposed direct tax code eliminates exemptions of various types for domestic investors, individual tax payers and firms in order to simplify the tax structure and make it more elastic and buoyant, on the other, the Finance Minister has been appreciative of the role of foreign institutional investors in the national economy and awarded them exemption from TDS on capital gains. They are even being allowed to file advance tax, a facility not available to domestic investors. It is well known that FIIs keep moving their funds in and

out of the country, engineering upheavals in the stock market and causing huge losses to small investors. Foreign institutional investors must, therefore, be taxed on the purchase of additional stocks on the lines of the Brazilian Government so that they opt for long term investments instead of making profits and leaving by the next flight. There should also be a provision for a 'lock-in period' of at least three years for investments made by FIIs.

Although tax has been proposed on incomes on foreign direct investment, FDI via Mauritius would continue to remain exempt from it owing to India's double taxation avoidance treaty (DTAT) with Mauritius. However, most of the investment coming from the rest of the world is routed through Mauritius. There was hope that the new tax code would try to plug this loophole by finding ways and means to tax foreigners and, maybe, even find a way of revising the treaty. But the Finance Minister has failed to make use of this opportunity.

16. PROPOSED GST: AN ANALYSIS

Ministry of Finance, Government of India, constituted a Task Force under the chairmanship of Mr. Vijay Kelkar on the implementation of the Fiscal Responsibility and Budget Management (FRBM).

Apart from recommendations on Direct taxes, the Task Force recommended that present CENVAT and Service Tax be replaced by a new tax namely Goods and Services Tax (GST) at Central level. It further proposed what it describes as a "grand bargain" between the Centre and the States, the Centre as well as the states should have concurrent power to levy Goods and services Tax (GST). This would require a change in the constitution so that both the Centre and the States are authorised to levy GST.

The Task Force asked both the Centre and the State Governments to abide by certain principles. Firstly, the number of tax rates proposed is to be restricted to three ad-valorem rates, in addition to zero rate. Under the proposal, the Centre would have three rates—6 per cent (floor), 12 per cent (standard) and 20 per cent (higher). Similarly, the States would have three rates—4 per cent (floor), 8 per cent (standard) and 14 per cent (higher). The total burden on most goods and services works out to be 20 per cent-12 per cent by the Centre and 8 per cent by the States. The standard Central rate of 12 per cent, as proposed by the Task Force, was lower than the CENVAT rate of 16 per cent. The Task Force considered this to be the revenue-neutral method to broaden the tax base.

Secondly, the introduction of GST at the Central and State level should be accompanied by the withdrawal of all cascading taxes such as Central Sales Tax, Octroi, State-level Sales Tax, Entry Tax, Stamp Duty, Telecom License Fee, Turnover Taxes, Tax on Consumption of Electricity, Taxation on Transportation of Goods and Passengers.

Thirdly, imports will be charged a two-part levy-representing the Central GST and State GST. However, exports are zero-rated obviously.

Both the Centre and States will bring about the necessary changes in legislation to implement the GST.

Fourthly, the Task Force made an attempt to win popular support for the proposed tax regime by seeking to exempt all small businesses from VAT, whether in manufacturing or services, with a turnover of up to ₹ 25 lakhs. This will certainly reduce the administrative burden in tracking small businesses. Task force projected an annual income in the hands of wage earners of ₹ 80,000 crores by 2008-09 and an incremental GDP growth of ₹ 1,31,000 crores purely on account of tax reforms, namely GST.

The baseline projections of the Task Force show that the country's fiscal stress will increase under the present tax regime. They show that revenue deficit in 2008-09 will be 1.66 per cent of GDP and fiscal deficit will be 3.98 per cent of GDP. The revenue deficit of 1.66 per cent implies a shortfall by Rs 51,540 crores. The proposals of the Task Force promised to eliminate this shortfall.

Justification of GST

The Empowered Committee of State Finance Ministers, Constituted for the purpose of implementing GST, in its first discussion paper has given the following merits of GST:

1. Despite the success with VAT, there are still certain shortcomings in the structure of VAT both at the Central and at the State level. The shortcoming in CENVAT of the Government of India lies in non-inclusion of several Central taxes in the overall framework of CENVAT, such as additional customs duty, surcharges, etc., and thus keeping the benefits of comprehensive input tax and service tax set-off out of reach for manufacturers/dealers. Moreover, no step has yet been taken to capture the value-added chain in the distribution trade below the manufacturing level in the existing scheme of CENVAT. The introduction of GST at the Central level will not only include comprehensively more indirect Central taxes and integrate goods and service taxes for the purpose of set-off relief, but may also lead to revenue gain for the Centre through widening of the dealer base by capturing value addition in the distributive trade and increased compliance.
2. In the existing State-level VAT structure there are also certain shortcomings as follows:

There are, for instance, even now, several taxes which are in the nature of indirect tax on goods and services, such as luxury tax, entertainment tax, etc., and yet not subsumed in the VAT.

Moreover, in the present State-level VAT scheme, CENVAT load on the goods remains included in the value of goods to be taxed under State VAT, and contributing to that extent a cascading effect on account of CENVAT element. This CENVAT load needs to be removed.

Furthermore, any commodity, in general, is produced on the basis of physical inputs as well as services,

and there should be integration of VAT on goods with tax on services at the State level as well, and at the same time there should also be removal of cascading effect of service tax.

In the GST, both the cascading effects of CENVAT and service tax are removed with set-off, and a continuous chain of set-off from the original producer's point and service provider's point up to the retailer's level is established which reduces the burden of all cascading effects. This is the essence of GST, and this is why GST is not simply VAT plus service tax but an improvement over the previous system of VAT and disjointed service tax. However, for this GST to be introduced at the State-level, it is essential that the States should be given the power of levy of taxation of all services. This power of levy of service taxes has so long been only with the Centre. A Constitutional Amendment will be made for giving this power also to the States. Moreover, with the introduction of GST, burden of Central Sales Tax (CST) will also be removed. The GST at the State-level is therefore, justified for:

(*a*) Additional power of levy of taxation of services for the States,

(*b*) System of comprehensive set-off relief, including set-off for cascading burden of CENVAT and service taxes,

(*c*) Subsuming of several taxes in the GST and

(*d*) removal of burden of CST. Because of the removal of cascading effect, the burden of tax under GST on goods will, in general, fall.

3. The GST at the Central and at the State level will thus give more relief to industry, trade, agriculture and consumers through a more comprehensive and wider coverage of input tax set-off and service tax set-off, subsuming of several taxes in the GST and phasing out of CST. With the GST being properly formulated by appropriate calibration of rates and adequate compensation where necessary, there may also be revenue/resource gain for both the Centre and the States, primarily through widening of tax base and possibility of a significant improvement in tax-compliance. In other words, the GST may usher in the possibility of a collective gain for industry, trade, agriculture and common consumers as well as for the Central Government and the State Governments. The GST may, indeed lead to the possibility of collectively positive-sum game.

In the opinion of the Empowered committee, GST is not simply VAT service tax, but a major improvement over the previous system of VAT and disjointed services tax- justified step forward.

A Critique of GST

The Proposal to impose goods and services tax (GST) both at the level of the Centre and the States has come in for criticism:

1. The Central Government has after a continuous effort extending over several years has been able to persuade the States to impose the Value-Added Tax (VAT) with effect from 1st April 2005. This was on the basis of an assurance by the Central Government that in case the States lose revenue in the initial years, the Central Government will provide compensation. For this purpose, an expert committee was decided to be set up. Kelkar Task Force intends to introduce goods and services tax (GST) with a 12% rate of Central and 8 per cent rate in the States. This will be accompanied by the withdrawal of a number of taxes at the Central and State level like Central Sales Tax, State level Sales Tax, Entry Tax, Stamp Duties, Octroi, Telecom License Fee, Turnover Tax, Tax on Consumption of Electricity and Transportation of Goods and Passengers. There is no doubt that the Kelkar Task Force by its prescription of one-point taxation has presented a very simple system instead of a large number of taxes prevailing earlier, but what is the guarantee that GST will not be evaded. Are Indian businessmen ready to bear 20 percent burden of GST across the board, is the moot question? It appears that the Task Force subsumes tax compliance as a natural outcome of the introduction of GST, which is an assumption of doubtful validity. There is considerable evidence available in the evasion of indirect taxes. A generalised GST in place of a number of taxes does not automatically ensure tax compliance. Tax evasion takes place in collusion with the taxation department and the political system. Merely, change of nomenclature cannot achieve the desired results.

   Indications are that the Centre and states may settle for more a moderate rate for the Goods and Services Tax (GST) when it is implemented, rather the originally proposed 20%. That yet-to-be-finalised rate may be between 16% and 18%, and all forms of taxes currently levied on goods and services would be subsumed into the proposed one. It is envisaged that the new rate would be revenue neutral for the Centre and the states. The proposed tax at a lower rate can be revenue neutral only if the tax base is widened and evasion contained.

2. The preparation for implementing GST looks to the very inadequate in context of the hill task of subsuming different types of taxes namely Central tax, Octroi, State-level Sales Tax, Entry Tax, Stamp Duty, Telecom License Fee, Turnover Taxes, Tax on Consumption of Electricity, Taxation on Transportation of Goods and Passengers.

   Countries that have benefited from switching over to GST (notable among them are New Zealand and Canada), managed the transition largely because they had a political leadership, which gave unequivocal support to the new taxation system and put in place a large autonomous body in charge of planning and implementing it over a stipulated time frame. In India, neither the committee nor the finance ministry has

any team in place to plan and manage the transition. China, which has just begun talks on moving over to GST, is already busy putting in place a strong team of experts and technocrats.

In the absence of adequate preparations, half baked proposal of GST may back fire and Union and State finances may suffer, causing an enormous loss to the economy at large.

3. The Government has not made any assessment of the impact of the proposed GST on different sectors of the economy therefore despite the claims of theoretical superiority of GST nothing could be established about the benefits of the proposed system of GST.

So far due to disagreement between Union government and state governments, no formal decision could be taken on GST.

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CHAPTER

53

FINANCIAL RELATIONS BETWEEN THE CENTRE AND THE STATES

"The Centre-State relations are crucial to the preservation of the unity and integrity of India within the framework of its linguistic, cultural and other diversities."

—West Bengal Government Document

1. FINANCIAL RELATIONS UNDER THE CONSTITUTION

India has a federal structure, in which a clear distinction is made between the Union and State functions and sources of revenue, but the residual powers belong to the Centre. Although the States have been assigned certain taxes which are levied and collected by them, they also share in the revenue of certain Union taxes, and there are certain other taxes which are levied and collected by the Union but the proceeds of which wholly go to the States. In addition, the States receive grants-in-aid of their revenue from the Union which further increase the amount of transfers between the two levels of governments. The transfer of resources from the Central Government to the States is an essential feature of the present financial system of India .

Division of Resources

The Constitution of India makes a clear division of fiscal powers between the Union (on the centre) and the State Governments. The principle adopted for this classification is that taxes which have an interstate base are levied by the Union, while those with a local base are levied by the States. The residuary powers belong to the Union.

The Union taxes as laid down in List I, Seventh Schedule of the Constitution of India, are as under :—

1. Taxes on income other than agricultural income, 2. Corporation tax, 3. Customs duties, 4. Excise duties except on alcoholic liquors and narcotics not contained in medical or toilet preparations. 5. Estate and succession duties other than on agricultural land, 6. Taxes on the capital value of assets, except agricultural land, of individuals and companies, 7. Rates of stamp duties on financial documents, 8. Taxes other than stamp duties on transactions in stock exchanges and future markets, 9. Taxes on sale or purchase of newspapers and on advertisements therein, 10. Taxes on railway freight and fares, 11. Terminal taxes on goods or passengers carried by railways, sea, or air, and 12. Taxes on the sale or purchase of goods in the course of inter-State trade.

Taxes within the jurisdiction of the States as given in List 11 of the Seventh Schedule of the Constitution of India are as follows :—

1. Land revenue, 2. Taxes on the sale and purchase of goods, except newspapers, 3. Taxes on agricultural income, 4. Taxes on land and buildings, 5. Succession and estate duties on agricultural land, 6. Excise on alcoholic liquors and narcotics, 7. Taxes on the entry of goods into a local area, 8. Taxes on mineral rights, subject to any limitations imposed by Parliament, 9. Taxes on the consumption and sale of electricity, 10. Taxes on vehicles, animals and boats, 11. Stamp duties except those on financial documents, 12. Taxes on goods and passengers carried by board or inland waterways, 13. Taxes on luxuries including entertainments, betting and gambling, 14. Tolls, 15. Taxes on professions, trades, callings and employment, 16. Capitation Taxes, and 17. Taxes on advertisements other than those contained in newspapers.

The Union and the State Governments have concurrent powers to fix the principles on which taxes on motor vehicles shall be levied and to impose stamp duties on non-judicial stamps. The property of the Union is exempted from State taxation and the property and income of the State are exempted from Union taxation. The Parliament may, however, pass legislation for taxation by the Union of any trading or business activities of a State which are not part of the ordinary functions of the Government. States may delegate part of their taxation power to the Central Government, as had happened in the case of agricultural land being included in the purview of the Estate Duty Act in many States. Parliament has exclusive power to tax sales or purchases of goods in the course of inter-State trade.

The Union Government has exclusive power to impose taxes which are not specifically mentioned in the State or Concurrent Lists.

Thus, the Indian Constitution, being federal in character, has indicated the nature and scope of functions of the Union and State Governments and also the taxes allocated to them. At the same time, the framers of the Indian Constitution were aware that the allocation of financial resources did not correspond with the assigned functions and that the resource gap in the States might widen over the years. Accordingly they provided for the distribution or devolution of financial resources from the Centre to the States. It was specifically for this purpose that Article 280 provides for the setting up of a Finance Commission by the President of India every five years or earlier.

Distribution and Allocation of Central Revenue

Apart from the taxes levied and collected by the States, the Constitution had provided for the revenues for certain taxes on the Union list to be allocated, partly or wholly, to the States. These provisions fall into various categories.

There are, in the first place, certain duties which are levied by the Union but are collected and appropriated by the States. These include stamp duties and excise duties on medical preparations containing alcohol or narcotics.

Secondly, there are certain taxes which are levied and collected by the Union, but the entire proceeds of which are assigned to the States, in proportion determined by the Parliament. These taxes include succession and estate duties, terminal taxes on goods and passengers, taxes on railway freight and fares, taxes on transactions in stock exchanges and futures markets, the taxes on the sale and purchase of newspapers and advertisements therein.

Thirdly, Central tax on income and Union excise duties were levied and collected by the Union but were shared by it with the States in a prescribed manner.

Finally, the proceeds of additional excise duties on mill-made textiles, sugar and tobacco, which were levied by the Union in 1957 in replacement of States' sales taxes on these commodities, are wholly distributed among the States in a manner as to guarantee their former incomes from the displaced sales taxes.

Grants-in-aid. As important welfare and development functions are entrusted to the States, gaps between their revenues and expenditure have to be corrected through transference of resources from Centre. This is done partly by arrangements for tax sharing. But grants-in-aid by the Union for specific purposes or general aid have come to occupy an important place in Union-State financial relations in India. The grants also serve the purpose of correcting inter-State disparities in resources. They also help in the exercise of a certain measure of central control and co-ordination over essential welfare services and development programmes in different states.

Loans. The States are authorised to raise loans in the market but they also borrow from the Union Government which gives the latter considerable control over State borrowing and expenditure. The rate of annual borrowing by the States from the Union has considerably increased during recent years. Borrowing is made among other purposes for irrigation and river programmes, agricultural development, community development and industrial housing.

Resources Transferred to the States

The importance of Central contributions to State resources becomes clear from Table 1 showing the transfer in broad categories since the inception of economic planning.

The figures indicate the rising contribution of the Centre to State resources. On an average, the States received ₹ 280 crores per year from the Centre during the First Plan, ₹ 3,020 crores per year during the fourth plan, and ₹ 21,000 crores per year during the the Seventh Plan.

During the first plan, 36 per cent of the State expenditure was met by resources transferred by the Centre. Currently, transferred resources from the Centre

Table 1. Gross Devolution and Transfer of Resources from the Centre to the States

(₹ crores)

		Shared Taxes	Grants	Loans (net)	Total	Transferred Resources as percentage of States' total expenditure
	1951-52	50	30	70	150	25
First Plan	(1951-56)	340	290	800	1,430	36
Second Plan	(1956-61)	670	790	1,430	2,870	42
Third Plan	(1961-66)	1,200	1,300	3,100	5,650	43
Fourth Plan	(1969-74)	4,560	3,830	6,710	15,100	37
Sixth Plan	(1980-85)	23,730	15,470	14,120	53,320	46
Seventh Plan	(1985-90)	49,460	42,810	31,260	1,23,530	46
For the period	(1990-95)*	98,890	90,720	54,650	2,44,260	43

Source : *Report of the Twelfth Finance Commission* (2005-10) and other Finance Commissions

pay for 46 per cent of the total expenditure of the States. The growing transference of resources from the centre to the states is evidence of : (a) increasing integration between the Central and State finances; (b) helpless dependence of States on the Centre; and (c) growing power and interference of the Centre in the affairs of the State.

2. THE FINANCE COMMISSION AWARDS

Under the provisions of Article 280 of the Constitution, the President is required to appoint a Finance Commission for the specific purpose of devolution of non-Plan revenue resources. The functions of the Commission are to make recommendations to the President in respect of

(i) the distribution of net proceeds of taxes to be shared between the Union and the States and the allocation of share of such proceeds among the States,

(ii) the principles which should govern the payment by the Union of grants-in-aid to the revenues of the States, and

(iii) any others matter concerning financial relations between the Union and the States.

The appointment of the Finance Commission is of great importance, for it enables the financial relation between the Centre and the units to be altered in accordance with changes in need and circumstances. The elasticity in relationship introduced by this provision has great advantage.

12 Finance Commissions have so far been appointed by the Government since the inauguration of the Constitution in 1951. The recommendations of the Finance Commissions can be grouped under three heads—

(a) Division and Distribution of income tax and Central excise duty, additional excise duty in lieu of sales taxes and

(b) Grants-in-aid and

(c) Centres' loans to States.

The Tenth Commission (TFC) presided over by K.C. Pant recommended an alternative devolution of Central taxes. This necessitated a Constitutional amendment under which the proceeds of all Central taxes were shared with States. The Eleventh Finance Commission (EFC) and the Twelfth Finance Commission have followed the new system of sharing and accordingly we have summarized their recommendations separately. The following summary of sharing revenues between the Centre and States relate to only the first ten Finance Commissions.

(a) Division and Distribution of Income Tax

The personal income tax is imposed and collected by the Union Government but the net proceeds are shared between the Centre and the States under Article 270 of the Indian Constitution. The Finance Commissions have to give their award on two points :

(a) the share of the States in the total collection of income tax (this is known as vertical division) and

(b) the principle/principles which should govern the share of each State in the divisible pool (this is konwn as horizontal division of resources between states).

Vertical division of Income Tax

The First Finance Commission (presided over by J.P. Neogi) recommended that the States should share 55 per cent of the proceeds of the income tax. But the successive Finance Commissions had raised the States' share in income tax to the level of 85 per cent (Seventh, Eighth and Ninth Finance Commissions). However, the Tenth Finance Commission in its report for the period

1. The recommendations of the Eleventh and Twelfth Finance Commission are elaborately dealt with separately in the next section.

1995-2000 recommended that 77.5 per cent of the net proceeds of taxes on income should be assigned to states.

Horizonatal division of income tax proceeds

As regards the basis for the distribution of the States' pool of income tax proceeds among the States, the first few commissions had used the double criteria of population and tax collection.

The First Finance Commission, for instance, recommended the allocation of income tax proceeds on the basis of 80 per cent and 20 per cent for population and collection. This criterion benefited populous states as well as those richer states which contributed more income tax revenue. The Second Finance Commission regarded population of a State as a more important basis for distribution and, accordingly, awarded that 90 per cent of the States' divisible pool of income tax should be distributed on the basis of population. This criterion naturally favoured populous states like Uttar Pradesh and Bihar which were the poorest states in India. This was reversed by the Third and Fourth Finance Commissions which raised the share of collection to 20 per cent and thus gave greater share to States like Maharashtra and West Bengal which contributed most of the collection of income tax (because of the location of metropolitan cities like Bombay and Calcutta). From the Fifth Commission onwards, population had again become the major criterion for distribution of income tax proceeds among the States.

For the first time, the Eighth Finance Commission presided over by Y.B. Chavan, introduced a new formula for distribution of the income tax proceeds among the States :

(a) 10 per cent would continue to be distributed among the States on the basis of collection of income tax;

(b) 90 per cent of the proceeds of the income tax would be distributed among the States on the following criteria :

25 per cent on the basis of population;

25 per cent on the basis of inverse of the per capita income of the state multiplied by population; and

50 per cent on the basis of the distance of the per capita income of a state from the highest per capita income state (i.e., Punjab) and multiplied by the population of the State.

The basic objective of this three-factor formula was to bring about a high degree of equity among the States. The Ninth Finance Commission (NFC) basically followed the above formula with minor modifications.

The Tenth Finance Commission (TFC) evaluated the formula of both Eighth and Ninth Finance Commissions and introduced the following formula/criteria to determine the shares of the different States in the shareable proceeds of income tax:

(a) 20 per cent on the basis of population of 1971;

(b) 60 per cent on the basis of distance of per capita income of a State from that of the State having the highest income;

(c) 5 per cent on the basis of area adjusted;

(d) 5 per cent on the basis of index of infrastructure; and

(e) 10 per cent on the basis of tax effort.

Table 2. Recommendations of Finance Commissions on Income Tax

Finance Commission	*State share of income-tax (per cent)*	*Distribution of income-tax to the States on the basis of*	
		Population and other criteria	*Tax contribution*
First	55	80	20
Second	60	90	10
Third	65	80	20
Fourth	75	80	20
Fifth	75	90	10
Sixth	80	90	10
Seventh to Ninth	85	90	10
Tenth	77.5	90	10

Source : *Finance Commission Reports*

It would be clear from the above table that (a) the successive finance commissions, except the Tenth, had increased the share of the States in the income-tax levied and collected by the Centre, and (b) the proceeds are shared among States mainly on the basis of population, economic backwardnes and other criteria.

(b) Division and Distribution of Excise Duty

Vertical division. The First Finance Commission selected three excise duties—on tobacco, matches and vegetable products—for division with the States, so as to give them larger revenues. These commodities are widely consumed and yield a substantial revenue to the Government. The Commission recommended 40 per cent of the net proceeds of these duties to be distributed among the States on the basis of population. The Second Finance Commission added to the list of duties shared between the Union and the states, but reduced the share of the States from 40 per cent to 25 per cent. The Third Finance Commission increased the number of excisable commodities in the divisible pool from 8 to 35 by including all commodities on which duties were collected in 1960-61 but reduced the States' share from the divisible pool from 25 per cent to 20 per cent. The Fourth Finance Commission enlarged the list to 45 commodities, but the share of the duties was

retained at 20 per cent. The Fifth and Sixth Commissions did not make any change.

The Seventh Finance Commission, however, raised the States' shares to 40 per cent of the net proceeds. The Eighth Commission raised the States' share to 45 per cent and distributed 40 per cent on the basis of a new formula—the same as for income tax—and 5 per cent to deficit states. The Ninth Finance Commission proposed to distribute the entire amount of 45 per cent as a consolidated amount without dividing it into two components of 40 per cent and 5 per cent.

Finally, the Tenth Finance Commission has raised the share of the states in the net proceeds of union excise duties to 47.5 per cent. This rise in the States' share in excise duties is to compensate for the reduction in their share in come tax.

Table 3. Recommendations of Finance Commissions on Excise Duty

Finance Commissions	*States' Share of Excise Duty*	*Distribution of Excise Duty*	
		on the basis of population	*on the chasis of backwardness of States the per centage of the poor in the state etc.*
First	40% of 3 duties	40	60
Second	25% of 8 duties	40	60
Third	20% of 35 duties	40	60
Fourth & Fifth	20% of 45 duties	80	20
Sixth	Do	75	25
Seventh	40% of all duties	25	75
Eighth & Ninth	45% of all duties	25	75
Tenth	47.5% of all duties	20	80

Source : *Finance Commission Reports*

It is necessary to emphasise here that all finance commissions kept one basic objective, that is, *to increase the share of the States in the proceeds of Central excise duties*. The first few finance commissions brought in more and more central excise duties under the divisible pool, but reduced the percentage share of the States. The Seventh, and subsequent Finance Commissions, however, have

(a) brought *all* the Central excise duties under the divisible pool; and

(b) raised the share of the States from 20 per cent to 40 per cent and then finally to 47.5 per cent.

Thus, over the years, Finance Commissions have increasingly relied on Union Excise Duties in meeting the revenue needs of the States.

Horizontal division.

As regards the horizontal distribution of the proceeds of Central Excise Duties among States, the Finance Commissions had initially adopted two criteria, viz., the population of the State and the backwardness of the States. This system of distribution clearly favoured populous but economically backward states like Uttar Pradesh and Madhya Pradesh.

The Seventh Finance Commission was the first to introduce a new formula for distribution of the States' share of the Central excise duty: 25 per cent weightage equally to (a) population, (b) increase in the per capita income of the state, (c) the percentage of the poor in each state, and (d) a formula for income equalisation between states.

The Ninth Finance Commission (NFC) recommended the following method for distribution of the net proceeds of the Union Excise Duties among the States:

(a) 25 per cent should be distributed among the States on the basis of 1971 population;

(b) 12.5 per cent should be distributed among the States on the basis of Income Adjusted Total Population (IATP)

(c) 12.5 per cent should be distributed on the basis of index of backwardness;

(d) 33.5 per cent should be distributed on the basis of distance of the per capita income of a State from that of the State having the highest per capita income i.e. Punjab; and

(e) the remaining 16.5 per cent should be distributed among the States with deficits, after taking into account their shares from income tax, excise duties and other shareable taxes.

The Tenth Finance Commission used the same formula prepared for the sharing of income tax for sharing the proceeds of 40 per cent of excise duties among the states as well. The remaining 7.5 per cent is distributed among deficit states.

(c) Additional Excise Duties in lieu of Sales Tax

Apart from the usual excise duties, the Central Government has been levying additional excise duties on sugar, tobacco, cotton fabrics, woollen fabrics and man-made fabrics--these goods were declared to be goods of special importance in inter-state trade and commerce. This scheme of levying additional excise duties on the above goods was the outcome of an agreement reached at the meeting of the National Development Council (NDC) held in December 1956, by which the States agreed to refrain from exercising their power to levy sales tax on these commodities in lieu of a share in additional excise duties to be levied by the Centre. Accordingly, since 1957, the Centre has levied and

collected these additional excise duties and the entire proceeds (after deducting the share of Union territores) are distributed among the States in accordance with the principles of distribution laid down by the Finance Commissions from time to time.

The Second, Third, Fourth and Fifth Finance Commissions adopted a procedure under which they first

(a) set apart the guaranteed level of States' revenue which the States were realising from sales tax on these commodities in 1956-57 and then (b) the balance amount of additional excise duties was distributed among the States according to specific principles. The Finance Commissions adopted such criteria as

(a) Percentage increase in the collection of sales tax in each State since 1956-57; and

(b) size of population of each State.

The Sixth Finance Commission made a departure from the earlier practice of first setting apart a minimum guaranteed amount for each State and then distributing the balance—the Commission was convinced that the share of each State would always exceed the revenue they would have realised in 1956-57 from the respective sales taxes on these commodities.

As regards the basis of distribution, the Sixth Finance Commission took the view that the additional duties of excise were levied in lieu of sales tax, which was itself a tax on consumption, the shares of various states should correspond to their shares in the consumption of these commodities. However, the Commission felt that reliable consumption figures were not available and, accordingly, it took State domestic product (SDP) and population as reliable approximation of consumption levels. Besides, the Commission also felt that the States would have realised sales tax not merely on what was consumed in the State but also on what was produced in the State and sold in the course of inter-state transactions of these commodities. Hence, the Sixth Finance Commission allocated the shares of additional duties on excise on the basis of population, State domestic product (SDP) and production in the ratio of 70 : 20 : 10. The subsequent finance commissions accepted this principle with minor modifications.

(d) Grant in lieu of Tax on Passenger Fares

Article 269 of the Constitution empowers the Government of India to levy and collect taxes on railway fares and freights but the net proceeds are to be assigned to the States. This tax was first imposed in 1957 and the proceeds were distributed to the States. The tax was repealed in 1961. Actually, the tax on passenger fare was merged with the basic fare and the system of grant was introduced to compensate States for the consequential loss of revenue. The tax on passenger fare was revived in 1971 but was again repealed in 1973. Now, the Finance Commissions were given the responsibility to suggest the grants to be made to the States in lieu of the tax on passenger fares. There are two points to be decided:

(a) what should be the volume of grant the Centre should transfer to the States in lieu of the tax on passenger fares, i.e., should it be a fixed amount or should it be a fixed percentage of the total passenger earnings; and

(b) What should be the basis of inter-state sharing of the grant?

On the first question, there has always been differences between the Centre and the States. At the time the tax on passenger fare was repealed, it contributed 10.7 per cent of the non-suburban railway passenger earnings. Accordingly the States have insisted that the grant should be pegged at 10.7 per cent of the railway passenger earnings at all times. On the other hand, the Railways have always insisted that the quantum of grant should be fixed as a given amount. This amount was originally fixed at ₹ 23 crores. The Railways' case for a fixed amount of grant was based on the following arguments:

(a) The impact of social obligations has been rising continuously and the annual loss to the Railways by way of subsidisation of passenger fares and tariff on low-rated commodities was around ₹ 2,000 crores. In other words, the Railways have been subsidising not only passenger traffic but also freight traffic.

(b) Railway receipts should not be treated on par with Central Government tax revenues, part of which devolves on the States. The Railways – being a major public utility undertaking – have to find adequate resources to provide a modern and efficient transport infrastructure to meet the demands of a growing economy which is acquiring further complexity and sophistication. Accordingly, increasing the amount of grant in lieu of the tax on passenger fare beyond the current size would put their development efforts at jeopardy.

The Eighth Finance Commission rejected the argument of the Railways and raised it to ₹ 95 crores which was actually 10.7 per cent of the railway passenger earnings at that time.

However, the Ninth Finance commission (NFC) accepted the Railways arguments that the latter could not bear the burden of 10.7 per cent incidence of the grant on non-suburban passenger fares but at the same time the NFC would not like to peg the quantum of grant at ₹ 95 crores. Hence, the Commission fixed the grant of a lump sum of ₹ 150 crores per annum for the Eighth Plan period of 1990-95.

The Tenth Finance Commission -- like the Eighth Finance Commission – rejected the Railways arguments but agreed with the views of most States , namely, the grants should be equal to 10.7 per cent of the non-suburban passenger earnings. As the total non-suburban passenger

earnings for the latest available year (1992-93) was ₹ 3,540 crores, the TFC recommended 10.7 per cent of ₹ 3,540 crores, viz., ₹ 380 crores to be paid to the States annually for the period 1995-2000.

As regards the inter-state distribution of the grant in lieu of the tax on passenger fares, the Seventh Finance Commission adopted the formula of distribution of the grant in proportion to the non-suburban passenger earnings from traffic originating in each State. As the taxable event was the payment of fare, the States should get the grant on the basis of the fare paid within their boundaries. The subsequent Finance Commissions accepted the logic of this basis and adopted the formula propounded by the Seventh Finance Commission.

(e) The Estate Duty

The estate duty was levied by the Centre in 1953 but the proceeds were to be assigned to the States. The Second Finance Commission recommended that one per cent of the net proceeds should be assigned to the Union Territories and balance to be divided among the States. The Fourth Finance Commission, however, recommended that two per cent of the proceeds of the estate duty should be assigned to Union Territories and the balance to be distributed among the States on the same basis as before. The Seventh Finance Commission recommended that the distribution of the net proceeds of estate duty in respect of property other than agricultural land should be in proportion to the gross value of all property located in each state. Meanwhile, the Estate Duty has been discontinued from 1985.

(f) Grants-in-aid to the States

List II of the Seventh Schedule of the Indian Constitution has entrusted important welfare and development functions to the States but the various tax resources provided to the States in the Constitution were found to be inelastic and wholly inadequate. It was to overcome this problem that the Constitution provided for a mechanism of grants from the Centre to the States. Grants-in-aid may take the general form of aid to overcome current revenue deficits or to correct inter-state disparities in resources. Grants-in-aid may be for specific purposes such as the promotion of education in a backward state or for toning up of administration, and so on. Under Article 275 of the Constitution, the Finance Commissions have to decide about the grants-in-aid to states corresponding to each five year plan. A summary of the recommendations of the Finance Commissions on the grants-in-aid is given below :

Finance Commission	Grants-in-aid
First	(i) for 7 states, to cover their deficits during the period 1951-56
	(ii) for 8 states to improve primary education facilities
Second	Larger grants-in-aid for meeting developmental needs of States
Third	(i) ₹ 550 crores to all States except Maharashtra to cover part of their revenue expenditure
	(ii) ₹ 45 crores for improvement of communication
Fourth	₹ 610 crores to cover deficits during the period, 1966-71
Fifth	₹ 638 crores to cover deficits during the period, 1969-74
Sixth	₹ 2,510 crores for 14 out of 21 States to cover their non-Plan deficits during the period, 1974-79
Seventh	₹ 1,600 crores to cover deficits of a few poor states during the period 1980-85 and also to upgrade the standard of administration
Eighth	A small grant of ₹ 1,556 crores for the period 1985-90 to cover deficits. A grant of ₹ 915 crores to certain states to upgrade the standard of administration.
Ninth	(i) Grant of ₹ 15,017 crores to cover deficits on Plan and non-Plan revenue account during 1990-95
	(ii) A special annual grant of ₹ 603 crores towards the Centre's contribution to the Calamity Relief Fund—totalling ₹ 3,015 crores for the 5 year period, 1990-95
	(iii) A grant of ₹ 122 crores to Madhya Pradesh towards the expenditure on rehabilitation and relief of victims of Bhopal gas leak.
Tenth	(i) grant-in-aid of about ₹ 7,580 crores to cover deficit on revenue account during 1995-2000
	(ii) upgradation grants of about ₹ 1,360 crores for such selected items as police, fire services, jails, promotion of girls' education, additional facilities for upper primary schools, drinking water facilities in primary schools, etc;
	(iii) grants of about ₹ 1,250 crores to solve special problems of States:
	(iv) Calamity relief of ₹ 4,730 crores;
	(v) grants of ₹ 5,380 crores to local bodies, viz., Panchayats, and municipalities.
Eleventh	(i) ₹ 35,359 crores (i.e. 8 percent of 100 transfer) goes to meet the revenue deficit of States.
	(ii) ₹ 7,793 crores was kept for upgradation of administration and special problems associated with some states.
	(iii) Total grant of Rs 10,000 crores for the

5 year period out of this panchayats would receive annually ₹ 1600 crores per annual municipalities would receive ₹ 400 crores per annum.

(iv) ₹ 8,256 crores for relief during calamties

(v) Thus in total grants in aid of ₹ 58,587 crores was recommended by the commission.

The total amount of grants provided by the Tenth Commission would come to Rs 20,300 crores.

It will be observed from the above summary of recommendations regarding grants-in-aid, that every finance commission—till the Sixth Finance Commission—increased the amount of grants-in-aid to the States. There were two basic reasons for this :

First, the finance commissions realised that the States required increasingly larger resources to meet their ever-growing expenditure on law and order, welfare and development.

Second, despite larger transfer of tax resources to the States, the latter were incurring huge revenue deficits.

Accordingly, the successive finance commissions awarded larger grants to be made by the Centre to the States. The Seventh and Eighth Finance Commissions, however, reversed this trend by providing for larger devolution of tax revenues to States :

(a) raising the share of the States in income tax proceeds from 80 per cent to 85 per cent;

(b) bringing all central excise duties under tax sharing, instead of only 45 duties; and

(c) raising States' share in excise duties from 20 per cent to 40 per cent and eventually to 45 per cent.

As a result of these awards, there was such a large devolution of tax revenue to the States that most of them got surpluses on revenue account. The Ninth and Tenth Finance Commissions calculated non-Plan deficit as well as Plan deficits of States during the periods (1990-95 and 1995-2000).

(g) Loans by the Centre to the States

The Second Finance Commission was asked to go into the question of Centres' loans to States which were mounting, as for instance, from ₹ 195 crores in March, 1951 to ₹ 900 crores by March 1955. The Second Finance Commission recommended that the States should be entitled to only two loans a year, a long-term loan and a medium-term loan at a rate of interest approximatly equal to the rate of interest at which the Central Government was borrowing from the market.

The Fourth Finance Commission suggested the formation of a competent body to study in detail the entire problem of indebtedness of States but nothing came out of this suggestion. The Fifth Finance Commission strongly recommended that the States should, "as a matter of necessary fiscal discipline" balance their budgets and manage their affairs within the resources available to them. The Commission was of the view that overdrafts were untenable in principle and undesirable in practice, that the States should not indulge in deficit financing and that balanced budgets and expenditure-control must be the sheet-anchor of their fiscal policy. The Commission recommended that :

(i) ways and means advances should not be considered as resources;

(ii) the present position relating to limits of ways and means advances did not call for an immediate change, although the Reserve Bank should periodically review the limits;

(iii) the Reserve Bank should call upon the States to repay the advances and should stop payment of unauthorised overdrafts; and

(iv) the Centre should assist the States to clear their overdrafts and achieve fiscal discipline, provided the default was not chronic and should consider the use of constitutional power in the case of persistent, unauthorised overdrafts.

The Sixth Finance Commission made a detailed study of debt position of the States and recommended the consolidation and spreading out of repayment over 15 to 30 years.

The finance commissions only recommended writing-off of some loans and rescheduling some portion of them. The Ninth Finance Commission was against such steps and asked states to be careful and exercise restraint in incurring additional debt.

3. EVALUATION OF THE FIRST ELEVEN FINANCE COMMISSION AWARDS

The appointment of a Finance Commission at intervals of five years or less has great significance for the financial relations between the Union and the States. Periodic examination of the division of resources and suitable modifications in it imparts a degree of flexibility to the finance of both the Centre and the States. This flexibility is of great value in these days of changing needs and resources. The planned development of the country involves growing expenditure and, therefore, larger revenues, and an elastic system of finance is a great necessity. Through the transfer of resources from the Centre to the States, the elasticity of the Union sources of revenue is transmitted to the State finances also. The Finance Commissions help in this process by making

suitable suggestions.

The general complaint against the awards of Finance Commissions is that they generally estimate revenue gaps of States (excess of revenue expenditure over their own revenues) and devise measures for 'gap filling'. In other words, the Finance Commission awards have been characterised as 'gap-filling' awards. This type of criticism may not hold good especially for the awards of Seventh and Eighth Finance Commissions. The Seventh Finance Commission was probably the first finance commission to be deeply concerned with the equitable system of federal transfers and accordingly the devolution under the Seventh Finance Commission award was twice that of the Sixth Finance Commission. The Eighth Finance Commission was also deeply concerned with the need to help the most poverty-stricken states, hill states and backward states and its award almost doubled the devolution of the Seventh Finance Commission. There was, therefore, some justification in the claim of the Eighth Finance Commission that its award was not simply 'gap-filling', but that it attempted to achieve the twin objectives of a more equal relationship between the Centre and the States and interstate equity.

In this context, a major shift in the awards of the Finance Commission from 7th to 11th Finance Commissions may be mentioned here. In their attempt to fill the resource gap of the states, the first Six Finance Commissions relied heavily on grants-in-aid to cover their revenue deficits. The Seventh Finance Commission raised the states' share in the divisible pool of taxes by (a) raising the states' share in income tax from 80 per cent to 85 per cent, (b) bringing all excise duties under the divisible pool and (c) by raising the states' share in excise duties from 20 per cent to 40 per cent. The Eighth Finance Commission further increased the states' share in excise duties to 45 percent (the additional 5 per cent to be meant for deficit states). As a result of these recommendations, the devolution of tax revenue to the states was so much that the Seventh and Eighth Finance Commissions did not find it necessary to recommend large grants-in-aid to cover the revenue deficit of States. This trend was reversed by the successive Finance Commissions and we do find sizable grants-in-aid to cover revenue deficit of the states by Ninth to Eleventh Finance Commission.

Alternative Scheme of Vertical Devolution

The Tenth Finance Commission (TFC) made its award on the vertical sharing of taxes between the Centre and the States and the horizontal sharing of the divisible pool between the states, and grants-in-aid. More important than its award, the TFC formulated an *alternative scheme of vertical sharing* between the Centre and States which, in its opinion, was better than the present system of tax sharing. Currently, the Constitution of India provided for sharing of the taxes with the States, viz., personal income tax and Central excise duties. According to TFC, the progress of tax reforms would be greatly facilitated if the ambit of tax sharing arrangement was enlarged. This would give greater certainty of resources for both the Centre and the States.

The TFC pointed out that for 10 years (1985-95), covered by the Eighth and Ninth Finance Commission awards, tax devolution remained constant, at 85 percent for income tax and 45 percent in Central excise duties. This meant that the Central Government had not shown any interest in income tax, as its share was only 15 percent. The tax sources under Article 268 and 269 have remained unexploited and under-exploited.

The TFC pointed out that corporation tax was more buyout and besides states had always pressed all the Finance Commission to bring the corporation tax under the divisible pool. The Finance Commissions too were concerned on this point and this was one reason why they continuously raised the States share in income tax from 55 to 85 percent and their share in Central excise duty to 40 percent. In the opinion of the Eighth Finance Commission, the corporation tax had shown high elasticity and it was fair that the states should have access to such a source of revenue. The Sarkaria Commission favoured constitutional amendment to bring the corporation tax under the divisible pool.

Finally, the Rajah Cheliah *Committee on Tax Reforms (1991)* had pleaded for re-examination of the constitutional provisions of tax sharing, for in its opinion, "The task of fiscal adjustment at the Centre has been rendered more difficult because of the compulsions arising from the formula of tax sharing with the States..... At present, tax devolution to the States constitutes around 24 percent of the Gross Central Tax Revenues. With the consent and cooperation of the States, the relevant constitutional provisions could be amended to the effect that 25 percent of the aggregate revenues of the Centre shall be shared with the States. There would be certainty then for the States and the Union regarding what revenues would accrue to their respective budgets and the Centre would not have to distort it pattern of taxation by being virtually compelled to raise non-shareable taxes."

Accepting the above recommendation of the Rajah Chelliah Committee, the Finance Ministry of the Government of India requested TFC to examine the *desirability of changing the pattern of tax sharing* in such a way that the entire tax revenues of the Centre (except of course Union surcharges and cesses) become shareable. The percentage could be around 22 to 23 percent and the arrangement should remain fixed for 20 years. If this suggestion was accepted, the Indian constitution would have to be amended suitably.

The TFC considered all these point carefully and calculated the shares of the states in (a) income tax, (b) Central excise duties, (c) revenue from additional excise duties in lieu of Central sales tax, and (d) grants in lieu of tax on passenger fares for the period 1979-80 to 1994-95. The average was as follows:

Seventh FC (1980-85) :	27.28%
Eighth FC (1985-90) :	25.44%
Ninth FC (1990-95) :	27.26%

TFC, therefore, recommended that

(a) The share of states in the gross receipts of Central taxes should be 26 per cent;

(b) The additional excise duties should be merged with basic excise duties and another 3 percent of the gross tax receipts of the Centre should go to the States in lieu of additional excise duties.

The TFC recommended that this arrangement – 26 percent and 3 percent of the Central tax revenues to be transferred to the States – to be provided suitably in the Constitution and should be reviewed after 15 years.

The TFC also recommended that the proceeds of taxes under Article 268 (taxes which are levied by the Centre but the States collect and appropriate the proceeds within the respective areas) should be kept out of the pool of the Central taxes. But the proceeds of the taxes under article 269 (taxes are levied and collected by the Centre but the proceeds are wholly assigned to the States) should form part of the divisible pool; this would induce the Centre to exploit these tax bases which had remained untapped for a long time.

The TFC mentioned the following three benefits from the new arrangement:

(a) With a fixed share allotted to the states in the aggregate tax revenues, the State would automatically share the buoyancy of Central taxes;

(b) The Central Government could pursue tax reforms without the need to consider whether a tax was shareable with the States or not; and

(c) In case, the taxes under Articles 268 and 269 formed part of this arrangement, there was a greater likelihood of their being tapped.

On the pattern of alternative scheme of vertical devolution, as devised by Tenth Finance Commission, Eleventh Finance Commission (EFC) recommended for enhancement of states' share in central taxes and duties from 26 percent to 28 percent. Further, the EFC noted that consequent to the 80th Amendment Act, (2000) to the Indian Constitution, the additional excise duties (Goods of Special Importance) Act, 1957 in lieu of sales tax on sugar, tobacco and textiles became part of the revenue receipts of the Central Government and were, therefore, shareable with the States. The EFC felt that the earlier arrangement should be reviewed and pending this review the EFC recommended that 1.5 percent of the shareable Union taxes and duties be allocated to the States separately and thus, altogether 29.5 percent of the total proceeds of Central taxes would be transferred to the States.

Table 4 : Criteria and Weights for determining the Relative share of States

Criteria	*Tenth Finance Commission*	*Eleventh Finance Commision*
1. Population	20%	10.00%
2. Distance of per capita income of the stae from that of the State having highest per capita income	60%	62.50%
3. Fiscal Capacity Distance		
4. Area	5%	7.50%
5. Index of Infrastructure	5%	7.50%
6. Tax effort	10%	5.00%
7. Fiscal Discipline	–	7.50%
Total	**100.00**	**100.00**

Regarding horizontal devolution, Eleventh Finance Commission modified the formula and reduced the weightage of population from 20 percent to 10 percent and increased the weightage of distance of per capita income of the state from that of the state having highest per capita income from 60 percent to 62.5 percent. Weightage of Area and index of infrastructure was also increased, while weightage for tax effort was reduced from 10 percent to 5 percent. A new criteria namely fiscal discipline was added and a weightage of 7.5 percent was given for the same. In the process big states with lower per capita income benefitted from the recommendation of the EFC. These states are Uttar Pradesh, Bihar, Madhya Pradesh and West Bengal.

The most important determinant of the share of the States was the distance of per capita income of a particular state from that of the state having the highest per capita income. The weightage to this measure, which was 60 per cent as fixed by the TFC was raised to 62.5 per cent by the EFC. The intention of EFC was to further help the poorer States more than the richer States. Professor AM Khusro, Chairman, EFC described this as a poverty alleviation measure.

EFC, therefore, combined the measures promoting equity and efficiency, tilting the balance, in favour of equity. On this basis, Uttar Pradesh, Bihar, Madhya Pradesh and West Bengal would receive 51.3 per cent of all shareable taxes and duties. It may be mentioned that these states comprise 43 per cent of the total population of India. Obviously, relatively lower per capita income contributed to enhancement of their share.

The Eleventh Finance Commission recommended a total devolution of ₹4,34,905 crores for the 5-year period (2000-05) in the form of devolution of taxes and grants.

It may be noted that out of the total devolution of funds, the share of the taxes and duties is 86.5 per cent and

that of grants is only 13.5 per cent. Out of the total grants in-aid of ₹ 58,587 crores, a sum of ₹ 35,359 crores (i.e. 8.1 per cent of total transfer) goes to meet the revenue deficit of states, a sum of ₹ 4,793 crores was kept for upgradation of administration and special problems associated with certain states.

To provide support to local bodies-at the panchayat level and municipalities at the urban level, the Eleventh Finance Commission provided a total grant of ₹ 10,000 crores for the 5-year period. Out of this, panchayats would receive annually ₹ 1,600 crores per annum and municipalities would receive ₹ 400 crores per annum.

As Eleventh Finance Commission introduced some major changes, both in vertical and horizontal devolution of central taxes and duties, it got a mixed bag of responses. It was praised for its concern for equity, but it was criticised on various counts. It gave the benefit of devolution of additional 1.5 percent devolution on account of additional excise duties levied in lieu of sales tax on sugar, tobacco and textiles to even states which do not levy these taxes. Secondly, although it recommended a ceiling of 37.5 percent of the transfer of receipt to the states (both in the form of tax devolution and grants-in-aid), centre added a provision by stating "Where this ceiling has been accepted, it does not imply the establishment of a principle of mandatory sharing of a fixed percentage of centers revenue receipt with the states." This in other words implies that centre would like to transfer below the ceiling of 37.5 percent.

By distinguishing the forward and backward states, EFC tried to help backward states and in the process forward states have incurred heavy losses. The argument of the EFC was that momentum gathered by the already prosperous states would enable them to push their economic growth further by attracting investment – both Indian and foreign, to develop their infrastructure in the newly emerging areas of Infotech and computers and this was also documented by various studies that foreign investment, lending by commercial banks and industrial finance institutions were heavily tilted in favour of the prosperous and developed states of India. It was, therefore, necessary to strengthen infrastructure and other growth elements in poorer states so that inequalities could be narrowed down. This approach of the EFC should, therefore, be appreciated rather than criticised.

Lastly, the Commission had made some recommendations which aimed at reducing the budget deficits such as widening the tax base, controlling expenditure, taxation of the fast growing service sector, user charges to be index-linked to costs, regular revision of royalties on mines, changing the composition of Government expenditure in favour of priority areas like elementary education, primary health care, water supply, sanitation and infrastructure like roads, bridges, downsizing of Government departments and public enterprises. Although all these measures were also suggested by the Central Government, the real issue was the extent to which Government could push them through.

4. TWELFTH FINANCE COMMISSION AWARD (2005-10)

Terms of Reference

The Twelfth Finance Commission was constituted by the President under Article 280 of the Indian Constitution, with Dr. C. Rangarajan as chairman. This was the second finance commission after he 80th Amendment Act (2000) of the Constitution. The terms of reference of the 12th FC were the same as those of the 11th FC, except the last one which was actually added later through a special notification. The terms of reference of the 12th FC were:

(*i*) The distribution between the Centre and the States of the net proceeds of all taxes and the allocation between the States of the respective shares of such proceeds;

(*ii*) The principles which should govern

a. The grants-in-aid to the States out of the Consolidated Fund of India; and

b. The sums to be paid to the States which are in need of assistance by way of grants-in-aid under Article 275 of the Indian Constitution.

(*iii*) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the States;

(*iv*) Review the Fiscal Reform Facility introduced by the Central Government on the basis of the recommendations of the 11th FC and suggest measures for effective achievement of its objectives;

(*v*) Assess the debt position of the States at the end of March 2004 and suggest necessary corrective measures consistent with macro-economic stability and debt maintainability;

(*vi*) Review the present arrangements as regards financing of Disaster Management; and

(*vii*) To recommend whether the non-tax income of profit petroleum to the Centre, arising out of contractual provisions, should be shared with the States from where the mineral oils are produced, and if so, to what extent.

The Award of the Twelfth Finance Commission

While giving its award on the various terms of reference, the 12th FC had carefully considered the views of the Central and State Governments on the various items of terms of reference... *The Commission's basic objective was*

(a) to sustain the growth momentum;
(b) to bring about fiscal consolidation, and
(c) to recommend a scheme of transfers that could serve the twin objectives of equity and efficiency.

The transfers from the Centre to the States – in the form of tax devolutions and grants – are meant to correct both the vertical and the horizontal imbalances.

Vertical imbalance and devolution. In India, vertical imbalance has always existed because the Central Government has been assigned more revenues while the State Government have been entrusted with more and larger responsibilities. Accordingly, correcting vertical imbalance necessitates transfers from the Central Government to the State Governments taken together.

As in the case of the 11th FC, the 12th FC considered all the relevant factors as regards receipts and expenditures of the Centre and of the States, the level of over-all transfers relative to Centre's gross revenue receipts, the relative balance between tax devolution and grants, etc. In their presentation to the Commission, the States had demanded an increase of the shareable pool from the 11th FCs 29.5 percent to 33 percent – some states had demanded the increase up to 50 percent. The 12th FC finally decided at 30.5 percent – increase by 1 percent – this is actually to accommodate the additional excise duty in lieu of sugar, tobacco and textiles.

As regards, the over-all transfers, the 11th FC had fixed it at 37.5 percent of Centre's gross revenue receipts. The Finance Ministry had actually requested the 12th FC to reconsider this aspect of the award of the previous Commission. Accordingly, the 12th FC considered all points of view including the historical trends in devolution.

The 12th FC found that, historically, about 38 percent of Centre's gross revenue was transferred to the States, partly through the Finance Commission awards (statutory awards) and partly through Planning Commission grants and transfers through other sources. The Commission also took note of the UPA's National CMP, which, while dealing with the subject of Centre-State relations, had demanded that the share of States in the shareable pool of Central Revenues be enhanced. Keeping all these points in view, the 12th FC fixed the indicative amount of overall transfers to States in Central gross revenue at 38 percent – just 0.7 percent more than the percentage fixed by the 11th FC.

Horizontal Sharing – The horizontal aspect of transfers relates to the sharing of the total shareable pool between the States. If all the States in the Indian Union have the same or almost the same per capita income, and if all the States have similar fiscal capacities, the problem of transfer between the States would be simple – namely, equal per capita transfers to every State... In practice, there are considerable horizontal imbalances – States differ in area, size of population, income, tax base, forest and mineral wealth, etc. There are differential capacities and needs of the States as also differences in the costs of providing services. Horizontal imbalances have to be corrected while distributing Central resources among all the States in the country.

The 12th FC considered the recommendations of previous commissions on this point and also the memoranda submitted by various States regarding:

(a) The continuation of the use of population as a factor;
(b) The use of income distance criteria;
(c) Continuation of area as a factor; and
(d) Retaining the tax effort and index of fiscal discipline criteria.

There is no objective factor in any of the above criteria. Till now, every FC has attempted to work out different criteria and different weightages for each criterion to arrive at a reasonable degree of equalization. In practice, this is impossible to arrive at and every FC award has been criticized by those States who felt that they should have got a bigger share in the shareable Central revenue pool.

Let us take only one criterion, viz., the population factor, which is a basic indicator of need for public goods and services, and as a criterion, it ensures equal per capita transfers among all States. This was recognized by all FCs, even though, different FCs have given different weights. The 12th FC stated in this connection, "Looking at the recent periods, during the Seventh and Eighth Finance Commissions, the weight attached to population, varied between 22.5 percent to 25 percent. This weight was reduced to 20 percent by the Ninth Commission and further to 10 percent by the Eleventh Commission. We feel that a strong case exists for increasing the weight and have fixed it at 25 percent."[1] Incidentally, in their memoranda submitted to the 12th FC, different States had demanded the weightage for population to be fixed between 10 percent to 50 percent.

Ultimately the 12th FC adopted the following criteria and weights for *inter se* determination of shares of states.

Criteria	*Weight %*
Population	25
Income distance	50
Area	10
Tax Effort	7.5
Fiscal discipline	7.5
Total	**100.0**

The 12th FC concluded: "We have tried to evolve a formula that balances equity with fiscal efficiency. Equity considerations, however, dominate, as they should, in any scheme of federal transfers trying to implement the equalization principle"[2]. Under this formula, the following five States would get the largest share of the total shareable revenue.

Table 6. Transfers from the Centre to the States as percentage of gross revenue receipts of the Centre (Average)

	Finance Commission Transfer				
	Share in Central taxes	*Grants*	*Total Transfers*	*Grants from Planning and other transfers*	*Total transfers*
VII FC	22.4	2.0	24.4	13.7	38.1
VIII FC	20.3	2.5	22.8	15.1	37.9
IX FC	21.4	3.4	24.8	15.5	40.3
X FC	21.4	2.3	23.7	11.1	35.8
XI FC (first 2 years)	20.9	5.2	26.1	11.2	37.3

Source : *Report of the Twelfth Finance Commission*

State	*% age share*
U.P.	19.3
Bihar	11.0
Andhra Pradesh	7.4
West Bengal	7.1
Madhya Pradesh	6.7
Total	**51.5**

The rest of 23 states would share the balance 48.5 percent of the shareable pool.

Grants-in-aid

As in the case of the previous FCs, the 12th FC has recommended non-plan revenue deficit grants, under Article 275 of the Constitution to be given to 15 States whose total non-plan revenue deficit was assessed at ₹ 56,856 crores for the period 2005-10.

The other grants-in-aid recommended by the 12 FC are as follows:

Grants for education for 8 States : ₹ 10,172 crores over the award period, with a minimum of ₹ 20 crores in a year for any eligible State.

Grants for health for 7 States : ₹ 5,887 crores over the award period, with a minimum of ₹ 10 crores in a year for any eligible State.

Grants for maintenance of roads and bridges : ₹ 15,000 crores over the award period,

of public buildings : ₹ 5,000 crores

of forests : ₹ 1,000 crores

Grants for heritage conservation : ₹ 625 crores over the award period

Grant for specific needs : ₹ 7,100 crores over the award period for State specific needs.

Altogether, the 12th FC awarded

Tax Devolution : ₹ 6,13,112 crores (81%)

Grants-in-aid : ₹ 1,42,640 crores (19%)

Total : ₹ 7,55,752 crores (100%)

Local Bodies – Panchayats and Municipalities

For the first time, it was the 11th FC which was required to suggest "the measures needed to augment the Consolidated Fund of a State to supplement the financial resources of Panchayats and Municipalities. The 11th FC recommended a number of measures which could be taken by State Governments and local bodies for augmenting the consolidated fund of the States to supplement the resources of local bodies. These measures included assignment of land tax, profession tax, surcharges/cesses on State taxes for improving the basic civic services and taking up schemes of social and economic development. At the same time, the 11th FC also noted the additional burden the States had to bear while implementing the recommendations of State Finance Commissions (SFCs). Accordingly, the 11th FC awarded *ad hoc* annual grant of ₹ 1,000 crores for Panchayats and ₹ 400 crores for municipalties – a total of ₹ 7,000 crores for the period 2000-05.

The 12th FC kept the above points and, ascertained the views of State Governments, of the Ministry of Rural Development, and of the Ministry of Urban Development and Poverty Alleviation, of the Government of India. The Commission felt that there was a case to augment the consolidated fund of the states through additional grants from the Centre, keeping in view the special circumstances of the states. Besides, there was a clear need to provide an impetus to the decentralization process. Accordingly, the Commission recommended a sum of ₹ 25,000 crores for the award period, (2005-10) as grant-in-aid to supplement the resources of municipalities and the panchayats.

The 12th FC argued that the urban local bodies (Municipalities) had a greater access to tax and non-tax resources of their own, and therefore, it were the panchayats which required substantial support. According to the 2001

1. *Report of the Twelfth Finance Commission* (2005-10), P. 130

2 Report of the *Twelfth Finance Commission*, 2005-10, p. 133.

Census Report, urban population in India constituted 26.8 percent of the total population. Hence, the 12th FC's grant-in-aid was based on the ratio of 20:80. That is, ₹ 5,000 crores (20 percent of the grant) would go to municipalities and ₹ 20,000 crores (80 percent) would go to Panchayats. In this connection, the 12th FC had also recommended separately grants for maintenance of roads and buildings which include the roads maintained by the municipalities. The municipalities would thus be major beneficiaries.

The criteria used for inter-State distribution of the above grants were as follows:

Criterion	*Weight (percent)*
1. Population	40
2. Geographical area	10
3. Distance from highest per capita income	20
4. Index of deprivation	10
5. Revenue effort	20
Total	**100**

The 12th Commission has emphasized that, of the grants allocated to panchayats, priority should be given to expenditure on the operation and maintenance costs (O & M) of water supply and sanitation and at least 50 percent of the grants provided to each State for the urban local bodies should be earmarked for the scheme of solid waste management. Besides, expenditure on the O & M costs of water supply and sanitation in rural areas and on the scheme of solid waste management in panchayats and urban local bodies should, out of the grants allotted should give high priority to expenditure on data base and maintenance of account.

Financing of Calamity Relief Expenditure

The 12th FC was asked to review the present arrangements as regards financing of disaster management with reference to the National Calamity Relief Fund (CRF) and the National Calamity Contingency Fund (NCCF) and make appropriate recommendations. After a careful study of the present system of disaster management, the 12th FC recommended the continuance of the scheme of CRF in its present form with contributions from the Centre and the States in the ratio of 75:25. The Commission fixed the size of the CRF for the award period, 2005-10 at ₹ 21,333 crores, of which the Centre's share would be ₹ 16,000 crores and the balance would be the share of the States (₹ 5,333 crores).

The 12th FC has also recommended continuance of the scheme of NCCF in its present form with core corpus of ₹ 500 crores. The outgo from the NCCF may continue to be replenished by way of collection of National Calamity Contingent Duty and levy of special surcharges.

Debt Relief to States

The 12th FC was asked to assess the debt position of the States as at the end of March 2004 and suggest such corrective measures, consistent with macro-economic stability and debt sustainability. The Commission estimated that at the end of March2004, the public debt of the States would amount to ₹ 7,83,310 crores. The Commission found that the previous FCs had given debt relief in various ways: -

(a) Consolidation of loans on common terms and with reduction in the interest rates in the future:

(b) Revision in the terms of repayment of loans without lowering of interest rates;

(c) Moratorium on interest payments and repayment of principal due in certain years;

(d) Write-off of loans or repayments falling due during a specified period; and

(e) Introduction of schemes of debt relief linked to fiscal performance, etc.

The 12th FC considered all the above measures taken by previous commissions and also the suggestions made by the State Governments in their memoranda in regard to debt relief – pleading, among other things, bringing down the interest rates on Central loans, waiver of interest, consolidation of loans, writing-off of principal, rescheduling and moratorium on repayment. The 12th FC recommended the following scheme of debt relief:

(a) Rescheduling of all Central loans outstanding as on end-March 2005 into fresh loans for 20 years carrying 7.5 percent interest with effect from the year a State enacts the Fiscal Responsibility Legislation.

(b) A debt write-off linked to reduction in revenue deficit of every State. The quantum of write-off of repayment would be linked to the absolute amount by which the revenue deficit is reduced in each successive year during the award period.

The twin objectives of the 12th FC, were to give debt relief to the States and urge them to reduce and completely eliminate revenue deficit.

Sharing of Profit Petroleum

The 12th FC was asked to recommend on: "whether non-tax income of profit petroleum to the Union, arising out of contractual provisions, should be shared with the States from where the mineral oils are produced, and if so, to what extent." This, indeed was the last term of reference given to the 12th FC.

To appreciate this question of sharing of profit petroleum, we should have some idea of the background. In terms of Articles 294 and 296 of the Constitution of India, the ownership rights of all land and mineral resources located within the territory of a State rest with the State.

In recognition of this constitutional right, the Petroleum and Natural Gas Rules, 1959 (P&NGR) provide that a licence or lease in respect of any land vested in a State should be granted by the State Government (though, with the agreement of the Central Government) Under these provisions, royalty in respect of any mineral oil or minerals excavated will have to be paid to

(a) the States, where the lease has been granted by the States on on-shore areas; and

(b) the Centre, where the lease has been granted by the Centre, in the case of offshore areas.

Initially, two national oil companies operated and bore all the liability of paying royalties to the States at the rate of 20 percent cess, etc. After 1997, the Government of India auctioned exploration blocks to private companies to attract private investment in exploration and thus increase the production of oil. The new exploration licensing policy (NEPL) reduced the royalty from 20 percent to 12.5 percent, to the new private parties, cancelled cess, exempted imports from customs duties and gave 7-year tax holiday from the date of commencement of commercial production of oil.

States accepted NELP, but some States (Gujarat, Assam and Madhya Pradesh) asked the Central Government to share at least 50 percent of the profit petroleum under the production sharing contract (PSC).

It was the contention of the Ministry of Law, Government of India that the regulation and development of oil fields and mineral oil resources is a subject of the Central Government under entry 53 of the Union List of the 7th schedule and is clearly outside the purview of the States, even though the State Governments have been given the benefit of certain arrangements/ practices under P & NGR, such as a (a) the authority to grant licences, leases, etc. and (b) receive rents, fees, royalties, etc.

The 12th FC did not agree with this opinion of the Central Ministry of Law but was convinced that there could be no constitutional or legal objection, if the Central Government decided to share profit petroleum under PSCs.

The States have a very strong case on the basic issue of sharing of profit petroleum. The land and mineral resources belong to them. They have to spend on the development of infrastructure, provide essential public services and incur environmental costs in order to facilitate oil exploration and development. The States should, therefore, get a share in the profit petroleum under NELP, as the royalty has been reduced from 20 to 12.5 percent.

There are, however, some differences between States themselves on this question. The States with oil resources have demanded a share in the profit petroleum between 15 to 50 percent. Some non-oil producing States have, however, suggested that profit petroleum should be shared not only with the oil producing states but with all the States. In support of this point of view, they have given two interesting but relevant arguments:

(a) The profits from petroleum production – both on-shore and off-shore are in the nature of receipts under excise duties and, accordingly, should form part of the shareable pool of taxes and apportioned like all other taxes.

(b) Any profit income that accrues to the Central Government should be made a part of the total shareable pool, because profit arises from sales across the whole country and not in the States of origin alone. Therefore, profit petroleum should not be made specific to the State of origin.

After a careful analysis of all these points, the 12th FC awarded:

(i) The Centre should share profit petroleum from NELP areas with the States from where the mineral oil and mineral gas are produced and the share should be 50:50.

(ii) The revenue earned by the Central Government on contracts signed under the coal bed methane policy should also be shared with the producing states in the same manner as profit petroleum.

Conclusion

The award of the Twelfth Finance Commission has been accepted by the Government, though in some cases, the Finance Ministry has added some conditionalties – as, for example, the total share of the States in the Central Government's gross revenue *should not exceed* 38 percent. The award, broadly, was on predictable lines. In going through the whole award and the arguments given by both the Centre and the States, two important points arise which will have to be discussed and solved by future commissions:

(a) The Centre has really no important functions of law and order and nation building, but the IAS bureaucrats have taken advantage of poor ministerial material, and have managed to create, expand and multiply departments just to increase Central expenditure, even in those areas which are the constitutional functions of the States. In other words, there is a legitimate case for the reduction of the Central Government expenditure. More Central revenues can and should be transferred to the States.

(b) Just as all Central taxes are being shared with the States from the 11th FC, there is a legitimate case for the sharing of all non-tax revenues also with the States.

The attitude of the Centre as *Big Generous Brother* distributing part of the common income to the poor cousins (the states) should stop. The sooner this is done, the better.

5. CENTRE-STATE CONFLICT ON FINANCES

In the last few decades, there has always been growing conflict and tension between the Indian Union and the States in the matter of finance. This comflict has often been aggravated by political and ideological differences between the different parties governing the Centre and the States.

The framers of the Indian Constitution provided for grants and loans so that the Centre might come to the help of those States which were in difficulty and also to bring about balanced development of the different regions. The use of grants and loans in the last 40 years or so, however, has resulted in the complete domination and control of the States by the Centre and to a certain extent, even financial irresponsibility and indiscipline on the part of the States. The enormous increase in transferred resources from the Centre to the States, the phenomenal growth in loan assistance to the states and the political pressure amounting to blackmail by the Centre through the instrument of grants have frightened the States. Hence, there has been an insistent demand for a comprehensive review of Centre-State relations in general and Centre-State financial relations in particular. The J.K. Thavaraj Committee (Report of the Taxation Enquiry Committee, Kerala Government), the Rajamannar Committee on Centre-State relations appointed by the DMK Government of Tamil Nadu and the document on Centre-State relations (1978) adopted by the West Bengal cabinet led by the CPI-M United Front—all these have the same theme viz., political and financial autonomy for the States and drastic restriction of the power and financial resources of the Centre.

Responsibility and Resources of the Centre and of the States

According to the Constitution, the Centre has to concern itself with the most generalised features of the Indian economy such as the creation and maintenance of the banking system, railways and ports as well as facilities for national economic planning with the regulation and development of large-scale industries, exploitation of mineral resources, regulation of foreign trade, etc., besides, of course, the defence of the nation from foreign aggression. On the other hand, the States are concerned with important aspects of the life of the people, such as the maintenance of law and order, the construction and maintenance of irrigation, power, road transport, etc. the development of educational and health facilities, the promotion of primary sector such as agriculture, fisheries, forests and secondary sector viz., tiny, small and medium industries.

In order to carry out these responsibilities the Constitution provided for different types of financial resources. The Union is entrusted with taxes on personal incomes and profits of companies, excise duties and customs duties. In a rapidly developing economy, these are precisely the most productive taxes in the country. In the case of the States, land constitutes an important base of taxation. In a densely populated country like India, the volume of land coming under tax remains almost stationary. Therefore, land, as a source of revenue has been responsible for the inelastic nature of State revenues to a considerable extent. On the other hand, the various taxes on commodities and services like sales tax, State excise duties, duties in electricity rates, motor vehicles tax etc. can be quite productive.

Taxation of industrial and commercial properties has been the preserve of the Centre, and tremendous expansion in the base of industrial and commercial property, income and wealth as a result of economic development has been responsible for raising the financial resources of the Centre. At the same time while rapid industrial development boosted Central excise duty collection, expansion of imports pushed up customs duty collections. This seems to have given a buoyancy to the Central revenues which is not available to any tax head assigned to the States except sales tax.

The period since 1951 has witnessed an enormous expansion of financial powers of the Central Government whose dimensions have progressively increased in relation to the combined resources of all State Governments put together. For instance, the current tax revenues of the Centre have risen from ₹ 360 crores in 1950-51 to ₹ 65,000 crores in 1994-95 and to ₹ 5,48,120 crores in 2007-08 (budget) On the other hand, current tax revenues of the States (excluding transfers from the Centre) have risen from ₹ 280 crores in 1951-52 to ₹ 53,400 crores in 1994-95. and ₹ 2,57,250 crores in 2006-07 (budget). The rate of growth of revenues of the Centre is much faster as compared to that of the States. But then, the Centre has only limited functions to perform while the functions of the States are almost unlimited.

In a way, the Indian Constitution itself is responsible for the existence of a financially strong-Centre and weak-States. Until partition, there was a growing consensus in favour of the corporation tax and export duties to be included in the divisible pool. This was the case made out before the Sircar Committee known as the Expert Committee on Financial Provisions. It was partition which alerted the Constituent Assembly against possible dangers to the unity of India arising from the divisive forces. Its effect is reflected in the strong-Centre theme which runs through the Constitution. The financial provisions of the Constitution clearly reflect this strong-Centre bias.

Sources of conflict listed by the States

West Bengal, Jammu and Kashmir, Punjab, Maharashtra and Southern states have generally been very agitated over the question of state's autonomy. The Centre-State conflict on financial relations is only a part of the overall Centre-State relations and the demand for political and fiscal autonomy. The sources of conflict as listed by the states, at different times, are as follows :

(i) The basic assumption of the Constitution in favour of a strong Centre and weak and dependent states is no longer acceptable and States like West Bengal insist that a strong Centre requires equally strong and autonomous States.

(ii) The nature of functions to be performed by the States and the necessity to promote cultural, linguistic and the special conditions of each State require that States should be autonomous.

(iii) Since Independence, the Centre has been gradually extending its functions in such a way as to keep the States completely dependent on it. This process has been encouraged in the first two decades after Independence by the Congress Party which was in power both, at the Centre, and at the States. The process was further strengthened during the period of Emergency, 1975-77.

(iv) The Centre has been duplicating unnecessarily a number of departments which have no real functions to perform—i.e., education, public health, etc., which are all State subjects. There is even a move that these subjects should be put on the concurrent list.

(v) The Centre has been interfering in the affairs of the State even in the field of law and order which is purely a State subject by setting up the Central Reserve Police, the Border Security Force, the Industrial Security Force, etc.

(vi) The Centre, with too little to do, is entrusted with too much financial resources while the State Governments with so many vital functions to perform are starved of financial resources.

(vii) The financial resources of the Centre are highly elastic, while those of the States are relatively inelastic. Accordingly, the States have been forced to depend upon the Centre to a large extent for their financial requirements.

States' complaint on financial arrangements

As the share of taxes and duties was inadequate to meet the growing revenue and capital expenditure (specially before the Seventh Plan award) the States had to resort more and more to grants-in-aid and loans from the Centre. There was a growing feeling of uncertainty and indecision, loss of initiative and irritation on the part of the States. The States had become further suspicious of the behaviour and motives of the Centre on the question of raising and sharing of tax revenues with the States.

(i) The Centre had not taken sufficient initiative to impose all the taxes under Article 269 whose proceeds would go to the States.

(ii) The corporation tax was excluded from the scope of sharing with the States from the very beginning. The States felt sore because their contribution to the development of the corporate sector was quite large. For example, they incurred considerable expenditure in providing the direct infrastructural facilities like power, water, raw materials, roads, lands, etc. Besides they provide considerable financial incentives for the setting up of industries. It was therefore, fair and appropriate that the States should have a share in the proceeds of the corporation tax as well.

(iii) The Central excise duties were continuously expanded by including under them a growing number of items previously taxed by the States.

(iv) The divisible pool of excise duties was limited to basic duties and additional excise duties; the special and auxiliary duties were kept out of the divisible pool. The rates of additional excise duties which had to be shared with the States were kept low, while raising steadily the rates of excise duties and of special and auxiliary duties which were not to be shared with the States or to be shared only in smaller proportions.

(v) The railway passenger tax whose proceeds were to go to the States was abolished and the Centre fixed arbitrarily a grant in lieu of railway passenger tax. This grant was much less than what the railway passenger tax would have brought to the States.

(vi) The surcharges on income tax were imposed by the Central Government but the proceeds were not shared with the States. The Central Government raised the exemption limit of income periodically and reduced the divisible pool of income tax. The Central Government, however, did not suffer much loss, as the loss was more than offset by the increase in the surcharge.

(vii) The main source of revenue of the States has been the sales tax which accounts for 60 per cent of the States' own tax revenue. The Centre has wanted to abolish the sales tax by introducing value added tax (VAT). There were also proposals to abolish octroi duties and state excises.

Further, the Planning Commission had asked the States to raise resources by enhancing electricity charges. But in the 1978-79 budget, the Centre decided to tap this source also by imposing excise duties on electricity, thus removing the scope for raising electricity tariff by the States (this was given up later). The States were thus left with no proper resources to raise their revenues. By depending upon the Centre, the States were running the risk of losing their economic independence.

While the revenues of the States are increasing only gradually, the expenses of the States are increasing at a fast rate. For instance, state plan outlays are increasing with every five year plan. Besides, the various policies of the Central Government (monetary, fiscal and general economic policies) affect the price situation in the country. Whenever there is a rise in price level, there is naturally a demand for increased D.A. from the Government and semi-government employees. Again, the Central Government appoints Central Pay Commission to revise salaries and dearness allowances of the Central Staff. The state Governments employees too demand rise in salaries and DA parallel to Central Government staff. The Central Government has vast financial resources to meet such demands, but the State Governments find it difficult to meet such periodical demands from their staff. It is important, therefore, that the Centre consults the States before agreeing to the grant of additional D.A. and also provide resources to the States for this purpose.

Too much dependence of the States on the Centre in the form of grants-in-aid and loans has had four serious adverse consequences.

(i) The Centre could be generous or mean to the different States. Some of the States have felt it humiliating to make frequent visits to New Delhi for funds.

(ii) A second difficulty is the uncertainty in the budgeting of the States. For instance, in the absence of firm commitments of the Central Government in the matter of grants-in-aid, it is difficult for the States to decide about the various projects of development they have to undertake.

(iii) That the States are not able to fulfil the various electoral promises because of inadequacy of financial resources.

(iv) Finally, most States had resorted to unauthorised overdrafts to finance plan projects.

Regional Imbalances as a source of Conflict

A serious complaint of some of the States like Kerala is about the regional imbalance in industrial development. The complaint is that the Centre has not used its fiscal dominance over States to correct regional imbalances. Nor has the Centre used other instruments at its disposal to narrow down the unevenness in regional development. In the absence of integrated approach to the development of the backward regions, location of the Central sector projects and even the location of private industries through licensing policy have not created much of an impression on the problem of regional imbalances. In fact, regional disparities have worsened during the plans. It was thought that the Planning Commission would bring about a closer economic integration of the country through rapid increase in national income, higher standards of living of the masses, reduction of inequalities between regions, expansion of agriculture, industry, power and transport. While some degree of economic development has been achieved in every direction, yet from the point of view of balanced regional development, planning may be said to be a dismal failure.

Now, with the acceleration of the planning process the responsibilities and commitments of States, have increased much more than their financial resources. The result was a kind of centralisation at the federal level bringing the economic functioning of the State Governments under Central directive and control through the mechaism of grants and loans. Correspondingly, the financial powers of the States are far too meagre in relation to their clearly defined responsibilities. It was really unfortunate that the framers of the Indian Constitution could not visualise the financial implications of large-scale programmes of planned development.

The States' demand

The Rajamannar Committee on Centre-State relations (it submitted its report in May 1971) and the West Bengal Memorandum came out with a string of suggestions and recommendations aiming at autonomy of the states, consistent with the integrity of the country. The suggestions of the West Bengal Memorandum, which revived the controversy on the question, were as follows:

(i) The powers and functions of the Centre and the States should be clearly marked and specified, and if necessary, the Constitution should be amended suitably.

(ii) The Centre's jurisdiction should be restricted to defence, foreign affairs and foreign trade, communications, currency and economic co-ordination. All other powers should be exclusively reserved for the States. There

should be no interference or control by the Centre in the exercise of its powers by the States.

(iii) The present instrument of Centre's control and interference in the affairs of the States viz., the Indian Administrative and Police Services, the Central Reserve Police, the Border Security Force, the Industrial Security Force etc., should be removed forthwith.

(iv) The Planning Commission and the National Development Council which have an important role in planning and economic co-ordination should be specifically referred to in the Constitution.

(v) 75 per cent of the central revenues should be automatically transferred by the Centre to the divisible pool of the States and the Finance Commission should have power only to recommend the principles for the distribution of this divisible pool among the States.

Other important suggestions made by the West Bengal Memorandum and the Rajamannar Committee on Centre-State relations included equal representation for all States in the Rajya Sabha, the maintenance of the special status of Kashmir in the Indian Union, the retention of English as the link language between the Centre and the States, the right to use mother tongue at all levels, industrial licensing to be vested with the States, except for large companies of national importance, inter-state water disputes to be settled by the Supreme Court, etc.

The problem of Centre-State financial relations has thus been a part of the general and more important problem of Centre-State relations. The West Bengal Memorandum would allow the Centre to perform only three or four functions and leave the rest of the functions to the States. The States would like to have a say, at least indirectly, even in the limited powers and functions of the Centre. For example, the States would like to influence the location and distribution of defence industries, the use of foreign exchange reserves, allocation for the projects of communication and also monetary and fiscal policies, etc. At the same time, the Centre should be left with only 25 per cent of the revenue raised while 75 per cent of the revenue should go to the States automatically. All these things clearly indicate that the ultimate intention was to have strong states and a weak and emaciated Centre.

There is also the fear that some of the States ideologically different from others might like to break away from the federation on some pretext or the other. The DMK ideology at one time, the Khalistan movement in Punjab and Assam agitation—all these had separatist tendencies. The supporters of strong states cite the example of USSR. It was the presence of a common political ideology and supreme Central authority which held together the culturally diverse antonomous States in the U.S.S.R. When the common political ideology and the strong Central authority disppeared, USSR disintegrated. State autonomy can thus be dangerous to the national integrity and India cannot be allowed to go the USSR way.

The argument that 'State autonomy' would liberate creative energies at present inhibited by constant central interference and domination and that state autonomy would promote rapid economic growth is highly questionable in the Indian context. It is the Centre's case that except for communist parties who are wedded to an economic ideology, other regional political parties are very parochial in their outlook. Most of them are financed by big business in industry, trade, transport, films, etc. They are corrupt to the core and destinies of these states are controlled by men, among whom some have very close links with smugglers and anti-social elements. These politicians cannot see beyond their noses and want to use state autonomy to further their selfish ends so as to remain in power. In any case there is no positive correlation between state autonomy and the rapid development of different states.

In this connection it should be emphasized that the States do already enjoy considerable autonomy. They have exclusive control over such key sectors as agriculture, irrigation and power, administration, social welfare, law and order etc. But not all States have performed these functions properly in any appreciable degree. The advanced states have continued to march ahead and the backward states have remained backward.

The States' complaint about inadequate financial resources and their demand for large taxation powers would sound more reasonable if the States had fully exploited the resources they command. They are not only reluctant to tax agricultural incomes but have been abolishing land levies despite the gaping deficits in their budgets. The financial difficulties thus arise in part from their own lack of political courage. It is also an accepted fact that State tax administration is hopelessly corrupt and inefficient. Still the Centre has been sympathetic to their pleas for assistance and their share of the divisible pool of Central taxes has progressively increased over the years.

States generally resort to alternative methods for overcoming their budgetary gaps and this was mostly done through grants-in-aid and loans from the Centre before 1967. After 1967, the non-Congress dominated States and even the Congress-controlled States were in a rebellious mood and they resorted to unauthorised overdrafts on the Reserve Bank, which they insisted should be converted into regular loans. In spite of pressure from the Reserve Bank, these over-drafts continued to create inflationary pressure in the economy and constituted serious financial indiscipline.

The inadequacy of financial resources was sought to be made up by the use of Central grants-in-aid. The grants-in-aid were also meant to help backward States to come up to the level of others. Besides grants, the States approach the Centre for loans and advances. The resources transferred from the Centre have accounted for over 45 per cent of the total expenditure of the States.

It is thus clear that the States have become increasingly dependent on the Centre for their expenditure. Such a dependence is the natural consequence of the enormous command enjoyed by the Centre over relatively larger and expanding revenue resources. The massive indebtedness of the States had led to a kind of creditor-debtor relationship between the Centre and the States breeding a sense of irresponsibility among the borrowing States. In a sense, the position of dependence on the Centre has suited the States well. It has enabled them to avoid taking unpopular tax measures and to attribute their inefficiency and failure to the Centre.

By 1983, the Centre-State relations were almost at a breaking point—with Khalistan demand for a separate Sikh state, and the Southern States forming a regional council, and so on. It was to settle this problem once and for all that the Central Government appointed the Sarkaria Commission, with comprehensive terms of reference covering constitutional, legislative, financial and administrative aspects of Centre-State relations.

The Sarkaria Commission submitted its report to the Government in January 1988. According to the Commission, it was necessary to preserve the unity and integrity of the country and, accordingly, the Commission rejected the various suggestions made before it either to reduce the functions of the Centre or modify them. The Commission rejected the suggestion of transfer of subjects like preventive detention, education, labour and electricity to the state list or concurrent list on the ground that it would disturb the basic scheme of the Constitution. The Commission called for a process of consultation by the Centre of all concurrent subjects. It also made a strong case for inter-state councils, for the retention of National Development Council (NDC) and for activisation of zonal councils.

In the financial sphere, the Sarkaria Commission favoured the amendment of the Constitution to provide for sharing of corporation tax between the Centre and the States but rejected all other suggestions for enlarging the divisible pool. The Commission also rejected the suggestion that the devolution of funds from the Centre to the States should be automatic. The Commission recommended the setting up of expert committees to examine taxation reforms and resource mobilisation, to study in depth the agricultural income tax and to review the loan-grant pattern. The Commission accepted that the present division of functions between the Finance Commissions and the Planning Commission as reasonable and that it should continue. However, it suggested that the terms of reference of the Finance Commission should be drawn up in consultation with the State Governments. Finally, the Commission recommended legislation to levy consignment tax and constitutional amendment to enable levy of tax on advertisements in broadcasting.

The Central Government did not accept all the recommendations of the Sarkaria Commission. In any case, the Sarkaria Commission's recommendations are not the last word on the question of Centre-State relations. The question is still wide-open. However, on the question of Centre-States financial relations, the States welcomed one recommendation of the Sarkaria Commission—viz., the inclusion of corporation tax in the divisible pool. This was a longstanding demand of the States before every Finance Commission till now. The Central Government did not accept this important recommendation because of its own heavy revenue deficits in the last few years.

However the Tenth Finance Commission (1995) suggested a vertical devolution of all Central taxes. This sugestion was accepted and 80th Amendment (2000) to the Constitution was passed. The 11th and 12th Finance Commissions have given awards under which the states share a *percentage of all the tax proceeds of the Centre*. As a consequence, to a large extent, the conflict between the Centre and the States on the sharing of Central taxes has almost disappeared. However, many serious problems still exist such as sharing of river waters. The UPA Government has proposed the setting up of a new commission on the lines of Sarkaria Commission.

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CHAPTER

54

THIRTEENTH FINANCE COMMISSION (2010-15)

"The vertical and horizontal devolution should be based on the principal of equality of access to public services, irrespective of jurisdiction"

— ***Report of theThirteenth Finance Commission***

The Thirteenth Finance Commission (FC-XIII) was constituted by the President under Article 280 of the Constitution on 13 November 2007 to make its recommendations for the period 2010-15. Dr. Vijay Kelkar was appointed the Chairman of the Commission.

Terms of Reference

The Terms of Reference (ToR) of the Commission included the following:

The Commission shall make recommendations as to the following matters, namely:-

(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States which are in need of assistance by way of grants-in-aid of their revenues under article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.

Subsequently, the commission was given additional terms of reference including the mandate to review the roadmap for fiscal adjustments and suggest a suitably revised one with a view to maintaining the gains of fiscal consolidation through 2010 to 2015 particularly considering the need to bring the liabilities of the Central Government on account of oil, food and fertilizer bonds into the fiscal accounting, and the impact of various other obligations of the Central Government on the deficit targets. The TFC has since submitted its Report.

1. THE APPROACH OF THE THIRTEENTH FINANCE COMMISSION

Following the mandate under the Presidential Order indicating the terms of reference, the Thirteenth Finance Commission submitted its report on December 30, 2009. The overall approach of the commission was as follows:

(a) To foster "inclusive and green growth promoting fiscal federalism"

(b) Focus on fiscal consolidation process in a medium-term debt reduction framework. The commission observed that as against the level of 75 per cent targeted by the Twelfth Finance Commission, the combined debt-GDP ratio was 82 per cent in the terminal year (2009-10). It purposed reducing the combined debt-GDP ratio to 68 per cent by 2014-15 with the Centre's debt-GDP ratio declining to 45 per cent.

(c) The commission recommended fiscal consolidation through the elimination of revenue deficit as the long-term target for both the Centre and States. Following a design similar to that adopted by the recent Finance Commissions, the FC-XIII indicated a normative discipline for both Centre and State; with equal treatment which entailed no automatic priority for any level of Government and a focus on equalization (and not equity). The latter signaled the intent of the FC-XIII to ensure that States and local bodies have the fiscal potential to provide comparable levels of public service at reasonably comparable levels of taxation. This principle does not guarantee uniformity in public services across the country; but it addresses the fiscal requirements of each jurisdiction to enable such uniformity.

2. VERTICAL DEVOLUTION: ISSUES AND APPROACH

The Thirteenth Finance Commission Justified the existing constitutional arrangement of division of taxes between Central and the States, that many direct taxes like Income Tax are levied and collected by the Centre, but the proceeds are shared with the states. Similar tax treatment, irrespective of geographical or political consideration is the key to efficient function of the market. The vertical and horizontal devolution should be based on the principal of equality of access to public services, irrespective of jurisdiction.

Asymmetric Fiscal Arrangement at Present

TFC elaborated on the asymmetric fiscal arrangement which the constitution specifies the taxing powers of the Centre and states with respect to different sources of tax revenue. It can be argued that there is a vertical imbalance in the distribution of these taxing powers which has worsened over time, while in the total revenue expenditure there has been long term stability in the relative shares of the Centre and the states after implementation of the transfers recommended by the Finance Commission, the buoyancy of central taxes has been higher than those of the states and such a trend is expected to continue, given the nature of tax assignment to the Centre and states. Thus the commission recommended that to maintain constancy in the share of states in post-devolution total tax revenue, there is a need to increase the share of states by the margin by which the buoyancy of central tax revenue exceed the buoyancy of combined tax revenue. This implies that given the higher buoyancy of central tax revenue, share of states in total central tax revenue to be increased, so that the revenue of centre and state taxes equalises in post devolution stage.

On the expenditure side, the commission notes that the states have higher 'fixed costs' than the Centre, as reflected in their higher share of committed expenditure in total non-plan expenditure relative to the Centre. In addition, states have restrictions placed on their borrowing powers. In addition, over the period 2010-15, there is an added fiscal burden posed by the states' pay awards, following that of the Sixth Central Pay Commission (CPC). The fiscal burden of the latest round of pay awards is much higher for the states in absolute as well as relative terms.

The commission preferred to discount the projected growth rates as given to it by the Planning Commission. This implies conservative revenue buoyancy for the centre and the states. The commission notes that its fiscal correction targets are not overly ambitious, and are more likely to lead to a situation where performance is better than the promise.

Poor States Get Less Subsidies

Commission further notes that there is always a choice between delivery of public goods and services and provision of subsidies for private goods. But there is

always a need for well directed subsidies such that they reach the target group. But this always does not happen. For instance poorer states don't stand to gain from three major subsidies, viz. food, fertiliser and petroleum, as share of poorer states were found to be far lower than the national average. The reasons for this may vary across the subsidies. Food subsidies are determined inter alia by efficiency of administrative arrangements in the respective states, as well as by their fiscal capacity to provide additional subsidies. The use of fertilisers is directly linked to irrigation facilities created and the size of land holdings. Consumption of petroleum products is directly proportional to the purchasing power of citizens. This implies that poorer states tend to receive much lower share in subsidies (food, fertiliser and petroleum given by the centre. In view of the objective of inclusive growth, regressive untargeted subsidies that reduce fiscal space for key growth-promoting public investments and delivery of public goods to enhance inclusiveness are, today, a fiscal obstacle to the acceleration of India's development transformation. Therefore the commission favored a fiscal path, wherein subsidies are closely targeted.

In view of all the arguments, as given above the Thirteenth Finance Commission recommended that

1. The share of States in net proceeds of shareable Central taxes shall be 32 per cent every year for the period of the award.
2. Revenue accruing to a State is to be protected to the levels that would have accrued to it had service tax been a part of the shareable Central taxes, if the 88th Amendment to Constitution is notified and followed up by a legislations enabling States to levy service tax.
3. Centre is to review the levy of ceases and surcharges with a view to reducing their share in its gross tax revenue.
4. Future fiscal roadmap should be designed in such a manner that subsidies are closely targeted. Public spending on subsidies that detract from inclusive growth should be discouraged.

3. HORIZONTAL DEVOLUTION: ISSUES AND APPROACH

The commission noted that the previous finance commissions have identified for major issues which are needed to the addressed. First, the fiscal needs vary from state to state, as they are at different stages of the development transformation. Some times aggregate state level development indicators do not capture the fiscal needs as there are variations even at district level. Second, fiscal capacity which is measured by the revenue base available to each state – varies. Third, cost of providing similar levels of public goods and services may also vary from state to state due to historical circumstances, adverse physical geography, sparse terrain, or geopolitical constraints to development. To some extent, the definition of some states as 'special category states' addresses this issue. But greater attention is needed to be paid to such factors. Fourth, commission highlighted the endeavor of previous finance commissions in rewarding the efficiency in public management, fiscal effort and outcomes. The commission notes that the adoption of fiscal responsibility legislation after the report of Twelfth Finance Commission has improved the fiscal health of many states. The Thirteenth Finance Commission favored to build upon this effort and incentivising improved efficiency in public expenditure management and revenue effort.

In horizontal devolution of resource transfers the commission clearly stated that it is concerned with *equalisation, not equity,* (italics added) it says at it is both feasible and possible to address efficiency and fiscal equalisation, using both instruments available to the commission, viz. grants and devolution. The Commission recommended that due weight be given to considerations of efficiency and performance in its overall design. In other words it implies that the states which do not respond to incentives as designed by the commission stand to lose and those who do respond stand to gain in terms of their share in total revenue. Giving effects to its thinking on horizontal devolution, the Thirteenth Finance Commission adopted the following criteria and weights for *inter se* determination of shares of states.

Table 1 : Criteria and Weights For Determining The Relative Share of States

Criteria	*Weight %*
1. Population	25.00
2. Fiscal Capacity Distance	47.50
3. Area	10.00
4. Fiscal Discipline	17.50
Total	**100.00**

Thirteenth Finance Commission apart from making recommendations about vertical and horizontal devolution of resources between union and state government made a few other recommendations as follows:

Table 2 : Relative Share of Different Heads in Tenth to Thirteenth Finance Commission

Total Tranfer	Tenth Finance Commission Amount (₹ crores)	% of Total	Eleventh Finance Commission Amount (₹ crores)	% of Total	Twelfth Finance Commission Amount (₹ crores)	% of Total	Thirteenth Finance Commission Amount (₹ crores)	% of Total
1. Shares in Central Taxes and duties	2,06,343	91	3,76,318	86.5	6,13,112	81.1	14,48,096	84.8
2. Grants-in -aid	20,300	9	58,587	13.5	1,42,640	18.9	2,58,571	15.2
of which								
(a) Local Bodies	5,381	2.4	10,000	2.3	25,000	3.3	87,519	5.1
(b) Panchayats			8,000	1.8				
(c) Municipalities			2,000	0.5				
Total (1 + 2)	**2,26,643**	**100**	**4,34,905**	**100**	**7,55,752**	**100**	**17,06,676**	**100**

Source : Reports of Tenth, Eleventh, Twelfth and Thirteenth Finance Commissions.

Grants-in-aid

A total sum of ₹ 2,58,571 crore has been recommended for the award period as grants-in-aid to States. It is important to note that a total of 1,42,640 crore was recommended as grants-in-aid by Twelfth Finance Commission. This means a big jump in grants-in-aid recommended by the Finance Commission. But we find a decline in terms of percentage of grants-in-aid in total transfers from Center to States recommended by the Finance Commission from 18.9 Percent to 15.2 Percent.

- State Governments are to be eligible for the general performance and special area performance grants only if they comply with the prescribed stipulation in terms of grants to local bodies.
- The National Calamity Contingency Fund (NCCF) should be merged with the National Disaster Response Fund (NDRF) and the Calamity Relief Fund (CRF) with the State Disaster Response Funds (SDRFs) of the respective States.
- A total non-Plan revenue grant of ₹ 51,800 crore is recommended over the award period for eight States. A performance grant of ₹ 1500 crore is recommended for three special category States that have graduated from a non-Plan revenue deficit situation.
- An amount of ₹ 24,068 crore has been recommended as grant for elementary education.
- An amount of ₹ 27,945 crore has been recommended for State-specific needs.
- Amounts of ₹ 5,000 crore each as forest, renewable energy and water sector-management grants have been recommended.

Local Bodies – Panchayats and Muncipalities

Thirteenth Finance Commission provided ₹87,519 crores as grants for local bodies. It is significant that out of total transfers from center to states share of local bodies made a jump from 3.3 per cent by Twelfth Finance Commission to 5.1 percent by Thirteenth Finance Commission (Table 3). In absolute terms this increase seems to be much greater as total grants for local bodies have increased from ₹ 25,000 crores to ₹ 87,519 crores. This shows the importance given by the Thirteenth Finance Commission to local bodies. Another major recommendation of the commission was with regard to sharing of income from royalties received by the state government with those local bodies in whose jurisdiction such income arises. Commission also recommended for sharing of revenues of local development authorities with local bodies.

Goods and Service Tax

Thirteenth Finance Commission had to deal with a special issue and that was Goods and Service Tax (GST), which was scheduled to be implemented by October 1, 2010 (earlier it was scheduled for April 2010). The Finance Commission was entrusted with the task of facilitating transition from prevailing system of indirect taxation to a new tax named GST. Thirteenth Finance Commission recommended that both the Centre and the states should conclude a 'Grand Bargain' to implement the Model GST. The Grand Bargain comprises six elements:

(i) The design of the Model GST
(ii) The operational modalities.
(iii) The proposed agreement between the Centre and states, with contingencies for changes.
(iv) The disincentives for non-compliance are described.
(v) The implementation schedule is described.
(vi) The procedure for claiming compensation.

To facilitate and incentivise the implementation of this Grand Bargain, the commission recommended a grant of ₹50,000 crore. The grant would be used to meet the compensation claims of State Governments for revenue losses on account of implementation of GST between 2010-11 and 2014-15, consistent with the Grand Bargain. Unspent balances in this pool would be distributed amongst all the states, as per the devolution formula, on 1 January 2015. However there is a rider clause in the recommedations of the Commission – "In the unlikely event that a consensus with regard to implementing all the elements of the Grand Bargain cannot be achieved and the GST mechanism finally adopted is different from the Model GST suggested by us, this Commission recommends that this amount of ₹ 50,000 crore shall not be disbursed."

4. REVISED ROADMAP FOR FISCAL CONSOLIDATION

The Thirteenth Finance Commission has recommended fiscal consolidation through the elimination of revenue deficit as the long-term target for both the Centre and States.

Table 3 : Aggregate Position of Centre and States

(Per cent of GDP)

	2004-05	*2005-06*	*2006-07*	*2007-08 (RE)*	*2008-09 (BE)*
RD	3.6	2.6	1.2	0.6	0.4
FD	7.3	6.6	5.3	5.3	5.0
Debt	91.7	91.2	88.2	86.5	81.9

Source: Report of Thirteenth Finance Commission (Original Source: Indian Public Finance Statistics 2008-09)

Following a design similar to that adopted by the recent Finance Commissions, the Thirteenth Finance Commission indicated a normative discipline for both Centre and States; with equal treatment which entailed no automatic priority for any level of Government and a focus on equalization (and not equity). The latter signaled the intent of the Thirteenth Finance Commission to ensure that States and local bodies have the fiscal potential to provide comparable levels of public service at reasonably comparable levels of taxation. This principle does not guarantee uniformity in public services across the country; but it addresses the fiscal requirements of each jurisdiction to enable such uniformity. The Commission recommended as follows:

- The revenue deficit of the Centre needs to be progressively reduced and eliminated, followed by emergence of a revenue surplus by 2014-15.
- A target of 68 per cent of GDP for the combined debt of the Centre and states should be achieved by 2014-15. The fiscal consolidation path embodies steady reduction in the augmented debt stock of the Centre to 45 per cent of GDP by 2014-15, and of the states to less than 25 per cent of GDP, by 2014-15
- The Medium Term Fiscal Plan (MTFP) should be reformed and made a statement of commitment rather than a statement of intent. Tighter integration is required between the multi-year framework provided by MTFP and the annual budget exercise.
- Along with the annual Central Budget / MTFT, some disclosures have been recommended. They include
  - (*i*) Detailed breakup of grants to states under the overall category of non-plan and plan grants.
  - (*ii*) Statement on tax expenditure to be systematised and the methodology to be made explicit.
  - (*iii*) Compliance costs of major tax proposals to be reported.
  - (*iv*) Revenue Consequences of Capital Expenditure (RCCE) to be projected in MTFP.
  - (*v*) Fiscal impact of major policy changes to be incorporated in MTFP.
  - (*vi*) Public Private Partnership (PPP) liabilities to be reported along with MTFP.
- Transfer of disinvestment receipts to the public account to be discontinued and all disinvestment receipts be maintained in the consolidated fund.
- Government of India should list all public sector enterprises that yield a lower rate of return on assets than a norm to be decided by an expert committee.
- The FRBM Act needs to specify the nature of shocks that would require a relaxation of FRBM targets.

- In case of macroeconomic shocks, instead of relaxing the states' borrowing limits and letting them borrow more, the Centre should borrow and devolve the resources using the Finance Commission tax devolution formula for inter se distribution between states.
- Structural shocks such as arrears arising out of Pay Commission awards should be avoided by, in the case of arrears, making the pay award commence from the date on which it is accepted.
- An independent review mechanism should be set-up by the Centre to evaluate its fiscal reform process. The independent review mechanism should evolve into a fiscal council with legislative backing over time.
- Given the exceptional circumstances of 2008-09 and 2009-10, the fiscal consolidation process of the states was disrupted. It is expected that states would be able to get back to their fiscal correction path by 2011-12, allowing for a year of adjustment in 2010-11.

  (*i*) States that incurred zero revenue deficits or achieved revenue surplus in 2007-08 should eliminate revenue deficit by 2011-12 and maintain revenue balance or attain a surplus thereafter. Other states should eliminate revenue deficit by 2014-15.

  (*ii*) The General Category States that attained a zero revenue deficit or a revenue surplus in 2007-08 should achieve a fiscal deficit of 3 per cent of Gross State Domestic Product (GDSP) by 2011-12 and maintain such thereafter. Other general category states need to achieve 3 per cent fiscal deficit by 2013-14.

  (*iii*) All special category states with base fiscal deficit of less than 3 per cent of GSDP in 2007-08 could incur a fiscal deficit of 3 per cent in 2011-12 and maintain it thereafter. Manipur, Nagaland, Sikkim and Uttarakhand to reduce their fiscal deficit to 3 per cent of GSDP by 2013-14.

  (*iv*) Jammu & Kashmir and Mizoram should limit their fiscal deficit to 3 per cent of GSDP by 2014-15.

- States should amend/ enact FRBM Acts to build in the fiscal reform path worked out. State-specific grants recommended for a state should be released upon compliance.
- Independent review/ monitoring mechanism under the FRBM Acts should be set up by states.
- Borrowing limits for states to be worked out by Ministry of Finance using the fiscal reform path, thus acting as an enforcement mechanism for fiscal correction by states.
- Loans from Government of India to states and administered by ministries/ department other than Ministry of Finance, outstanding as at the end of 2009-10, to be written off, subject to conditions prescribed.

5. ASSESSMENT OF THE THIRTEENTH FINANCE COMMISSION REPORT

Vertical Devolution: Increase in the overall share of the States from Central revenues

Thirteenth Finance Commission recommended that the share of States in net proceeds of shareable Central taxes shall be 32 per cent every year for the period of the award. It has also recommended for greater grants-in-aid to states. In all States will get 136 percent higher amount in comparison with Twelfth Finance Commission. This has been due to increase in the expected revenue of the Centre and secondly due to increase in the share of states as recommended by Thirteenth Finance Commission. In comparison to the indicative ceiling of 38 percent by Twelfth Finance Commission, Thirteenth Finance Commission recommended for indicative ceiling at 39.5 percent of gross revenue receipts of the centre as overall transfers to states on revenue account.

Therefore one may conclude that with regard to vertical devolution Thirteenth Finance Commission has done better by granting more revenue transfer to the states.

Table 4 : Share of States in Taxes in 11th, 12th and 13th Finance Commission

States	*11th Finance Commission*	*12th Finance 1Commission*	*13thFinance Commission*
Andhra Pradesh	7.701	7.356	6.948
Arunachal Pradesh	0.244	0.288	0.328
Assam	3.285	3.235	3.634
Bihar	14.598	11.028	10.934
Chhattisgarh	0.000	2.654	2.474
Goa	0.206	0.259	0.266
Gujarat	2.821	3.569	3.046
Haryana	0.944	1.075	1.050
Himachal Pardesh	0.683	0.522	0.782
Jammu & Kashmir	1.290	1.297	1.394
Jharkhand	0.000	3.361	2.806
Karnataka	4.930	4.459	4.335
Kerala	3.057	2.665	2.345
Madhya Pradesh	8.838	6.711	7.131
Maharashtra	4.632	4.997	5.207
Manipur	0.366	0.362	0.452
Meghalaya	0.342	0.371	0.409
Mizoram	0.198	0.239	0.269
Nagaland	0.220	0.263	0.314
Orissa	5.056	5.161	4.787
Punjab	1.147	1.299	1.391
Rajasthan	5.473	5.609	5.862
Sikkim	0.184	0.227	0.239
Tamil Nadu	5.385	5.305	4.977
Tripura	0.487	0.428	0.512
Uttar Pradesh	0.000	19.264	19.708
Uttarakhand	19.798	0.939	1.122
West Bengal	8.115	7.057	7.276
All States	**100.000**	**100.000**	**100.000**

Source : Report of Thirteenth Finance Commission
(Original Source : Indian Public Finance Statistics 2008-09)

Table 5 : Share of States in Central Taxes & Duties and Grants-in-aid

States	*Share in Central Taxes & Duties*	*% of Total*	*Total Grants-in-aid*	*% of*	*Total Transfers (col.2 + col.4)*	*% of Total*
1	2	3	4	5	6	7
1. Andhra Pradesh	100616.0	6.948	13532.3	5.233	114148.3	6.688
2. Arunachal Pradesh	4755.6	0.328	4348.2	1.682	9103.8	0.533
3. Assam	52620.6	3.634	5215.1	2.017	57832.7	3.389
4. Bihar	158341.2	10.934	14602.8	5.647	172944.1	10.133
5. Chhattisgarh	35825.2	2.474	6175.5	2.388	42000.7	2.461
6. Goa	3857.8	0.266	516.2	0.200	4374.0	0.256
7. Gujarat	44107.1	3.046	9682.9	3.745	53789.9	3.152
8. Haryana	15199.5	1.050	4270.8	1.652	19470.3	1.141
9. Himachal Pradesh	11327.3	0.782	10364.4	4.008	21691.6	1.271
10. Jammu & Kashmir	20182.7	1.394	20255.9	7.833	40438.7	2.369
11. Jharkhand	40640.3	2.806	7238.4	2.799	47878.6	2.805
12. Karnataka	62774.9	4.335	11601.4	4.487	74376.3	4.358
13. Kerala	33954.3	2.345	6371.5	2.464	40325.8	2.363
14. Madhya Pradesh	103268.9	7.131	13324.5	5.153	116593.4	6.832
15. Maharashtra	75406.9	5.207	16302.8	6.305	91709.8	5.374
16. Manipur	6541.2	0.452	7026.3	2.717	13567.5	0.795
17. Meghalaya	5918.5	0.409	3923.9	1.517	9842.4	0.577
18. Mizoram	3901.3	0.269	4904.0	1.897	8805.3	0.516
19. Nagaland	4552.9	0.314	9191.3	3.555	13744.2	0.805
20. Orissa	69316.1	4.787	9658.8	3.735	78974.9	4.627
21. Punjab	20146.4	1.391	5540.3	2.143	25686.6	1.505
22. Rajasthan	84892.2	5.862	12949.8	5.008	97842.0	5.733
23. Sikkim	3466.8	0.239	1058.8	0.409	4525.7	0.265
24. Tamil Nadu	72070.4	4.977	11366.9	4.396	83437.3	4.889
25. Tripura	7411.5	0.512	5716.1	2.211	13127.6	0.769
26. Uttar Pradesh	285397.1	19.708	26742.9	10.342	312140.0	18.289
27. Uttarakhand	16245.1	1.122	4063.0	1.571	20308.1	1.190
28. West Bengal	105358.6	7.276	12638.7	4.888	11997.2	0.703
Total	**1448096.0**	**100.000**	**258581.0**	**100.000**	**1706676.0**	**100.000**

Source: Report of Thirteenth Finance Commission

Table 6 : Criteria and Weights for determining the Relative Share of States in Taxes and Duties

	Tenth Finance Commission	*Eleventh Finance Commission*	*Twelfths Finance Commission*	*Thirteenth Finance Commission*
1. Population	20%	10.00%	25.00	25.00
2. Distance of per capita income of the stae from that of the State having highest per capita income	60%	62.50%	50.00	
3. Fiscal Capacity Distance				47.50
4. Area	5%	7.50%	10.00	10.00
5. Index of Infrastructure	5%	7.50%		
6. Tax effort	10%	5.00%	7.50	
7. Fiscal Discipline	-	7.50%	7.50	17.5
Total	100.00	100.00	100.00	100.00

Source: Report of Tenth, Eleventh, Twelfth &Thirteenth Finance Commission (Original Source: Indian Public Finance Statistics 2008-09)

Horizontal Devolution: A Major bane of Contention

According to the basic spirit of the Constitution, Finance Commission is supposed to make recommendations in such a manner that devolution of taxes and grants in aid tend to reduce the prevailing disparities among different states by allocating more resources for the development of less privileged and underdeveloped states. But as far as share of respective states in overall devolution of union taxes is concerned, the 13th Finance Commission's recommendations do not seem to have followed that spirit of the constitution. For example, for Orissa the allocation was 5.2 per cent as per Twelfth Finance Commission award, was reduced to 4.8 per cent by 13th Finance Commission, i.e. a loss of 8 percent. It also means that in the year 2010-11 Orissa would be getting Rs 798 crore less as per Budget Estimates for 2010-11 and in the five year period for which 13th Finance commission is operative it would be at loss of about ₹ 5,000 crore. It is important to note that in terms of human development Orissa is way down. Similarly, Bihar would be at loss of ₹ 2400 crore in the next 5 years and even smaller but underdeveloped states like Chhattisgarh and Jharkhand will also bear loss respectively of ₹ 3000 and ₹ 10,000 crore. Though West Bengal has been allocated a little more than12th Finance Commission, but it is still at loss of 10 percent as compared to Eleventh Finance Commission. It is obvious that smaller devolution would adversely affect the development efforts of these States. Similarly, the important thing is that many States such as Maharashtra, Punjab etc., which are much advanced in terms of human development, have been given higher allocation than before. The rich states which were subject to loss such as Karnataka, Tamil Nadu, Gujarat, Kerala, etc., will not be harmed much because they are revenue rich states.

Basic cause of all these upheavals is the formula adopted by the 13th Finance Commission to decide the share of different states in devolution of Union Taxes. The 13th Finance Commission made radical changes in the formula for devolution such that more deprived states are put at loss and better off are given more resources. Previous Finance Commissions had given utmost importance to the state's per capita income and its gap with highest per capita income. 10th Finance Commission provided a weight of 60 percent to this factor, 11th Finance Commission 62.5 percent of and now 13th Finance has given a weight of only 47.5 percent to this factor and that too only an approximation of this factor, i.e. fiscal ability of the state.12th Finance commission had given 7.5 per cent importance to fiscal discipline and in 13th Finance Commission its importance has been enhanced to17.5 percent. It is worth noting that this factor was absent in 10th Finance Commission. Whereas the Central Government itself is not serious about fiscal discipline and its fiscal deficit had exceeded 6.7 percent of GDP and under the pretext of fiscal discipline and FRBM Act, reduction in states' share by the Finance Commission is untenable.On the one hand reducing the importance of poverty and on the other hand giving more weightage to fiscal discipline have put poorer states in loss at large. What makes the things even worse is the fact that some poor states get even lower share in grants-in-aids also. This award would make the task of reducing existing regional inequalities more difficult. Rather it may enhance these inequalities. This has been noticed in past that rich states tend to attract more investments from other parts of the country and abroad, which increase their growth potential and prospects, while the poor states remain deprived of this benefit. Now that poorer states would receive less money from the central taxes, the aspirations of the residents of those poorer states would remain unfulfilled.

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Report of the *Thirteenth Finance Commission*

CHAPTER

55

GOVERNMENT SUBSIDIES IN INDIA

Subsidies are akin to steroids as prescriptions. Lazy doctors like to administer to their ignorant patients a dose of steroids to remedy the proximate cause of illness. Steroids provide quick relief but don't promise an enduring cure.

— Kishore Jethanandanini

1. NIPFP PAPER ON SUBSIDIES (1997)

In his budget speech for 1996-97 Mr. P. Chidambaram, Finance Minister promised to bring out a discussion paper on subsidies. The Finance Minister placed before the Parliament the discussion paper entitled ***'Government Subsidies in India'*** in May 1997.

The estimation of subsidies is based on a standard classification relating to subsidies into three categories (i) Public goods, (ii) merit goods and (iii) non-merit goods.

The best examples of public goods are national defence, police, general administration. Since these services are available to all, they are normally characterised by non-rivalry and non-excludability in consumption, as observed by P. Samuelson. Since these services are available to all citizens, they do not exclude any one. Thus, such goods cannot be priced and hence are not included in the calculation of subsidies.

The second category of goods are called 'merit goods'. Examples of such goods/services are inoculation against infectious diseases, environmental protection and minimum level of education (primary education), for all. The social benefit resulting from these goods/services is much greater than the sum of private benefits to individual consumers. This is because these goods contain elements of 'externality' beneficial to the society as a whole. Other examples of merit goods are roads and bridges, flood control and research pertaining to agriculture, space, atomic energy, etc. The availability of benefits in the form of externality justifies the subsidies on these goods.

The third category of goods are non-merit goods and in their case, the benefit of subsidies accrues to the individual consumers. In case of non-merit goods, the cost of providing the commodity/service to the society is higher than the price fixed for providing it to the consumer. These subsidies result in the transfer of benefits to the individual consumer in a number of ways :

(i) Cash subsidies — Providing food or fertilisers to the consumer at prices lower than those at which the government procures the commodities.

(ii) Interest or credit subsidies relate to loans given at rates lower than market rates. This takes the form of concessional credit to small scale industries or priority sector loans to individuals to buy a taxi, an auto-rickshaw or to set up some small enterprise by buying some equipment.

(iii) Tax subsidies can be in the form of tax exemption of medical expenses, postponing collection of tax arrears.

(iv) In-kind subsidies — provision of free medical services though government dispensaries, provision of equipment to physically handicapped persons.

(v) Procurement subsidies — a good example is the purchase of foodgrains at an assured price which is higher than the prevailing market price.

(vi) Regulatory subsidies — fixation of prices of goods produced by the public sector at less than the cost with a view to providing inputs to industry or helping certain other categories of consumers. Examples are making steel, coal or other minerals available to industry, providing electricity to farmers at a rate much lower than the cost.

There is a consensus on the provision and continuance of subsidies on merit goods since the overall benefit to the society in the form of externalities is much larger. However, the provision of subsidies on non-merit goods has come in for sharp criticism since in their case, the benefits accrue to the individual while the costs are borne by the society. Moreover, in several cases, instead of the intended beneficiaries, the benefits are appropriated by better-off sections. For instance, it is alleged that benefits of the provision of cheap electric energy to farmers are, by and large, appropriated by rich and affluent farmers. Similarly, better off sections may take advantage of a generalised scheme of public distribution of foodgrains or other essential commodities.

After detailing these three categories the Discussion Paper of NIPFP concludes :

(a) Public goods like defence, general administration are not amenable to usual pricing mechanisms and therefore subsidies are not relevant for this category.

(b) Merit goods include, *inter alia*, primary education, public health, sewage and sanitation, many social welfare schemes, soil and water conservation, agricultural research, flood control and drainage, roads and bridges and scientific research. The economic case for subsidising "merit goods" is the strongest.

(c) The rest are categorised as other (non-merit) services. Some of the known subsidies like food, fertiliser and education beyond elementary level are not counted in the group of merit services. In food and fertiliser, the element of externality is limited. In such cases, justification for subsidies may have to be on grounds other than strong externality, viz., social and equity objectives. Education beyond the elementary level also falls outside the ambit of merit category.

Estimate of subsidies

The Finance Minister's estimate of subsidies is focused on budget-based subsidies. The estimation of budgetary subsidies are computed *as excess of the cost of providing a service over the recoveries from the service.* These costs have been taken as the sum of: (i) revenue expenditure on the concerned service; (ii) annual depreciation on cumulative capital expenditure for the creation of physical assets in the service; and (iii) interest costs (computed at the average rate of interest actually paid by the respective governments), of the cumulative capital expenditure, equity investment in public enterprises, and loans given for the service concerned including those to public enterprises.

While calculating subsidies in public enterprises, in some cases, recoveries were higher than the costs. Such enterprises generated surplus. The surplus of public enterprises has to be deducted from the aggregate of subsidies so as to obtain the net estimate of subsidies.

Table 1 : Finance Ministry's Estimates of Aggregate Subsidies in India : 1994-95

₹ crores

	Total Cost	*Total Receipts*	*Subsidies/Surplus*		*Recovery Rate %*
			Amount	*% of total*	
	(1)	*(2)*	*(3) = (1–2)*	*(4)*	*(5) = ((2)1×100)*
I. Centre					
a. Merit Goods/Services	7,094	171	6,923		2.41
b. Non-merit Goods/Services	41,113	4,988	36,125	38.4	12.13
c. Surplus Sectors	26,118	30,720	-4,602	-4.9	117.62
d. Non merit Subsidies (net of surplus) (b+c))	67,231	35,708	31,523	33.5	53.11
II. States					
e. Merit Goods/Services	28,567	297	28,270		1.04
f. Non-merit Goods/Services	72,772	6,752	66,020	70.3	9.28
g. Surplus Sectors	-561	2,989	-3,550	-3.8	
h. Non merit Subsidies (net of surplus) (f+g))	72,211	9,741	62,470	66.5	13.49
III. All India					
i. Merit Goods/Services	35,661	468	35,193		1.31
j. Non-merit Goods/Services	1,13,885	11,740	1,02,145	108.7	10.31
k. Surplus Sectors	25,556	33,708	-8,152	-8.7	131.90
l. Non merit Subsidies (net of surplus) (j+k))	1,39,441	45,448	93,993	100.0	32.5

Source : Government of India, Ministry of Finance, *Discussion Paper, Government Subsidies in India*, May 1997.

Table 2 : Sectorwise Estimates of Non-merit Subsidies : 1994-95

	Centre ₹ crores	*Recovery Rate*	*States[1] ₹ crores*	*Recovery Rate %*
I. Centre				
A. Social Services	**2,497**	**18.1**	**20,138**	**4.0**
(i) Education, Sports, Arts and Culture	782	0.4	10,262	1.7
(ii) Health and Family Welfare	758	2.5	4,938	1.5
(iii) Water Supply, Sanitation and Housing	523	12.3	2,790	5.2
(iv) Other Social Services	434	51.4	1,503[3]	6.6
B. Economic Services	**33,628**	**11.7**	**31,123**	**12.9**
(v) Agriculture and Allied Activities	8,214	4.5	7,925[2]	22.7
(vi) Irrigation and Flood Control	133	3.8	12,421	4.2
(vii) Power	3,929	36.8	5,957	15.0
(viii) Industries	10,878	9.0	1,959	5.9
(ix) Transport	1,486	14.9	647	39.8
(x) Other Economic Services	4,988	4.5	2,214	5.32
Total	**36,125**	**12.1**	**51,261**	**9.6**

Note : 1. Data relate to 15 selected states for 1993-94
2. Includes rural development, co-operation and special areas programmes
3. Includes ₹ 907 crores for urban development.

SOURCE : Government of India, Ministry of Finance, *Discussion Paper, Government Subsidies in India*, May 1997.

An estimate of the aggregate budget-based subsidies in India as given in table 1 reveals that

(i) Merit goods/services subsidies, both of the Centre and State governments, for 1994-95 were of the order of ₹ 35,193 crores — ₹ 6,923 crores by the Central Government and ₹ 28,270 crores by the State Governments.

(ii) Non-merit subsidies of the Centre and State governments, aggregated to ₹ 1,02,145 crores. Adjusting for the surplus sectors to the tune of ₹ 8,152 crores, net non-merit subsidies accounted for ₹ 93,993 crores, out of which the share of the Central Government was ₹ 31,523 crores (33.5% of the total) and that of the State Governments was ₹ 62,470 crores (66.5% of the total).

(iii) The recovery rate in case of the Centre was 12.1 per cent for non-merit goods/services and that of the State Governments was 9.3 per cent. At the aggregate level, the recovery rate was 10.3 per cent.

(iv) Non-merit subsidies were 10.71 per cent of GDP and merit goods subsidies were 3.69 per cent of GDP. Subsidies on all services were 14.40 per cent of GDP.

Break-up of subsidies into social services and economic services reveals that

(i) At the level of the Centre, economic services dominate accounting for ₹ 33,628 crores i.e., nearly 93 per cent of total subsidies provided by the Centre and social services merely account of ₹ 2,497 crores i.e., 7 per cent. The recovery rate of economic services was 11.7 per cent and that of social services was 18.1 per cent.

The major beneficiaries of the Central subsidies are industries (₹ 10,878 crores), agriculture (₹ 8,214 crores), and power (₹ 3,929 crores).

(ii) At the level of the States, social services account for about 39 per cent of total subsidies and the economic services for about 61 per cent. Since education, health, water supply and sanitation are primarily the responsibility of the states, the level of subsidies is much higher in the social sector. In economic services, irrigation is the major component accounting for a subsidy of ₹ 12,421 crores, followed by agriculture and allied services (₹ 7,925 crores), and power (₹ 5,957 crores).

The recovery rate in the social services is miserably low at 4 per cent and in economic services is 12.9 per cent. Recovery rate in irrigation is as low as 4.2 per cent and in education barely 1.7 per cent.

2. REPORT OF THE CENTRAL GOVERNMENT ON SUBSIDIES IN INDIA (2004)

Finance Minister P. Chidambram presented the *Report on Central Government Subsidies in India* in December 2004. It is just coincidental that in May 1997, Mr. Chidambram had also presented the discussion paper '*Government Subsidies in India.*' The present report has a narrow focus on account of the following reasons. Firstly, it focuses on only Central Government subsidies and leaves out state Government subsidies. The earlier

Discussion Paper was thus more comprehensive. Secondly, while it gives a total estimate of explicit and implicit subsidies, it concentrates on a detailed analysis of only explicit subsidies which account for only 40 percent of total subsidies in 2003-04 and undertakes no analysis about the composition, structure and need for 60 percent implicit subsidies. Even in explicit subsidies, it makes a detailed, though very useful analysis of only three major subsidies on food, fertilizers and petroleum. With these limitations, it appears that the Report was intended to provide some suggestions for reducing only explicit subsidies for the 2005-06 budget, but did not make a penetrating analysis on the need for reducing overall subsidies, at the Central as well as the State level.

The Report classifies subsidies in two broad groups – merit and non-merit subsidies. Merit subsidies are further classified into Merit-I and Merit-II subsidies.

Merit-I : Elementary education, primary health care, prevention and control of diseases, social welfare and nutrition, soil and water conservation, ecology and environment.

Merit-II : Education (other than elementary), sports and youth services, family welfare, urban development, forestry, agricultural research and education, other agricultural programmes, special programmes for rural development, land reforms, other rural development programmes, special programmes for north-eastern areas, flood control and drainage, non-conventional energy, village and small industries, ports and light houses, roads and bridges, inland water transport, atomic energy research, space research, oceanographic research, other scientific research, census surveys and statistics, and meteorology.

Non-merit: All others.

But the classification into Merit I and Merit II loses its significances since the Report states: Subsidy reforms should aim at "limiting these two only merit I and Merit II categories while eliminating non-merit subsidies." (p.21) In case, it in intended for prioritization, even then it depends on the subjective judgment of State and Central governments. Both kinds of subsidies Merit I and Merit II are considered sacrosanct. Thus, the sub-classification into the two is of academic value.

Data provided by the Report reveals that total subsidies have grown from ₹ 36,829 crores in 1992-93 to ₹ 1,15,824 crores in 2003-04. Thus, the average annual growth rate (AGR) was 11.0 percent during the 11-year period. Out of them, explicit subsidies have increased from ₹ 11,995 crores in 1992-93 to ₹ 46,869 crores in 2003-04, indicating an annual growth rate of 13.2 percent. As a percentage of total subsidies, explicit subsidies have increased from 32.6 percent to 40.5 percent during this period. Likewise, implicit subsidies have jumped from ₹ 24,834 cores in 1992-93 to ₹ 68,955 cores in 2003-04, indicating an annual average growth rate of 9.7 percent. The share of implicit subsidies in total subsidies has, however, fallen from 67.4 percent to 59.5 percent during the period. The point which deserves attention is that the absolute size of implicit subsidies is nearly one and half times the size of explicit subsidies.

Another, interesting revelation is that in 2003-04 the share of merit subsidies in total subsidies was 42 percent and that of non-merit subsidies was 58 percent. Since subsidies are the difference between the cost of providing goods and services and the receipts obtained from the users, then it may be noted that in merit goods, the recovery rate is only 0.9 percent and in non-merit goods, it is 47.3 percent. As a policy prescription, there is a need to gradually increase the recovery rate in non-merit goods to reduce the huge outgo in the form of subsidies to this sector, but this is again a political decision that coalition government which have been in power during the last 15 years in India are unable to take due to various kinds of political pressures from different sectors of the population.

Table 3. Break-up of Subsidies into Explicit and Implicit Subsidies for Selected Years

	Total Subsidies (₹ crore)	*Explicit Subsidies (₹ crore)*	*Implicit Subsidies (₹ crore)*	*Relative Share (%)*	
				Explicit Subsidies	*Implicit subsidies*
1992-93	36,829	11,995	24,834	32.6	67.4
1994-95	43,089	12,932	30,157	30.0	70.0
1995-96	42,941	13,372	29,569	31.1	68.9
1996-97	47,781	16,364	31,417	34.2	65.8
1998-99	79,828	24,786	55,042	31.1	68.9
2002-03	1,04,913	45,189	59,724	43.1	56.9
2003-04	1,15,824	46,869	68,955	40.5	59.5
Annual Average growth rate (1992-93 to 2003-04)	11.0	13.2	9.7		

Source : Compiled and computed from Table 2.1 and 2.4 of the *Report on Central Government Subsidies in India* (2004).

Table 4: Relative Importance of Different Classes of Subsidies (2003-04)

	Cost (₹ crore)			Receipts	Subsidy	Percentage of total subsidies	Recovery Rate (%)
	Current	Capital	Total	(₹ crores)	(₹ crores)		
	(1)	(2)	(3=1+2)	(4)	(5=3-4)	(6)	(7=4/3x100)
Social Services	**20,619**	**4,353**	**24,972**	**497**	**24,475**	**21.2**	**1.99**
Merit I	6,062	315	6,377	3	6374	5.5	0.04
Merit II	6,872	2,960	9,832	72	9,760	8.5	0.73
Total Merit	12,934	3,275	16,209	75	16,134	14.0	0.46
Non-Merit	7,686	1,078	8,763	422	8,341	7.3	4.82
Economic Services	**1,13,129**	**38,142**	**1,51,271**	**60,170**	**9,1101**	**78.8**	**39.78**
Merit I	398	3	401	0.0	401	0.3	0.00
Merit II	26,500	5,896	32,396	357	32,039	27.7	1.10
Total-Merit	26,898	5,899	32,797	357	32,440	28.0	1.09
Non-Merit	86,230	32,243	118,273	598,13	58,460	50.57	49.43
Total Social and Economic Services	**1,33,748**	**42,494**	**1,76,242**	**60,667**	**1,15,575**	**100.0**	**34.41**
Merit I	6,460	318	6,778	3	6,775	5.9	0.04
Merit II	33,372	8,856	42,228	429	41,799	36.1	1.02
Total-Merit	39,832	9,174	49,006	432	48,574	42.0	0.88
Non-Merit	93,916	33,320	1,27,236	60,235	67,001	58.0	47.31

Source: Compiled and computed from the *Report on Central Government Subsidies in India* (2004).

The share of social services which include education, health, family welfare, water supply and sanitation and labour and employment is only 21.2 percent in total subsidies, and the share of economic services, viz., agriculture, rural development, energy, industry and minerals, irrigation and flood control, science, technology and environment is 78.8 percent in the total subsidies. Although it is possible to reduce subsidies in social services to some extent by raising recovery rates in university and higher education and to some extent in some unnecessary youth and welfare programmes, but this shall have to be compensated by increasing subsidies in compulsory elementary education and expanding public health services for the poor. In short, the scope for reducing subsidies in social services in practically negligible.

There is, however, enough scope for reducing subsidies in economic services. For instance, in agriculture and rural development activities, subsidies of the order of ₹ 50,579 cores were provided in 2003-04, but recovery rate was barely 1.3 percent. Similarly, in coal and lignite which is a non-merit good, the recovery rate is only 3.3 percent. Another big area for reducing subsidies is industry and minerals which receives a subsidy of ₹ 29,532 crores and the recovery rate is only 6 percent. Besides bringing about an overall increase in recovery rate, there is a need to give pointed attention to reducing subsidies in agriculture and rural development, coal and lignite and industry and minerals. But the farm lobbies on the one hand and industrial lobbies on the other, besides the coal mafia would put up resistance. Again, the decisions have to be taken at the political level.

Table 5: Central Government Subsidies (2003-04)

	Cost ₹ crores	Subsidy ₹ crores	Recovery Rate (%)	Subsidies as percentage of	
				Revenue Receipts	GDP
A. Social Services (a+b)	**24,972**	**24,475**	**1.99**	**9.30**	**0.88**
(a) Merit	16,209	8,763	16,134	8,341	0.46
(b) Non-merit	4.82	6.13	3.17	0.58	0.30
B. Economic Services (c+d)	**1,51,519**	**91,350**	**39.71**	**34.73**	**3.30**
(c) Merit	32,797	1,18,722	32,440	58,910	1.09
(d) Non-merit	50.38	12.33	22.40	1.17	2.13
C. Total (A+B)	**1,76,491**	**1,15,824**	**34.37**	**44.04**	**4.18**
(e) Merit (a+c)	49,006	1,27,485	48,574	67,250	0.88
(f) Non-merit (b+d)	47.25	18.47	25.57	1.75	2.43

Note: Memo-items for 2003-04 in ₹ crores GDP = 27,72,194 Revenue Receipts: 2,63,027
Source: Ministry of Finance, Government of India, *Central Government Subsidies in India* (2004).

TABLE 6. *Explicit Subsidies in Central Budget*

Year	Food	Fertilizer	Petroleum	Import	Railways	Interest	Others	Total	Total as %age of GDP
1990-91	2,450	4,389		2,742	283	379	1,915	12,158	2.1
1991-92	2,850	5,185		1,758	312	316	1,832	12,253	1.9
1992-93	2,800	5,796		818	353	113	2,115	11,995	1.6
1993-94	5,537	4,512		665	412	113	1,393	12,682	1.5
1994-95	5,100	5,769		658	420	76	909	12,932	1.3
1995-96	5,377	6,735		318	388	34	520	13,372	1.1
1996-97	6,066	7,578		397	468	1,222	633	16,364	1.2
1997-98	7,900	9,918		429	536	78	644	19,505	1.3
1998-99	9,100	11,596		574	602	1,434	1,480	24,786	1.4
1999-00	9,434	13,244		520	685	1,371	438	25,692	1.3
2000-01	12,060	13,800		621	812	111	867	28,271	1.4
2001-02	17,499	12,595		616	896	210	906	32,722	1.4
	(53.5)	(38.5)		(1.9)	(2.7)	(0.6)	(2.8)	(100.0)	
2008-09	43,751	76,602	2,852	–	2,346	3,492	3,009	1,32,054	2.5
2009-10	58,443	61,267	14,951	198	NA	2,957	2,958	1,41,351	2.3
2010-11 (Actual)	63,844	62,301	38,371	NA	NA	4,680	4,224	1,73,420	2.3
2011-12 (RE)	72,823	67,199	68,481	NA	NA	5,791	2,003	2,16,297	
2012-13 (BE)	75000	60974	43580	NA	NA	7,968	2,493	1,90,015	NA

Note: **1.** Others include grants to NAFED, debt relief and import subsidies on pulses and edible oils. to farmers and some other minor subsidies.

2. Figure in brackets indicate percentage of a particular subsidy to total in the row.

3. Data on Explicit subsidies include subsidy to railways also upto 2001-02.

SOURCE: Compiled and computed from *Report of Central Government Subsidies in India (2004)* of the Ministry of Finance, Union Budget 2010-11.

Let us examine the issues at the level of the Central Government. Of the total Central Government subsidies in 2012-13 of the order of ₹ 1,90,015 crores, food subsidy accounts for ₹ 75,000 crores (39.5%), fertilizer subsidy ₹ 60,974 crores (32.1%) and petroleum subsidy ₹ 43,580 crores (22.9%). Taking food, fertilizer and petroleum, these three subsidies account for 94.5 percent of the total explicit subsidies. Other Central Government subsidies on Railways, interest subsidy etc. account for barely 5.5 percent. Obviously, if explicit subsidies have to be reduced, then steps have to he taken to limit these three subsidies.

Food subsidy

Food subsidy in India comprises of three components: (i) subsidies to farmers through support prices, (ii) subsidies to consumers through public distribution system, and (iii) subsidies to the Food Corporation of India (FCI) in its purchase and maintenance of buffer stocks. Data reveal that during 1997-98 and 2003-04, the Central issue price of rice was increased from ₹ 350 per quintal to ₹ 565 per quintal – an increase by 61.4 percent and that of wheat was increased from ₹ 250 per quintal to ₹ 415 per quintal – an increase by 66 percent. However, the consumers price index for agricultural labourers (CPIAL) increased by only 25.8 percent during this period. The purpose of raising the issue price at a relatively higher rate than the rise in CPIAL was to subsidize the farmers to keep foodgrains production at a comfortable level.

Since the FCI continues to purchase foodgrains without any limit, this has resulted in the creation of buffer stocks in FCI godowns far in excess of the prescribed minimum norms. Food stock reached a peak of 63 million tonnes in July 2002, more than 2.5 times the norm of 24 million tonnes. By April 2004, the stocks were brought down to 20 million tonnes, not by increasing PDS offtake of foodgrains, but by exporting foodgrains at near BPL prices. The cost of handling and carrying costs of foodgrains by the FCI over and above the minimum norm is met by the subsidy to FCI. Since FCI operations are concentrated only in five states, viz., Punjab, Haryana, Western UP, Andhra Pradesh and Chhattisgarh, the entire subsidy is available to farmers in these states only. Moreover, since the Minimum Support Price (MSP) is limited to only two crops, rice and wheat, this has distorted the cropping pattern in favour of these two foodgrains.

The Report has suggested the following policy reforms:

(i). Minimum Support Price (MSP) should correspond to CACP-determined C2 cost, which includes all cash costs and the imputed value of family labour.

(ii) Before every sowing season, food procurement targets should be fixed on the basis of norms and a margin of error of about 10 percent. FCI should suspend puchase of operations once the targets are achieved.

(iii) A system of price insurance, similar to Farm Income Insurance Program introduced recently on a pilot basis, may be developed.

(iv) FCI should include a greater number of states in their price-support operations.

(v) In order to enforce efficiency, the reimbursement to FCI should be on the basis of normative unit costs and actually involved quantity, instead of reimbursement on actual basis.

(vi) To improve PDS penetration and reduce leakages, the Government can introduce the system of food coupons for the poor. A uniform PDS price will be fixed for APL and BPL facilities, but the poor can buy foodgrains partly with coupons and partly with cash. Since the poor cannot afford monthly procurement of foodgrains in one go, the PDS purchases should be allowed only on a weekly basis. Restricting monthly bulk purchases at PDS will discourage the not-so-needy from PDS outlets. This will help self- targeting of PDS.

All these measures appear to be good intentioned. But the major problem relates to their implementation. It is said that habits die hard and hardened habits are still difficult to break. For all these years, the State has been succumbing to farm lobby pressures, thereby responding by raising the minimum support price as also undertaking unlimited procurement. With limiting PDS operations to only five states, a huge buffer stock surplus was created which the state frittered away in exports at nearly BPL prices. Now on the one hand, a proposal is made to extend procurement to more states, and on the other, to limit procurement to the procurement target fixed in the beginning of the agricultural season, appears to be a non-feasible proposition. It would have been better if the present practice of procuring foodgrains by FCI had been continued and the Government should resist further increase in MSP beyond the increase in CPIAL. At the same time, the surplus in FCI godowns should be used to guarantee employment to all unemployed by extending the provisions of the Employment Guarantee Act. Wages can be paid partly in cash and partly in kind – foodgrains. This will be a more practical way of converting food subsidy into employment. The Government will earn the goodwill of farmers as well as unemployed – landless labourers, marginal farmers, and other semi-literates in rural areas.

Fertilizer Subsidy

Fertilizer subsidy which was ₹ 6,735 crores in 1995-96 shot up to Rs. 13,800 crores in 2000-01 – more than double the level during the five year period. Thereafter, it slightly declined and was around ₹ 12,000 crores in 2003-04. As a proportion of GDP, fertilizer subsidy which was only 0.23 percent in the early-1980s increased to a peak of 0.93 percent in 1989-90 and thereafter, it started to decline. It was barely 0.53 percent in 1993-94. In the subsequent period, reversal of trend occurred, it reached a level of 0.68 percent in 1999-00, but had declined since then to an estimated level of 0.43 percent in 2003-04. In 2010-11 (BE) fertilizer subsidy has been kept at ₹ 49,981 crores.

Fertilizer subsidy is the difference between the retention price of fertilizers and the price at which fertilizers are made available to consumers. The difference is paid to industry as subsidy. A serious attempt was made by the Government to reform the Retention Price Scheme (RPS) so as to rationalize fertilizer subsidies. Government decontrolled the import of phosphorus and potassium fertilizers and provided a flat-rate concession on their imports. But urea imports continued to be restricted and canalized. In 2000, on the recommendation of Expenditure Reform Commission (ERC) a group-concession rate scheme was introduced on 1st April 2000. ERC recommended phasing out of the unit-wise RPS in stages over a period of six years.

Studies have revealed that overall, for the entire period of 1981-82 to 2002-03, the average share of farmers in fertilizer subsidy was 62 percent and that of industry was 38 percent. Any scheme of rationalization of fertilizer subsidy depends on two factors: (i) efficiency of domestic fertilizer industry and the domestic cost of production, and (ii) the international price of urea. In the event of opening up of fertilizer sector imports, the gas-based plants would survive, whereas others, particularly naphtha-based plants, would not. This is due to the fact that naphtha or fuel oil or low sulphur feedstock is more costly as a raw material than natural gas.

The Report suggests that there is a need to reduce the subsidy to farmers as well as industry. In the short run, the subsidy may be continued. But in the long run, the option of setting up fertilizer plants in such countries where natural gas is available in plenty may be considered. Secondly, there is a need to increase the farm-gate price of urea at regular intervals. The Report is of the opinion that the application of fertilizers is "more dependent on technological and non-price factors than on price or agro-economic variables. These factor include irrigation facilities, cropping pattern, spread of high yielding varieties (HYVs), effective fertilizer distribution and availability of credit." The Report, therefore, is of the view that

increase in urea prices may not translate into lower production. It recommends public investment as "an effective instrument to promote the use of fertilizers." Moreover, rationalization of urea price would have a salutary impact on balanced application of N (Nitrogen), P (Phosphate) and K (Potash).

Petroleum Subsidies

Two major components of petroleum subsidies are (a) subsidy for kerosene for domestic use and (b) LPG subsidy due to the difference between international price and the price at which it is supplied to consumers. On account of the unprecedented rise in the international prices of crude and petroleum products, there is an explicit increase in the subsidy bill in the Central Governement's budget from ₹ 5,225 crores in 2002-03 to ₹ 3,108 crores in 2010-11 (BE). Discussing the policy options, the Report mentions: "LPG subsidy benefits largely the higher expenditure groups in the urban areas, and may be regressive." (p.19) Consequently, the Government can legitimately increase the LPG prices to reduce its subsidy bill consequent upon a steep rise in petroleum crude prices world over. "With regard to kerosene, on a per capita basis, the urban areas receive a larger subsidy. The limited availability of subsidized kerosene in rural areas biases its use in favour of lighting rather than cooking. Moreover, the kerosene subsidy in rural areas is regressive as higher expenditure groups receive more subsidized kerosene than lower expenditure groups. Kerosene subsidy is prone to misutilization with about half the subsidized kerosene supplies diverted and never reaching the intended groups." (p. 19) To improve the targeting of this subsidy to the poor, the Report suggests that "coupons may be issued only to poor ration card holders with entitlement to purchase kerosene from a retailer at subsidized price." (p. 19)

The upshot of the analysis is that subsidies can be reduced if the Government has the political will to undertake hard decisions. But coalition government which try to appease various social groups find it extremely difficult to do so. There is a large gap between policy and practice. The scheme of distributing food coupons or kerosene coupons to the poor appears to be good, but the question is: Do we have an administrative system which is decidedly pro-poor? Or even if the job of distributing coupons is left to panchayats or local MLAs, shall it result in achieving the desired objective? It would be better to distribute coupons to families whose children get education in State primary schools or who avail of the facilities of primary health centres. A system of identification of poor has to be evolved, or else even the coupon method would lead to heavy misutilization. Besides this, the Government should present a discussion paper on implicit subsidies and find out mechanisms of reducing them. There is a big scope in this area.

However, enunciating The Policy of the Government, the Finance Minister in his Budget speech on February 28, 2005 mentioned: "Subsidies provide a measure of protection for poor and we shall continue to provide subsidies". Obviously, the political economy of subsidies prevents the government not to go ahead with a policy of reduction of subsidies. A blanket statement of this kind prevents even the of restricting of subsidies which benefit the better-off sections of society.

Though we find actually significant amount of subsidies per petrolem product is the recent years, but the same is not getting reflected in the budget, as this has been financed by issue of oil bonds by public sector oil companies. These bonds are supposed to the redeemed from the profits of public sector oil companies.

3. FUTURE POLICY ON SUBSIDIES

It is now really over a decade that a comprehensive paper on subsidies was presented by National Institute of Public Finance and Policy (NIPFP) in 1997. The situation has changed drastically since then and there is a need to re-examine the issue. The main reasons are :

1. Implicit subsidies in various forms are growing both at the Central and State levels. Take for instance, the large number of tax exemptions on Special Economic Zones (SEZs) granted by the Government. They imply a big loss of tax revenues. Another instance is the role of the state governments in acquiring land for SEZs and passing on to industrial houses.

West Bengal in its drive for industrialisation agreed to the following subsidies on its Singur project to the Tatas. The land at Singur has been provided by the Government to the Tatas on a 90-year lease, with no downpayment. Secondly, for the first five years, Tatas will pay ₹ 1 crore as rent and the yearly payment will increase by 25% for each year interval for five years for the next 25 years. For the next 30 years, payment will increase by 33% at a five year interval and for the final 20 years, the rent would be ₹ 20 crore per year. The West Bengal Government also agreed to provide a loan to the Tatas of ₹ 200 crores at 1 percent rate of interest while the VAT proceeds accruing from the sale of cars will be handed back to the Tatas against 1% loan for the first 10 year period. But as against this, the total compensation to the farmers will be of the order of ₹ 200 crores.

The question raised by the critics of industrialisation paradigm of development is : Are we following a policy of inclusive growth by taking away the livelihoods of farmers, sharecroppers and other associated persons

dependent on land? On the other hand, are we providing heavy subsidies of several kinds — land acquisition and development by the Government on behalf of industry, subsidised power, generous tax holidays, financial support for purchase of equipment, subsidised credit and exemption of waiver from exports etc. to industrialists.

Similarly, the state governments have been providing free or highly subsidised electricity for agriculture which benefit mainly the rich farmers.

It has been estimated that various kinds of tax exemptions have resulted in revenue foregone to the tune of ₹ 2,78,644 crores – a colossal sum indeed. The Government has been praixing the corporate sector for better tax compliance resulting in a sharp increase in corporation tax revenues, but facts as they stand, reveal that although notionally, the corporation tax rate is 33%, its effective rate is only 19%. This sharp reduction in effective rate as against the prescribed rate of 33% is the result of the plethora of exemptions granted to the corporate sector.

2. There is a need a consider the legitimacy of other subsidies as well which fall in the category of non-merit subsidies.

3. There is a tremendous change in the situation with respect to petroleum subsidy since international price of crude petroleum has crossed $ 110 per barrel. If the government provides the subsidy fully to oil companies, then the subsidy amount is likely to reach 1.5 lakh crores this years. As a consequence, the fiscal deficit could be pushed up by an additional 3.2% of GDP. The Government could partially salvage the situation by providing 50% subsidy in the form of bonds and thus, only the interest on bonds will be reflected in the budget as a cost. But when the bonds mature at a future date, their redemption will exercise pressure on the fiscal deficit.

The situation in case of fertilizer subsidies is no better. The international price of fertilizers is 4-5 times the domestic price. The likely impact of fertilizers subsidy is going to be ₹ 80,000 crores as against the provision of ₹ 31,000 crores in 2008-09 budget.

A similar situation prevails in food subsidies. The international price of foodgrains has also risen sharply. On account of shortage at home, India has decided to import one million tonne of foodgrains so that the weaker sections of society are provided foodgrains at subsidized rates. Thus, the foodgrains subsidy bill will be much higher than the provision in the 2008-09 budget of the order of ₹ 32,667 crores.

The Finance Minister made a provision of ₹ 66,537 crores in the budget for 2008-09 – for food subsidy ₹ 32,666 crores, for fertilizers ₹ 30,986 crores and for petroleum for ₹ 2,885 crores. But both national and international factors are going to jeopardise these predictions. Even by issuing bounds to some public sector companies for petroleum subsidy, the country shall be only postponing a part of the burden for future years. Despite this, experts estimate that the total subsidy on food, fertilizers and petroleum products is likely to go up to 4-5% GDP. The situation is, therefore, very grim.

But what are the policy options? Firstly, the Government has no option but to accept the subsidy on petroleum imports. It can further increase the domestic price of petroleum products. Even if this is done, it will only reduce the burden of the Government partially. The option of reducing petroleum imports is not available to the Government in view of expanding demand for petroleum due to sharp increase in the growing demand and production for automobiles — motor cycles, three wheelers and cars. Secondly, in case of food and fertilizers, the chances of charging the consumers more appear to be very bleak since the coalition government has to face the electorate in the General Election due in early 2009. Thirdly, the Government has to take a decision about the large scale exemptions granted to industry so as to enchance its revenues. But in view of the commitment made on SEZ projects, the Government requires great amount of courage to slash down exemptions.

The only policy option available with the Government is to present a comprehensive paper on all subsidies – Central as well as state levels, both implicit and explicit. It is quite possible that a national debate on the question of subsidies may result in throwing up a consensus on some short-term and some long-term options to reduce the mounting burden of subsidies.

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ABBREVIATIONS

AAI	Airport Authority of India
AAPs	Annual Action Plans
ACRS	Agricultural Credit Review Committee
ADB	Asian Development Bank
ADR	American Depository Receipts
AGMARK	Agricultural Marketing Department
AHT	Agricultural Holdings Tax
AIMO	All-India Manufacturers Organisation
AITUC	All-India Trade Union Congress
AITWF	All-India Textile Workers' Federation
AMCs	Asset Management Companies
APC	Agricultural Prices Commission
APDRP	Accelerated Power Development and Reform Programme
APDRP	Accelerated Power Development and Reform Programme
APL	Above the Poverty Line
APM	Administered Pricing Mechanism
APR	Administered Pricing Regime
ARCI	Agricultural Refinance Corporation of India
ARDC	Agricultural Refinance Development Corporation
ARDC	Agricultural Refinance Development Corporation
ARF	Assets Reconstruction Fund
ARM	Additional Resource Mobilisation
ARS	Assets Responsibility System
ASSOCHAM	Associated Chamber of Commerce and Industry
ATC	Agreement on Textiles and Clothing
ATM	Automatic Teller Machines
BCR	Balance from Current Revenues
BFAD	Brackish Water Fish Farmers' Development Agencies
BIFR	Board of Industrial and Financial Reconstruction
BIMARU	States Bihar, Madhya Pradesh, Rajasthan and U.P.
BIS	Bank of International Settlement
BMS	Bharatiya Mazdoor Sangh
BN	Bharat Nirman
BOL	Build-Own-Lease
BOOS	Build-Own - Operate System
BOP	Balance of Payment
BOT	Build-Operate and Transfer System
BPE	Bureau of Public Enterprises
BPL	Below the Poverty Line
BSE	Bombay Stock Exchange
BSNL	Bharat Sanchar Nigarm Ltd.
CAC	Capital Account Convertibility
CACP	Commission for Agricultural Costs and Prices
CAD	Command Area Development/Current Account Deficit
CADP	Command Area Development Programme
CAG	Comptroller and Auditor General
CAGR	Compound Average Growth Rate
CARC	Congress Agrarian Reforms Committee
CARDBs	Cooperative Agricultural and Rural Development Banks
CARE	Co-operative for American Relief Everywhere
CAS	Credit Authorisation Scheme
CBR	Crude Birth Rate
CCA	Culturable Command Area
CCBs	Central Cooperative Banks
CCFI	Cabinet Committee on Foreign Investment
CCI	Communications Commission of India
CCI	Competition Commission of India
CCI	Controller of Capital Issues
CCS	Cash Compensatory Support
CDS	Current Daily Status
CGS	Credit Guarantee Scheme
CHV	Community Health Volunteer
CII	Confederation of Indian Industry
CIL	Coal India Ltd.
CIRM	Central Industrial Relations Machinery
CIS	Commonwealth of Independent States
CITU	Centre of Indian Trade Unions
CKD	Completely Knocked down
CMA	Credit Monitoring Arrangement
CMIE	Centre for Monitoring Indian Economy
CMP	Coommon Minimum Programme
CNC	Computer Numerically Controlled
COFEPOSA	Conservation of Foreign Exchange and Prevention of Smuggling Activities
COPU	Committee on Public Undertakings

COR	Capital-Output Ratio
CPI	Consumer Price Index
CPI	Corruption Perception Index
CPIAL	Consumer Price Index for Agricultural Labourers
CPIIW	Consumer Price Index for Industrial Workers
CPINM	Consumer Price Index for Non-manual Employees
CPR	Couple Protection Rate
CPSEs	Central Public Sector Enterprises
CPSU	Central Public Sector Undertaking
CRAR	Capital to Risk Assets Ratio
CRISIL	Credit Rating Information Services of India Ltd.
CRR	Cash Reserve Requirements
CSEAs	Cluster Small Enterprise Associations
CSEPs	Cluster Small Enterprise Associations
CSF	Consolodated Sinking Fund
CSIR	Council of Scientific and Industrial Research
CSO	Central Statistical Organisation
CST	Central Sales Tax
CTM	Cotton Technology Mission
CWC	Central Warehousing Corporation
DCPs	District Credit Plans
DDP	Desert Development Programme
DFH	Discount and Finance House of India Ltd.
DFIs	Development Financial Institutions
DGCA	Director-General of Civil Aviation
DGCI&S	Directorate General of Commercial Intelligence and Statistics
DGET	Directorate General of Employment and Training
DGSD	Director-General of Supplies and Disposals
DIC	District Industries Centre
DICGC	Deposit Insurance and Credit Guarantee Corporation
DIR	Defence of India Rules
DIR	Differential Interest Rate
DOT	Department of Electronics
DRAP	Drought Prone Area Programme
DRDAs	District Rural Development Agencies
DRI	Differential Rate of Interest
DTEC	Direct Taxes Enquiry Committee
DTL	Demand and Time Liabilities
EAS	Employment Assurance Scheme
ECB	External Commercial Borrowing
ECM	European Common Market
EDP	Entrepreneurship Development Programme
EEC	European Economic Community
EFC	Eleventh Finance Commission
EFTA	European Free Trade Area
EGS	Employment Guarantee Scheme
EOUs	Export Oriented Units
EPCG	Export Promotion, Capital Goods
EPF	Employees Provident Fund
EPZs	Export Processing Zones/Export Promotion Zone
ERC	Expenditure Reforms Commission
ESAF	Enhanced Structural Adjustment Facility
ESCAP	Economic and Social Commission for Asia and the Pacific
EWS	Economically Weaker Sections
EXIM Bank	Export and Import Bank
EXIM Policy	Export Import Policy
FAO	Food and Agriculture Organisation
FATF	Financial Action Task Force
FCCBs	Foreign Currency Convertible Bonds
FCDs	Fully Convertible Debentures
FCI	Food Corporation of India
FCNR(B)	Foreign Currency Non-residents Accounts (Banks)
FCRCs	Foreign Controlled Rupee Companies
FDI	Foreign Direct Investment
FECs	Foreign Exchange Certificates
FEMA	Foreign Exchange Management Act
FER	Foreign Exchange Reserves
FERA	Foreign Exchange Regulation Act
FFDAs	Fish Farmers Development Agencies
FFW	Food for Work
FIB	Foreign Investment Promotion Board
FICCI	Federation of Indian Chamber of Commerce and Industry
FIIA	Foreign Investment Implementation Authority
FIIs	Foreign Institutional Investors
FIPB	Foreign Investment Promotion Board
FIPC	Foreign Investment Promotion Council
FOGS	Functioning of the GATT Systems
FRBM	Fiscal Responsibility and Budget Management
FTZ	Free Trade Zones
FWP	Food for Work Programme
GATT	General Agreement on Tariff and Trade
GCA	General Currency Area

GCF	Gross Capital Formation
GDCF	Gross Domestic Capital Formation
GDI	Gender related Development Index
GDP	Gross Domestic Product
GDRs	Global Depository Receipts
GDS	Gross Domestic Saving
GEF	Global Environment Fund
GFCF	Gross Fixed Capital Formation
GFD	Gross Fiscal Deficit
GFR	General Fertility Rate
GNI	Gross National Income
GPF	Gandhi Peace Foundation
GRT	Gross Registered Tonnage
GSFC	Gujarat State Fertilizer Corporation
GSTP	Global System of Trade Preference
GTR	Gross Tax Revenue
HDFC	Housing Development Finance Corporation
HDI	Human Development Index
HMKP	Hind Mazdoor Kisan Panchayat
HMS	Hind Mazdoor Sabha
HPAEs	High Performing Asian Economies
HPC	High Power Committee
HPI	Human Poverty Index
HUDCO	Housing and Urban Development Corporation of India Ltd.
HYVP	High Yielding Varieties Programme
IAAI	International Airports Authority of India
IADP	Intensive Agricultural District Programme
IATP	Income Adjusted Total Population
IAY	Indira Awaas Yojna
IBA	Indian Bankers Association
IBM	International Business Machines
IBPs	Inter-Bank Participations
IBRD	International Bank for Reconstruction and Development (World Bank)
ICAR	Indian Council of Agricultural Research
ICDS	Integrated Child Development Services Scheme
ICICI	Industrial Credit and Investment Corporation of India
ICL	Indian Confederation of Labour
ICOR	Incremental Capital Output Ratio
ICP	International Comparison Programme
ICRA	Investment Information and Credit Rating Agancy of India Ltd.
ICRR	Incremental Cash Reserve Ratio
ICRR	Indepent Cash Reserve Ratio
IDA	International Development Association
IDBI	Industrial Development Bank of India
IDRA	Industrial (Development & Regulation) Act
IEBR	Internal and Extra Budgetary Resources
IEBR	International Extra Budgetary Resources
IFC	Indian Fiscal Commission
IFCI	Industrial Finance Corporation of India
IFFCO	Indian Farmers Fertilizers Cooperative Ltd.
IIBI	Industrial Investment Bank of India
IIDC	Integrated Infrastructure Development Centres
IIDCs	Integrated Infrastructure Development Centers
IIF	Institute of International Finance
IIP	Index of Industrial Production
IISCO	Indian Iron and Steel Company
IL&FS	Infrastructure Leasing and Financial Services Ltd.
ILO	International Labour Organisation
IMF	International Monetary Fund
INTUC	Indian National Trade Union Congress
IPCL	Indian Petrochemicals Corporation Ltd.
IPPs	Independent Power Producers
IPPs	Independent Power Producers
IRBI	Industrial Reconstruction Bank of India
IRCI	Industrial Reconstruction Corporation of India
IRDP	Integrated Rural Development Programme
IREDA	Indian Renewable Energy Development Agency
ISID	Institute for Studies in Industrial Development
ISID	Institute for Study of Industrial Development
ISM	Indian System of Medicine
ISRO	Indian Space Research Organisation
IT	Information Technology
ITI	Industrial Training Institute
IUCN	International Union for the Conservation of Nature and Natural Resources
IWT	Inland Water Transport
JMF	Jute Modernisation Fund
JNURM	Jawaharlal Nehru Urban Renewal Mission

JPC	Joint Plant Committee/Joint Parliamentary Committee
JRY	Jawahar Rozgar Yojna
KCC	Kisan Credit Card
KVIC	Khadi and Village Industries Commission
LBS	Lead Bank Scheme
LCC	Low Cost Carrier
LDBs	Land Development Banks
LDCs	Least Developed Countries
LERM	Liberalised Exchange Rate Mechanism
LFPR	Labour force Participation Races
LIBOR	London Inter-bank Borrowing Rate
LTFP	Long Term Fiscal Policy
MAI	Multilateral Agreement on Investment
MAT	Minimum Alternate Tax
MCH	Maternity and Child Health
MCR	Miscellaneous Capital Receipts
MDG	Millennium Development Goals
MDMS	Mid-day Meal Scheme
MEP	Macro-economic Programme
MFA	Multi-Fibre Agreement
MFAL	Marginal Farmers and Agricultural Labourers
MIC	Monopolies Inquiry Commission
MIC	Monopolies Inquiry Commission
MIGA	Multilateral Investment Guarantee Agency
MIS	Management Information System
MISA	Maintenance of Internal Security Act
MMMFs	Money Market Mutual Funds
MMTC	Minerals and Metals Trading Corporation
MNCs	Multi-national Corporations
MNP	Minimum Needs Programme
MODVAT	Modified Value Added Tax
MOU	Memorandum of Understanding
MPCE	Monthly Per Capita Expenditure
MRTP	Monopolies and Restrictive Trade Practices
MSP	Minimum Support Price
MTN	Multilateral Trade Negotiations
MTNL	Mahanagar Telephone Nigam Ltd.
MTO	Multilateral Trade Organisation
MWS	Million Wells Scheme
NABARD	National Bank for Agriculture and Rural Development
NAFED	National Agricultural Cooperative Marketing Federation
NAS	National Accounts Statistics
NASSCOM	National Association of Software and Services Companies
NAV	Net Asset Value
NBFC	National Banking Finance Companies
NBFCs	Non-banking Finance Companies
NBO	National Building Organization
NCA	National Commissionon on Agriculture
NCAER	National Council of Applied Economic Research
NCCF	National Consumers Cooperative Federation
NCDBA	National Committee for the Development of Backward Areas
NCDC	National Cooperative Development Corporation
NCDWB	National Cooperative Development and Warehousing Board
NCEUS	National Commission on Enterprises in the Unorganised Sector
NCF	National Commission on Farmers
NCL	National Commission on Labour
NCRL	National Commission on Rural Labour
NDC	National Development Council
NDCF	Net Domestic Capital Formation
NDDB	National Dairy Development Board
NDP	Net Domestic Product
NEEP	National Energy Efficiency Programme
NEF	National Equity Fund
NELP	New Exploration Licensing Policy
NEP	New Economic Policy
NFC	Ninth Finance Commission
NFE	Net Foreign Exchange Earnings
NFITU	National Federation of Independent Trade Unions
NGOs	Non-Government Organisations
NHAI	National Highways Authority of India Ltd.
NHB	National Housing Bank
NHPC	National Hydel Power Corporation
NIDC	National Industrial Development Corporation
NIEs	Newly Industrialised Economies
NIPFP	National Institute of Public Finance and Policy
NIRD	National Institute of Rural Development
NLI	National Labour Institute
NLM	National Literacy Mission

NLO	National Labour Organisation
NNMB	National Nutrition Monitoring Bureau
NNP	Net National Product
NOCIL	National Organic Chemical Industries Ltd.
NODP	National Oilseed Development Programme
NPAs	Non-performing Assets
NPC	National Planning Commission
NPMN	National Programme for Minimum Needs
NPRI	National Programme of Rural Industrialisation
NREGA	National Rural Employment Guarantee Act
NREGP	National Rural Employment Guarantee Programme
NREP	National Rural Employment Programme
NRF	National Renewal Fund
NRHM	National Rural Health Mission
NRIs	Non-Resident Indians
NRNR	Non-Resident Non-repatriable Rupee Account
NRR	Net Reproduction Rate
NRSA	National Remote Sensing Agency
NSC	National Seeds Corporation
NSDP	Net State Domestic Product
NSIC	National Small-scale Industries Corporation
NSS	National Sample Survey
NTC	Nationa Textile Corporation
NWDB	National Wastelands Development Board
OAEs	On Account Enterprises
OCBs	Overseas Corporate Bodies
OECD	Organisation for Economic Cooperation and Development
OGL	Open General Licence
ONGC	Oil and Natural Gas Commission
OPEC	Organisation of Petroleium Exporting Countries
OPTP	Oilseeds Production Thrust Project
OTCEI	Over the Counter Exchange of India
PAC	Public Accounts Committee
PACER	Programme for Acceleration of Commercial Energy Research
PACS	Primary Agricultural Credit Societies
PACT	Programme for the Advancement of Commercial Technology
PBIT	Profit Before Interest and Tax
PBR	Plant Breeder Right
PBT	Profit Before Tax
PCDs	Partially Convertible Debentures
PDS	Public Distribution System
PECV	Profit-Earning Capacity Value
PEO	Programme Evaluation Organisation
	Persons of Indian Origin
PFC	Power Finance Corporation
PHDCCI	Punjab, Haryana and Delhi Chamber of Commerce and Industry
PIM	Participatory Irrigation Management
PLF	Plant Load Factor
PMRY	Prime Minister's Rozgar Yojana
PMS	Portfolio Management Scheme
PNs	Participatory Notes
POL	Petroleium Oil and Lubricants
PPDS	Process-cum-Product Development Centres
PPDs	Process-cum-Product Development Centres
PPP	Public – Private Partnership
PPPs	Purchasing Power Parities
PSBR	Public Sector Borrowing Requirement
PSE	Public Sector Enterprises
PSIF	Public Sector Infrastructural Facility
PSU	Public Sector Undertakings
PURA	Providing Urban Facilities in Rural Areas
RBI	Reserve Bank of India
RCF	Risk Capital Foundation
RCH	Reproductive and Child Health Care
RCTC	Risk Capital and Technology Corporation Ltd.
RDA	Recommended Daily allowance
RDD	Research Design and Development
REC	Rural Electrification Corporation
RIB	Resurgent India Bonds
RIDF	Rural Infrastructure Development Fund
RLEGP	Rural Landless Employment Guarantee
ROI	Return on Investment
RPA	Rupee Payments Area
RRBs	Regional Rural Banks
RSVC	Rashtriya Sam Vikas Yojana (National Equal Development Plan)
RTCs	Road Transport Corporations
S & T	Science & Technology
SAA	Service Area Approach
SAARC	South Asian Association for Regiinal Cooperation
SAIL	Steel Authority of India Ltd.
SCARDB	State Cooperative Agricultural Rural Development Bank

SCBs	State Cooperative Banks
SCI	Shipping Corporation of India
SCICI	Shipping Credit and Investment Corporation of India
SCOPE	Standing Conference of Public Enterprises
SDF	Steel Development Fund
SDP	State Domestic Product
SEBI	Securities and Exchange Board of India
SEBs	State Electricity Boards
SEZs	Special Economic Zones
SFCs	State Financial Corporations
SFDAs	Small Farmers Development Agencies
SFPP	Special Foodgrains Production Programme
SGL	Subsidiary General Ledger
SHCIL	Stock Holding Corporation of India Ltd.
SHG	Self help Group
SIA	Secretariat of Industrial Approvals
SICA	Sick Industrial Companies Act
SIDBI	Small Industires Development Bank of India
SIDCs	State Industrial Development Corporations
SIDF	Small Industries Development Fund
SIDO	Small-scale Industries Development Organisation
SIL	Special Import Licence
SLPEs	State Level Public Enterprises
SLR	Statutory Liquidity Requirements
SLUB	State Land Use Board
SME	Small and Medium Enterprises
SMP	Statutory Minimum Price
SNA	System of National Accounts
SNP	Special Nutrition Programme
SPG	Squared Poverty Gap
SPY	Standard Person Year
SRS	Sample Registration System
SRTCs	State Road Transport Corporations
SRTUs	State Road Transport Undertakings
SSA	Sarve Shiksha Abhiyan (Education for all)
SSEs	Small Scale Enterprises
SSIDC	State Small Industries Development Corporation
SSIS	Small Scale Industrial Sector
SSIs	Small Scale Industries
STC	State Trading Corporation
STCI	Securities Trading Corporation of India Ltd.
SUME	Scheme for Urban Micro Enterprises
SWCs	State Warehousing Corporations
SWS	Single Window Scheme
TAFCO	Tannery and Footwear Corporation
TCOs	Technical Consultancy Organisations
TDC	Technology Development Cell
TDICI	Technology Development and Infomation Company of India Ltd.
TEST	Trade in Environmental Science and Technologies Programme
TFC	Tenth Finance Commission
TFCI	Tourism Finance Corporation of India
TFR	Total Fertility Rate
TISCO	Tate Iron and Steel Co.
TLM	Total Literacy Mission
TNCs	Transnational Corporations
TPDS	Targeted Public Distribution System
TPS	Technology Policy Statement
TRAI	Telecom Regulatory Authority of India
TRIFED	Tribal Cooperative Marketing Development Federation of India Ltd.
TRIMS	Trade Related Investment Measures
TRIPs	Trade Related Aspects of Intellectual Property Rights
TRYSEM	Training Scheme for Rural Youth for Self-Employment
TUCC	Trade Union Coordination Committee
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisaion
UNRID	United Nations Research Institute for Development
UPOV	International Union for the Protection of New Varieties of Plants
UPS	Usual Principal Status
UR	Uruguay Round
URP	Uniform Recall Period
UTI	Unit Trust of India
UTUC-LS	United Trade Union Congress – Lenin Sarani
VABAL	Value Based Advance Licence
VAM	Value Added by Manufacture
VAT	Value Added Tax
VCF	Venture Capital Funds
VDIS	Voluntary Disclosure Income Scheme
VDS	Voluntary Disclosure Scheme
VECC	Voluntary Executive Crops Cell
VRS	Voluntary Retirement Scheme
WCSDC	World Commission on the Social Dimensions of Globalisation
WDR	World Development Report
WHO	World Health Organisation
WLL	Wireless in Local Loop
WPI	Wholesale Price Index
WPR	Work Participation Rate
WTO	World Trade Organisation
WUAs	Water Users Associations
XGS	Exports of Goods and Services

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INDIAN ECONOMY

ABOUT THE BOOK

Authors present a comprehensive survey of the Indian Economy in terms of GDP growth, savings, investment and developments in various sectors like agriculture, industry and services. A contradiction observed in India is that while the reform process has resulted in boosting GDP growth, it has failed to yield acceleration in the process of poverty reduction and growth of employment.

A thorough revision of the book was necessitated by these rapid changes taking place in the Indian Economy. Readers will appreciate that economic scenarios, both at the global and national levels, have been changing continuously. It has been our endeavour to introduce new analysis by way of adding new section and revising existing chapters for a better understanding of the evolving problems and opportunities for the Indian Economy. A new chapter namely **'The Approach Paper to the Twelfth Five Year Plan (2012–17)'** has been added in the book.

Following sections have also been added in the book:

- **Central Government Budget 2012–13**
- **Extent of water resources**
- **Relative Shift in the Shares of NSDP and Employment**
- **A Critique of the Eleventh Plan**
- **A Note on Railway Budget 2012–13**

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