

INDIAN ECONOMY

V SEMESTER

CORE COURSE

BA ECONOMICS

(2011 Admission)



UNIVERSITY OF CALICUT

SCHOOL OF DISTANCE EDUCATION

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STUDY MATERIAL

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MODULE 1

RESOURCE BASE AND STRUCTURE OF INDIAN ECONOMY

Economic Geography of India – Basic features - Human Resource: Demographic Features, extent of unemployment, poverty, and inequality: Recent trends and conceptual issues. HDI of India.- Trend in National Income and Per capita income. Sectoral composition (output and employment), Primary, Secondary and Tertiary Sectors.

Economic Geography

Contemporary economic geographers tend to specialize in areas such as location theory and spatial analysis (with the help of Geographical Information System), market research, geography of transportation, real estate price evaluation, regional and global development, planning, Internet geography, innovation, social networks. Economic Geography is the analysis of spatial organizations of economic activities which are directly or indirectly related to the physical or human resources of a country and its levels of development. As economic geography is a very broad discipline, with economic geographers using many different methodologies in the study of economic phenomena in the world some distinct approaches to study have evolved over time:

- Theoretical economic geography focuses on building theories about spatial arrangement and distribution of economic activities.
- Regional economic geography examines the economic conditions of particular regions or countries of the world. It deals with economic regionalization as well as local Economic Development.
- Historical economic geography examines the history and development of spatial economic structure. Using historical data, it examines how centers of population and economic activity shift, what patterns of regional specialization and localization evolve over time and what factors explain these changes.
- Critical economic geography is an approach taken from the point of view of contemporary Critical geography and its philosophy.
- Behavioral economic geography examines the cognitive processes underlying spatial reasoning, locational decision making, and behavior of firms and individuals.

Economic geography is sometimes approached as a branch of anthropogeography that focuses on regional systems of human economic activity. An alternative description of different approaches to the study of human economic activity can be organized around spatiotemporal analysis, analysis of production/consumption of economic items, and analysis

of economic flow. Spatiotemporal systems of analysis include economic activities of region, mixed social spaces, and development.

Alternatively, analysis may focus on production, exchange, distribution and consumption of items of economic activity. Allowing parameters of space-time and item to vary, a geographer may also examine material flow, commodity flow, population flow and information flow from different parts of the economic activity system. Through analysis of flow and production, industrial areas, rural and urban residential areas, transportation site, commercial service facilities and finance and other economic centers are linked together in an economic activity system.

Economic geography can be divided into these sub disciplines:

1. Geography of agriculture
2. Geography of industry
3. Geography of international trade
4. Geography of resources
5. Geography of Transport and communication

Economists and Economic Geographers

Economists and economic geographers differ in their methods in approaching similar economic problems in several ways. An economic geographer will often take a more holistic approach in the analysis of economic phenomena, which is to conceptualize a problem in terms of space, place and scale as well as the overt economic problem that is being examined. The economist approach, according to some economic geographers, has the main drawback of homogenizing the economic world in ways economic geographers try to avoid.

New Economic Geography

With the rise of the New Economy, economic inequalities are increasing spatially. The New Economy, generally characterized by globalization, increasing use of information and communications technology, growth of knowledge goods, and feminization, has enabled economic geographers to study social and spatial divisions caused by the arising New Economy, including the emerging digital divide. The new economic geographies consist of primarily service-based sectors of the economy that use innovative technology, such as industries where people rely on computers and the internet. Within these is a switch from manufacturing-based economies to the digital economy. In these sectors, competition makes technological changes robust. These high tech sectors rely heavily on interpersonal relationships and trust, as developing things like software is very different from other kinds of industrial manufacturing—it requires intense levels of cooperation between many different people, as well as the use of tacit knowledge. As a result of cooperation becoming a necessity, there is a clustering in the high-tech new economy of many firms.

Economic Geography of India-Basic features

Despite the fact that India started with economic planning as early as 1951 and now has compelled to 15 years planning instead of 5 years, little attention has been paid to spatial aspects of social and economic development. However, many good basic surveys both regional and topical have been published now.

Human Resource

The present day economies considered as the greatest wealth of an economy is the human resource of a nation. Human being is not only the instruments of production but also ends in themselves. The qualities of them are crucial in the developmental process of a nation. That is why most of the nations put much on Human capital development. A country should concentrate more on the developmental aspect of its people and put all its efforts upon it. In this respect it is necessary to know the size and growth of the population and also its compositions.

Demographic Features of India

India, with 1,21,01,93,422 people is the second most populous country in the world, while China is on the top with over 1,350,044,605 people. India possesses about 2.4% of the total land area of the world but support 17.5% of the world population, which means one out of six people on this planet live in India. Although, the crown of the world's most populous country is on China's head for decades, India is all set to take the China's position by 2030. With the population growth rate at 1.58%, India is predicted to have more than 1.53 billion people by the end of 2030.

Even though the first census in India is under taken in 1871 it was not considered as scientific. Therefore the first scientific complete general census in India was conducted in the Year 1881. India's census is decadal census. In 1891 the population of India is just 23.6 crores; while it rose to 121 crores in 2011 census. 2011 census is the 15 th and 7 th after independence. The growth of India's population can be analysed into four phases:

- I. 1891-1921: Stagnant Population
- II. 1921-1951: Steady Growth of population
- III. 1951-1981: Rapid growth of population
- IV. 1981-2011: High growth with definite signs of slowing down.

During the first phase the population of India is stagnant and she is in the first stage of Theory of Demographic Transition. The year 1921 is called the 'Year of Great Divide' because in this year India entered in the second stage of Theory of Demographic Transition. During this period the population growth rate is steady.

It is in the third phase India faces a population explosion, where there is a rapid growth of population.

The fourth stage shows the definite signs of slowing down of population and it is believed that India will enter soon in the third stage of Theory of Demographic Transition.

India going through the second stage of Theory of Demographic Transition witnesses lot of change introduced by Frank Notenstien. In different aspects of demography of India there are changes.

Table 1.1

Population of India-2011				
Rank	State or Union Territory	Population	Density (per km ²)	Sex Ratio
1	Uttar Pradesh	199,581,477	828	908
2	Maharashtra	112,372,972	365	946
3	Bihar	103,804,637	1102	916
4	West Bengal	91,347,736	1029	947
5	Andhra Pradesh	84,665,533	308	992
6	Madhya Pradesh	72,597,565	236	930
7	Tamil Nadu	72,138,958	555	995
8	Rajasthan	68,621,012	201	926
9	Karnataka	61,130,704	319	968
10	Gujarat	60383,628	308	918
11	Odisha	41,947,358	269	978
12	Kerala	33,387,677	859	1,084
13	Jharkhand	32,966,238	414	947
14	Assam	31,169,272	397	954
15	Punjab	27,704,236	550	893
16	Haryana	25,353,081	573	877
17	Chhattisgarh	25,540,196	189	991
18	Jammu Kashmir	12,548,926	56	883
19	Uttarakhand	10,116,752	189	963

20	Himachal Pradesh	6,856,509	123	974
21	Tripura	3,671,032	350	961
22	Meghalaya	2,964,007	132	986
23	Manipur	2,721,756	122	987
24	Nagaland	1,980,602	119	931
25	Goa	1,457,723	394	968
26	Arunachal Pradesh	1,382,611	17	920
27	Mizoram	1,091,014	52	975
28	Sikkim	607,688	86	889
UT1	Delhi	16,753,235	9,340	866
UT2	Puducherry	1,244,464	2,598	1,038
UT3	Chandigarh	1,054,686	9,252	818
UT4	Andaman & Nicobar Islands	379,944	46	878
UT5	Dadra & Nagar Haveli	342,853	698	775
UT6	Daman & Diu	242,911	2,169	618
UT7	Lakshadweep	64,429	2,013	946
Total	India	1,210,193,422	382	940

Source: Census of India, 2011.

1. Size and Growth of Population

Out of the total population, male population in India is 623724248 (51.53%) and female population is 586489174 (48.47%). The state Uttar Pradesh stands top in total population with 199,581,477 and Sikkim is in the bottom with a population 607,688. This is shown in the Table 1.1 and the size and Growth of India's population from 1891 to 2011 is in the Table 1.2.

Table 1.2
Size and Growth of India's Population

Census Year	Population In Crores	% increase or decrease
1891	23.6	--
1901	23.84	0.0
1911	25.20	+5.75
1921	25.13	-0.3
1931	27.89	+11.0
1941	31.86	+14.2
1951	36.10	+13.3
1961	43.92	+21.64
1971	54.81	+24.80
1981	68.33	+24.66
1991	84.64	+23.87
2001	102.87	+21.54
2011	121.02	+17.64

Source: Census Report 2011

2. Birth Rate and Death Rate

Actually the growth rate of population is the function of birth rate and death rate. Consequently the variations in these affect the population growth rate. The average annual birth rate and death rates are given in the Table 1.3

Table 1.3
Average Annual Birth Rate and Death Rates

Decade	Birth Rate per 1000	Death Rate per 1000
1891-1901	45.8	44.4
1901-1911	48.1	42.6
1911-1921	49.2	48.6
1921-1931	46.4	36.3
1931-1941	45.2	31.2
1941-1951	39.9	27.4
1951-1961	40.0	18.0
1961-1971	41.2	19.2
1971-1981	37.2	15.0
1985-1986	32.6	11.1
2011	21.8	7.1

Source: Census Report 2011

3. Sex Ratio in India

Sex ratio means the number of females for 1000 males. In India the sex ratio is in favour to the male from 1901 onwards. Kerala is the only exemption where the sex ratio is in favour to females and it is 1084 per 1000 males. Whereas the lowest sex ratio is shown in the state Haryana (877). The Sex ratio declines continuously except for the years 1981, 2001 and 2011. In 1901 the sex ratio is 972 and it falls to 940 in 2011. It is shown in the Table 1.4.

Table 1.4
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

Source: Census Report 2011

4. Density of Population

Density of population implies the average number of population lived in a Sq. K.m. From a small number 77 in 1901 it rose to 382 in 2011. Bihar is the most densely state in India with 1102 person per sq. k.m., followed by West Bengal (1029) and then Kerala (859). Arunachal Pradesh is in the bottom position with 17 per sq.k.m. It was given in the Table 1.5.

Table 1.5
Density of Population

Year	Density Per sq.k.m
1901	77
1911	82
1921	81
1931	90
1941	103

1951	117
1961	142
1971	178
1981	230
1991	273
2001	324
2011	382

Source: Census Report 2011

5.Rural-Urban Population

Urbanization is considered as the true representation of development of a country. In India the process of urbanization is very slow. According to 1901 census, 89% of Indian people are lived in rural areas and only 11 % are in the urban areas. The percentage of urban population increased to 31.16 % in 2011 census. The percentage share of Rural- Urban population is given in the Table 1.6.

Table 1.6
Percentage Share of Rural- Urban Population

Year	Rural	Urban
1901	89.2	10.8
1911	89.7	10.3
1921	88.8	11.2
1931	88.0	12.0
1941	86.1	13.9
1951	82.7	17.3
1961	82.0	18.0
1971	80.1	19.9
1981	76.7	23.3
1991	74.3	25.7
2001	72.2	27.8
2011	68.84	31.16

Source: Census Report 2011

6. Literacy Rate in India

The literacy rate is one of the important indicators of quality of population. From independence onwards the literacy rate is on hike. The male literacy rate is more than female in India, which is given in the Table 5.7. Kerala ranks first in literacy with 93.91% and Bihar is in the bottom with 63.82% in 2011. Literacy rate for up to 1971 is estimated

Table 1.7
Crude Literacy in India from 1901 to 2011

Year	Male	Female	Total
1901	9.83	0.60	5.35
1911	10.56	1.05	5.92
1921	12.21	1.81	7.16
1931	15.59	2.93	9.5
1941	24.9	7.3	16.1
1951	16.67	9.45	16.67
1961	34.44	12.95	24.02
1971	39.45	18.69	29.45
1981	46.89	24.82	36.23
1991	52.74	32.17	42.84
2001	75.26	53.67	64.83
2011	82.14	65.46	74.04

Source: Census Report 2011

on the population aged 5 and above after that the age is raised to 7 years and above. Census of India, 2011 indicates that only 65.46 % women are literate as compared to 82.14% men. Female literacy is highest in Kerala (91.98%) and lowest in Rajasthan (52.66%). The literacy rate taking the entire population into account is termed as “crude literacy rate” and taking the population from age 7 and above into account is termed as “effective literacy rate”. Effective literacy rate is increased to a total of 74.04% with 82.14% of the males and 65.46% of females being literate. The Table 1.7 lists the crude literacy in India from 1901 to 2011

7. Life Expectancy

In Life expectancy at birth the females surpasses the male population of the country. The average life expectancy at birth in 1951 is only 41.2 years. It is due to the very high infant mortality rate. The Life expectancy Rate of both men and female are given in the Table 1.8

Table 1.8
Life Expectancy at Birth in India (in years)

Year	Male	Female	Total
1921	19.4	20.9	20.1
1931	26.6	26.6	26.6
1941	32.1	31.4	31.7
1951	32.4	31.7	32.1
1961	41.9	40.6	41.2
1971	47.1	45.6	46.4
1981	54.1	54.7	54.0
1991	50.9	50.0	50.4
2001	63.9	66.9	65.3
2010-11	62.6	64.2	63.5

Source: Census Report 2011

8. Child Sex Ratio

The Child sex ratio indicates the number of girls per 1000 boys in the 0-6 age group. Now the fall in this ratio is an alarming problem. According to the 2001 estimates it is 927 while it falls to 914 in the 2011 census. In the case of Kerala, the only state where the sex ratio is in favour to the female population ranked first with 959 girls for 1000 boys. Haryana is in the bottom position with 830 girls for 1000 boys. The child sex ratio from 1961 to 2011 is given in the Table 1.9.

Table 1.9
Child Sex Ratio

Year	Number of girls
1961	976
1971	964
1981	962
1991	945
2001	927
2011	913

Source: Census Report 2011

9. Infant Mortality Rate (IMR)

Infant Mortality Rate Means the number of deaths of infants under one year old in a given year per 1,000 live births in the same year; included is the total death rate, and deaths by sex, male and female. This rate is often used as an indicator of the level of health in a country. The infant mortality is high in rural areas (61) than the urban areas (37). The IMR is lowest in the state, Goa and it is only 10. It is high in Meghalaya where it is 55. IMR for different years are given in the Table 1.10

Table 1.10

Infant Mortality Rate

Year	IMR
1971	192
1980	114
1985	97
1990	80
2000	68
2007	53
2011	47.57

Source: Census Report 2011

10. The Maternal Mortality Rate (MMR)

The maternal mortality rate (MMR) is the annual number of female deaths per 100,000 live births from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). The MMR includes deaths during pregnancy, child birth, or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, for a specified year. The MMR for India in 2008-09 is 212 per 100,000 live births.

11. Age Structure of India's Population

The age composition or the age structure will change over the years. The working age is considered as 15-60. The proportion of child population is decreasing slightly now while slow improvement in the age group 60 and above. The age composition is given in Table 1.11.

Table 1.11

The Age Composition (In %)

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
	Below 15	15-64	65 and above
2011	29.1	65.4	5.5

Source: Census Report 2011

Major Issues: Poverty, Unemployment and Inequality

Even though India is one of the major developing economies in the world, it faces certain crucial issues in its developmental path. They are Poverty, Unemployment and Inequality. Only by solving these issues and looking from different angles these are to be removed.

The Concept of Poverty

Poverty is a plague as it is prevalent in almost all countries in the world and it has many faces and dimensions. Therefore it is difficult to define the concept poverty in precise. Poverty is always defined according to the conventions of society in which it occurs. But in the recent years, the concept of poverty has been refined and made more comprehensive. The New World requires better and more scientific ways to assess the concept of poverty in the society. Now its multidimensional aspect is recognized and uses a multidisciplinary approach to assess poverty. Poverty is not simply a social phenomenon but also include economic, political, historical, geographical and cultural aspects.

Various attempts have been made by societies to define poverty. In human terms poverty means little to eat and wear, and in economic terms the poverty means the inability to attain a minimum standard of living. It is natural to view poverty as the failure to meet the basic requirements to maintain a minimum standard of living. This minimum standard of living may vary from society to society. While biological requirement and nutritional norms provide the most elementary concept of a minimum standard of living, modern understanding of poverty requires other factors such as school enrolment, infant mortality, immunization, malnutrition, women empowerment, overall standard of living, asset holding etc.

Poverty can be defined as a social phenomenon in which a section of the society is unable to fulfill even its basic necessities of life. In India the generally accepted definition of poverty emphasizes minimum level of living rather than a reasonable level of living. In economics there are two important classification of poverty; 'Absolute Poverty' and 'Relative Poverty'.

Absolute Poverty and Relative Poverty

Absolute Poverty is the sheer deprivation or non-fulfillment of bare minimum needs of existence- of food, shelter, health or education. It is based on the absolute needs of the people and people are defined as poor when some absolute needs are not sufficiently satisfied. Hence according to this type poverty is treated as deprivation. Most of the developing countries are experiencing such type. An absolute poverty line is based on the cost of minimum consumption basket based on the food necessary for a recommended calorie intake.

Relative Poverty is related with high income countries, where people are poor because they cannot maintain or equivalent to others in the society. There should be differences in living standards among the people. It reflects economic distress, despair and dissension that stem from serious inequalities in income and wealth. The relative poverty line varies with the level of average income. Relative poverty is based on inequality and differences in standard of living. According to the relative concept of poverty, people are poor because

From this classification we know that poverty is not inequality. Poverty is only one of the evil consequences of inequality. Whereas poverty is concerned with the absolute standard of living of a part of the society i.e.; the poor, inequality refers to relative living standards across the whole society.

Measurement of Poverty

Once we understand poverty, it is essential to measure it with its various dimensions. The measurement of poverty is needed to plan policies to check this global phenomenon. Many factors were listed, some of them are life expectancy, mortality, maternity, safe

drinking water, pure air, women empowerment, energy consumption, literacy, asset holding, sanitation, primary health facilities, clean surroundings etc. most of these are derived with income. Therefore consumption data can be used to measure poverty.

Poverty Line

Poverty line is the most widely used measure for assessing poverty. Under this method, people are counted as poor when their measured standard of living is below a minimum acceptable level-known as Poverty Line. The poverty line in India is defined as 'the level of private consumption expenditure, which ensures a food basket that would supply the required amount of calories'. Actually in India the Planning Commission estimates the poverty on the basis of Calorie intake. By considering age, sex, activity etc., Indian Council of Medical Research (ICMR) proposes 2400 calorie intake for the rural person per day and 2100 calorie per person per day in urban. The calorie requirements in the rural areas is higher because people engaged in heavy work more in rural areas than in urban areas.

Poverty Estimation in the Independent India

In independent India, the first official definition of poverty was given in 1962. This pegged the rural poverty line at a Monthly Family Income of Rs.100 and urban one at Rs.125.

Dandekar and Rath (1971) estimated poverty in terms of consumer expenditure needed a diet adequate at least inform of calories, they adopted 2250 calories per person per day as the norm for their study. According to them, the consumer expenditure necessary to obtain the minimum nutritional standard was an amount of Rs. 14.16 per capita per month at 1960-61 prices for rural India. Based on this norm, 30.92 percent of the rural population lies below the poverty line in 1961-62, in India.

Bhrdhan (1974) adopted the poverty line of Rs 15 at 1960-61 all India rural prices as the minimum level of living, and also estimate poverty for 1967-68 period, taking Rs. 29.90 as minimum requirement and find that in 1960-61 about 38% of rural Indians and in 1967 - 68, 53 percent of rural Indians are below poverty line.

Vaidyanathan (1974) adopted Rs. 21.44 as rural poverty in India at 1960-61.prices. To his estimate the rural poverty in India is 15.65percent.

Bhatty (1974) measured the incidence of poverty for the year 1968-69. He selected poverty lines in terms of Percapita income instead of Percapita consumer expenditure. He made use of the income distribution data collected by National Council of Applied Economic Research (NCAER) for 1968-69. In order to overcome arbitrariness in using a single poverty line, Bhatty made use of five poverty lines namely Rs. 180, Rs 240 Rs. 300, Rs. 360 and Rs. 420. percapita per annum at 1968-69 prices or its percapita monthly equivalent Rs. 15, Rs. 20, Rs. 25, Rs. 30 and Rs. 35. His results show that the poverty levels vary corresponding to different income levels. The corresponding rural poverty is 21.95 percent, 39.55 percent, 55.87percent, 69.70 percent, and 78.70 percent corresponding to monthly percapita income.

Ahluwalia's (1978) "estimates shows a fluctuating trend in the incidence of poverty over time. Rural poverty in India declined from 53.4 percent in 1957-58 to 42 percent in 1960-61. Then it started rising from 42.3 percent to 57.9 percent during 1961-62 to 1967-68 and then declined to 47.6 percent in 1973-74.

Mahendra Dev (1988) estimated the poverty lines for the reference years by making use of the estimates derived by Bardhan (1974) for the year (1960-61). He adjusted the poverty lines by the Consumer Price Index of Agricultural Labourers (CPIAL) for the reference years. He found that the percentage of rural Indian population living below the poverty line was continuously declining from 46.4 percent in 1964-65 to 44.78 percent in 1972-73 and from 40.45 percent in 1977-78 to 33.20 percent in 1983-84.

The Planning Commission (1981 and 1985) measured the extent of rural poverty for 4 years taking Rs 77 (at 1979-80 prices) percapita per month as the poverty line. In 1977-78, about 51.2 percent of rural population was poor as against 54.1 percent in 1972-73. It comes down to 40.4 percent in 1983-84. The Planning Commission calculates the poverty ratio on the basis of quinquennial Consumer Expenditure Surveys conducted by NSSO. The Planning Commission's estimates of the poverty ratio for 1987-88 indicated further decline in the incidence of poverty to 33.4 percent in 1987-88.

Criticising the Planning Commission's earlier estimates, Minhas, Jain and Tendulkar (1991) measured the incidence of poverty by using correct procedure for three years 1970-71, 1983 and 1987-88. They converted the poverty norms to prices prevailing in the year for which NSS consumer expenditure data are available. They worked out State Specific Cost of Living Indices. Then, applying these indices, they calculated State Specific Poverty norms for 1970-71, 1983 and 1987-88. The poverty norms for rural India were Rs. 33.01, Rs 93.16 and Rs. 122.63 for the years considered respectively. Corresponding to these poverty lines, the percentage of population below poverty lines were 57.3, 49.02 and 44.88 for the corresponding years.

Rohini Nayyar (1991) measured the poverty line for 13 years period from 1960-61 to 1983-84 and estimated the incidence of rural poverty. Her calculations are based on actual consumption data by broad category. She made use of the calorie norm of 2200 to arrive at the poverty line. To her estimates rural poverty fluctuates over the years.

Kakwani and Subba Rao (1992) attempted a study on rural poverty for the period 1973-86. They used relative price levels in the rural areas to arrive at the poverty lines. Using the price relatives and consumer price indices for agricultural labourers they worked out the State Specific Poverty Lines at the current prices for the years 1973-74, 1977-78, 1983 and 1986 - 87. According to their estimates the rural poverty continuously declined.

Tendulkar and Jain (1995) estimated the incidence of poverty for 12 years from 1970-71 to 1992. They estimated the poverty lines for various years taking the Planning Commission's all India poverty line of monthly percapita total expenditure of Rs. 49.09 at 1973-74 prices. Urban Poverty profile of the different authors are given in the Appendix,

Even though the earlier estimates of Planning Commission is based on this calorie norms which is criticised because of methodological defects and it cannot consider the other basic items like health, education etc. Therefore Planning Commission appointed an Expert Committee, under Suresh Tendulkar in 2008 and reported its recommendations in November 2009. The committee suggested a formula based on Consumption Expenditure for identifying BPL families. His recommendations are more scientific and there is some novelty in the measurement because Tendulkar committee uses a broad definition of poverty including expenditure for food, education, health etc., and uses consumer expenditure taking Mixed Recall Period as against Uniform Recall Period. According the committee the monthly consumption expenditure to measure poverty line is Rs. 446.68 per person per month in rural areas and Rs. 578.8 per person per month in urban areas. To their report India's poverty is 37.2 percent (2004-05) as against the Planning Commission's estimates of 27.5 percent in 2004-05 calculated on the basis of Dandekar- Rath formula based on calorie intake. Latest poverty estimates of Planning Commission are seen from the Table 1.12.

Table 1.12

Poverty Rates in Various NSSO Rounds

Year	Round	Poverty Rate (%)
1973-74	27	54.88
1977-78	32	51.32
1983	38	44.48
1987-88	43	38.86
1993-94	50	35.97
1999-00	55	26.10
2004-05	61	27.50
2009-10	66	29.80

Source: Planning Commission, March, 2011 and NSSO Data

Planning Commission estimates India's poverty both on the basis of Uniform Recall Period (Uniform Recall Period took consumption in which the consumer expenditure data for all items are collected from 30-day recall period.) and Mixed Recall Period (Mixed Recall Period took consumption in which the consumer expenditure data for five non-food items, namely, clothing, footwear, durable goods, education and institutional medical expenses are collected from 365-day recall period and the consumption data for the remaining items are collected from 30-day recall period.). It consider Cost of Living as the basis of poverty.

Table 1.13

Poverty in India, New Estimates

Uniform Recall Period				Mixed Recall Period		
Years	93-94	04-05	2009-10	99-00	04-05	2009-10
Rural	37.3	28.3	....	27.1	21.8	33.8
Urban	32.4	25.7	....	23.6	21.7	20.9
All India	36.0	27.5	....	26.1	21.8	29.8

Source: Economic Survey

In opposition to Tendulkar committee, Dr. N.C. Saxena committee was appointed by Rural Development Ministry in August 2008. This committee argued for a New BPL criterion, which suggests automatic inclusion of socially excluded groups and automatically exclusion of those who are relatively well-off. The committee recommended a new methodology of Score Based Ranking and put forwarded that Rs. 700 per month per rural person and Rs. 1000 per month per urban person to maintain 2400 and 2100 calorie intake for a day. The committee estimates that India's poverty is 49.1 percent in 2004-05.

According to Arjun Sengupta committee appointed by National Commission for Enterprises in the Unorganised Sector (NCEUS) India's poverty is 77 percent. The Committee uses the same data of NSSO and takes the norm of Rs. 20 per day per person to measure the poverty line.

Based on World Bank's estimates (2005), 41.6 percent of Indians fall below the International Poverty Line this of \$ 1.25 per day (PPP). In nominal terms Rs. 21.69 per day in urban area and Rs. 14.3/day in the rural area. They estimate 456 million Indians lived in poverty. World Bank's new International Poverty Line is based on \$ 2 per day.

Abbijith Sen found out that if we took calorie norm even then the poverty is much higher i.e.; in urban 80 percent and in rural 64 percent of the Indians are lived below poverty line. This estimate is also very higher than official estimate.

Table.14

Poverty line, 1973-74 to 2009-10

Year	Rs per capita per month, current prices	
	Rural	Urban
1973-74	49.63	56.76
1977-78	56.84	70.33
1983	89.50	115.65

1987-88	115.2	162.16
1993-94	205.84	281.35
1999-2000	327.56	454.11
2004-2005	356.30	538.60
2009-2010	672.80	859.60

Sources: Planning Commission

The Planning commission has updated the poverty lines and poverty ratios for the year 2009-10 as per the recommendations of the Tendulkar Committee using NSS 66 thround(2009-10) data from the Household Consumer Expenditure Survey. It has estimated that the poverty lines at all India level as an MPCE of Rs. 672.80 for rural and Rs. 859.60 for urban in 2009-10. Based on these cut-offs, the percentage of people living below thw poverty line in the country has declined from 37.2 % in 2004-05 to 29.8 % in 2009-10.

Causes of Poverty in India

Poverty is not caused by any single reason. It is the outcome of the interaction of several factors; economic, non- economic, political, social, cultural, geographical etc.

1. Underdevelopment

The most important cause for poverty is the underdevelopment of the economy. Due to underdevelopment a large proportion of the people have go without even the basic necessities of life. With the low national income and percapita income the country cannot increase its aggregate consumption and investment. Hence the standard of living is also so low among the people. Even though there is much improvement in the development of the country after independence still we want to go a lot.

2. Inequality

The second important cause of poverty in India is inequality in income and wealth. Even the New Economic policies could not reduce the depth of inequality in India. Instead there is increase in inequality among the people.

3. Inadequate growth rate

In the early years of planning the growth rate of Indian economy is not high enough to check the problem of poverty. Even though economy railed in a high growth path in the mid of 2000 onwards the benefits are not trickle down to the poor sections of the society. Still the gap between rich and poor is increasing.

4. Large population

Even though the growth rate of population is coming down still the size of it is very large. Therefore it is not capable to implement the poverty alleviation programmes successfully.

5. Unemployment

Another major cause for the growth of poverty is unemployment. The problem of unemployment is still so acute in the economy. Thus increasing unemployment and underemployment accentuate poverty.

6. Poor performance of agriculture sector

Still Indian agriculture is carried on largely with primitive techniques. High dependency on rain, small and scattered holdings, lack of inputs, exploitative land tenure system, competition from foreign markets, lack of storage and marketing facilities etc. are responsive to the poor performance of agriculture sector even after the Green Revolution.

7. Poor performance of industrial sector

In spite of much improvement in line with development of modern industries still performance is not up to the mark. Lack of dynamic entrepreneurs, lack of competitiveness, lack of skilled and trained workers, inadequate finance, irregular supply of power and raw materials, poor transport and methods of production etc. leads to slow industrialization of the country.

8. Inflation

Rise in price is an alarming problem to the economy. It is the poor who suffered a lot due to inflation. When prices are high the purchasing power of money falls and leads to impoverishment of the poor sections of the country.

9. Social factors

It is agreed that the poverty in India is the outcome of social factors. It includes caste system, joint family system, law of inheritance, lack of initiative and entrepreneurship etc. India is also poor in social overheads like education, health, medical facilities, illiteracy etc. The attitudes and aspirations of the people are not conducive to economic growth and development.

10. Political factors

Even after India escaped from the yoke of British exploitative administration still the political set up is not that much efficient to solve the problem of poverty. It is true that various programmes are initiated under five year plans. The Fifth Five Year Plan raised the slogan "Garibi Hatao" but still the poverty alleviation is a nightmare to Indian policy makers.

Thus the poverty in India is happened due to various reasons. Regional disparities, lack of investment, lack of proper implementation of public distributive system, lack of vocational training and education, migration of rural youth to cities etc. have also contributed to poverty in India.

Remedial Measures

Poverty is a tragedy not only for the individuals but also for the economy at large. As a result of this the remedial measures to poverty is emphasized. From the experiences of the economy we can suggest the following to alleviate poverty.

1. Rapid Economic Growth

Fast economic growth is a necessary condition for poverty alleviation programme for the following reasons: It changes the low income agricultural set up, helps to strengthen the redistributive activities of the government, made a radical change in production and distribution process, create more employment opportunities etc. Even there is the possibility of trickledown effect to economic growth.

2. Accelerate agricultural growth

No doubt that when there is agricultural growth it reduces the burden of poverty because majority of poor are lived with agriculture sector. So steps should be taken to solve the problems of small and marginal farmers.

3. Accelerate industrial growth

The industrial development will create more income and employment opportunities to the people. Through this the depth of poverty can be reduced.

4. Development of small- scale and cottage industries

In Indian economy small- scale and cottage industries have played a crucial role. This sector which being labour intensive, create more employment opportunities and help in the removal of poverty.

5. Land reforms

Land reforms as poverty alleviation measures aimed to break the old feudal socio-economic structure of land ownership. It aims to eliminate exploitation by providing security of tenure and regulation of rent. It also aims to bring direct contact between the state and the tiller and give social economic status of the landless by distributive measures.

6. Better Public Distributive System

Poverty can be reduced if people are ensured with essential commodities at fair prices. Therefore the government should establish a wide network of fair price shops to provide the essential commodities.

7. Control Population

Unless the population is not reduced, the additions to wealth production will be eaten up by the fresh torrent of babies. Therefore the planners should aim at the family planning measures to bring down the birth in the country.

8. Provision of Common Services and social Security

The government should spend for the provision of free common services like primary education, medical aid, potable drinking water, housing and other facilities to the people. This will increase their real consumption and make them feel better off and hence reduce the poverty.

9. Improve the Status of the Women

Gender equality can help to reduce poverty and encourage growth in variety of ways. Women are provided with direct access to institutional credit, direct membership in cooperatives, setting up of women organization etc.

10. Good Administrative Setup

Above all the success of any programme primarily depends on the effective working of the administrative machinery.

A Brief Review of Poverty Alleviation Programmes

Beginning with the launch of Integrated Rural Development Programme (IRDP, 1978) in the Sixth Five Year Plan, a number of PAPs have been formulated and implemented; many of them are have been restructured and formulated fresh from time to time . Among these PAPs the more important have been:

- (a) Training of Rural Youth for Self-Employment (TRYSEM, 1979)
- (b) National Rural Employment Programme (NREP, 1980)
- (c) Rural Landless Employment Guarantee Programme (RLEGP, 1983)
- (d) Million Wells Scheme (MWS, 1988)
- (e) Nehru Rozgar Yojana (NRY, 1989).It is for the urban poor people.
- (f) Jawahar Rozgar Yojana (JRY, 1989).NREGP and RLEGP are merged in this in 1989.
- (g) Development of Women and Children in Rural Areas (DWCRA, 1992)
- (h) Employment Assurance Scheme (EAS, 1993)
- (i) Prime Minister Rozgar Yojana (PMRY, 1994)
- (j) Prime Minister's Integrated Urban Poverty Eradication Programmes (PMIUPEP,1995)

Most of these programmes have been recently redesigned and restructured to improve their efficacy or impact on the poor. The important PAPs, presently in operation are;

- Self Employment Programme:
Swarnjayanthi Gram Swarozgar Yojana (SGSY, 1999). This replaces IRDP, TRYSEM, DWCRA, SITRA, GKY and MWS and work for rural poor.
- Wage Employment Programme:
 - National Food for Work Programme (NFWP, 2004). It intensifies the generation of supplementary wage employment.
 - Sampoorna Grameen Rozgar Yojana (SGRY, 2001). Rural Employment Generation Programme (REGP, 1995) was merged in SGRY in 2001.SGRY provide additional wage employment in the rural areas. Now this programme is entirely subsumed in NREGS with effect from April, 1, 2008.
- National Social Assistance Programme (NSAP, 1995). It provides social assistance to the rural poor.

- Urban Employment and Anti-poverty Programme:
 - Prime Minister Rozgar Yojana (PMRY, 1993)
 - Swarna Jayanti Shahari Rozgar Yojana (Golden Jubilee Urban Employment Scheme, 1997). This scheme integrates three PAPs for urban areas, viz. NRY, PMIUPEP and Urban Basic Services for the poor.

Unemployment

Another major developmental issue in Indian economy is unemployment. Although this problem had existed in the past; it has become more acute after the independence. The backwardness and increasing population are mainly responsible for this problem. The socio-economic consequences of unemployment are very dangerous. It has economic consequences for the individual as well as the society.

Unemployment means idleness of man power. It is the state in which labour possesses necessary ability and health to perform a job, but does not get job opportunities. In other words unemployment is the situation in which individuals are available for work, but are not able to find a work.

In order to explain the concept unemployment it is better to distinguish between the concepts like labour force and work force. The labour force refers to the number of persons who are employed plus the number who are willing to be employed. In India the labour force excludes children below the age 15 and old people above the age 60 and mentally or physically handicapped. The work force includes those who are actually employed in economic activity. If we deduct work force from labour force we get the number of unemployment.

The unemployment rate means the number of persons unemployed per 1000 persons in the labour force.

The labour force participation rate and work force participation rate can be expressed in percentages and as given below.

Labour Force Participation Rate = Labour Force / Size of the population

Work Force Participation Rate = Work force / Size of the population

Types of unemployment

In every economy there is unemployment but the nature and magnitude differ according to the economic progress. Following are the important types of unemployment.

1. Voluntary unemployment

This is the main type of unemployment referred by the Classical economists. Voluntary unemployment is happened when people are not ready to work at the prevailing wage rate even if work is available. It is a type of unemployment by choice.

2. Involuntary Unemployment

Keynes analysed this type of unemployment. It is a situation when people are ready to work at the prevailing wage rate but could not find job.

3. Natural rate of Unemployment

This is postulated by the Post-Keynesians. According to them in every economy there exists a particular percentage of unemployment.

4. Structural unemployment

This type of unemployment is not a temporary phenomenon. It is chronic and is the result of backwardness and low rate of economic development. The structural changes of an economy are the main reason for this type of unemployment.

5. Disguised Unemployment

When more people are engaged in a job than actually required, then it is called disguised unemployment. If a part of labour is withdrawn and the total production remains unchanged because their marginal product is zero. This is a part of structural unemployment.

6. Under Employment

This exists when people are not fully employment ie; when people are partially employed. In other words it is a situation in which a person does not get the type of work he is capable of doing.

7. Open Unemployment

Mrs. Joan Robinson calls this type of unemployment as 'Marxian Unemployment'. Open unemployment is a situation where a large labour force does not get work opportunities that may yield regular income to them. It is just opposite to disguised unemployment. It exists when people are ready to work but are not working due to non-availability of work

8. Seasonal unemployment

Generally this type of unemployment is associated with agriculture because the unemployment rate is changed according to the season.

9. Cyclical Unemployment

It is generally witnessed in developed nations. This type of unemployment is due to business fluctuation and is known as cyclical unemployment.

10. Technological Unemployment

When the introduction of a new technology causes displacement of workers it is called technological unemployment.

11. Frictional Unemployment

It is a temporary unemployment which exists when people moved from one occupation to another. It will take time lag in transferring one work to another. The market imperfections are the main reason for this.

Measurement of Unemployment in India

The National Sample Survey Organization (NSSO), which provides estimates of the rates of unemployment in India on the basis of its quinquennial surveys, uses three different concepts. They are Usual Status Unemployment, Current Weekly Status unemployment and Current Daily Status unemployment.

I. Usual Status Unemployment (US)

Here the reference period is 365 days. The usual status gives an idea about long-term employment (or chronic and open employment) during the reference year. A person is considered unemployed on Usual Status basis, if he/she was not working, but was willing to work for the major part of the reference year (more than 183 days) but did not get work for even 183 days. Dividing the usual status unemployment by the size of the labour force, we get unemployment rate by usual status. This measure is more appropriate to those in search of regular employment (educated and skilled persons) who may not accept casual work.

II. Current Weekly Status Unemployment (CWS)

Here the reference period is one week. A person is considered unemployed by Current Weekly Status, if he/she had not worked even for one hour during the week, but was seeking or was available for work. The estimates are made in terms of the average number of persons unemployed per week. The Current Weekly Status approach gives an idea about temporary unemployment (or chronic plus temporary unemployment) during the reference week. Current Weekly Status is used by the agencies like Inter National Organisations (ILO) to estimate employment and unemployment rates based on weekly reference period for international comparison. Dividing the weekly status unemployment by the size of the labour force, we get unemployment rate by weekly status.

III. Current Daily Status Unemployment (CDS)

Here the reference period is each of the 7 days, preceding the date of survey in each of these days. It records the activity status of a person for each day of the 7 days preceding the survey i.e. persons who did not find work on a day or some days during the survey week. The Current daily status approach gives a composite or comprehensive measure of unemployment, i.e., it is a measure of chronic and temporary unemployment as well as under employment. Dividing the current daily status unemployment by the size of the labour force, we get unemployment rate by usual status.

The current daily status gives the most faithful picture of unemployment situation.

Magnitude of Unemployment in India

A comparison between different estimates of unemployment in 2009-10 indicates that the CDS estimate of unemployment is the highest (Table 1.15). The higher unemployment rates according to the CDS approach compared to the weekly status and usual status approaches indicate a high degree of intermittent unemployment. Interestingly, urban unemployment was higher under both the usual principal and subsidiary status (UPSS) and current weekly status (CWS) but rural unemployment was higher under the CDS approach. This possibly indicates higher intermittent or seasonal unemployment in rural than urban

areas, something that employment generation schemes like the MGNREGA need to pay attention to. However, overall unemployment rates were lower in 2009-10 under each approach vis-a-vis 2004-05.

Table 1.15

All-India NSS 66th Round Rural and Urban Unemployment Rates

Si No	Estimates	Rural (2009-10)	Urban (2009-10)	Total (2009-10)	Total (2004-05)
1	UPSS	1.6	3.4	2.0	2.3
2	CWS	3.3	4.2	3.6	4.4
3	CDS	6.8	5.8	6.6	8.2

Source: NSSO

Labour force participation rates (LFPR) under all three approaches declined in 2009-10 compared to 2004-05 (Table 1.16). However, the decline in female LFPRs was larger under each measure in comparison with male LFPRs which either declined marginally (UPSS), remained constant (CWS), or increased marginally (CDS).

Table 1.16

All-India Employment and Unemployment Indicators (per 1000)

<i>Indicators</i>	NSS 66 th Round (2009-10)			NSS 61 th Round (2004-05)		
	Male	Female	Total Person	Male	Female	Total persons
UPSS						
LFPR	557	233	400	559	294	430
Work Participation Rate	546	228	392	547	287	420
Unemployment Rate	20	23	20	22	26	23
CWS						
LFPR	550	207	384	550	257	407
Work Participation Rate	532	198	370	527	244	389
Unemployment Rate	33	43	36	42	50	44
CDS						
LFPR	540	179	365	538	215	381
Work Participation Rate	507	164	341	496	195	350
Unemployment Rate	61	82	66	78	92	82

Source: Key Indicators of Employment and Unemployment in India, 2009-10, NSSO.

Causes of unemployment in India

Following are the important causes of unemployment in India

1. Rapid population growth
2. Slow growth of the economy
3. Decay of small scale and cottage industries
4. Low rate of capital formation
5. Defective planning
6. Slow growth of agriculture sector
7. Global financial crisis
8. Illiteracy
9. Lack of training facilities

Remedial Measures for unemployment

In order to solve the problem of unemployment there is both government measures and other measures. It includes the following measures.

1. Rapid growth and expansion of the economy
2. Establishment of more work and training centers
3. Development of small scale and cottage industries
4. Establishment of poverty eradication programmes
5. Liberal institutional finance and self employment programmes
6. Establishment of more employment exchanges
7. Introduction of population control measures
8. Introduction of more public works programmes
9. Reduce illiteracy
10. Stress on vocational and technical education

The Concept of Inequality

While the concept of poverty is rooted in the “lack of access” or “a low level of access” to food, nutrition, shelter, education and other services. Inequality is related to “unequal access” or “different degrees of access” of different individuals or groups of individuals to opportunities, services and benefits. Inequality is, thus, a more general concept than poverty. It looks at the **relative levels of access** of different groups to development opportunities and benefits. The “different levels of access” in the concept of inequality also include the low level of access below which people are considered poor. In fact, the low level of access or the limit (like for example, the calorie limit for consumption) that may be set for defining poverty will itself include a number of lower levels of access.

Inequality in India

India is shining for only a select few. The impressive economic growth of our country has brought smiles on the faces of the rich and the powerful even as the rest suffer in distress and drudgery. This was revealed by the Human Development Report, 2011 (HDR) released by Planning Commission. The report highlights the skewed income and wealth distribution in India and the widening gap between the rich and the poor. According to HDR 2011, inequality in India for the period 2010-11 in terms of the income Gini coefficient was 36.8. India's Gini index was more favourable than those of comparable countries like South Africa (57.8), Brazil (53.9), Thailand (53.6), Turkey (39.7), China (41.5), Sri Lanka (40.3), Malaysia (46.2), Vietnam (37.6), and even the USA (40.8), Hong Kong (43.4), Argentina (45.8), Israel (39.2), and Bulgaria (45.3) which are otherwise ranked very high in human development.

There are three important types of inequality exist in India, namely inequality in income and consumption, inequality in assets and regional inequality. These three forms of inequality are interrelated and mutually reinforcing. The Government of India has been concerned about rising inequalities and uneven distribution of the benefits of growth. Accordingly, the thrust of the 11th Five-Year Plan (2007-12) was on inclusive growth. The forthcoming 12th Five-Year Plan is expected to deepen and sharpen the focus on inequalities.

Inequality in Income and Consumption

Let us look at levels of inequality in income or consumption. Consumer expenditure of households is a good proxy for income, at least in the lower classes. A study of inequalities in levels of consumption will by itself be useful in an economy where agriculture, the unorganised sector, payment of wages in kind and the non-monetised sector still play an important role. Such an analysis will be able to pinpoint attention on specific areas of concern in the consumption pyramid. Let us, therefore, turn to levels of inequality in consumption.

The household consumer expenditure surveys of the NSSO provide the levels of consumption of expenditure in the population by Monthly Per capita Consumer Expenditure (MPCE) classes. The Average MPCE of the rural people in India is only Rs.1054 and in Urban it is Rs.1984.

Table: 1.17

Share of Household Expenditure by Percentile Groups of Households (in %)

Percentile groups of Households	1989-90	1994	1997	2004-05
Lowest 20 percent	8.8	9.2	8.1	8.1
Second quintile	12.5	13.0	11.0	11.3
Third quintile	16.2	16.8	15.0	14.9
Fourth quintile	21.3	21.7	19.3	20.4
Highest 20 percent	41.3	39.3	46.1	45.3
Highest 10 percent	27.1	25.0	33.5	31.1

Source: Various NSSO Report

A comparison of the share of the bottom 10 per cent (or 20 per cent or 50 per cent) of the population in total consumption with that of the top 10 per cent (or 20 per cent or 50 per cent) of the population brings out dramatically the extent of inequality in consumption. The inequality situation is worse in urban areas than in rural areas. This is so in all States and Union Territories. Inequality in consumption is declining, *albeit* slowly, in rural areas according to all measures of inequality. On the other hand, urban inequality shows no sign of any decline.

Inequality in Assets

Incomes are derived from two main sources. Namely, assets like land, cattle, shares and labour etc. In India a few own a large chunk of income-earning assets therefore the distribution of assets is extremely unequal. The top 5 per cent of the households possess 38 per cent of the total assets and the bottom 60 per cent of households owning a mere 13 per cent. The disparity is more glaring in the urban areas where 60 per cent of the households at the bottom own just 10 per cent of the assets. Predictably, asset accumulation is minimal among the agricultural labour households in rural areas and casual labour households in urban areas. But the asset distribution is even more unequal in the urban than in the rural areas. At the one extreme there are highly rich households of industrial, commercial, financial, and real estate magnates and some ex-princes and political leaders. They own enormous assets and running for huge profits. On the other extreme there are slums, and pavement dwellers, unemployed and casual labourers, independent workers providing petty services etc. who generally hold negligible assets.

Regional Inequality

Third important type of inequality that India faces is the regional inequality. Some states are economically and socially advanced while others are backward. Even within each state some regions are more developed while others are primitive. The co existence of relatively developed and economically depressed states and even regions within each state is known as regional inequality. The existence of regional inequality creates social, economic and political issues. The regional inequality is so prominent in India in the case of HDI Value, growth of the economy, poverty, unemployment, education, health, monthly percapita expenditure, rural- urban divide etc.

The India Human Development Report, 2013 shows that India has a HDI value of 0.547. The HDI is the highest for Kerala (0.790) followed by Goa (0.617) and then Punjab (0.605) and the lowest for Chhattisgarh (0.358), Odisha (0.362) and Bihar (0.367). While the HDI scores across states show little variation the variation in the sub-indices for education and health show a greater degree of variation. The income index shows the least degree of variation. The major states are distributed between the categories of countries with 'Medium' and 'Low Human Development' as per the HDR 2011 classification. Kerala is in the 'Medium HDI' category. Other major states in this group are Punjab, Himachal Pradesh, Haryana, Maharashtra, Tamil Nadu, Karnataka, Gujarat, West Bengal and Uttarakhand. Nine other states, namely Andhra Pradesh, Assam, Uttar Pradesh, Rajasthan, Jharkhand, Madhya Pradesh, Chhattisgarh, Bihar and Odisha fall in the 'Low HDI' category India is ranked 134 out of 187 countries in the Global HDI,2011.

The best performer in terms of growth in 2009- 10 was Uttarakhand, followed by Odisha, Chhattisgarh, and Gujarat and the worst performers were Karnataka, Rajasthan, and Jharkhand. States with above 10 per cent growth rate for the period 2004-5 to 2009-10 are Uttarakhand, followed by Maharashtra, Gujarat, and Bihar.

The state-wise estimates of poverty as recomputed by the Tendulkar Committee show that the highest poverty headcount ratios (PHRs) for 2009-10 exist in Odisha (57.2 per cent), followed by Bihar (54.4 per cent) and Chhattisgarh (49.4 per cent) against the national average of 37.2 per cent.

The unemployment rate (per 1000) according to usual status (adjusted) as per the NSS 66th round 2009-10 among the major states is lowest in Rajasthan(4) and highest in Kerala(75) in rural areas and the lowest in Gujarat(18) and highest again in Kerala(73) and Bihar(73) in urban areas.

In the area of education, Madhya Pradesh has the highest GER (6-13 years) in 2008-9 while Punjab has the lowest. Pupil-teacher ratios in primary and middle/basic schools are the lowest in Himachal Pradesh and high in states like Bihar and Uttar Pradesh.

Health-wise, Kerala is the best performer and Madhya Pradesh the worst in terms of life expectancy at birth (both male and female) during 2002-6. IMR in 2010 is also the lowest in Kerala and highest in Madhya Pradesh. Kerala has the lowest and Uttar Pradesh the highest birth rate in 2010, followed by Bihar and Madhya Pradesh. Odisha has the highest and interestingly West Bengal the lowest death rate.

The MPCE indicator shows that there is disparity both in the MPCE and food share across states. According to the 66th round NSS round estimates India 's average monthly per capita expenditure is Rs .1053.64 for rural and Rs. 1984.46 in urban areas. Bihar has the lowest MPCE of Rs 780 with 65 per cent food share in rural areas and Rs 1238 with 53 per cent food share in urban areas whereas Kerala has the highest MPCE of Rs 1835 with 46 per cent food share in rural areas and Rs 2413 with 40 per cent food share in urban areas. States with low average MPCE tend to have a higher share of food in total consumer expenditure as food is the primary need for survival and takes up a larger proportion of overall expenditure in the poorer sections of population. The top states spending more than the national average on food items both in rural and urban India are Bihar, Assam, Odisha, and Jharkhand.

Turning to the rural urban gap, we begin with the Monthly per capita expenditure (MPCE) defined first at household level to assign a value that indicates level of living to each individual or household. Based on the 68th round (2011-12) of the National Sample Survey (NSS), average MPCE [Uniform Reference Period (URP) based] is Rs. 1281.45 and Rs.2401.68 respectively for rural and urban India at the all India level indicating rural-urban income disparities. Out of the MPCE, the share of food is 53.6 per cent and Rs. 40.7 per cent for rural and urban India respectively which shows that food share is more in rural India as compared to urban India.

Causes of Inequality in India

1. Private ownership of means of production
2. Poverty of the people
3. Law of inheritance
4. Concentration of economic power in the hands of a few
5. Highly unequal asset distribution
6. Inadequate employment generation
7. Inadequate development of the economy
8. Differential regional growth
9. Inequalities in professional training
10. Low investment in social sectors
11. Use of capital intensive technique of production
12. Failure of implementation of land reforms
13. Tax evasion and of the richer sections of the community
14. Inflation
15. Privatisation and globalisation

Remedial measures

In order to find out the remedial measures for inequality it is better to solve first the real causes of it in the country. Any how the following are the some of the measures to solve inequality.

1. Reduction in the concentration of economic power
2. Development of backward areas
3. Better distribution of income and wealth
4. Land reforms
5. Creating more employment opportunities
6. Provide more social security measures
7. Control of black money
8. Progressive income tax
9. Control of monopolies and trade restriction practices
10. High taxes on luxuries
11. Change in inheritance law
12. Use of labour intensive technique of production
13. More investment in social sectors
14. Control of inflation
15. Population control

HDI of India

Human Development Index was introduced by UNDP in 1990. The committee for the introduction of this index is headed by the Pakistani Economist Mahbub-Ul-Haq and helped by Amartya Sen. The Human Development Report 2013, *The Rise of the South: Human Progress in a Diverse World*, notes that over the last decades, all countries accelerated their achievements in education, health, and income dimensions as measured in the Human Development Index. In 2010 Human Development Report the UNDP began using a new method of calculating the HDI. The HDI combines following three dimensions:

- A long and healthy life: Life expectancy at birth
- Educational Index: Mean years of schooling and Expected years of schooling
- A decent standard of living: GNI per capita (PPP US\$)

$$1. \text{ Life Expectancy Index (LEI)} = \frac{LE - 20}{82.3 - 20}$$

$$2. \text{ Educational Index (EI)} = \frac{\sqrt{MYSI \cdot EYSI}}{0.951}$$

$$2.1 \text{ Mean Years of Schooling Index (MYSI)} = \frac{MYS}{13.2}$$

$$2.2 \text{ Expected Years of Schooling Index (EYSI)} = \frac{EYS}{20.6}$$

$$3. \text{ Income Index (II)} = \frac{\ln(\text{GNI pc}) - \ln(100)}{\ln(107,721) - \ln(100)}$$

Finally, the HDI is the Geometric Mean of the previous three normalized indices:

$$\text{HDI} = \sqrt[3]{LEI \cdot EI \cdot II}$$

LE: Life Expectancy at Birth.

MYS: Mean Years of Schooling (Years that a 25-year-old person or older has spent in schools).

EYS: Expected Years of Schooling (Years that a 5-year-old child will spend with his education in his whole life).

GNI pc: Gross National Income at Purchasing Power Parity Per capita.

India's progress in each of the HDI indicators is given in Table 1.18. Between 1980 and 2012, India's life expectancy at birth increased by 10.5 years, mean years of schooling increased by 2.5 years and expected years of schooling increased by 4.4 years. India's GNI per capita increased by about 273 % between 1980 and 2012.

Table:1.18

India's HDI Trend Values Components and Indicators

Year	Life expectancy at Birth	Expected Years of Schooling	Mean Years of Schooling	GNI Percapita (2005 PPP \$)	HDI Value
1980	55.3	6.3	1.9	0,880	0.345
1985	57	7.1	2.4	1,007	0.379
1990	58.3	7.4	3.0	1,191	0.410
1995	59.8	8.2	3.3	1,389	0.438
2000	61.6	8.3	3.6	1,702	0.463
2005	63.3	9.9	4.0	2,190	0.507
2010	65.1	10.7	4.4	3,009	0.547
2011	65.4	10.7	4.4	3,175	0.551
2012	65.8	10.7	4.4	3,285	0.554

Source: Various Reports of UNDP.

The human development index is estimated in terms of three basic capabilities: to live a long and healthy life, to be educated and knowledgeable, and to enjoy a decent economic standard of living. Between 1980 and 2012, India's HDI value increased from 0.345 to 0.554, an increase of 61 percent or average annual increase of about 1.5 percent. In the 2011 HDR, India was ranked 134 out of 187 countries. The HDI value of India at different years is given in Table.1.19. However, it is misleading to compare values and rankings with those of previously published reports, because the underlying data and methods have changed. Among the Indian states Kerala ranks First with HDI value 0.790 in 2011 while Chattisgarh in the bottom with HDI value 0.304 in the same year.

The HDI for India was 0.554 in 2013 with an overall global ranking of 136 out of 186 countries placing the country in medium human development category. Novey stands First with HDI value 0.955.

Table: 1.19

India and HDI Value for Different Years

Years	HDI Value
1975	0.419
1980	0.345
1985	0.380
1990	0.410

1995	0.437
2000	0.463
2005	0.507
2006	0.515
2007	0.525
2008	0.533
2009	0.540
2010	0.547
2011	0.551
2012	0.554
2013	0.554

Source: Various Reports of UNDP

Trends in National Income and Percapita Income

In the Pre- independence Period the first estimation of National Income is done by the *father of Indian economy DadaBhai Naoroji* in 1868. In his book *Poverty and Un-British Rule in India*, estimated India's Percapita Income as Rs.20. While the first systematic effort to estimate National Income is undertaken by *V.K.R.V. Rao* in his Book, *National Income in British India 1931-32*. In 1949, the Govt. of India appointed a National Income Committee under the Chairmanship of *P.C. Mahalanobis* and *V.K.R.V. Rao* and *D.R. Gadgil* as the Members. Its first Report came in 1951 and second in 1954. According to the report the National Income of the country is Rs. 8650 crore and Percapita Income is Rs.246.90. Now, in India the National Income is estimated by CSO which is founded in 1951 and located in Delhi. The National Income is estimated both in current and constant year prices.

National Income is defined as the money value of all final goods and services produced in a country during a particular time period.

In India it is one year period known as financial year. The financial year starts from April 1st and ends in March 31st. The national income figures are deflated at constant prices to eliminate the effect of any change of price level during the period. The national income figures at constant prices, therefore, become comparable, but they conceal the population effect and show nothing about the standard of living. Therefore the percapita national product or percapita income is calculated. PCI at constant price is an indicator of change in the standard of living of the people. The current base year for the estimation of National Income in India is 2004-05. Since NNP at factor cost represents the national income, table 1.20 shows both NI and PCI in the base year 2004-05. Its growth rate is also shown in table 1.21.

From the data given in the table revealed that for the 30 years periods ie., 1950-50 to 1980-81 the average annual growth rate is 3.5%. This was referred as the Hindu Rate of Growth by Prof. Raj Krishna because the growth rate of the economy is very similar to the growth rate of Hindu families in India during the same period of time. During this period the growth rate of percapita income is very low and it is just 1.4 % annually.

There was very perceptible improvement in the growth rate during the eighties. During 1980-81 and 1990-91 the national income showed a growth rate of 5.2 % per annum and the Percapita NNP at 3 % per annum. This is very healthy development as far as the economy is concerned.

During 1990-91 to 2000-01 the annual average growth rate of NNP at factor cost (NI) was 5.5 % per annum and that of NNP Percapita was 3.4 % per annum. During 2000-01 and 2004-05, NNP growth rate accelerated to 6.4 % and Percapita NNP grew at the rate of 4.7 % per annum. During 2004-05 to 2010-11 we find further acceleration in the NNP to 8.4 % and that of Percapita income to 6.9 %.

In State wise GSDP at constant price Maharashtra stood top with Rs. 8,05,031 crores in 2011-12 and Mizoram in the lowest position with GSDP Rs. 5,017. In the case of Percapita Net State Domestic Product Goa stood top with Rs.1,12,602 and Bihar in the bottom with Rs.13,178 in 2011-12 estimates at constant price.

Table: 1.20

NNP at Factor Cost and Per Capita NNP at constant Price (2004-05)

Period	NNP at Factor Cost(In crore)	Per Capita NNP at factor Cost(In Rs.)
1950-51	255,405	7,114
1955-56	314,238	7,996
1960-61	385,761	8,889
1965-66	436,650	9,003
1970-71	541,867	10,016
1975-76	626,779	10,326
1980-81	727,359	10,712
1985-86	913,143	12,095
1990-91	1,202,305	14,330
1995-96	1,547,480	16,675
2000-01	2,074,858	20,362
2005-06	2,877,284	26,015
2010-11	4,268,715	35,993
2011-12	4,549,652	37,851
2012-13(AE)	4,764,819	39,143

Source: A Hand Book on Indian Economy Published by RBI

Table: 1.21

Rate of growth of NNP at Factor Cost and Per Capita NNP

Period	NNP at Factor Cost	Per Capita NNP at factor Cost
1950-51 to 1960-61	4.2	2.3
1960-61 to 1970-71	3.5	1.2
1970-71 to 1980-81	2.9	0.6
1980-81 to 1990-91	5.2	3.0
1990-91 to 2000-01	5.5	3.4
2000-01 to 2004-05	6.4	4.6
2004-05 to 2010-11	8.4	6.9
2011-2012	6.2	4.7
2012-2013	4.9	2.9

Source: A Hand Book on Indian Economy Published by RBI

Sectoral Composition

After independence there should be change in the sectoral composition of GDP also along with the growth of NI and PCI. We can broadly classify the sectors into three as Primary, Secondary and Tertiary sectors.

The share of primary sector which includes agriculture, forestry gone down from 55.4 % in 1950-51 to 14.3 % in 2010-11 and further to 13.68 % in 2012-13. Its position changed from the highest contributor to lowest contributor to the Indian economy. The main cause for the decline is the rapid decline in agriculture alone.

The share of industry which includes mining, manufacturing, electricity, gas & water supply and construction has shown a steady increase from 15% in 1950-51 to 27.03 % in 2012-13.

The share of service sector shows a sharp improvement from 29.6% in 1950-51 to 59.29 % in 2012-13. Now the service sector is considered as the power horse of Indian economy. There was significant increase in the share of trade, transport and communication.

Table 1.22

Share of GDP by Industry origin at 1999-00 series

	1950-51	1960-61	1970-71	1980-81	1990-91	2001-02	2010-11	2012-13
Primary	55.4	54.8	46.3	38.0	32.2	24.0	14.3	13.68
Secondary	15	16.6	21.6	24.0	27.2	26.7	27.9	27.03
Tertiary	29.6	28.6	32.1	38.0	40.6	49.3	57.8	59.29

Source: CSO and Various Economic Surveys

Sector wise Employment

There should be changes in share of employment also. At the time of independence the major source of employment is Primary sector which provides 72.1 % employment in 1951 and it falls to 53.2 % in 2009-10. The industrial sector provides employment to just 10.6 % people in 1951 and it increased to 21.5% in 2009-10. The tertiary sector provides employment to 17.3% of the people in India in 1951 and it rose to 25.2% in 2009-10. As a result it is clear that even though the share of primary sector falls to GDP still it dominates in employment sector and employment creation in the service sector is less compared to its income generation. This is clear from the Table:1.23.

Table1.23

Share of Employment in different sectors

	1951	1961	1971	1981	1990-91	2001-02	2004-05	2009-10
Primary	72.1	71.8	72.1	68.8	62.7	59.3	57.0	53.2
Secondary	10.6	12.2	11.2	13.5	14.9	18.2	18.2	21.5
Tertiary	17.3	16.0	16.7	17.7	22.4	22.5	24.8	25.3

Source: CSO and Various Economic Surveys

As per the National Sample Survey Office's (NSSO) report on Employment and Unemployment Situation in India 2009-10, on the basis of usually working persons in the principal and subsidiary statuses, for every 1000 people employed in rural India, 679 people are employed in the agriculture sector, 241 in the services sector (including construction), and 80 in the industrial sector. In urban India, 75 people are employed in the agriculture sector, 683 in the services sector (including construction) and 242 in the industrial sector. Construction; trade, hotels, and restaurants; and public administration, education, and community services are the three major employment-providing services sectors. Studies show that the tertiary employment share has strong upward trends in all the income quintiles both in rural and urban areas.

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MODULE II

AGRICULTURE

Trends and Composition of Output of major crops - Trends in Investment, Credit and Agricultural Subsidy. - New Agricultural strategy of 1960s (Green Revolution) – Food security and PDS in India - Evaluating Land Reforms in India - New Agricultural Policy (In the context of liberalization.)

Introduction

On the eve of independence, the agricultural sector was the pre dominant sector of the Indian economy both in terms of its contribution to the gross domestic product (GDP) and in providing employment to the country's labour force . Therefore , the fortunes of large majority of people in India were basically linked with agricultural performance . Accelerated growth of agriculture was instrumental not only in raising the income levels of agricultural workers but also in transforming India from a chronic food- deficit country into a food self-sufficient country .

The differential growth of various sectors in India in the post independence period has resulted in major changes in the composition of gross domestic product of India . One important consequence is that in the share of agriculture in the total gross domestic product (GDP) has sharply declined from about 57.7 percent during 1950 .51 to only 20.8 percent in 2004.05 but the share of agriculture in total employment has declined only marginally from 73.9% in 1973-74 to 56.5% by 2004.05.

In addition to its contribution to GDP and employment the agricultural sector in India also plays a major role in the economy by producing a large proportion of food grains, fodder, edible oils and fruits and vegetables , and milk ,meat and food products etc. The agricultural sector also provides bulk of raw materials to most traditional agro-based industries. In addition, agricultural sector also makes a notable contribution to export and accounts for nearly one eighth of total exports of the country.

Finally, since a very large number of workers are engaged in agriculture , they provide a huge market for manufacturing industries and services .

Trends and composition of output

A .During British Period

The growth rate of agricultural output was quite low throughout the first half of the 20th century . According to Blyn's estimates prepared on the basis of 18 major crops during 1901-4 to 1940-44 , agricultural output recorded a growth rate of 0.262% per annum at 1925-9 prices . According to Siva _Subramonian's extended study of the princely states of India covering 25 using 1938-9 prices , the growth rate of total agricultural out put was 0.41% pa during 1900-1 to 1946-7. While foodgrains grew at 0.15% pa ,the growth rate of non foodgrains was 0.77% pa.

But despite this the structure of the economy did not undergo any significant change and the share of agriculture in the labour force remained more or less constant at 75% from 1900-1 to 1946-7.

B. During post -Independence period

The independence of India in 1947 marked a turning point in the history of its economic development. In agriculture, the public sector played a promotional role through mobilizing financial and physical resources for investment. The main elements of plan strategy for agricultural growth consisted of land reforms and large investment in irrigation and other rural infrastructure, investment in science and technology, promotion of new technology in agriculture through input subsidies, and guaranteed minimum support prices.

These policies resulted in bringing about a creditable acceleration in the growth rate in Indian agriculture. Taking the entire period 1950-51 to 2003-04, agricultural GDP recorded a growth rate of 2.54 % pa as compared with a growth rate of agricultural product of 0.46% pa during 1900-01 to 1946-41

For analysis, the post independence period 1950-51 to 2003-04 is divided into 4 sub periods. The agricultural sector as a whole recorded a reasonable high growth during the first period 1950-51 to 1964-65. There was a notable deceleration in growth rates of agriculture during the second period 1967-68 to 1979-80 despite the introduction of seed-fertilizer technology during the mid - sixties. With the maturing of green revolution, the agricultural sector recorded the highest growth during 1980-81 to 1990-91. The growth rate of the economy accelerated during the post-reform period 1990-91 to 2003-04. But the growth rate of agriculture recorded a significant deceleration during this period. The trend of growth rates of agriculture both in terms of GDP and value of output during 1950-51 to 2003-04 and in different sub periods are described in the following section.

Growth of Agricultural GDP:

During 1950-51 to 1965-65, the overall GDP recorded a growth rate of about 3.94% pa and percapita incomes grew at a rate of 1.86 percent per annum. The growth rate of income from the agricultural sector was 2.54% per annum. The period 1967-68 to 1979-80 is characterized by a perceptible deceleration of growth of overall and sectoral GDP. This happened primarily because of after effects of severe drought during 1956-66 and 1966-67 and also as a consequence of the after effects of wars, two oil crises and a drastic reduction in foreign aid. The period 1980-81 to 1990-91 showed a marked revival in the agricultural sector because of the rapid spread of Borlaug new seed -fertilizer technology to new crops and new areas. The changes in macro economic policy and trade policy with the initiation of economic reforms in 1991, had a deep effect on the agricultural sector. During the post reform period 1991-91 to 2003-04, the growth rate of agriculture decelerated to 2.38% per annum compared with a growth rate of 3.08% per annum during 1980-81 to 1990-91.

Growth of Production of Major Crops.

Food grains output increased more than four fold from 50.82 million tonnes in 1950-51 to 213.5million tonnes in 2003-04. In the meantime wheat output increased 12 times from 6.46 million tonnes to 88.30 million tonnes. Some of the commercial crops like oilseeds, cotton and sugar cane also registered large increases in output.

The growth rate of output is studied under two heads:

- (a) Growth of crop output in different periods ,and
- (b) Production of major crops (crop- wise analysis)

a. Growth of crop output –Different periods

The whole period is conveniently divided into four sub periods.

(i) Pre -Green revolution period (1950-51 to 1964-65)

During the first period (1950-51 to 1964-65) total crop output in India recorded a trend growth rate of 3.15% per annum . This growth rate was fairly high and was achieved mainly as a result of increases in irrigation and net sown area .The growth rate of food grains output was 2.82 percent per annum during this period .

(ii) The Beginning of Green Revolution (1967 -68 to 1979 – 80)

The growth rate of total crop output during (1967-68 to 1979-80) decelerated to 2.19% per annum compared with a growth rate of 3.15% per annum during the earlier period .The growth rate of food grains output also decelerated to 2.15% per annum during this period compared with 2.82% per annum earlier. Wheat output had more than doubled to 23.8 million tones by 1970-71 . It constituted nearly 22% of total food grains output in that year . Even by 1970 -71 rice accounted for nearly 40 % and coarse cereals 28.2% of total food grains output .It shows that the impact of HYV on growth of the food grains is only limited

(iii) The Maturing of Green Revolution (1980-81 to 1990-91)

The growth rate of crop output recorded a spectacular growth rate of 3.19% during the period 1980-81 to 1990-91. A notable feature of this period was that the rapid growth of agriculture was not confined only to wheat ; it also spread in a big way to rice and also some coarse cereals as well as some commercial crops like cotton , sugar cane and oil seeds .Another notable feature was that the green revolution which was hither to confined to the north western region , spread almost evenly to all the regions of India .

(iv) Economic Liberalization (1990-91 to 2003- 04)

A new policy framework of economic liberalisation consisting of comprehensive macro economic and trade policy reforms was initiated in India in 1991 . In the agricultural sector, the key areas of reform consisted of liberalising the working of commodity markets , reforming commodity price policy and gradual withdrawal of input subsidies. One of the main objectives of policy was to end discrimination against agriculture and improve the terms of trade of agriculture vis –a vis other sectors of the economy.

How ever , contrary to expectation instead of showing any buoyancy , the growth rates of agricultural sector recorded a significant deceleration after the introduction of economic reforms in 1991. The growth rate of agricultural GDP decelerated from 3.08 % per annum during 1980 -81 to 1990-91 to 2.38 % per annum during 1992- 93 to 2003-04 .

The growth rate of crop output decelerated from 3.19% per annum during the 1980's to only 1.18% per annum during the latter period. Similarly, the growth rate of food grains output decelerated to an all period low of 1.16%. There took place a decline in the per capita availability of food grains during the post reform period.

B. Production of Major Crops. (Crop- Wise Analysis)

A comparative analysis of the performance of the food grain crops and the non-food grain crops in India from 1980-81 onwards, vividly shows that in terms of production, the performance of non-food grain crops had been relatively better compared to the post reforms period, the annual growth rates in production of both the food grain and non food grain crops are found to be higher during the 1980's. During the period from 1980-81 to 1990-91, the index number of the production of food grain crops registered an annual compound growth rate of 3.20 per cent, but during the period from 1990-91 to 2006-07 it declined to 1.27 per cent. In the case of non food grain crops the respective growth rate were 4.84 and 2.75 per cent. Similarly, the annual growth rate in the yield of food crops during the period from 1990-91 to 2006-07 is found to be 3.43 per cent while the corresponding figure for the non food grain crops was only 1.76 percent.

1.Rice:

Rice is the predominant food grain crop in India. In the production of rice India ranks second, next to China. During the period from 1980-81 to 2006-07, rice production in India increased from 53.63 million tones to 93.35 million tones registering an overall increase of 74.06 per cent and an annual compound growth rate of 2.15 per cent.

2.Wheat:

India holds second position among the wheat producing countries of the world, next only to China. In 2007 the country accounted for 12.51 per cent of the world's wheat production. Within a period of 26 years from 1980-81 to 2006-07, wheat production in India increased from 36.31 million tonnes to 75.8 million tonnes, showing more than twofold increase.

3.Coarse Cereals:

In sub group of coarse cereals consists of six cereals, viz. jowar, bajra, maize, ragi, barley and millets. In the production of coarse cereals, India holds the sixth position in the world. During the year 1980-81 the country produced 29.02 million tonnes of the coarse cereals, and it increased to 32.70 million tonnes by the year 1990-91. Since the early years of the 1990's production of the coarse cereals in India stagnated around 30 million tonnes. The average annual growth rate in the production during the period from 1980-81 to 1989-90 had been 2.03 per cent and during the period from 1990-91 to 2006-07 it declined to 0.23 per cent.

4.Pulses

In the production of pulses, India ranks first in the world. During the period from 1980-81 to 2006-07, the total production of pulses in the country increased from 10.63 million tonnes to 14.20 million tonnes showing an aggregate increase of 33.58 per cent.

5.Nine Oilseeds

The sub-group of nine oilseeds consist of ground nut, castor seed, linseed, niger seed, safflower, sesamum, soyabean, sunflower, rape seed and mustard. Nearly 25 percent of the global production of ground nut comes from India. India is the second largest producer of the crop. Similarly, the country holds the second position in the production of rapeseed and mustard also. During the period from 1980-81 to 2006-07, the total annual production of the crop increased from 9.37 to 24.29 million tonnes registering on overall increase of 169.90 per cent and an annual growth rate 3.59 percent.

6.Cotton

Cotton is one of the important commercial crops cultivated in India. Next to China and the U.S, India commands the third position among the cotton producing countries of the world. The domestic production of cotton which was 7.01 million bales in 1980-81, increased to 22.63 million bales by the year 2006-07 registering a more than three fold increase.

7.Jute and Mesta

India holds first position in the world in the production of jute and jute like fibres. The production of jute and mesta increased from 8.16 to 10.84 million bales during the period from 1980-81 to 2006-07.

8.Sugar Cane

Among the sugar cane growing countries in the world, India holds the second position next to Brazil in the production of the crop. In the year 2006, 20.19 percent of the global production of sugar cane came from the country. Within the period from 1980-81 to 2006-07, the production of sugar cane increased from 154.25 to 355.52 million tonnes, showing an aggregate increase of 130.48 percent, and an impressive annual growth rate of 3.26 per cent.

9.Plantation Crops

Tea ,coffee and natural rubber are the three important plantation crops cultivated in India. India is the second largest producer of tea in the world. During the period from 1982-83 to 2007-08, the production of tea in India increased from 561 to 987 million kilograms and the annual compound growth rate in production during the period is estimated as 2.29 per cent.

In the production of coffee India holds the sixth position in the world. Total production of the crop during the year 2007-2008 had been 262 million kilograms.

India is the third largest producer of natural rubber in the world, next to Thailand and Indonesia. In the country, Kerala has near monopoly in the production of natural rubber. During the period from 1990-91 to 2007-08, the production of natural rubber in the country increased from 3.3 to 8.2 lakh tonnes, showing an overall increase of 148.8 percent and an annual compound growth rate of 5.5 per cent .

In addition to the major crops, mentioned above, a wide variety of condiments and spices like pepper, ginger, garlic, chilly, turmeric, areca nut, coriander, cardamom, etc. and fruits and vegetables like potato, onion, banana, cashew nut, tapioca, sweat potato, etc. are also cultivated in India.

Trends in Investment

There has been a secular decline in public investment in agricultures. Any decline in investment in agriculture has to be viewed with concern. This is particularly so because the growth of infra structural facilities determines the growth of a particular sector. Less investment in agriculture would mean less growth of infra structural facilities and this would, in turn, affect agricultural growth adversely.

Gross Capital Formation and Public Investment

The gross capital formation in agriculture stood at Rs.1034 crores in 1950-51, constituting 22.14 per cent of the gross domestic capital formation. During the first decade, the gross capital formation in agriculture increased at the rate of 5.19 per cent per annum. By 1970-71, the gross capital formation reached Rs.7379 crores, the percent share in the gross capital formation being 15.63, During the same period, the public and private sectors respectively, contributed 28.51 and 71.49 per cent. In the next dead , there were substantial improvements in the gross capital formation in agriculture. Between 1980-81 and 1985-86, the gross addition of capital formation in the agriculture sector was Rs.2404 crores, the per cent contribution from public and private sector being 37.54 and 62.46 respectively. In 1985 gross capital formation in agriculture contributed just 8.43 per cent to the gross domestic capital formation. The gross capital formation in agriculture and allied sectors as a proportion of total GDP stood at 2.66 per cent in 2004-05 and improved to 3.34 per cent in 2008-09. Another notable change during the period was the significant cut in the public sector contribution and improvement in the private sector share.

From the above discussion, the following observations emerge.

- i. The share of the gross capital formation in agriculture to gross domestic capital formation came down drastically since 1990.
- ii. The decline in the share of the agricultural sector's capital formation in GDP from 2.2 per cent in the 1990's to 1.7 per cent in 2004-05 is a matter of concern.
- iii. The decline in the share of agricultural sector's capital formation in GDP is mainly due to the fall in the public investment in irrigation, particularly since 1990.
- iv. The public sector investment on agriculture, which accounts for about one third of the total investment, has been drastically declining in the recent years and it is the private sector which is playing a major role.

Subsidies and Public Investment

There seems to be some trade off between input subsidies and public investment. The problem of mounting subsidies and its effects in terms of crowding out public investment in agriculture has been highlighted in the Tenth plan document. Input subsidies (on power, fertilizer and irrigation) have been rising while public investment has been declining. Some estimates show that these input subsidies along with food subsidy amount to roughly five to six times the public investment in agriculture. (Gulati and Narayana 2003) For example, food subsidy increased from Rs.7500 crore in 1997-98 to Rs.43,668 crore in 2008-09. As far as input subsidies are concerned, they were as high as Rs.30,473 crore in 1999-2000 and rose further to Rs.74,037 crore in 2007-08 (at current prices). During the same period, public investment declined from Rs.4221 crore (at 1993-94 price) to a lower level.

Methods for Raising Agricultural Investment

Reducing the subsidies itself is a source of finance for public investment in agriculture. However, there is a view that subsidy reduction should not be linked to resource mobilization. State governments have to increase investments for creating productive assets by reducing funds for populist and unproductive activities. Tax/GDP ratio of both central and state governments should be increased in order to provide for more funds for investment in agriculture. One of the factors determining private investment is public investment because of the complementarity between the two. The institutional credit seems to be another crucial variable in determining private investment.

One important step taken for improving public sector investment was the creation of Rural Infrastructure Development Fund (RIDF). It was started in 1995-96 with corpus of Rs.2000 crore. Its main objective was to provide funds to state governments and state owned corporations to enable them to complete various types of rural infrastructure projects. The total corpus of RIDF amounted to Rs.86,000 crore. The resources for the fund are contributed by the scheduled commercial banks to the extent of the short fall in meeting their priority sector lending targets. Loan under RIDF are given for various purposes like irrigation projects, watershed management, construction of rural roads and bridges, etc.

Trends in Subsidies

The question of subsidies in agriculture has emerged as an important issue in recent policy debates. Undoubtedly, subsidies are effective in pushing agricultural growth to a certain extent but it is important to make sure that they do not become a permanent feature of the Indian economy. In developing countries, subsidies are provided simply to ensure self reliance and self sufficiency.

In India, agricultural inputs like fertilizers and water, implements and rural electricity are subsidized. If inputs are not subsidized, the poor farmers will not be able to use them. Similarly, food subsidy is essential to maintain and sustain the food security system and ensure a safety net for the poor. On the other hand, the opponents have argued that agricultural subsidies are fiscally unsustainable and encourage misuse of resources, leading to environmentally malignant development. It is also argued that continuation of agriculture subsidies is against the spirit of Agreement of Agriculture as adopted by the WTO

Therefore, the issue of agricultural subsidies is not to be examined only from the point of view of fiscal unsustainability but from a much wide perspective of ensuring food security and safety net for the poor and protecting the interest of the country in the new emerging international economic order that is taking shape under the aegis of the WTO.

Subsidization of agricultural inputs has become an important instrument of agricultural policy in India since the introduction of the high yielding varieties programme (HYVP) in the 1960's . Subsidy on fertilizers is provided by the central government while subsidy on water is provided by the state governments. Water subsidy is of two kinds:-power subsidy and irrigation subsidy. Power subsidy is granted on power that is used to draw on ground water. Irrigation subsidy means subsidy on canal water (i.e. surface water) usage. Information on agricultural inputs clearly indicates that substantial amounts of subsidy are provided on agricultural inputs. Total subsidy on agricultural inputs was Rs.33,591 crore in 1999-2000 which rose to Rs.77,935 crore in 2007-08

Power and Irrigation Subsidies

Power and irrigation subsidies are provided by the government as water and electricity fall within their domain. Subsidy on electricity was Rs.6033 crore in 1999-2000 which increased to Rs.20,547 crore in 2007-08. Subsidy on irrigation increased from Rs.11,196 crore to Rs.21,000 crore during the same period. The main reason for the high level of power subsidies is the pricing policy of the State Electricity Boards (SEBs). Gulati and Narayanan have estimated that the average revenue tariff from power supply to agricultural consumers in 2000-01 was only 28.42 paise per kwh whereas the estimated average cost of supply of power to all sectors combined was as high as 303.86paise per kwh. This implies a subsidy of 275.44paise on every kwh supplied to agriculture. Gulati and Narayanan estimated that in 2000-01, SEBs were recovering from agriculture only 9.35 percent of the average unit cost of power supply.

Irrigation Subsidies arise because of the neglect of rational pricing for canal water. Gulati and Narayanan have estimated that the pricing of canal water did not cover more than 20per cent of the operation and maintenance expenses in the mid 1990s. In 1999-2000 subsidy on irrigation was Rs.11,196 crore which rose to Rs.21,000 crore in 2007-08.

Fertilizer Subsidy

Fertilizer subsidy is borne by the centre. The need of fertilizer subsidy arises from the nature of the fertilizer pricing policy of the government of India. This policy has been governed by the following two objectives.

- i. Making fertilizers available to the farmers at low and affordable prices to encourage intensive high yielding cultivation, and
- ii. Ensuring fair returns on investment to attract more capital to the fertilizer industry.

To fulfil the former objective, the Govt.has been statutorily keeping the selling prices of fertilizers at a largely static, uniformly low level throughout the country. In order to attain the second objective, the Govt. under the Retention Price Scheme (1977) fixes a fair ex-factory retention price for various products of different manufacturers. The fertilizer industry is largely insulated against cost escalation by the system of retention prices. Under this pricing policy of fertilizer subsidy, farmers get fertilizers at a low rate which is pre-determined, called the maximum selling price. The manufacturer is paid the retention price. The difference between the retention price and the selling price is the subsidy paid by the Govt. For imports, subsidy is equal to the difference between the cost of imported material and the selling price. Because of increasing differential between the retention price and the selling price, the burden of subsidy on the government has increased enormously. For instance, fertilizer subsidy was Rs.505 crore in 1980. It rose from Rs.4,562 crore in 1993-94 to Rs.13,800crore in 200-01 and further to Rs.32,490 crore in 2007-08.

Many economists have argued that RDs has outlived its utility and must be abandoned. In fact, as feared by the Fertilizer Prices Committee, the RDs has created a “vested interest in proving costs rather than in reducing them, in claiming escalation rather than in finding ways and means of containing costs”.On account of the above reason, the Expenditure Reforms Commission (2000) recommended the dismantling of the control system in a phased manner. The government has introduced a Nutrient Based Subsidy Policy for the fertilizer sector from April1, 2010.

Food Subsidy

The Government incurs food subsidies so as to fulfil the obligation towards distributive justice. Food subsidy went up from Rs.2850 crore in 1991-92 to Rs.7500 crore in 1997-98. It then increased to Rs.2100 crore in 2000-01 and further to RS.27748 crore in 2004-05. It is a strange that food subsidy has gone up substantially during the period of liberalization. Food subsidy showed an annual increase of above 30 per cent during each of the three years namely 2000-01, 2001-02 and 2002-03 but it is relatively stable since 2003-04.

Arguments in favour of Subsidisation

1. If agricultural inputs are not subsidized, the poor farmers will not be able to use them and this will lead to a decline in productivity levels and in their income.
2. Subsidies must be considered more as an instrument for promoting risk-bearing function of the farmers.
3. The subsidization of input and credit will influence the adoption of the new technology.
4. Input subsidization reduces prices of raw-materials and food items. This will have favourable effect on the growing industrial sector or large mass of poor living in the developing countries.
5. Value-added by subsidized inputs far exceeds the cost of subsidy.

Arguments against the Continuation of Subsidies

1. Agricultural subsidies are fiscally unsustainable and encourage misuse of resources.
2. Subsidies result in crowding out public investment resources and adversely affect the overall agricultural growth in India.
3. Fertilizer and irrigation subsidies have widened regional disparities to some extent.
4. The marginal cost of power to the farmer is almost zero. This power pricing framework provides "perverse incentives to the farmers, leading to excessive and inefficient use of power"
5. Low price canal water has led to the highly wasteful use of canal water, ecological degradation from water logging and salinity.
6. Another worrisome factor is the reckless exploitation of ground water, resulting in the shortage of drinking water in several parts of the country.
7. The prevailing heavy subsidy on nitrogenous fertilizers perpetuates inefficiencies in the domestic fertilizer industry.
8. Most of the fertilizer subsidy goes to the farmers under irrigated area.
9. The maximum benefit of subsidisation of inputs is reaped by large and medium farmers.

WTO and Subsidies

Under the WTO Agreement, an index known as "Aggregate Measurement of Support" (AMS) has been introduced. It seeks to provide the overall permitted measure of subsidies allowed as a percentage of gross agricultural production. Under the Agreement, product specific and non-product specific domestic support, as measured by the AMS, would have to be reduced if they exceed 5 per cent of the value of production. For developing countries the percentage is 10 percent. However, the following are exempted.

- i. Govt. measures which encourage agricultural and rural development, like subsidies for low income producers in developing countries.
- ii. Govt. service programmes like research, pest and disease control, training, extension and advisory services, inspection, marketing and promotion and infrastructural services.

In India, the aggregate value of agricultural subsidies was not only far below the 10% limit but also negative. In fact, in many cases India actually taxes her farmers by not allowing them to export their products freely at international prices which are higher than the domestic prices. India, whose prices will then become competitive, will stand to gain. India would further gain out of the provision that the countries with balance of payments problems are not required to provide minimum market access.

Agricultural Credit.

Agricultural production depends on factors like the availability of land, quality of seeds, irrigation facilities, the application of fertilizers and timely availability of credit, and a host of other factors. Credit is a critical input for revitalizing agriculture. Over the years, India adopted a multi agency approach for providing agricultural credit. The major agencies which provided agricultural credit are the co-operatives, the RRBs and the commercial banks. These agencies provide short term, medium term or long term credit.

Types of Agricultural Credit

Short term credit is normally given for a period of 15 months, exclusively for purchasing seeds, manures, fertilizers, labour charges and similar quick needs of the farmers. Short term credit is repaid immediately after the harvest. Medium term loans are provided for purposes like sinking of wells, purchase of bullocks, pumping plants and to make improvements in implements. The period of medium term loan is from 15 months to 5 years. Loans repayable over a long period of time, normally above 5 years are included in the long term credit.

Sources of Agriculture Credit

The sources of credit can be divided into institutional and non institutional. The main non institutional sources are the money lenders, relatives, friends, land lord, etc. Institutional sources include co-operative banks, regional rural banks, farmers service societies, NABARD etc. Institutional loans are generally for productive purposes and carry much lower interest rate.

Trends in agriculture credit

A. Non Institutional sources of credit

Money lenders are the oldest source of agricultural credit. Over the years, the influence of money lenders has declined sharply in the farm credit scenario of India, still they play a significant role. They are popular even today because they have only limited formalities ; they give loans at any time of the year for any agricultural purpose and are easily approachable. The total contribution of non institutional sources towards agricultural credit has gradually declined from 92.7 percent in 1950 -51 to 25.0 percent in 1996. The share of money lenders was 7.0 percent in 1996

B. Institutional sources of credit

Institutional sources of credit to agriculture has expanded at a very rapid rate after independence. It increased from Rs 880 crore in 1971-72 to Rs 1,25,309 crore in 2004 -05. The share of institutional sources in agricultural credit increased from 7.3 percent in 1951 to 75.0 percent in 1996 Institutional credit to agriculture rose from Rs 1,25,309 crore in 2004 – 05 to Rs 2,92,437 crore in 2008 -09 .

(i) Co -operative credit societies :

There are two separate wings of the co operative credit structure in India; one provides short term and medium term loans; whereas the second provide long term loan. The former has three tier structure with 31 state co –operative banks at the apex 371 central co-operative banks at the district level and 94,942 primary agricultural credit societies at the village level .Long term credit is provided by 20 state co operative Agricultural and Rural Development Banks and 697 primary co operative Agricultural and Rural Development Banks .

It is seen that the co operative credit stood Rs 4403 crores in 1991-92, which improved to Rs 10,047 crores in 1993-94. In the later years, the co-operative credit gradually improved and reached Rs.48,258 crores in 2007-08. It is also noted that the share of the co-operative stood at 39.03 per cent in 1991-92 but only 20 per cent in 2008-09. Short term co-operative credit constituted 62.18 per cent of the total short term credit in 1991-92, and 46percent in 2003-04. In the case of the medium and long-term credit, it is also seen that the shares of the co-operatives were zero in 1991-92 and 12.90 per cent in 2006-07. Agriculture and Rural Development Bank gives only meager amount for the long term agricultural development. It shows that the role of co-operative credit in augmenting investment in agriculture is very limited.

(ii) Commercial Banks:

The second institution providing credit to agriculture is the commercial banks. One of the objectives of bank nationalization was to provide the maximum credit to the farming operations throughout the country. The commercial bank credit constituted 20.89 per cent in 1990-91 and reached about 68 per cent in 2008-09. Compared to the long term credit, the short term credit constituted a major part of commercial bank credit for agriculture.

(iii) Regional Rural Banks (RRBs)

The Regional Rural Banks were set up in 1975. The main objective of the RRB's was to take banking to the door steps of the rural masses, particularly in areas without banking facilities. In 1991-92, RRBs disbursed just Rs.336 crores to agriculture, that too as short term credit. This subsequently increased and reached Rs. 26,724 crores in 2008-09. In 2008-09 the share of the short term credit remained at 60 per cent.

(iv) National Bank for Agricultural and Rural Development.(NABARD)

The NABARD was set up on July 12,1982. It has taken over the functions of the agricultural credit department of RBI and the Agricultural Refinance and Development Corporation (ARDC). NABARD is now the apex bank for rural credit.

The amount of loan sanctioned by NABARD increased from RS.16,867 crore in 2004-05 to Rs.35,243 crore in 2006-07.

(v) Other Programme

(a) Kisan Credit Card Scheme: This scheme aims at providing adequate and timely credit support from the banking system to farmers for their cultivation needs in a flexible, hassle free and cost effective manner has been operationalised. The farmers may use the cards for the purchase of agricultural inputs such as seeds, fertilizers, pesticides etc. and also draw cash for their production needs. Credit limits are fixed on the basis of size of operational land holding, cropping pattern, scale of finance, etc.

In the year 2008-09, 85.93 lakh cards were issued and the credit disbursed amounted to RS.53,085 crore.

(b) Self Help Groups-Bank Linkage:

This programme was initiated in 1992 with a view to improving the flow of credit to the resource poor section of the society. The main objective of the SHG-Bank linkage programme is to provide thrift-linked credit support to the members of SHG's. This enables the rural poor to have access to the formal banking system and get loan in a reasonably short time and at a low cost. By December 2005-06, 18.29 lakh SHG's have been financed by banks with credit of over Rs.8,319 crores. Over 90 per cent of the SHG's are exclusive women groups. This programme has emerged as the largest and fastest growing micro finance programme in the country.

New Agricultural Strategy

During the sixties, Indian agriculture experienced a spectacular increase in production, especially in that of wheat and rice crops. It was mainly through an increase in productivity per hectare of these crops. The jump in the rate of increase in productivity of these crops was so sudden and conspicuous that some economists termed the new change as "green revolution". By 'green revolution' we mean two things:

(a) Well marked improvement in agricultural production in a short period: and

(b) The sustenance of the higher level of agricultural production over a fairly long period of time.

It has been claimed that the contributory cause for the spectacular increase in agricultural production is the adoption of the new strategy in agriculture. This new strategy was adopted in India during the Third plan, i.e. during 1960's. The first stage of new strategy pertained to the Intensive Agricultural District Programme (IADP). It was started in 1960-61 in three districts and was subsequently extended by stages to another thirteen. The district selected under IADP was required to possess qualities such as assured water supply, minimum hazards, (like floods, drought etc.) well developed institutions and maximum potentialities for increasing agricultural production within a short span of time. Farmers of selected districts were provided with all types of facilities such as improved seeds, implements, fertilizers, easy credit, soil testing facility, etc. Thus IADP is also called "package programme" due to the use of a package of improved practices. Later on, this programme was extended to remaining states and one district from each state was selected for intensive development. Accordingly, in 1965, 144 districts (out of 325) were selected for intensive development and the programme was renamed as Intensive Agricultural Areas Programme (IAAP). The main concern of the programme was with specific crops.

In the kharif season of 1966, India adopted High Yielding Varieties Programme (HYVP) for the first time. This programme was adopted as a package programme as the very success of the programme depends upon adequate irrigation facilities, fertilizers, high yielding varieties of seeds, pesticides, insecticides, etc.

Components of the New Strategy:

Green revolution is the combined result of various measures taken by the Govt. Some of these are:-

(i) Supply of New Inputs

(a) High yielding varieties of seeds

The use of high yielding varieties of seeds since 1966 has resulted in substantial increase in food grains production. Wheat production has been more than trebled. Rice and Bajra production also registered same increase. The break through in the production of wheat and rice has been attributed to magic seeds adopted by the farmers. Some important quality seeds of wheat used in the initial stages were Lerma Rojo, S 308, WG.357, WL 212 and those of rice were IR8 and jaya. The area under high yielding varieties of wheat increased from 0.54 million hectares in 1966-67 to 24.0 million hectares in 1998-99.

(b) Supply of Fertilizers:

Besides high yielding varieties of seeds chemical fertilizer is the other input which is responsible for ushering forth the green revolution in India. In fact the latest agricultural technology is called the seed cum fertilizer technology. Crops of high yielding variety cannot grow properly if regular doses of fertilizers are not applied to them. The total amount of fertilizers used in 1960-61 was 292 thousand tonnes. It increased to 13960 thousand tonnes in 1995-96. In 2008-09, consumption of fertilizer stood at 249 lakh tonnes.

(c) Expansion of Irrigation Facilities:

The new high yielding variety of seeds require more fertilizers and the use of fertilizers necessitates a regular supply of water. Since dependence on monsoon is unreliable, irrigation facilities will have to be expanded. In India, irrigation potential has increased from 22.6 million hectares in 1950-51 to 102.8 million hectares in 2006-07.

(d) Plant Protection and Pest Control:

The seeds sown through use of new seeds are more prone to disease. The use of fertilizers for their production, also increases the susceptibility of these crops to diseases. So, use of plant protection measures becomes necessary in order to get the maximum yield from the new seeds. In 1995-96 the quantity of chemical pesticides used was 61260 tonnes

(e) Development of Infrastructure:

Infrastructure comprises those activities and facilities which aid in increasing production. Important elements of infrastructure include transport and communication regulated markets, storage and warehousing, agricultural education and training etc.

(f) Use of Machinery:

New technology has necessitated the use of machinery. Bumper harvest of wheat necessitated the use of threshers and the combined harvesters. For timely sowing, tractors became important. There was a sudden jump in the use of machinery in Indian agriculture since 1965.

(ii) Multiple Cropping Programme

The multiple cropping programme aims at increasing the cropping intensity of land through better utilization of the existing irrigation facilities as well as development of new irrigation potential throughout the country. In 1960-61, the area sown more than once was about 1.9 crore hectares which increased to 4.43 crore hectares in 1993-94.

(iii) Provision of Agricultural Credit:

The provision of cheap agricultural credit facilities has encouraged the adoption of new agricultural technology. Farmers need credit for the purchase of new seeds, better implements, chemical fertilizers, insecticides etc. Accordingly, co-operative credit society, commercial banks, Regional Rural Banks, NABARD and certain specialized institutions have been established by the Govt. throughout the country. The short term and long term loans advanced by the commercial banks and the RRB's to the agricultural sector increased from Rs.212 crore in 1976 to Rs.12083 crore in 1995-96.

(iv) Incentive Prices:

In order to enable the farmers to reap more profits through the adoption of modern technology, it is essential to assure them of certain minimum prices for their products. The Agricultural Price Commission was set up in 1965. This commission advises the Govt. on price policy for agricultural commodities.

(v) Public Institutions:

A number of new public institutions were promoted and provided with funds to lend support to production programmes. It includes:

- (a) The National Seeds Corporation (1963)
- (b) The State Farms Corporation of India (1969)
- (c) Agro Industries Corporation (1965)
- (d) The National Co-operative Development Corporation (1963)
- (e) The Agricultural Refinance Corporation (1963)
- (f) The Food Corporation of India (1965)

Effects of Green Revolution

The effects of the green revolution can be studied in two parts, viz. i) its economic effects and (ii) its sociological impact.

Economic Effects:

Two important economic effects of green revolution are: (a) an increase in agricultural production, and

(b) an increase in productivity.

(a) Increase in Agricultural Production:

Due to the adoption of new agricultural strategy, the volume of agricultural production has recorded manifold increase. The production of wheat, rice, maize and potatoes have increased substantially. Total production of food grains in India has increased from 81.0 million tonnes in the Third plan to 202.0 million tonnes in the Tenth plan. In 2008-09, it stood at 233.9 million tonnes.

However, this improvement in production has not been shared equally by all the crops, especially in the initial stages. (1966-72). The gains of the green revolution were largely cornered by wheat crop, and only to a very little extent by the rice crop. In the second phase, however, the revolution has spread to other crops also.

(b) Increase in Productivity:

The new technology has brought about a sharp increase in agriculture productivity. The gain in yield was very large in the initial years. Thereafter, the phenomenon continued, although at a somewhat slow pace. The yield per hectare of all food grains has increased by more than three times from 552 kgs per hectare in 1950-51 to 1898 kgs per hectare in 2008-09. More significant has been the rise in the growth rate of wheat productivity from 1.3 per cent per annum in the pre-revolution period to 2.5 per cent per annum in the green revolution period.

Sociological Impact

Important sociological implications of the green revolution can be summed up as follows.

(a) Personal Inequalities:

The green revolution has promoted inequalities and has widened the already existing gulf between the rich and the poor in the rural sector. There seems to be a general consensus that in the early period of green revolution, large farmers benefitted much more from new technology as compared with the small and marginal farmers.

(b) Regional Inequalities:

Another harmful consequence of green revolution has been that it has promoted regional inequalities. The region of Punjab, Haryana and Western Uttar Pradesh derived the benefits of new agricultural strategy. Thus the introduction of new agricultural strategy into some restricted areas and crops has widened the regional disparity in respect of agricultural production and productivity of the country.

Undesirable Social Consequences:

Green revolution has also raised certain unwanted social consequences. Green revolution paves the way for transforming a large number of tenants and share croppers into agricultural labourers due to large scale eviction of tenants.

Moreover, increased mechanization of farm has resulted huge number of accidents. Again, the increasing application of poisonous pesticides, has added to serious health problem.

Land Reform

Changes brought about in the agrarian structure through direct intervention by the state are characterized as land reforms. It refers to all kinds of policy induced changes relating to the ownership of land, tenancy, and management of land.

The significance of land reforms arises from the defects of the prevalent agrarian structure. In this context, it will be proper to have a look at the agrarian structure that obtained on the eve of independence.

Agrarian structure on the Eve of Independence

At the time of independence India inherited a semi feudal agrarian structure with onerous tenure arrangements over substantial areas. There were three types of land tenure systems prevailing in the economy viz. the Zamindari system, the Mahalwari system and the Ryotwari system.

Under the Zamindari system, the landlord is simply the provider of land and the tenant provides all the management and labour. The landlord gets the pre-determined share of the produce. The landlord is responsible for the payment of land revenue to the state. The actual tiller does not come into contact with the state. The landlord acts as an intermediary.

Under the Mahalwari system land is maintained by a collective body; usually the village serves as a unit of management. Revenue is collected from them, the responsibility of paying revenue to the state rests with the village.

Under the Ryotwari system, every individual registered, and holder is recognized as the proprietor of land and is responsible for the payment of land revenue to the Government. The Ryot possess the right to sub let his land or to transfer the land by gift, sale or mortgage. A ryot cannot be ejected by the Government till he pays his land revenue.

Objectives

It was basically to stop exploitation of the actual tiller of the soil and pass on the ownership of land to them that land reforms were introduced in the post -independence period in India. The major objectives of land reforms in India are as follows.

1. Restructuring of agrarian relations to achieve egalitarian social structure.
2. Elimination of exploitation in land relations.
3. Actualisation of the goal of "land to the tiller"
4. Improving the socio, economic conditions of the rural poor by widening their land base.
5. Increasing agricultural production and productivity.
6. Infusion of a greater measure of equality in local institutions.

For the fulfillment of these objectives, the major steps adopted under the land reforms programme are as follows:

1. Abolition of intermediaries

2. Tenancy reforms:- (a) regulation of rent (b) security of tenure and (c) conferment of ownership rights for tenants

3. Reorganisation of agriculture:- (a) redistribution of land (b) consolidation of holdings and (c) Co-operative farming

Progress of Land Reforms

1. Abolition of the Zamindari System

The Zamindari system manifested absentee landlordism at its worst and was largely responsible for the continuously deteriorating condition of tenant farmers. This system led to the exploitation and moral degradation of the tiller. Immediately after independence, a strong voice was raised against these vested interests in land. As a result, a high priority was given to the abolition of the Zamindari system. Accordingly, by 1952, necessary legislation had been enacted in all the states. As a result of the abolition of intermediaries more than 2 crore cultivators have been brought under direct relationship with the state. A considerable area of culturable wastelands and private forests belonging to the intermediaries have been vested in the state. This has facilitated the distribution of 57.7 lakh hectares to landless agriculturists .

2. Tenancy Reforms

Tenants can be classified into (a) occupancy tenants, (b) tenants at will, and (c) sub-tenants. The rights of the tenancy of the occupancy tenants are permanent and heritable. Hence, the occupancy tenants do not face the fear of eviction so long as they pay rent on time. But the position of tenants-at-will and sub-tenant is very precarious ; since such tenants depend on the mercy of land lords. Hence, special laws had to be enacted and implemented to protect these tenants. These laws relate to (i) regulation of rent (ii) security of tenure and (iii) conferment of ownership rights on tenants.

(i) Regulation of rent : During the pre-independence period, rents were fixed either by custom or were the result of market forces of demand and supply. The rate of rent prevalent were one-half of the produce which were considered excessive by any standard of social justice. Consequently, the first and second plans recommended that rents should not exceed one-fourth or one-fifth of the gross produce. Accordingly, various states have passed necessary legislation in this regard, but there were variations in the rates of rent fixed in different states.

(ii) Security of tenure: Legislations have been passed in most of the states to protect tenants from ejection and grant them permanent rights in the land. The purpose of these legislations is to ensure that (a) ejection are lawful (b) land resumed by an owner is only for personal cultivation, and (c) the tenant is assured of a prescribed minimum area in case of resumption.

Due to the enactment of tenancy legislation, Indian tenants have acquired security in only 9 percent of total cultivated area of the country.

(iii) Conferment of ownership rights: Legislative provisions have been made in many states for conferment of ownership rights on tenants or allowing cultivating tenants to acquire ownership rights on payment of compensation. It has been estimated that as a result of laws conferring ownership rights on tenants in various states, approximately 12.42 million tenants have acquired ownership rights over 6.32 million hectares of land.

3. Reorganisation of Agriculture:

It includes (i) ceiling on agricultural holdings (ii) consolidation of holdings and , (iii) Co-operative farming

(i) Ceiling on Agricultural Holdings:

By ceiling on land holdings, we mean the fixing of the maximum size of holdings that an individual cultivator or an household may possess. The basic aim of ceiling is to accomplish the elimination of excess ownership of land. In this system, the land over and above the permissible limit for personal cultivation would be taken over by the state. The surplus land is distributed among the landless labourers and small and marginal farmers.

To bring uniformity in land ceiling policies a conference of Chief Ministers was held in 1972. The main features of the new policy were as follows.

1. Lowering of ceilings to 18 acres of irrigated land and 54 acres of unirrigated land.
2. Making family and not the individual as the unit for determining land holding.
3. Lowering ceiling for a family of 5.
4. Declaring binami transaction null and void.
5. Including the land reform laws in the Ninth Schedule of the constitution.

In the light of new policy, land ceiling legislations were enacted by all the states , except Goa and the North East Region. However ,the success has been limited due to poor enforcement. The committee on state Agrarian Relations and the Unfinished Task in Land Reform points out that the potential of ceiling surplus land was approximately 210 lakhs hectares. As against it, the declared surplus has been put at only 27 lakh hectares. Out of this states have taken possession of 23 lakhs hectares and distributed only 19 lakh hectares among 55 lakh households.

(ii) Consolidation of Holdings:

Consolidation of fragmented agricultural land has been an integral part of the land reform policy. By consolidation of holdings, we mean bringing together into one compact block scattered fragments of land of a cultivator. Initially the programme of consolidation was started on a voluntary basis but was later made compulsory.

Recognizing the importance of consolidation, legislations have been passed in most of the states to prevent sub division and fragmentation of land. However ,progress under the programme has been very slow. As on March 31,2002 consolidation of holdings had taken place only in an area of 66.10 million hectares against a total cultivable area of 142 million hectares. In fact ,only 15 states have passed laws of consolidation.

(iii) Co-operative Farming :

Co-operative farming has been one of the major objectives of the land reforms programme in India. By developing Co-operative farming the small holdings will be pooled and cultivated jointly to increase the size of the operational unit. Four kinds of Co-operative farming were identified by the Co-operative Planning Committee. These are (i) Co-operative collective farming, in which members have to give up their land forever but are paid wages and gain a share in the surplus produces. (ii) Co-operative tenant farming ,in which land owned by a society is divided into holdings and then distributed among them. Each farmer has to pay a rent for his portion of land. However, the produce of his holdings is entirely his own. (iii) Co-operative better farming where farmer get together to perform agricultural activities with improved methods but on their own separate lands; and (iv) Co-operative joint farming where in small farmers pool their lands together for better cultivation without giving up the ownership of their lands.

Co-operative farming in India has not been a success.

4.Land Records :

Correct and up-to-date land records are an essential condition for effective implementation of land reforms programme. It is also necessary to ensure smooth flow of credit and agricultural inputs to land holders. Land records are now being computerized throughout the country, although the progress is slow.

Impact of Land Reforms

India's achievement in the field of land reforms have been praiseworthy which may be described as follows:

The abolition of exploitative agrarian relation- marked by intermediary tenures-was the first and foremost task of the country after independence. This task has been accomplished in an appreciable manner. Zamindari and all intermediaries were completely abolished by the end of the First plan. It has been estimated in all about 173 million acres of land were acquired from the intermediaries. As a result, about two crore tenants were brought into direct relationship with the government.

As regards tenancy reforms , nearly 124.22 lakh tenants got their rights protected over an area of 156.30 lakhs acres by September 2000. The total quantum of land declared surplus in the entire country in 73.49 lakh acres in September 2000, out of which about 64.84 lakh acres were taken possession of and 52.99 lakh acres distributed to 55.10 lakh beneficiaries. About 147.47 lakh acres of public waste land have been distributed among the poor so far. Further ,a total of 39.19 lakh acres of land was acquired under Bhoodan land.

As far as a consolidation of fragmented agricultural land holdings in concerned, an area of 1633.47 lakh acres has been consolidated all over the country so far. As regards updating and maintenance of land records, the computerization of land records scheme is being implemented in 554 districts of the country. Co-operative farming has failed to serve the end.

Evaluation :

An evaluation of the implementation of land reforms brings out that land reforms in India achieved only a partial success. Whereas legislation succeeded in the matter of abolition of intermediaries, other objective of land reforms namely tenancy reforms and ceilings on landholdings were only partially realized. The partial success of land reforms is attributable to the fact that the reform measures were generally promulgated by ruling elites composed of the upper echelons of agrarian society.

The distribution of land has remained much skewed despite the enactment of legislation for land reforms. The Indian rural scene is characterized by extreme inequality in land and asset distribution. The latest data brings out that the concentration ratios of both the ownership and the operational holdings continue to be very high.

Some other adverse socio political consequences have also followed because of partial implementation of land reforms. According to Joshi, “.....it served primarily the richer peasants rather than the rural poor”. One such consequence is the emergence of a well to do peasantry as a powerful and political force in the rural areas.

Reasons for poor performance:

The reasons for the poor performance of land reforms programmes in India can be studied under three broad heads:- legislative snags , lack of political will, and bureaucratic apathy.

(a) Legislative snags : These include the following

- (i) Definition of personal cultivation:** personal cultivation should have meant cultivation by one’s personal labour. Personal supervision was generally considered a part of personal cultivation. Such an interpretation of personal cultivation led to a large scale transfer of land by the land lords to their family members to escape the laws relating to land ceiling. This reduced the effectiveness of ceiling laws.
- (ii) Inadequate definition of tenant :**in some states, sharecroppers and oral informal tenancies are not accorded the status of tenants. Therefore, laws relating to tenancy reform are not effective in protecting their rights.
- (iii) The problem of voluntary surrender:** The laws related to tenancy reforms cannot help tenants if they surrender their land voluntarily. This provision provided the landlords an opportunity to use their muscle and money power against the poor tenants, thereby forcing the latter to evict their lands voluntarily.
- (iv) Inadequate ceiling laws:** The levels of ceiling were different in different states. This created a lot of confusion and disputes. The list of exemption from ceiling was also unduly large.

(b) Lack of political will power:

Bringing reform in the age-old agrarian relation requires a substantial amount of courage and determination on the part of the authorities, which is unfortunately lacking in India. Our political leadership has adopted a two faceted policy as far as land reforms are concerned, viz., expressing sympathy with the poor while still aligning with the rich.

(c) Bureaucratic apathy:

Bureaucratic apathy is also a great obstacle in the progress of land reforms. It has been observed that a number of persons in the higher echelons of the administration are substantial land owners themselves who often prefer to protect the interests of the land owning section of the society. The bureaucracy is responsible for non-implementation of land reforms measures. Hence, a politician- bureaucrat-landlord nexus has developed in the country much to the detriment of land reforms.

Other reasons:

- (a) **Legal hurdles** : Land reform laws were defective in many ways. Legislation relating to the land reform were so full of loop holes.
- (b) **Absence of updated land records** : Land reforms cannot succeed unless the beneficiaries can produce evidence of their rights. The position regarding records of tenancies is not satisfactory anywhere in the country and no records exist in some areas. This has been creating difficulties in the implementation of land reforms.
- (c) **Agrarian reforms discouraged by foreign -aid institution** :Key players in the international community gave low priority to agrarian reforms as part of a strategy for addressing poverty issues and pursuing rural economic development. There were more interested in the achievement of aggregate production increases in agriculture by applying new technology in that sector.

Suggestions for improvement :

In order to implement the land reform measures successfully, the following suggestions are worth mentioning.

- (a) Effective implementation
- (b) Efficient administrative machinery
- (c) Simplifying legal procedures
- (d) Update land records
- (e) Generation of awareness among potential beneficiaries, and
- (f) Lessening political interference

Agricultural policy

Agricultural policy is designed by the Govt. for raising agricultural production and productivity and also for raising the levels of income and standard of living of farmers within a definite time frame. This policy is formulated for all round and comprehensive development of the agricultural sector.

Main objectives : The following are some of the important objectives of India's agricultural policy.

1. Raising the productivity of inputs
2. Raising value-added per hectares
3. Protecting the interest of poor farmers
4. Modernizing agricultural sector
5. Checking environmental degradation
6. Agricultural research and training
7. Removing bureaucratic obstacles

New National Agricultural Policy-2000.

In view of the problems associated with the agricultural sector during the 1990's , the National Agricultural Policy was announced on July ,2000. The policy document aims to attain the following objectives.

1. An annual growth rate of over 4 percent in the agricultural sector.
2. Growth that is based on efficient use of resources and conserves our soil, water and bio diversity
3. Growth with equity, i.e growth is widespread across regions and farmers
4. Growth that is demand driven and caters to domestic market and maximizes benefits from exports of agricultural products.
5. Growth that is sustainable technologically, environmentally and economically.

In order to attain these objectives ,National Agricultural Policy envisages measures in the following areas.- Sustainable agriculture, food and nutritional security ,generation and transfer of technology, incentives for agriculture, investment in agriculture, institutional structures ,and risk management.

The main features of the new agricultural policy are as follows:

This policy seeks to harness the vast untapped potential of Indian agriculture and also to strengthen rural infrastructure that is necessary for faster agricultural development. Therefore, this policy seeks to promote technically sound, economically viable, environmentally non degrading, and socially acceptable use of country's natural resources to promote sustainable development, to raise and to serve as a vehicle for building a resurgent national economy.

The new policy promises a lot. It hopes to achieve green revolution, white revolution, and blue revolution. In other words , it promises " Rainbow Revolution".

The policy aims at removing controls and restrictions and subsidies to inputs. The policy also lays emphasis on private sector through contract farming by land leasing arrangements.

Private sector investment in agriculture will be encouraged. The domestic agricultural market will be liberalized. Restrictions on the movement of agricultural commodities will be progressively dismantled. The policy aims at encouraging lease markets for raising the size of holdings. It also seeks to encourage consolidation of holdings and speeding up tenancy reforms to recognize the rights of the tenants and sharecroppers. The policy encourages future trading in all important products. The policy has recommended formulation of commodity wise strategies and arrangements to protect farmers from adverse impact of undue price fluctuations in the world market and promote exports.

Food Security

From the chronic shortage of foodgrain and virtually “ship –to-mouth” existence in the mid 1960 s ,India has made considerable strides towards achievings food security . Thanks to green revolution the country has not only achieved self sufficiency in food grains but has become a net exporter .There has been a significant decline in the incidence of poverty since the mid 1960 s .Even then , according to latest official estimates in 2004- 05 27.5 per cent of the population was still below the poverty line . This implies that despite the availability of food grains for meeting the requirements of the entire population , we are still far from generating the necessary purchasing power or effective demand from the poor to satisfy their needs .Since effective food security implies achievement of both physical and economic access to food , a large section of our population can still be considered to be suffering from food insecurity .

“Food security implies access by all people at all times to sufficient quantities of food to lead an active and healthy life “. (P.V. Srinivasan). Food security exists when all people at all times have physical and economic access to sufficient , safe and nutritive food to meet the dietary needs and food preference for active and healthy life (FAO .1996) Food security is broadly defined as a synchronization of three important elements . it envisages the availability of quality food at affordable prices to the citizens of a country .It any time and place . it has three main elements to fulfil the food availability , the quality of food available and the accessibility of the people to such food. At the household levels, food security implies having Physical and economic access to food that is adequate in terms of the quantity , quality and safety .

Food Security in India

If the objective of ensuring a healthy and productive life to all households is to be fulfilled , a time bound programme to meet four critical requirements for food security have to be met . They are : (a) adequate availability , (b) reasonable stability in terms of quantity and price ,(c) purchasing power to access food and desired nutritional intake .Let us summarise some important action in these areas .

Pre-reform period: The first condition for ensuring food security is availability of food grains to meet the requirement of the country’s population . With concerted efforts we have transformed a heavily import depended agricultural economy into one of food self sufficiency, in fact , one with exportable surpluses . it has been largely due to several policy and programmatic interventions . The most important among them being (a) Technological improvement , (b) Institutional and infra structural reforms ,and (c) Support prices Another requisite for ensuring food availability is making sure that the domestic market functions efficiently

Per capita food availability recorded a notable increase during the period 1950-51 to 1990-91, since the growth rate of foodgrain during this period was significantly higher than the growth rate of population . The per capita availability of food grains increased from an average of 391 grams per day during 1951 to an average of 494 grams per day during 1991, but declined to 449 grams per day by 2003.

The Indian economy and all its sectors registered a high growth during the 1980's resulting in increasing per capita incomes and increased access to food in general. The economic access to food increased both because of rising income in agriculture and also, the real price of food declined during the 1980's and the proportion of per capita income required to buy food had also increased as a result of operation of numerous anti poverty and employment generating programmes. Food management and the policy of buffer stocking were also instrumental in imparting stability to prices of major cereals.

According to the Planning Commission, the most significant contribution of food management in India was to encourage food production, increase per capita availability, keep real price of food grains low and contain food price variability.

Post liberalisation period :

Available data suggest that the state of food security deteriorated during the post reform period 1990-91 to 2003-04.

Availability of foodgrain is the first component of food security.

The availability of food grain declined since the growth rate of foodgrains production which was 2.85% per annum during 1980-81 to 1990-91 decelerated significantly to only 1.16% per annum during the post liberalisation period 1990-91 to 2003-04. This growth rate was lower than the population growth rate of 1.95% per annum during this period, thereby resulting in a reduction of per capita availability of food grains from 492 kg per capita during 1992 to 449 kg per capita during 2004. The available data indicate that a decline in per capita availability of foodgrains has adversely affected their nutritional status.

Stability of supplies is the second feature of food security. Indian food production is characterized by large year-to-year fluctuations. For instance, foodgrains output which had increased to a peak level of 212.9 million tonnes in 2001-02 fell down to 174.2 million tonnes during 2002-03 and rose again to 212 million tonnes in 2003-04. However, the policy of buffer stocking has enabled India to maintain a satisfactory level of stability of food supplies and effectively insulated domestic prices from high volatility in international prices of wheat and rice.

Economic access to food is the third component of food security. There is mixed evidence as to whether or not access to food increased during the post reform period. Both the GDP and per capita income recorded a significant acceleration during the post reform period 1992-93 to 2003-04. According to official data, the incidence of poverty declined from 36 percent during 1993-94 to 28 percent by 2004-05. This implies that the access to food of the poor has increased at a slow rate.

But the deceleration in the growth rate of agriculture during the post reform period has resulted in slower growth in income of agricultural workers. Hence, their access to food is likely to have declined. The access of rural people to food has also declined because of collapse of employment in agriculture. Rapid rise in wheat and rice prices also resulted in reducing the access of the poor to food.

The introduction of TDPS as well as various other schemes have all had a positive impact on access of food to the poor

Public Distribution System(PDS)

The most important component of the food security system is public distribution of foodgrains through a network of fair price shops. The basic objectives of the public distribution system is to protect the interest of the vulnerable sections of population against high prices. It operates through a network of fair price shops. With a network of more than 4.47 lakh fair price shops, distributing consumption items worth more than Rs 30000 crore annually, to about 16 crore families, the PDS in India is the largest distribution network of its kind in the world. Its broad features are as follows:

1. Selected essential commodities are distributed through the fair price shops and co-operatives
2. The Govt. maintains a buffer stock and replenishes the same through the system of procurement.
3. Prices charged are lower than the market prices.
4. Free market mechanism co-exists with the public distribution system.
5. It has been basically an urban – oriented system.

Objectives

The important objectives of the system are:-

1. To improve the distribution of basic goods e.g. rice, wheat, edible oil, sugar, kerosene, etc.
2. To control prices of essential commodities,
3. To meet consumption needs of masses
4. To maintain good quality at low cost;
5. To bring stability in prices,
6. To weave production and marketing system into a unified whole.

Public distribution system is being seen more as an anti-poverty programme with the onset of the Structural Adjustment Programme. In January 1992 the Govt. introduced a scheme of revamped PDS in 1700 blocks located in most difficult areas of the country. Food grains are allocated to these blocks at Rs 50 per quintal lower than normal issue price. The other programmes under which food grains are distributed are National Food for Work Programme, Antyodaya Anna Yojana, Midday Meals Scheme, etc.

Public distribution system has been widely criticized for its failure to serve the population below the poverty lines, its urban bias, limited coverage in the states with high concentration of the rural poor and lack of transparent and accountable arrangements for delivery. In order to meet some of these objections, in June 1997, the Govt. of India launched the Targeted Public Distribution System (TPDS) with focus on the poor.

Targeted Public Distribution System (TDPS)

Under the Targeted Public Distribution System (TDPS), foodgrains are distributed to the BPL Families at highly subsidized rate. States are required to formulate and implement foolproof arrangements for identification of the poor for delivery of food grains and for its distribution in a transparent and accountable manner at the fair price shop level.

The population below the poverty line is worked out by adopting the methodology suggested by the expert groups set by the planning commission. Under the TPDS, the prices for the below poverty line families were 50 percent of the economic cost of the FCI but the amount was only 10 kg per family per month. APL families are also eligible for 10 kg per family per month but at a higher price. Later the Govt. of India increased allocation to BPL families from 10kg to 20 kg of foodgrains per family per month at 50 percent of the economic cost with effect from April. 1. 2004

The introduction of the TPDS combined with large scale anti. Poverty programmes has, no doubt, tended to benefit the poor in India but it has also resulted in large increases in food subsidy from Rs 7500 crore in 1997-98 to Rs 25,800 crore by 2004-05. TPDS suffers from several other deficiencies such as urban bias in coverage. diversion of grains to the open market etc.

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EPW Various Issues

Yojana various issues

Special issue of Agriculture by the Hindu News paper.

MODULE III

INDUSTRY

Industrial structure in India: Traditional, SSI, Village, Cottage and Modern industries. -
Industrial Policy Resolution in India till 1991 - New Industrial Policy and its impacts

Introduction

Industry includes manufacturing (registered and un registered), mining ,construction and electricity , gas and water supply . But manufacturing occupies a central role in the industrial sector of a country . Industrial development is necessary to bring about structural changes in the economy . Economic development of a country is associated with industrialization .Western capitalist countries amply demonstrates this thesis .Their rate of growth are attributed to industrialization .The high rate of growth of income of industrially advanced countries is due to the fact that these countries are industrially advanced . Industrialization brings about favourable change in the country's occupational structure. Industrialisation offers the only way to the creation of employment .Further , agricultural development is largely conditioned by industrial development . For security consideration , no one can deny the role of industrialization in an economy .Thus , it is quite clear that industrial development is of urgent necessity in a country like India .

Industrial scene at Independence .

The main features of the industrial scene in India on the eve planning were as under :

1. There was preponderance of consumer goods industries vis .a .vis producer goods industries resulting in lop-sided industrial development
2. The industrial sector was extremely under developed with a very weak infrastructure.
3. The lack of government intervention in favour of the industrial sector
4. Export orientation has been against the country's interest
5. The structure of ownership was highly concentrated .
6. Technical and managerial skills were in short supply .

With independence, India turned its back on an open economy in pursuit of its objective of an industrial self -sufficiency . Organized thinking concerning the direction of industrial development may be traced to the statement of industrial policy. Since the initiation of planned development , the economy has attained considerable diversification .The broad aims of the plan have been to turn India into an industrial power .The strategy adopted involved the establishment of a heavy industrial base and consumer goods industry to self sufficiency. As a result, the industrial structure has been widely diversified covering broadly the entire range of consumer, intermediate and capital goods industries.

Industrial structure in India

The changes in the structure of industrial growth in India during the last five decades can be analyzed under two broad heads . viz: (a) Industrial growth ,and (b) pattern of industrialization.

A. Industrial Growth

One can identify four distinct phases of industrial growth in India since the planning era. The first phase of rapid growth ends from 1956-1965. The second phase of slow growth or deceleration extends from 1965-66 to 1979-89 .The third phase is a phase of recovery and revival of growth since 1980s and the fourth phase starts with 1991 economic policy reform since 1991.

First phase (1951-65)

Phase I laid the basis for industrial development in the future . There occurred a noticeable acceleration in the compound (annual) growth rate of industrial production over the first three plan periods up to 1965 from 5.7 percent in the First plan to 8.0 percent in the Third plan .This period of growth has been named the period of “industrial growth with regulation”

This high rate of a industrial growth were due to (a) Emphasis on industrialization (b) Heavy industry oriented strategy of industrialization ,and (c) Substantial investment made in the industrial sector .

Second phase (1966-80)

The period 1966-80 was marked by a sharp deceleration in industrial growth. The growth rate declined to 5.7 percent in the period 1966-67 to 1979-80 .This period was characterized by structural retrogression. Major reasons for deceleration and retrogression are as follows.

- (a) Slow down in public investment.
- (b) Poor management of infrastructure.
- (c) Slow growth of agricultural income ,and
- (d) Restrictive industrial and trade policies

Third phase (1981-1991)

The period of 1980's can be broadly termed as the period of industrial recovery or revival. The rate of industrial growth was 6.5 percent per annum during 1981-85 ; 8.5 percent during the seventh plan (1985-90) ;and 8.3 percent in 1990-91. “This performance is an improvement upon the growth rate achieved during the First and Second plan periods“

The major factors that contributed to this turn around are explained below .

- (1) Liberalization of industrial policy.
- (2) Increase in public investment
- (3) Notable improvement is private sector investment.
- (4) Improvement in the agricultural production.
- (5) Growth of service sector,
- (6) Better performance of infrastructure industries ,
- (7) A decline in inter sectoral terms of trade in favour of non.- agricultural sector.
- (8) positive role of state in stimulating recovery ,
- and (9) Liberal fiscal regime .

Fourth phase (1991-92 on wards)

The 1990's have certainly been an eventful period for the industrial economy of India . Crisis, adjustment ,recovery , rapid growth and then a downward slide –this decade has seen it all .The period after reform can be divided into two sub periods .(1) The period of 1990's (upto 2001-02) and (2) the period since 2002-03.

(i) The period of 1990's

The post reform period up to 2001-02 was marked by considerable fluctuation and showed total lack of consistency in industrial growth performance. The set back in industrial production occurred during 1991-93 extended right into 1993-94 also. The rate of industrial growth began to accelerate in the second half of 1993-94 .The three years from 1993-94 to 1995-96 saw an average growth of 13 percent per annum . The average annual growth rate of industrial production was 5 percent during the period 1990-91 to 1999-2000.The rate of growth of industrial production was just 2.7 percent in 2001-02

The industrial deceleration was due to (a) demand constraints , (b) supply constraints , and (c) structural and cyclical reasons.

ii The period since 2002-03 (Revival and strong growth)

The period of the Tenth plan (2002-03-2006-07) has witnessed revival of industrial growth . The industrial recovery in 2002-03(5.7 percent) , which consolidated during 2003-04 (7.0 percent) ,has gathered momentum since then reaching 8.4 percent in 2004-05 , 8.2 percent in 2005-06 and 11 percent in 2006-07 . For the plan as a whole , the average rate of growth of industrial production comes out to be 8.2 percent per annum . In fact , the rate of growth in industrial production at 11 percent in the last year of the plan (2006-07) is the highest growth achieved since 1995-96 .

The surge in industrial growth could be attributed to certain structural changes in the economy. These included rise in savings rate from 23.5 percent in 2000-01 to 37.7 percent in 2007-08; increase in exports /GDP ratio (33.2% in 2007-08) and financial deepening

Though the growth of industrial sector started to slow down in the first half of 2007-08 , the overall growth during the year remained as high as 8.5 percent . The year 2008-09 witnessed slow down due to the global financial recession . The pace of slow down accelerated in the second half of 2008-09 . The year 2008-09 thus closed with the industrial growth at only 2.4 percent .There was, however , a recovery in industrial growth from 2.4 percent in 2008-09 to 5.3 percent in 2009 and 8.2 percent in 2010-11.

B. Pattern of Industrialization .

Another dimension of the structure of the Indian industry is pattern of industrialization . The pattern of industrialization can be studied under two heads:

- (i) Functional pattern of Industries (use based classification)and
- (ii) Ownership pattern of industries

(i) Functional pattern of Industries

With use based or functional classification as the criterion, various industries can be divided into four groups; viz (a) Basic goods industries (b) capital goods industries, (c) Intermediate goods industries; and (d) consumer goods industries. In this context, five distinct phases relating to the compound rates of growth in different industries can be observed.

(i) The first phase (till 1965) of industrial development has been characterized by high growth. The pattern of industrialization that evolved during this period had shown two features (i) The rate of growth of capital goods industries has been rapid. The rate of growth increased from 9.8 percent per annum in the First plan to 19.6 percent per annum in Third plan.

(ii) The rate of growth of basic goods industries also registered a significant increase from 4.7 percent per annum in the First plan to 10.4 percent per annum in the Third plan.

(iii) A slow growth of consumer goods industries

The second phase (1965-75) has been characterized by structural retrogression. During this period, capital goods industries group registered an annual rate of only 2.6 percent.

During the third Phase (1975-90), industrial growth was fairly diversified and growth rates in all the different segments picked up. Basic goods industries maintained a fairly high rate of growth (8.4% per annum) as did the capital goods (5.7% per annum) and intermediate goods (4.3% per annum) industries.

During the fourth phase (1990 onwards), the relative share of basic and capital goods sector declined whereas the contribution of intermediate and consumer goods industries increased. The relatively low contribution of the basic and capital goods sector reflects the impact of trade liberalization and of financial liberalization.

The fifth phase (2008-09 onwards) is characterized by slow down in the growth rate of consumer durables. But growth in production of capital goods continued at a robust pace. By the last quarter of 2008-09, all sectors of the industrial economy had entered the revival mode. Consumer durable goods sector grew by an average 25.8 percent during 2009-10. Basic goods and intermediates also recorded higher and more consistent growth during 2009-10.

ii. Ownership Pattern of Industries :

The present economic structure of Indian economy is known as mixed economy, where there is a co-existence of both the public sector and the private sector. All the different types of industries are divided between these two sectors. The scope of each sector was defined in the industrial policy resolutions announced from time to time by the Govt. An attempt is made in this section to examine the structure of India's industrial sector on the basis of ownership pattern. After independence especially after the introduction of economic planning the importance of public sector was realized.

The public sector accounted for 6.1 percent of total number of factories , 28 percent of employees , 55 percent of net fixed capital and 32.1 percent of net value added by the industrial sector in 1992-93 .The private sector accounted for 92.3 percent of total number of factories , 67.2 percent of employees , 39.4 percent of net fixed capital and 61.5 percent of a net value added in 1992-93 . Joint sector accounted for 1.5 per cent of total factories , 4.7 percent of employees , 5.6 percent of net fixed capital and 6.4 percent of net value added in 1992-93 .

Around the mid 1990,s public sector accounted for 4.7 percent of the total number of factories , 27.4 percent of employees , 55.0 percent of net fixed capital , 30.1 percent of value added , 25.5 percent of value of output and 34.3 percent of emoluments . It would be observed that while Govt. occupies the commanding heights of investment , its share in output , value added and employment is substantially smaller .

Industrial policy

The pace, pattern and structure of industrialization in a country is highly influenced by its industrial policy .The industrial policy of a country consists of (i) the philosophy of a given society to bring about industrial expansion and (ii) the principles , procedures , rules and regulations which can give concrete shape to the philosophy .

At independence , India inherited a state of economy with a very weak industrial base . So there was a need for a strong and effective industrial policy . The first industrial policy resolution was issued by the Government of India on April 6, 1948. This was followed by industrial policy resolution of 1956,1977,1980 and 1991 . The main industrial policies are briefly discussed below .

I. Industrial policy Resolution - 1948

Industrial policy resolution of 1948 recognised the principle of mixed economy. This policy divided the various industries into four broad categories .

- i. State Monopolies :**The first category included three industries ,viz: arms and ammunition, atomic energy and rail transport . This category would belong to the exclusive monopoly of the central Government .
- ii. Basic industries :** The second category included six industries , viz :coal, iron and steel , aircraft manufacture , ship building , manufacture of telephone , telegraph and wireless apparatus and mineral oils .New undertakings in this category would be taken only by the Government but the existing private under takings were allowed to continue for 10 years .
- iii. Regulated industries :** The third category included 18 industries of national importance such as automobiles ,heavy chemicals , heavy machinery , machine tools , etc .The Government of India would regulate these industries because of the importance of these industries .
- iv. Private industries:** The last category included all the other industries except the above . These industries were open to private sector .
This industrialpolicy resolution also stressed importance of cottage and small – scale industries .

II. Industrial Policy Resolution-1956

The formulation of the second five year plan and the acceptance of a “Socialistic pattern of society “ as the objective of social economic policy necessitated a new Industrial Policy Resolution on April ,1956. The objectives of the new industrial policy were :

- i.To accelerate the rate of economic growth and to speed up industrialization ,
 - ii. To develop heavy industries and machine making industries ,
 - iii.To expand the public sector ,
 - iv. To reduce disparities in income and wealth ,
 - v. To prevent monopolies and the concentration of economic power ,and
 - vi. To build up a large and growing co-operative sector . The 1956 Resolution divided the industries into three schedules .
- i. Schedule A:**This schedule includes 17 industries , the future development of which was to be the exclusive responsibility of the state . Of the 17 industries 4 industries -arms and ammunition , atomic energy , railway and air transport were to be government monopolies . In the remaining 13 industries , new units were to be established by the state but the existing private units were allowed to subsist and expand .
 - ii. Schedule B:** Schedule B contained 12 industries. Such industries would be progressively state owned . The state was to establish new under takings but the private enterprise can also supplement the efforts of the state in these fields .Some of the important industries in this schedule are machine tools , the chemical industry , fertilizer etc.
 - iii. Schedule C:** Schedule C includes all the remaining industries, mostly in the consumer goods sector. The future development these industries had been left to the initiative and enterprise of the private sector .

The 1956 Resolution recognized the importance of small-scale and cottage industries and the interdependence between public and private sector .It also called for the reduction in regional imbalances and inequalities .This policy has been described as the “economic constitution of India “.

III. Industrial Policy of 1977

In December,1977, the Janatha Government announced its New Industrial Policy in the parliament . Following are the main elements of the new policy .

(1) Development of small -scale sector : The main thrust of new policy was the emphasis on the development of small -scale industries .The Janatha Government classified small -scale industries in to:-

- (i) Cottage and house hold sector ,(ii) Tiny industry sector , (iii) small scale industries

(2) Areas of large –scale Industry sector :-

The 1977 Industrial Policy prescribed the following areas for large scale industries sector :- (a)Basic industries (b)Capital goods industries (c) High technology industries , and (d) Other industries out side the list reserved items for the small – scale sector

(3) Approach to Large Industrial Houses :

The new policy restricts the scope of large business houses so that no unit of the same business group acquired a dominant and monopolistic position in the market .

(4) Expanding Role of the Public Sector :

The new policy expanded the role of the public sector .It was stated that the public sector industries would produce not only basic and strategic goods but also essential consumer goods. This sector would be encouraged to develop ancillary industries .

(5) Promotion of Technological Self reliance :

Govt. recognized the necessity of allowing the inflow of foreign technology in high priority industries where domestic technology has not yet adequately developed .

(6) Approach towards Foreign collaboration :

It was maintained that “In areas where foreign technological know –how is not needed, existing collaboration will not be renewed

(7) Measures in case of Sick Industrial units :

The new policy aimed at adopting a selective approach in the case of sick industrial units. While the govt. cannot ignore the necessity of protecting existing employment, the cost of maintaining such employment has also to be taken into account. .

(8) Labour Management Relations

The new policy put emphasis on reducing the occurrence of labour unrest .The Govt. encouraged the worker’s participation in management of industrial units from shop floor level to this board level

IV. Industrial policy of 1980

The congress Government announced its industrial policy on 23rd July 1980 .This policy was based on the Industrial Policy Resolution of 1956 .The IP of 1980 believed that industrialization was essential for the rapid economic development of the country .It believed in Government’s commitment to rapid industrialization in the country with a view to benefit the common man

The Industrial policy statement of 1980 had the following socio economic objectives .

- (i) Optimum utilization of installed capacity ,
- (ii) Maximization of industrial production and achieve higher productivity .
- (iii) Generation of employment opportunities ;
- (iv) Correction of regional imbalance by setting up industrial units in backward areas ,
- (v) High priority and preferential treatment to agro-based industries
- (vi) Faster promotion of export – oriented and import substitution industries
- (vii) Promoting economic federalism by properly spreading investment in small scale industries ,
- (viii) Reviving the economy by removing infra structural gaps

Policy Measures :-

(1) Revitalization of the public sector industries :

The Govt. proposed to revitalize the public sector industrial units by strengthening their management , developing management cadres , making unit by unit study , converting loss making units into viable units , etc .

(2) Small – scale and village industries

Taking into consideration the rise in prices , investment limits were raised from Rs 10 lakh to Rs 20 lakh in the case of small – scale units; from Rs 15 lakh to Rs 25 lakh in the case of ancillaries and from Rs 1 lakh to Rs 2 lakh in the case of tiny units :

(3) Economic Federalism

The Industrial policy statement of 1980 proposed to promote economic federalism by setting up nucleus plants in each district identified as industrially backward ; with a view to generate ancillary and small – scale industries around the nucleus industry .

(4) Automatic Expansion :

The facility of automatic expansion was extended to 15 other basic industries .

(5) Industrial sickness

The IP statement of 1980 proposed to devise an early warning system to identify incipient sickness . It was proposed to give income tax and other concessions in the case of voluntary merger of sick units with a healthy unit . Govt. was to takeover sick units only when public welfare demanded such a take over .

(6) Export – oriented industries

The IPR of 1980 proposed to offer special facilities for export – oriented industrial units .

(7) Advanced Technology

This policy favour advanced technology . The idea behind permitting advanced technology was both to increase international competitiveness and also to bring about improvement in quality of goods and reduction in their costs and prices

(8) Modernization

The IPR of 1980 proposed to evolve “ Modernization Package” that would suit the requirements of each industry .

(9) Ecological Balance

The Industrial policy of 1980 proposed to continue the policy of not allowing setting up of new industrial projects in metropolitan areas which are already congested . It encourages dispersal of industries to relatively less industrially developed areas .

(V) New Industrial Policy of 1991

The government announced a new industrial policy on July -24 , 1991 in line with the liberalization measures taken during the eighties . It marks a sharp departure from earlier policy resolutions. The basic philosophy of the new policy has been summed up as “ continuity with change “

Objectives : the prime objectives of the new industrial policy are :

- (i) To unshackle the economy from the cobwebs of unnecessary bureaucratic controls ,
- (ii) To consolidate the strength built up during the last four decades of economic planning and to build on the gains already made ,
- (iii) To correct the distortion or weakness that may have crept in the industrial structure .
- (iv) To maintain a sustained growth in the productivity and gainful employment , and
- (v) To attain international competitiveness.

To fulfil these objectives, the government introduced a series of initiatives in the new industrial policy in the following areas.

A. Industrial Licensing Policy

(i) Industrial licensing has been abolished for all projects except for a short list of industries related to security and strategic concerns, social reasons hazardous chemicals and overriding environmental reason , and items of elitist consumption . Now licensing is compulsory for only 5 Industries ,(ie. alcohol , cigarettes , hazardous chemical , electronic aero scope , defence equipment and industrial explosive).

(ii) Only three industries groups where security and strategic concerns predominate , will be reserved exclusively for the public sector .(ie atomic energy , substance notified by the Dept. of Atomic Energy , railway transport).

(iii) . In projects where imported capital goods are required , automatic clearance will be given in the following cases :

- (a) Where foreign exchange availability is ensured through foreign equality .
- (b) If the CIF value of imported capital goods required is less than 25 per cent of the total value of plant and equipment , up to a maximum value of Rs .2 crore

B. Foreign Investment

- (i) Automatic approval will be given for direct foreign investment up to 51 per cent equity in high priority industries . The limit was subsequently raised from 51 percent to 74 percent and then to 100 percent for many of these industries .[FDI is only prohibited in retail trading , atomic energy lottery business, and gambling and betting]
- (ii) To provide access to international markets , majority foreign equity holding up to 51 percent equity will be allowed for trading companies primarily engaged in export activities .
- (iii) The Foreign Investment Promotion Board has been constituted to negotiate with a number of large international firms and approve direct foreign investment in the selected areas

C. Foreign Technology Agreement

- (i) Automatic permission will be given for foreign technology agreements in high priority industries up to a lump sum payment of \$ 2 million , 5 per cent royalty for domestic sales and 8 percent sales over a 10 year period from the date of agreement or 7 days from commencement of production .
- (ii) In respect of industries other than those included above , automatic permission will be given subject to the same guidelines as if no foreign exchange is required for any payments.

D. Public Sector Policy

- (i) The 1991 industrial policy reduced the number of industries reserved for the public sector to 8. Now only three industries (atomic energy , minerals and rail transport) are reserved for public sector.
- (ii) Potfolio of public sector investments will be reviewed with a view to limit these to strategic , high-tech and essential infra structure .Where as some reservation for the public sector is being retained , there would be no bar on opening up areas reserved exclusively for the public sector to the private sector selectively . Similarly , the public sector will also be allowed entry in areas not reserved for it
- (iii) Public enterprises which are chronically sick and which are unlikely to be turned to normal health , will be referred to the Board for Industrial and Financial Reconstruction (BIFR) for advice about rehabilitation and reconstruction .

- (iv) In order to raise resources and encourage wider public participation, a part of the government's share holding in the public sector would be offered to mutual funds, financial institutions, general public and workers
- (v) Board of public sector companies would be made more professional and given greater powers

E. MRTP Act

- (i) MRTP (Monopolies and Restrictive Trade Practices) Act has been amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings.
- (ii) Emphasis will be placed on controlling and regulating monopolistic, restrictive and unfair trade practices.
- (iii) Provisions relating to concentration of economic power, pre entry restrictions with regard to prior approval of the central government for establishing new undertakings, expanding the existing undertaking, amalgamation, merger etc. have been deleted

F. Abolition of Phased Manufacturing Programmes and removal of mandatory convertibility clause and liberalization of location policy; etc. are some other provisions of this policy

Appraisal of New Industrial policy (impact)

The new industrial policy (1991) paves way for liberalization which will again result in faster industrial growth as the industrial sector is being relieved of unnecessary control and regulation. J.C. Sandesara argued that the new policy will accelerate industrial production as it reduces project time and project cost of production, attracts capital, technology and managerial expertise from abroad and improves the level of efficiency of production, enhances the allocative efficiency of the public sector and curbs anti-competitive behaviour of firms in the monopolistic and oligopolist markets.

However, some economist have criticized this new policy on various ground :

- (i) The new policy package makes a complete departure from the Nehruvian model.
- (ii) Indian businessmen are facing unequal competition from MNCs. The various measures to promote foreign investment and various concessions to such investment have provided opportunities to MNCs to penetrate the Indian economy and gobble up Indian enterprises
- (iii) India has moved from the much protection to too little protection, which may eventually result in policy induced de industrialization.
- (iv) It cause distortions in production structure.
- (v) Excessive freedom given to foreign capital may affect our economic sovereignty and will push the country towards debt trap

Thus considering all these apprehensions sufficient care should be taken in near future to keep the industrial economy in right track

Large Scale Industries – Traditional

We distinguish the industries in terms of capital investment as large, small and tiny sectors. Industrial units with investment higher than specified for small scale industries are large-scale industries. Large-scale industries can further be classified as traditional and modern. Industries may be described as 'Traditional' in the sense that they have a fairly long history and were well established when the First Five Year plan was launched. They include most prominently the cotton and jute textiles, sugar, iron and steel, paper and cement industries. Let us now discuss the present status of some of these major large scale industries in India.

Cotton Textile Industry

The cotton industry is one of the oldest industries in India. It has become one of the major large scale industries in India.

The first cotton mill was established in 1818 at Fort Gloster near Calcutta. The real growth of the industry started with the setting up of the Bombay Spinning and Weaving Mills in 1854 with Parsi capital. The Swadeshi movement and the First World War helped in the expansion of the industry. In the early period of this century the industry faced stiff competition from Japan. After 1930, however, the situation improved as a result of bilateral trade agreements with Japan. With the grant of protection in 1927 the industry began to make rapid progress. During the Second World War competition from Japan ceased and the industry increased its production to cater to war demands. In 1947 protection to the industry was withdrawn.

The partition of the country was a serious blow to the industry. India retained most of the factories whereas 40% of the area under cotton cultivation went to Pakistan. This adversely affected the supply of raw cotton.

Till 1920 the development of cotton textile industry was concentrated in and around Mumbai. With the establishment of cotton textile mills in north India, Tamil Nadu, Karnataka, and Madhya Pradesh, there took place decentralization of this industry. Even now sixty percent of the spindles and looms are concentrated in Mumbai and Ahmedabad.

The industry has three mutually exclusive and disparate sectors, namely, the mills, the handlooms and the power looms. The mills manufacturing cloth come under the organized sector while the other two are generally included in the decentralized sector.

Till 1960, a major proportion of cloth output in India was produced in the mill sector (72.5% in 1960). Since the mid 1960's the major share (95%) of cloth output comes from the decentralized sector. Of the two sub sectors -handlooms and power looms -in the decentralized sector, it is the power looms sub sector that has grown at a faster pace. For instance in 1998-99, the share of power looms in total fabric production was as large as 74.7 percent while handlooms contributed 18.8 percent.

Cotton textile industry provide employment to about 35 million workers and accounts for 14 percent of total industrial production in the country. This industry accounts for 16.33 percent of the total value of exports and 4percent to the GDP in this country. Textiles and cloths worth US Dollar 26.82 billion were exported during 2010-11.

With the aim of developing the three sectors of the industry, viz,mills, power looms and hand looms in an integrated manner, the government announced a new textile policy in 1985. The main objective of this policy was to enable the industry to increase production of cloth of good quality at reasonable prices for the vast population of the country as well as for exports. A textile modernization fund of Rs. 750 crore was created in 1986 to meet the modernization requirements of the textile industry. A textile workers rehabilitation fund has been set up to provide interim relief to workers rendered unemployed as a consequence of permanent closure of the textile mills.

The Govt.of India has agreed to phase out Multi Fibre Agreement within 10 years. The MFA is now to be dismantled in four stages. Thus immense opportunities await the Indian textile exports in years to come.

The Cotton Technology Mission has been launched to improve cotton yield in the country. The mission is a major initiative of the Govt. to help the industry face global competition once the MFA under the August of the WTO ends.

Problems :

1.Modernisation and rationalization : There are four aspects of the problem.

- a) Modernization requires funds. Textile mills lack internal surpluses to meet their modernization needs. But banks are unwilling to provide necessary funds. The attitude of various financial institutions has been lukewarm.
- b) Lack of modernization raises the cost of production. The cost of production is further increased by hike in wages in the organized sector and the cost of raw materials. Higher costs lead to higher prices. This adversely affects their competitive position and hence their share in the export market.
- c) Non- availability of modern sophisticated machinery within the country. Moreover, textile industry has not attracted enough foreign investments.
- d) The decreasing share of the organized sector and increasing share of the decentralized sector on account of a deliberate policy adopted by the Govt, the modernization of one sector alone will not do either.

2.Lack of raw-materials:

Among the raw materials, cotton is the most important. Given the fact that the productivity of crop Is very low in India, its cost of production, and hence price is relatively higher. Moreover, the quality of Indian cotton is deplorably low. The prices of other raw materials like dyes, chemicals and starch have also been increasing sharply. All these have raised the prices of yarn and cloth. Thus, rising prices of raw materials, particularly cotton, are bound to have great impact on the economics of textile production. In addition to raw cotton, non-availability of power and coal and railway wagons make things more complicated.

3.Low demand for cotton cloth :

- a) Cotton cloth is pitted against synthetic cloth. Synthetic cloth has been attracting more demand both from the urban and the rural consumer. Further massive power loom sector has been flooding the market with its cheap products. All this adversely affected cotton cloth industry.
- b) Low demand for cotton cloth has also been a consequence of low availability of the purchasing power with the weaker sections of the society. Lack of demand is also due to changing pattern of consumption. There is a trend of an increase in consumption of mixed fabrics.
- c) The capacity utilization of cotton textile industry is very low.

4.Sickness :

Because of two problems i.e out dated plant and machinery and labour disputes, a number of cotton mills are facing recession and are turning sick, which often leads to widespread unemployment Govt. of India established the National Textile Corporation in 1968 with the objective of reviving the sick textile mills.

Suggestions :we may make the following suggestions.

Proper attention should be paid to quality. Steps should be taken to ensure full utilization of spindles and looms. Timely financial assistance on easy terms should be provided to such of the sick mills as are capable of generating repayment capacity out of such assistance. It is essential that measures are taken to ensure a steady consumption of indigenous cotton and create buffer stock operations for cotton. A reasonable floor price of cotton should be assured to the grower, so that he is encouraged to grow more cotton. The uneconomic subsidy system has to be discontinued.

New textile policy :

A new textile policy was announced on Nov.2,2000. The aims of the new policy are:

1. To increase apparel and textile exports to \$ 50 billion from the present level of \$ 11 billion.
2. To encourage the private sector in setting up specialized financial arrangements to fund the diverse need of the industry.
3. To encourage the private sector to set up integrated complex and units.

The principal provisions of the new policy are as follows:

- i. Free flow of capital allowed in the sector.
- ii. Duty structure would be reviewed.
- iii. A venture capital fund should be set up to encourage entrepreneurship among technocrats.
- iv. There should not be any mandatory export obligation on FDI.
- v. The highly export oriented garment sector has been taken off SSI reserve list.

Iron and Steel Industry

The iron and steel industry is the basic industry of the country. Indeed, steel is the backbone of all development, industrial as well as agricultural. The development of machine-building, consumer goods industries, transport and communications, irrigation and scientific agriculture is dependent on the availability of adequate quantity of cheap and good quality steel in the country.

The real beginning of modern iron and steel production started with the establishment of Tata Iron and Steel works in 1907 (TISCO). In 1919 the Indian Iron and Steel company and in 1923 Mysore State Iron Works were started. The first unit in the public sector, now known as the Visvesvaraya Iron and Steel Works Ltd. started functioning at Bhadravati in 1923.

Progress after independence:

The iron and steel industry has been accorded the highest priority under the five year plans. During the Second plan three steel plants were set up in the public sector at Bhilai (M.P), Durgapur (West Bengal) and Rourkela (Orissa). The Third plan placed emphasis on expansion of these three plants and the setting up of new steel plant at Bokaro. The Fourth plan aimed at setting up new steel plants at Salem in Tamil Nadu, Vijaya Nagar in Karnataka and Vishakapatnam in A.P. The Bokaro steel plant was commissioned in 1978.

There are at present six integrated steel plants in the country – five in the public sector and one TISCO in the private sector. The public sector steel plants are owned by the Steel Authority of India Ltd.(SAIL) which was set up in 1974. At present there are 177 mini steel plants in the country. As a result of the investment in new plants and expansion of the old ones, the production of finished steel has increased from 55.15 million tonnes in 2006-07 to 59.33 million tonnes in 2009-10. India ranked as the fourth largest producer of crude steel in the world during January- November 2011.

Production and Consumption

The steel industry is regarded as the barometer of the overall industrial growth. The production of finished steel in India rose from 1.04 million tonnes in 1950-51 to 59.33 million tonnes in 2009-10. India has now emerged as the third largest producer of steel in the world.

The consumption of finished steel in 2008-09 was 52.4M.T. India's per capita consumption of steel was at about 38k.g. Total export of finished steel in 2008-09 was 4.44M.T.

Steel Policy

The iron and steel sector is now almost entirely open with no sectoral reservations, with no licensing, pricing, distribution and import controls.

Problems of the Industry

- (1) Lack of technical and trained personal: In India, we do not have adequate technical staff and trained workers. Therefore, we have to take the services of foreign technicians on high remuneration.

- (2) Shortage of Metallurgical coal: For melting iron, good quality coal is required. India does not possess sufficient good quality coal. This adversely affects the production of finished steel.
- (3) Shortage of Finance: One of the important problems facing the industry is shortage of finance. This industry requires heavy capital investment which is difficult to secure.
- (4) Under-utilisation of Capacity: The iron and steel industry has been working below full capacity. It was 70% in the public sector concerns whereas it was 97 percent in private concerns.
- (5) Sickness of Mini Steel Plants: The main problem faced by the mini steel plants is their sickness. The problems faced by these units include short supply of inputs like scrap, inadequate power supply, constraint of working capital and poor management.
- (6) Labour unrest : There were periods of strained labour relations at many plants. Production suffered as a result.
- (7) Rapidly increasing demand: Demand for steel is increasing very fast under the impact of Five Year Plans. This requires that the output of the industry should be increased rapidly to cope with the ever increasing demand.
- (8) Product-mix and waste-materials: There is need to reorient the product-mix of the industry and to use the waste materials namely slag.
- (9) Distortions of Planning: Excessive control and lack of proper co-ordination also resulted in the poor performance of the iron and steel industry.

Sugar Industry

Sugar industry is one of the major industries of India. It ranks second among the agro-based industries. It provides employment in mills and in the production of sugar cane. Its contribution to the revenues of both the Central and the State Governments in the form of various taxes is quite high. It provides direct employment to about 3.25 lakh workers. The industry contributes an estimated Rs.1600 crore annually to the Central and State exchequers.

History:

Sugar industry had its origin in India in 1903. But the industry developed on modern lines only after 1920. Since 1920, the development of the industry was phenomenal when the industry was given tariff protection against foreign competition. The industry has been described as the "Child of Protection". Within five years of the grant of protection, the number of factories increased from 31 in 1931-32 to 137 in 1936-37. In fact by 1939-40 India attained self sufficiency in sugar production. After the Second World War, the prices of sugar started rising and the Govt. had to adopt the system of price control and rationing. In 1952, production reached its peak level and controls were given up.

Progress under the Plans:

Production of sugar increased by leaps and bounds during the planning period. The number of sugar mills rose from 138 in 1950-51 to 582 in 2006-07, out of which 189 are in the private sector, 306 in the co-operative sector and 62 in the public sector. The production of sugar increased from 11.34 lakh tonnes in 1950-51 to 282 lakh tonnes in 2006-07. At present there are 245 sugar factories in the private sector, 62 in the public sector and remaining 317 factories in co-operative sector working in the Country, India is the second largest producer of sugar with a share of over 15 per cent of world sugar production.

Problems of the Industry:

Sugar industry has been suffering from the following problems.

(1) Shortage in the Supply of Sugar Cane:

The sugar industry suffers from an inadequate and irregular supply of sugar cane. Cane output fluctuates with general weather conditions and the diversion of the land under cane to other crops.

(2) Problem of Uneconomic Units:

Most of the sugar mills of the country were of uneconomic size, and they cannot be expected to produce sugar on a very large scale. As a result of this, production cost of these mills was quite high.

(3) Low Yield of Cane per acre:

The yield of sugar cane per hectare in India is very low. It is much less than that of Cuba, Java, and Hawaii Islands. Further, quality of sugar cane produced in India is not quite satisfactory.

(4) Centralization :

Most of the sugar mills were situated in U.P. and Bihar, whereas the area in the south was more suitable for the setting up of sugar mills only.

(5) Use of by Products:

The by products of the industry such as baggasse, molasses, etc. are not put to economic use. The economic utilization of by-products can help in reducing cost of production.

(6) Problem of Modernisation:

Most of the sugar mills of our country possess out-dated machines. The machines are to be replaced by a new one to increase the productivity and to reduce the cost of production.

(7) Burden of Excessive Taxation:

The industry has to face the burden of excessive taxation.

(8) Short duration of the Crushing season:

Another problem is short duration of the crushing season in India. The average duration of the crushing season is about 4 to 5 months in India as against 8 to 10 months in Cuba and Jawa.

(9) The Sugar economy is highly controlled:

This industry requires compulsory licensing under the existing policy. There is a statutory minimum price (SMP) for sugar cane fixed by the centre and state advised price over and above the SMP. Though there is no price control on free sale sugar, its market supplies are regulated by fixing quarterly release quotas to maintain stability.

(10) Governments' Changing policy :

The frequently changing government policy with short term objectives in view , injected an element of serious uncertainty in the development of the industry .

Jute Industry

This is another important traditional industry which helps India to earn substantial of foreign exchange. The jute manufacturing industry which came to be established in India in 1855 went on recording progress as India had almost attained a monopolistic position in respect of jute products in the world.

Till partition of the country in 1947, the India jute industry held a dominant position , not only in Indian economy, but also in the entire world economy. The Indian jute industry received a rude jolt with the partition of the country. While practically all the manufacturing jute mills happened to be in and around Calcutta, which formed part of India, more than 70 percent of raw-jute growing areas became part of East Pakistan. This created a serious shortage of raw-material for jute factories in India.

In 1951 while the total production of raw-jute in India was around 3.3 million bales, requirement of industry was around 7.2 million bales. Later, production of raw-jute increased to 4.1 million bales in 1960-61 and further to 7.8 million bales in 1990-91.

Present position:-

At present , there are 77 jute mills in India with nearly 44,990 looms, out of which only 70 units are in operation and 60 are in West Bengal. This industry accounts for about 32 percent of the world production and about 46 percent of world export of jute goods. The total capital employed in the industry is of the order of Rs.500 crore. This industry provides employment to about 2.3lakh workers. Moreover, the cultivation of jute provides living to nearly 40lakh families. The production of jute and mesta textiles increased from 8.37 thousand tonnes in 1950-51 to 16.0lakh tonnes 2008-09. The estimated value of the output of the industry is of the order of Rs.1000 crore, out of which goods worth about Rs.700 crore are exported.

Problems of the Industry:

The Indian jute industry has been facing a number of problems of which the following are the important ones.

(a) Problem of Raw –materials:

The partition of the country in 1947 gave rise to the problem of raw-materials. In spite of vigorous efforts to produce raw-jute by extensive and intensive cultivation even at present the supplies of raw-jute are inadequate and irregular.

(b) Problems of Modernisation:

Machinery of the Indian jute industry is to a large extent old and obsolete. As a result production is uneconomic and cannot be sustained for long without modernization. Unless we modernize our plants and equipments, it will be extremely difficult for us to compete with low priced jute goods produced by new mills set up in Bangladesh and other countries.

(c) Problem of Substitution:

A more important and disturbing problem is the emergence of a new range of packing material. Paper and plastic bags and covering and specially designed cloth wrappings have proved to be extremely competitive substitutes for jute bags and wrappings. All these developments adversely affected the demand for jute products and its competitive strength in the world market.

(d) Decling Demand for Jute Goods.

Demand, especially from foreign markets, has been declining an account of the following reasons. Synthetic producers are able to undercut jute in both the primary and secondary backing markets. Cost of production of Indian jute industry is relatively high. This has also adversely affected demand.

(e) Irregular Power Supply, Low yield per hectare, fall in export etc., are some other problems facing this industry.

Government Measures

In order to enable the Indian jute industry to over come some of these difficulties and barriers, the Govt. of India have been taking some short-term measures such as the reintroduction of cash compensatory support to almost all types of jute goods to be exported, insisting on Indian cement, fertilizer and some other industries to use only new jute bags, and providing additional funds to Indian jute mills to purchase more raw-jute from jute producers.

In addition, Govt. has announced a package of financial assistance from the Industrial Reconstruction Corporation to sick jute mills. Govt. has also set up a separate fund to explore the possibilities of increasing jute goods exports.

Suggestions:

1. The government should announce a long-term policy on jute so as to protect the interest of both jute growers and consumers.
2. There should be a monopoly procurement of raw jute by Jute Corporation of India.
3. The prices of raw-jute should be determined by an independent body like the Commission on Agricultural Costs and Prices.
4. Attempts should be made to make the industry cost competitive.
5. There is an urgent need to intensify research and development activity in the jute industry.
6. Diversify the jute products.
7. The import of machinery and spares should be liberalized.
8. To boost domestic demand for jute goods, mandatory use of jute goods is to be envisaged.

Cement Industry

Cement is one of the key industries in India. It is a capital intensive industry. The first cement manufacturing unit was started in 1904 in India. But the systematic manufacturing of cement was started in 1914 by the India Cement Company Ltd. (Gujarat). At the beginning of economic planning, there were 21 factories in India with an annual capacity of 3.28 million tonnes.

The government had complete control over the production, distribution and price of cement and this had dampened the growth of the cement industry. Later a policy of partial decontrol was announced in 1982 and this policy was continued till 1989. The cement industry was delicensed in 1991. The industry responded favourably to the government initiatives and the production capacity also increased. Total production increased from a mere 2.7 million tonnes in 1950-51 to 51.7 million tonnes in 1991-92 and finally to 190 million tonnes in 2009-10. At present (2011) there are 166 large cement plants in the country with an installed capacity of 282.09 million tonnes per annum. Besides, there are about 350 mini -steel plants with an estimated installed capacity of 11.10 million tones per annum. Now, India is the second largest producer of cement in the world after China. This industry provides employment to about 2 lakh people. The production during 2010-11 rose to 223.6MT. During 2007-08, cement export was 3.65 million tones and it increased to 4.62 MT in 2010-11.

The major Indian cement companies are Associated Cement Company (ACC), Grasim Industries, Ambuja Cements, J.K. Cements and Madras cement.

The Indian government has ranked different states in India in terms of current production. Rajasthan ranks first, (16.18%) followed by Andhra Pradesh (15.5%), Madhya Pradesh (11.02%) Tamil Nadu (10.47%) and Gujarat (8.38%)

Problems

The cement industry in India has been suffering from the following problems: a) under-utilisation production capacity, b) cost escalation and rigid pricing, c) excessive burden of excise duty, d) unrealistic distribution policy, e) partial control and dual pricing, f) Low profitability and g) obsolete technology, etc.

Small-scale and Cottage Industries

Development in any system hinges on the growth of smalls first and bigs next. There is a growing recognition worldwide that micro, small and medium enterprises (MSMEs) have an important role to play in terms of resource use efficiency, capacity for generation of employment, technological innovation, promoting inter-sectoral linkages, raising exports and developing entrepreneurial skills. This is particularly true in the case of India.

Definition: There is no single, uniformly acceptable definition of a small or medium enterprise. Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 provided a comprehensive definition of 'Micro', 'Small', and 'Medium' enterprises. Under the Act, enterprises have been categorized broadly as : i) Manufacturing Enterprises and ii) Service Enterprises. Both categories have been further classified into three groups as micro, small and medium enterprises based on their investment in plant or in equipment as under.

A. Manufacturing Enterprises

- i. Micro enterprises – investment upto 25 lakh,
- ii. Small enterprises – investment above Rs.25 lakh and upto Rs.5 crore.
- iii. Medium Enterprises – investment above Rs.5 crore and upto Rs.10 crore

B. Service Enterprises

- i. Micro enterprises - investment upto Rs.10 lakh,
- ii. Small enterprises – investment above Rs.10 lakh and upto Rs.2 crore.
- iii. Medium Enterprises – investment above Rs.2 crore and upto Rs.5 crore

According to the Fourth All India Census Report of MSMEs, there were 2.61 crore MSMEs in 2006-07. They represent 92 per cent of India's registered companies. They account for about 40 per cent of GDP and contribute about 50 per cent of exports. This sector accounts for about 39 per cent of the manufacturing out put and 33 per cent of the total export of the country. Of the total, 72 per cent of these enterprises are engaged in service sector and only 28 per cent of MEME's constitute the manufacturing sector. These service sector units are largely in Apparel (14.03%) and Maintenance of Personal and Household goods (9.25%). The MSMEs sector accounts for employment of 5.95 crore persons, of which 0.95 crore are in registered units.

New Small Enterprise Policy

Classified small enterprises under two headings : a) Small and tiny enterprises and b) Village industries

a) Small and Tiny Enterprises

According to this classification all units within the investment limit of Rs.5 lakh and located in bigger towns (population of 50,000 plus) will now become a part of the tiny group. All industry related services and business enterprises, irrespective of their location are now recognized as small enterprises but their investment limit corresponds to those of tiny enterprises.

b) Village Industries

A major objective for the group of village industries seems to be to promote rural industrialization. The other major objective is to promote employment, which is more welfare-oriented than efficiency oriented. A number of measures are proposed to achieve these objectives, such as supply of raw materials, sale of products, upgradation of production methods, etc.

Small scale and cottage industries

Small scale industries have emerged as a vibrant and dynamic sector of the Indian economy. This sector plays a pivotal role in the Indian economy in terms of its contribution to the country's industrial production, exports, employment and the creation of an entrepreneurial base.

Role of Small scale Industries (Rationale)

Small scale and cottage industries have an important role in India's industrial and economic development. The rationale of SSIs (Small Scale Industries) can be explained in terms of the following arguments.

- i. **Employment Generation:** The cottage and small-scale industries are believed to be labour intensive, i.e. they use more labour with given amount of capital in comparison to large-scale industrial units. It has been estimated that Rs.1 lakh of investment in fixed capital in the SSI generates employment for 4 persons. Employment in the small-scale sector grew at the rate of 5.45 per cent per annum. It has been estimated that labour intensity in micro and small enterprises sector is almost 4 times higher than the large enterprises. In 2007-08 the SSI sector employed 322.28 lakh people.
- ii. **Equitable Distribution of Income:** Development of cottage and small-scale industries helps to reduce income inequalities and secure more equitable pattern of income distribution. This is accomplished because of two reasons. I) ownership of small-scale industries is more widespread, and ii) labour intensive nature of production.
- iii. **Use of Latent Resources:** Development of village and small-scale industries in the rural areas would lead to utilisation of latent resources such as hoarded wealth, surplus rural man-power, local entrepreneurship and native skills.
- iv. **Industrial Decentralisation:** Development of cottage and small-scale industries prevents concentration of industries at only a few places as it disperses them all over the country. Small industry helps in fostering enterprises from amongst the members of the castes, classes and professions which have hitherto not contributed to the entrepreneurial class in India. All these will lead to a balanced regional growth.

- v. **Efficiency:** Economists differ over the issue of efficiency in the small-scale industries vis-à-vis large scale industries. Economists like Dhar, Lydall and Sandesara inferred that modern small scale industry is less efficient relative to large scale sector industry. However, some studies reached the conclusion that small scale is more efficient in terms of labour productivity, total factor productivity and employment potentiality. For instance, a rupee worth of fixed assets produced almost seven times an output in small as compared to large industries and that the value added by a rupee worth of fixed investment in small factories was at least three times as large as that for a large factory. Similarly, it is found that organized sector requires an investment of Rs.5 lakh to generate employment to one person whereas the SSI sector generates employment for 7 persons with the same investment.
- vi. **Less Industrial Disputes:** Supporters of small-scale industries argue that small-scale industries are free from industrial disputes and there is consequently less loss of output. In the case of cottage industries, the question of disputes does not arise at all since the main form of labour in these industries is family labour.

Other Arguments:

A.Economic Factors

- i. The small-scale sector has certain inherent advantages in terms of flexibility of decision-making. This makes small firms more innovative and open to new ideas.
- ii. This sector is better placed to cater to specific and changing customer needs.
- iii. Small sector plays an important part in the innovation process.
- iv. Small sector has build up brands that are small, reliable, trusted and local. These tiny brands have remained small in their volume turn over but are truly big in their equity in the markets they operate in.

B. Sociological Factors.

- i. There exists in man a desire to gamble, so that he takes risks irrespective of consequence and small industry provides an outlet for this desire.
- ii. Man often enjoys the independence or status of an entrepreneur for its own sake, and this is possible for men in small industry than in large industry.

Major Problems:

The small-scale and cottage industries face a number of problems. Let us now consider the main problems that the small scale units have to face.

- i. **Problem of Finance:** The most important problem faced by those industries is that of finance. The capital base of the small industrial units is usually very weak. These units are forced to sell their products on credit basis to their clients. In many cases credit is obtained on a very high rate of interest and is thus exploitative in character. Banks are reluctant to lend to SSI units. They insist on collateral. Further, with the implementation of the Base II norms, banks would be discouraged to lend to SSI that is not rated because a loan to an unrated entity will attract 100% risk weight.

- ii. **Problem of Raw-materials:** Another problem affecting the SSIs is scarcity of raw materials. Scarcity of raw-material means a waste of productive capacity for the economy and a loss for the unit. The problem has assumed the shape (i) an absolute scarcity, (ii) poor quality of materials and (iii) a high cost. Scarcity intensified competition and the small units competing with the large scale producers have suffered severely.

According to Sebastian Morris, tariffs on certain materials remain high in comparison to tariffs on manufactured goods (other than consumer goods). This has created a problem of a significant “inversion” in tariff structure which specifically hurts small firms.

- iii. **Problem of Technical know-how:** One of the major handicaps of the small-scale sector has been the absence of the latest technology. This sector is still saddled with obsolete technology, resulting in poor productivity, inferior quality, excessive cost and inadequate returns. Moreover, the small-scale units often do not care about the changing tastes and fashions of the people. There is an urgent need for upgradation of technology, otherwise technological polarization between the large and small-scale sectors will be intensified.

- iv. **Problem of Marketing:** Most of the SSI units do not have staying capacity and are forced to sell their products to the local market at unremunerative prices. The inability to procure clientele from distant markets compels them to restrict their scale of operation and forgo economies of scale. Further on, in the post WTO scenario with the removal of quantitative and non-quantitative restrictions across countries, SSIs would have to face increasing competition from imports.

Ancillary industries have their own problems, like (i) delayed payment by parent units, (ii) frequent changes in fiscal levies, (iii) absence of well defined pricing system and regulatory system, (iv) inadequacy of technological support extended by parent units. etc.

- v. **Problem of sickness:** There are two main issues in respect of sick SSIs (i) existence of a large number of sick units which are non-viable, and (ii) rehabilitation of potentially viable units. At the end of March 2008 as many as 8,5187 units were sick and an amount of Rs.13,849 crore was blocked in them. Rehabilitation is a costly proposition.

- vi. **Exogenous Forces:** There are some exogenous forces which influence the performance of SSI. Such forces are exposing SSIs to a world of intensive competition, risk and uncertainties. Some of these exogenous forces include advancement in generic technology of computers and telecommunications, rise in E-commerce, globalization and liberalization policies, multilateral trading rules under the WTO, mergers and acquisitions, etc. For instance, opening up the industrial sector to both internal and external competition, lowering of tariff, removal of quantitative restrictions, etc have had an adverse effect on the small scale sector. The most serious threat is being posed by cheap Chinese imports as the so called “China Price” is forcing many small scale units to close down.

- vii. Infrastructural Constraints:** Studies have shown that many productive activities of SSI's are being constrained by inadequate physical infrastructure. The most severe constraint is power. Power supply is not always everywhere available to the small industry on the mere asking. Moreover, unlike large industries, the SSIs cannot afford to go in for alternatives like installing own thermal units. Transport and communication infrastructures are also universal constraints. In many SSI units (i.e. beverages, tobacco, paints, varnish etc.) water supply is fast emerging as an important infrastructural constraint.
- viii. Other Problems:** In addition to above mentioned problems, the small-scale industries face a number of other problems like inefficient management, delayed payments, location bars, lack of accommodation, deteriorating industrial relations, high rate of mortality among units, faulty planning and inadequate appraisal of projects, problem of recoveries, etc. All these constraints have resulted in a skewed cost structure placing this sector at a disadvantage vis-à-vis the large industries, both in the domestic and export markets.

Measures to promote SSIs (Government Policy)

It has been argued by some economists that small-scale industries are hampered in their growth by imperfections in factor markets. Therefore, special support policies are needed for small-scale enterprises. The policy of the Government of India towards the small-scale sector has been guided by this consideration. Amongst developing countries India was the first to display special concern for small-scale enterprises, before it became fashionable to do so. (Rakesh Mohan). In the post-reforms period, there has been a shift in focus from 'protection to promotion'.

Organisational Structure: In order to give more impetus to SSI, a number of Central and State level organization have been set up to look after different aspects of the development programmes. At the central level the following institutions have been set up.

- a. **Small Industries Development Organisation (SIDO)** was set up in 1954. It functions as an apex body in the formulation of policies and co-ordination of institutional activities for sustained and organised growth of small-scale industries. SIDO has now been renamed as the Micro, Small and Medium Enterprises Development Organisation.
- b. **Regional Small Industries Service Institutes** (4) with a number of branches (30), extension centres (38), field testing centres (18) were set up to provide technical assistance to the small scale industries.
- c. **National Small Industries Corporation Ltd. (NSIC)** was set up in 1955 to provide machinery to small-scale units on hire purchase basis and to assist these units in procuring orders from government departments and offices.
- d. **Small Industries Development Bank of India (SIDBI)**

It is an apex all India financial institution set up in 1989. SIDBI is to function as the principal financial institution for the promotion, financing and development of industry in the small-scale sector. At the same time, it has to co-ordinate the functions of institutions engaged in promoting the small-scale units.

SIDBI's immediate thrust is on : (1) initiating steps for technological upgradation and modernization of existing units.

- ii. expanding the channels for marketing the products of SSIs in domestic and overseas markets, and
- iii. promotion of employment-oriented industries, especially in semi-urban areas to create more employment opportunities .

SIDBI provides refinance to primary lending institutions like the commercial banks, State Industrial Development Corporation, State Financial Corporations for meeting the Nidhi Scheme, National Equity Fund Scheme, Seed Capital Scheme, etc. The SIDBI has also set up the SIDBI Growth Fund and the National Fund for Software and IT industry.

The major activities of the SIDBI are:

- i. Refinance of loans and advances,
- ii. Discounting and re-discounting of bills of exchange,
- iii. Subscribing to or purchasing stocks, shares, bonds or debentures,
- iv. Extension of seed capital or soft loans,
- v. Granting direct assistance and refinancing of loans,
- vi. Leasing any asset to any industrial concern in the small-scale sector.

e. National Institute of Entrepreneurship and Small Business Development (NIESBUD)

It was established in 1983 to assist the small-scale industries. It co-ordinates Entrepreneurship Development Programme (EDP) organized by various EDP institutions in the country.

For cottage and traditional industries also, a number of institutions have been set up both at the all India and state levels. These include All India Handloom Board (1955), All India Handicrafts Board (1962), All India Khadi and Village Industries Board (1953) The Small Scale Industries Board (1954), The Coir Board (1954) and the Central Silk Board (1949).

Financial Assistance: Several schemes were introduced to provide financial assistance to small-scale industries. These include the following:

i. The Small Industries Development Fund (SIDF).

SIDF provides re-finance assistance for development, expansion, diversification and rehabilitation of small-scale, cottage and village industries.

ii. National Equity Fund (NEF).

NEF provides equity type support to small entrepreneurs for setting up new projects in tiny/small-scale sector and also assistance for rehabilitation of viable sick units in the small-scale sector.

iii. The Single Window Scheme (SWS).

SWS provides working capital loans along with term loans for fixed capital to new tiny and small-scale units.

- iv.** Small enterprises are treated as a priority sector for extending credit by financial institutions. As such 10 per cent of the total credit to be advanced by commercial banks should go to SSI units.
- v.** The State Governments provides seed capital and margin money assistance to small-scale entrepreneurs in order to enable them to secure loan from commercial banks and the SFCs.
- vi.** A credit Guarantee Fund Trust for small industries has been constituted.
- vii.** The Industrial Development Bank of India (IDBI) provides funds to the commercial banks and the State Financial Corporation (SFCs) through the scheme of refinancing.
- viii.** Public sector banks have decided to introduce a scheme called Laghu Udyami Credit Card Scheme for providing simplified and borrower friendly credit facilities to small entrepreneurs.

Technical Assistance

Technical assistance to SSI takes the form of identification of new lines of production, assistance in installing plant and machinery and in solving various production problems from time to time. Technical advice is also an important part of assistance.

Small Industries Service Institutes and State Government agencies have set up common facility workshops and prototype and production centres.

A Quality Certificate Scheme was launched in 1994 to improve the quality standards of SSI products.

A scheme introduced in 1993 aims to promote the adoption of clean technology by small industries. The scheme covers three main areas. I) reduction of waste and pollution from the manufacturing processes, ii) recycling, collection, storage and processing of industrial and household wastes for re-use, and iii) effluent treatment and disposal.

A Small Enterprise Information and Resources Centre Network (SENET) has been set up by installing net link computers in various institutes.

There has also special training programmes in khadi and village industries conducted by the KVIC for technicians, supervisors, managers and artisans.

The Council for Development of Rural Technology (CART) now renamed as CAPART (Council for People's Action and Development of Rural Technology) acts as a nodal point for the co-ordination of all efforts for the dissemination of technology relevant for rural areas.

The Technology Bureau for the Small Enterprises (TBSE) has been set up as an endeavour to bridge the technology gap.

Physical Facilities

The programme of Industrial Estates was initiated in 1955. The programme aims at providing factory accommodation with infrastructural facilities such as water, power transport, etc to small entrepreneurs at one place. One of the stated objectives of the programme is to facilitate industrialisation of the economically backward and rural areas.

NABARD launched District Industries Project. Under this project efforts are being made for creating an environment and infrastructure conducive to increased production and income earning opportunities to the setting up of commercially viable unit in rural areas.

A merge plan to set up about 1000 rural technology parks was taken. This will provide all the infrastructural needs in the village.

In 1994, the Infrastructural Development Scheme was started. It aims at providing sites, power distribution network, water, raw material depots, storage and marketing outlets, etc.

District Industries Centres (DICS) was introduced in 1978. The DICs were charged with the responsibility of providing all the services and support required at pre-investment and post investment stages to small scale entrepreneurs and institutions. The DICs provide and arrange a package of assistance and facilities for credit guidance, raw-materials, training, marketing etc, including the necessary help to unemployed educated young entrepreneurs in general and custom services.

Marketing Assistance

Marketing assistance programmes mainly include:

- a. Exclusive assistance of specific products of the SSIs for the Government.
- b. Price preference to small-scale enterprise in public sector procedure.
- c. Provision of quality control and testing facilities.
- d. Opening sales emporia
- e. Setting up of sub-contract Exchange for SSIs.
- f. Launching of Market Development Assistance Scheme.
- g. Plan to set up a consortium.

Fiscal Incentives: This includes tax 'holiday for new industrial undertakings, investment allowances, capital subsidy to industries in backward areas, excise duty exemption, price preference, etc.

Other Schemes: It includes the following : Rural Industrial Projects (RIP), Rural Artisan Programme (RAP), etc

Recent Policy Measures (1991 onwards)

The industrial policy measures announced in 1991 laid special thrust on promotion and strengthening of small, tiny and village industries. Besides raising investment limits to Rs. 5 lakh, equity participation upto 24 per cent by other undertakings, a new scheme of integrated infrastructure development for SSIs with the participation of state government and financial institution was initiated.

A comprehensive policy package for the small-scale sector was announced on August 30, 2000. The main elements of this package were mentioned below.

1. Investment limit of the SSI has been increased to Rs. 5 crore.
2. The Government has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act 2006 to facilitate the promotion and development of micro, small and medium enterprises.
3. The turn over eligibility limit under the general SSI Excise Exemption Scheme has been raised from Rs.3 crore to Rs.4 crore.
4. The government launched the Credit Guarantee Fund Scheme for Micro, and Small enterprises in 2000 with the objective of making available credit to SSI units .
5. To encourage technology up gradation , a credit linked capital subsidy scheme has been launched .
6. A new “Promotional Package for Small and Medium Enterprises ” is being formulated .This would include measures to provide infrastructure and marketing facilities ; fiscal support ,cluster based development , etc.
7. In recent times the Govt. has been following the policy of dereservation. At present , only 14 items are reserved for the small-scale sector

Modern industries (Sun Rise Industries)

1. Engineering industry

Engineering industry is one of the recently developed industries of the country .The engineering industry was gradually being developed in the country since the second plan .At present engineering industrial sector is contributing nearly 31.2 percent of industrial out put . The employment in the engineering industry is nearly 28 percent of the total industrial employment in the country .Total investment in the industry accounts nearly 31.5 percent of the total industrial investment of the country . The share of engineering goods export to total export earning increased from a mere 1.3 percent in 1960-61 to 11.9 percent in 1990-91

2. Electronic Industry

The development of the electronics has opened unimagined vistas in human life. Electronic have become vital for modern industry , communication data processing and strategic sector such as development and application atomic energy, defence and space .

Electronics industry is labour intensive and can employ a large trained man power. It is not location specific and lends itself to regional dispersal and small- scale production .

The Indian electronics industry has made rapid progress during the last four decades . This industry covers a wide range of products and technology starting from entertainment electronics to telecommunication equipment , industrial and professional equipment like computers , defence and space electronics . it provides direct employment to 2.60 lakh persons and indirect employment to more than 5 lakh people .

The Indian electronics industry is estimated to have had production worth Rs. 3,68,220 crore during 2008-09 as compared to that of Rs 2,95,820 crore during 2007-08 , registering a growth rate of 24.4 percent. Production of electronics item is likely to register a growth rate of 30 percent per annum during the Eleventh plan period .

Bangalore has emerged as the electronic capital of India .Other major electronics goods producing centres are Hyderabad ,Delhi ,Mumbai , Chennai ,Kolkata, Kanpur ,Pune ,Lucknow and Coimbatore .

3. The Automotive industry

The automotive industry has growth at a spectacular rate of 17 percent over the last five years . The industry provides direct employment to about 5 lakh people . At present there are 15 manufactures of passenger car and multi utility vehicle , 9 manufactures commercial vehicles, 5 manufactures of engine . The turn over of the automotive industry exceeded Rs 92,500 crore in 2003-04 .The automotive industry recorded a growth 13.6 percent in 2006-07. In 2008-09 the industry has witnessed a modest growth of 30 percent

4. Fertilizer industry

The first fertilizer plant was set up in India at Ranipet in Tamil Nadu in 1906. The real growth of the industry began with the establishment of a plant at Sindri by the Fertilizer Corporation of India in 1951. The increased demand for fertilizer as a result of Green Revolution led to the spread of the industry in several parts of India . Gujarat ,Tamil Nadu , Uttar Pradesh ,Punjab and Kerala produce more than half of the total fertilizer production in India .

India is the fourth largest producer of fertilizer after China, the U.S and Russia .There are , at present , more than 57 fertilizer ,units manufacturing a wide range of nitro genous and complex fertilizers including 29 units producing urea and nine units producing ammonium sulphate as by- product .

The production capacity of nitrogen has increased from modest 85000 tonnes in 1950-51 to 120.31 lakh tones in 2005 . Against the nominal production of 16,000 tonnes of nitrogen in 1950-51 the country produced 113.39 lakh tones of nitrogen in 2003-04 The domestic production of urea in the year 2010-11 was 218.8 lakh MT.

5. Petro chemical Industry

The petro chemical industry is a post war phenomenon .Production of petro chemical s increased from 7.M.T.in 2003-04 to 7.35 M.T in 2004-05. However , during the first half of 2005-06 production of petro chemicals remained almost the same as in the corresponding period of the previous year .

6. Chemical industry

The chemical industry occupies an important position in Indian economy. The industry is growing fast . Rapid growth has been recorded in both inorganic and organic chemical industries .Heavy organic chemicals provide basic building blocks for many product like dyes, pharmaceutical , pesticides , paints , etc . Inorganic chemicals included sulphuric acid, nitric acid ,alkalies ,soda ash and caustic soda .

It contributes 20 percent of the excise revenue to the government .Its turnover is estimated at around us \$ 35 billion in 2011.

7. Information Technology

The marriage of computer and communication has given birth to what is now called information technology (IT) . This industry is popularly known as InfoTech industry .

Recognizing the huge potential of IT and IT enabled services , top priority has been given for its promotion and development . The total number of professional employed in this sector increased to 2.2 million in 2008-09 .The volume of software and IT enabled services (ITES) exports from India grew from Rs 28,350 crore in 2000-01 to Rs 103,200 Crore in 2005-06 .Total revenue earned from software and services industry increased from \$ 39.3 billion in 2006-07 to \$ 52.0 billion 2007 -08 .

8. Software industry

The one industry which has profited most from the burgeoning of IT revolution and economic liberalization is the software industry .AS a result soft ware industry has emerged as one of the stand out sectors of the economy , recording a growth of 24.0 percent in production and an increase in export by 31.5 percent in 2008-09

During 2009-10 software exports amounted to a total of \$ 80 billion and the domestic soft ware market a total of 10 billion. This shows that software is basically an export based industry .

Towards end of 2008 , the IT sector began to suffer from adverse effects of global slowdown . But it is being projected that important structural changes taking place on the back of global economic meltdown will propel a new “market order “ in the domestic Indian IT/ITES industry.

MODULE IV

EXTERNAL SECTOR

Trends and composition of India's Imports - Trends and direction of India's Exports - EXIM Policy of India in relation to trade liberalization and its impacts-FDI, FII and MNCs in India - External Borrowing and BOP problem in India – International Institutions (IMF, WB, ADB, WTO) and the Indian Economy.

The country's external sector comprises its trade, investments, borrowings, the relations with the international bodies etc. An understanding of such variables helps us in understanding the strength and weakness of our economy. Trade policy reforms constitute the core of economic reforms in India. This chapter analyzes India's external sector while highlighting the positive impact of India's trade policy reforms. The trends in India's foreign trade, changes in the composition and direction of India's exports and imports have been examined in detail in the chapter. There has been a consistent increase in India's exports and imports and degree of openness to trade since 1991. Further, diversification of the export and import basket and markets has reduced the vulnerability of the economy to external shocks. India's commitments to the WTO have also helped India to compete in world markets and strengthen its external sector.

TRENDS AND COMPOSITION OF INDIA'S IMPORTS

After independence, composition of India's import trade has undergone many changes. By 1975, imports of food grains, cotton, jute etc. increased very much. Imports of petroleum, chemicals fertilizers, steel, iron, non-ferrous metals, industrial raw materials machinery, capital goods, edible oils, un-cut precious stone etc. have increased.

Pattern of Imports

On the basis of the volume of imports, it has been divided into bulk imports and non-bulk imports. The bulk imports comprises Petroleum, crude and its products, bulk consumption goods like cereals and pulses, edible oils and sugar and other bulk items like fertilizers, non-ferrous metals, metallic ores, iron and steel, paper, rubber, pulp etc. The non-bulk imports comprises capital goods, export related items like pearls, precious metals, chemicals textile, coal, artificial resins, plastic materials, non metallic mineral etc.

Changes in composition of Imports

After independence, composition of India's import trade has undergone many changes. By 1975, imports of foodgrains, cotton, jute etc. increased very much. Imports of petroleum, chemical fertilizer, steel, iron, non-ferrous metals, industrial raw materials, machinery, capital goods, edible oils, un-cut precious stones etc., have increased. The important changes in the composition of imports can be listed as follows.

1. The imports of agricultural products fell considerably. Agricultural products include foodgrains, edible oils, raw cotton, jute etc. In 1970-71, the share of agricultural products in the total imports was 14.6 % which came down to 2.1% in 2008-09.

2. However, there has been a substantial rise in import expenditure on petroleum products from Rs. 163 crore in 1970-71 to Rs.419946 crore in 2008-09. The reasons for this increasing trend were firstly the increase in the prices of crude oil and secondly increase in the demand of petroleum products for the expanding industrial and transport sectors.
3. Increase in imports of capital goods consequent upon the programme of industrialization initiated during the planning period import of machines, metals, electrical equipments, transport equipments etc. increased considerably. The expenditure on imports of capital goods were increased to 216511cr. in 2008-09 from 404cr.in 1970-71. However, in percentage terms, the share of capital goods in total imports declined. In 1970-71, its share was 25% which declined to 15.75% in 2008-09.
4. There has been substantial increase in the expenditure on imports of raw materials and intermediate goods. In 1970-71, the percentage of expenditure on imports of raw materials and intermediate goods was 54% of the total expenditure on imports. It increase to about 82.15% in 2008-09.
5. The imports of chemical fertilizers have also increased during the same period from 86 crore to 59569 crore.

TRENDS AND DIRECTION OF INDIA'S EXPORTS

Since independence it is the percentage share of exports of agricultural products in total exports has been declining e.g., in 1970-71 the agricultural products contributed 31% of total export earnings. It declined to 9.2% in 2008-09. The main reason of this decline is the increase in domestic demand of agricultural products due to increase in population. Hence the availability of agricultural products for export has considerably declined.

The major changes in the sectoral composition of India's export basket seen in the last decade have accelerated in the beginning of this decade. While the share of petroleum crude and product increased by 11.8 % during the 10 year period from 2000-01 to 2009-10. The share of other two sectors, i.e., manufactures and primary products fell almost proportionately over the same period. The biggest gainer is the engineering goods sector with its share increasing from 15.7% in 2000-01 to 22.2% in the first half of 2011-12.

Export growth was high in 2010-11 and the first half of 2011-12 in case of agriculture and allied products due to export growth in cereals, meat, oil meals and coffee. Among manufactured exports, engineering goods, gems and jewellery, and chemicals and related products registered high growth, while textiles export growth was moderate. Ores and minerals is the only item with negative growth in the first half of 2011-12 due to a ban on export of iron ore by the state governments of Karnataka and Odisha.

Since 2007-08, electronic goods have displaced leather and manufactures from fifth place with the share of the former increasing and the later decreasing. There has been a gradual shift in India's manufactures exports from labor intensive like textiles, leather and manufactures handicraft to capital and skill intensive sectors. Engineering goods exports has seen an almost steady rise in shares from 1999-2000 to the first half of 2011-2012.

Changes in the composition

The important changes in the composition of exports can be listed as follows.

1. A decline in percentage share from 41 in 1970-71 to 13.3 in 2008-09 of conventional items like jute, tea food grains etc. in total exports.
2. Increase in percentage share of Manufactured goods in total exports. In 1970-71, the share of manufactured goods in export earnings was 56%, by 2008-09 it increased to 66.4%.
3. Export of Gems, Engineering goods and Ready-made garments has emerged as an important foreign exchange earner in recent years.
4. The composition of the export of agricultural products has undergone considerable changes. In 1970-71, the export of rice was negligible. But in 2008-09 rice worth Rs. 11164 crore was exported.
5. Due to enhance refining capacity, India has also been exporting petroleum products. In 1970-71, petroleum products worth Rs.13crore were exported. In 2008-09 these have increased to Rs. 127324 crore.
6. The continuous programmes of industrialization initiated during planning period, export of engineering good rose substantially.
7. India is exporting software, consultancy services and other information technology related services. Export of services are rising over 25% per annum during the last 10 years.

EXPORT-IMPORT (EXIM) POLICY IN INDIA

Foreign trade has played a crucial role in India's economic growth. The composition and direction of India's foreign trade has undergone substantial changes, particularly, after the liberalization process which began in the early 1990s. Our major exports now includes manufacturing goods such as Engineering goods, Petroleum products Chemicals and related products, Gems and Jewellery Textiles etc. which constitute over 80 per cent of our export basket. On the other side, major import items constitute capital goods and intermediates which not only support the manufacturing sector but also supply raw materials for the export oriented units.

Trade Policy in India during the post independenceperiod

During the first five years after independence, the country had to led wartime controls. Since our Balance of payment with the dollar area was heavily adverse and 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. Consequently, the import policy continued to be restrictive during this period. Since then, liberalization of foreign trade was adopted as the goal of the trade policy. Import license were granted liberally. The export policy were also encouraged by relaxing export controls, reducing export duties, abolishing export quotas and providing incentives to exports. This liberalized policy led to a huge increase in our imports but export did not rise appreciably which might have led to fast deterioration in India's foreign exchange reserve then.

After assuming the need for reversal of trade policy a re-orientation was made to meet the requirements of planned economic development. A very restrictive import policy was adopted and 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. Similarly, import substitution industries should also be encouraged so that dependence on foreign countries be lessened. It was this period that India's trade policy was thoroughly reviewed by the Mudaliar Committee in 1962. The committee felt that developmental and maintenance imports were both essential for a growing economy like India. Therefore the recommendation of the committee led to an import policy of restriction of non-essential goods on the one side and liberalization of imports of essential goods on the other was successful to a large extent. So that the imports were controlled and exports were pushed up. This policy helped to reverse the persistent trade deficit.

Trade policy in India since 1991 was mainly aimed to cut down administrative controls and barriers which acted as obstacles to the free flow of export and imports. Therefore, the Government of India 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 license system. With a view to increase India's share in the international trade, Government of India has been making consistent efforts through various policy initiatives and reform measures. Accordingly, foreign trade policy underwent a comprehensive change since 1991. Tariff restrictions have been considerably moderated and presently it is the competition that prevails and not the quotas and tariffs. Efficiency is the benchmark of growth, not merely expansion. Trade policy after 1991 is to facilitate integration of the Indian markets with the rest of the world with a view to enhancing economic growth through global competition and non-competitive controls and protection.

New Foreign Trade Policy(2009-14)

The Union Commerce Ministry, Government of India announces the integrated Foreign Trade Policy (FTP) every five years. This is also called EXIM policy. This policy is updated every five years with some modifications and new schemes. New schemes come into effect on the first day of financial year i.e. April 1, every year. The foreign Trade Policy which was announced on August 28, 2009 is integrated policy for the period 2009-14. The policy aims at developing export potential, improving export performance, boosting foreign trade and earning valuable foreign exchange. FTP assumes great significance this year as India's exports have been battered by the global recession.

The major objectives of Foreign Trade Policy 2009-14 are the following

1. To arrest and reverse declining trend of exports is the main aim of the policy. This aim will be reviewed after two years.
2. To double India's export of goods and services by 2014.
3. To double India's share in global merchandise trade by 2020 as a long term aim of this policy. India's share in Global merchandise exports was 1.45% in 2008.
4. Simplification of the application procedure for availing various benefits.

5. To set in motion the strategies and policy measures which catalyse the growth of exports.
6. To encourage exports through a “mix of measures including fiscal incentives, institutional changes, procedural rationalization and efforts for enhance market access across the world and diversification of export markets.

Special Economic Zones (SEZ)

Another major policy issue in the trade sector which created a lot of heat was that of Special Economic Zones. SEZ are growth engines that can boost manufacturing, augment export and generate employment. The Act of SEZ-2005 supported by SEZ rules, came into effect on February 2006. The main objectives of the SEZ Act are 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.

The SEZ require special fiscal and regulatory regime in order to impart a hassle free operational regime encompassing the state of the art infrastructure and support services. The policy is to provide an internationally competitive and hassle free environment for exports and are expected to give a further boost to the country's export.

The SEZ rules also provide for simplified procedures for development, operation and maintenance of the SEZ and setting up units in SEZs, single window clearance both relating to Central as well as State governments for setting up of an SEZ and units in a SEZ.

Various incentives and facilities are offered to both-units in SEZs for attracting investments into SEZ and for SEZ developer. These incentive and facilities are expected to trigger a large flow of foreign and domestic investment in SEZs, particularly in infrastructure and productive capacity, leading to generation of additional economic activity and creation of employment opportunities.

FOREIGN DIRECT INVESTMENT

Foreign Direct Investment (FDI) in India has played an important role in the development of the Indian economy. FDI in India has in a lot of ways enabled India to achieve a certain degree of financial stability, growth and development.

Definition: - FDI is an investment that a parent company makes in a foreign country. FDI not only brings in capital but also helps in good governance practices and better management skills and even technology transfer. The FDI flows into the primary market and only targets a specific enterprise. It also aims to increase the enterprises capacity or productivity or change its management control

Impact on India

Liberalizing FDI was another important part of India's reform, driven by the belief that this would increase the total volume of investment in the economy, improve production technology, and increase access to world market. These reforms have created a very different competitive environment for India's industry than existed in 1991. Indian companies have upgraded their technology and expanded to more efficient scales of production. They have also restructured through mergers and acquisition and refocused their activities to concentrate on areas of competence.

India has continually sought to attract FDI from the world's major investors. In 1998 and 1999, Government of India announced a number of reforms designed to encourage and promote a favorable business environment for investors. FDIs are permitted through financial collaborations, through private equity, by way of capital markets through euro issues, and in joint ventures. FDI is not permitted in the arms, nuclear railway, coal and mining industries.

A number of projects have been implemented in areas such as electricity generation, distribution and transmission, as well as the development of roads and highways, with opportunities for foreign investors. The Government of India also granted permission for FDIs to provide up to 100% of the financing required for the construction of bridges and tunnels. Presently, FDI is allowed in financial services, including the growing credit card business. These also include the non-banking financial service sector. Foreign investors can buy up to 40% of the equity in private banks, also there is condition that these banks must be multilateral financial organization. In 2007, India received \$34 billion in FDI, a huge growth compared to the previous years, but significantly less than the \$134 billion that flowed into China.

FOREIGN INSTITUTIONAL INVESTORS

The introduction of foreign investment in Indian equity has not added significantly to market liquidity or volatility of stock prices. However, the presence of FIIs in Indian markets has contributed to the expansion of wholesale capital market and the evolution of the institutions and financial structure in the country. This has given an extra momentum to improve market efficiency and transparency.

Definition: - Foreign Institutional Investment is an investment made by an investor in the markets of a foreign nation. In FII the companies only need to get registered in the stock exchange to make investment. The FII is also known as hot money as the investors have the liberty to sell it and take it back. These investment flows only into the secondary market. It helps in increasing capital availability in general rather than enhancing the capital of a specific enterprise.

Impact on India

Portfolio investors may become the ultimate arbiters of national macro economic policy to the determinant of economically vulnerable groups. Under floating exchange rate, a withdrawal of portfolio investment may trigger a nominal and real depreciation of the domestic currency.

Securities and Exchange Board of India (SEBI) is the nodal agency for dealing with FIIs. FIIs include asset management companies, pension funds, mutual funds, investment trusts as nominee companies, institutional portfolio managers, university funds, endowment foundations, charitable trust and charitable societies. FII investment is frequently referred to as hot money for the reason that it can leave the country at the same speed at which it comes in. In India statutory agencies like SEBI have prescribed norms to register FIIs and also to regulate such investments flowing in through FIIs. FEMA norms include maintenance of highly rated bonds with security exchange.

MULTINATIONAL CORPORATIONS

An MNC (Multinational Corporation) is one which undertakes FDI. It means the MNC owns or controls income generation assets in more than one country. It also does the production of goods or service outside its country of origin. The MNCs are multi-process, multi-national composite enterprises. The assets and sales of MNCs run into billions of dollars and they also make supernormal profits.

Till 1991, India was more or less a closed Economy. The rate of growth of the economy was limited. The contribution of the local industries to the country's GDP was limited that were the main cause of shortage of funds for various development projects initiated by the government. In an effort to revive the industries and to bring the country back on the right track, the government began to open various sectors such as Infrastructure, Automobile, Tourism, Information Technology, Food and Beverages, etc to the Multinational Corporations. The MNCs slowly but reluctantly began to pour capital investment, technology and other valuable resources in the country causing a surge in GDP and upliftment of the economy as a whole. This was the post 1991 era where the government began to invite and welcome giant MNCs into the country.

The opportunities for developing economies are significant as well. Through the application of capital, technology, and a range of skills, multinational companies' overseas investments have created positive economic value in host countries, across different industries and within different policy regimes. The single biggest effect evidenced was the improvement in the standards of living of the country's population, as consumers have directly benefited from lower prices, higher quality goods, and broader selection. Improved productivity and output in the sector and its suppliers indirectly contributed to increasing national income. And despite often-cited worries, the impact on employment was either neutral or positive in two-thirds of the cases.

Investments by multinational companies (MNC) allow developing economies to share in the considerable benefits of the global economy. Official incentives, trade barriers, and other regulatory policies, though, can result in inefficiency and waste. Case studies reveal that in virtually all cases, MNC investment had a positive to very positive impact on the host country. Rather than leading to the exploitation of lower-wage workers, as some critics have charged, the investments fostered innovation, productivity, and an improved living standard. Therefore, government seeking those advantages would be advised to favor policies of openness, rather than regulation, when it comes to foreign direct investment.

In 2007, exports stood at US\$145 billion and imports were around US\$217 billion. Textiles, jewellery, engineering goods and software are major export commodities while crude oil, machineries, fertilizers, and chemicals are major imports. India's most important trading partners are the United States, the European Union, and China. India is the world's most-populous democracy and has one of the fastest economic growth rates in the world (8.9 percent GDP increase in 2007, the second-fastest major economy in the world after China).

Multinational companies are like double-edged sword. The sword can harm if not handled properly. Similarly the Multinational companies have their own pros and cons. The extent of technology and management of know-how transfer by the MNCs depend to a large extent on their corporate strategy; for example, firms desiring to have a longer-term relationship with the suppliers (rather than those simply using the host country as a marketing/export base) will be more inclined to effect transfer technology.

As pointed out in the World Investment Report, 2000, MNCs may restrict the access of particular affiliates to technology in order to minimize inter-affiliate competition. It is noted that MNCs are more likely to license older technologies from which they have already derived significant rents than newer technologies on which there are still relying for market leadership. Further, they may hold back the upgrading of the affiliate technology or invest insufficiently in host-country training and R&D in accordance with their global corporate strategies. Therefore, arguing that FDI inflows and economic liberalization automatically facilitates technology transfer is being extremely naïve.

INTERNATIONAL MONETARY FUND (IMF)

International Monetary Fund is the inter-governmental organization that oversees the global financial systems by following the macroeconomic policies of its member nations, in particular, those countries with an impact on exchange rate and the balance of payments. The IMF was conceived in July, 1944 during the United Nations Monetary and Financial Conference. Later, it was formally organized on December 27, 1945, when the first 29 countries signed its Articles of Agreement at the Conference of Bretton Woods. Its head quarters are in Washington DC, United States of America. The IMF is accountable to the governments of its member countries. The IMF's resources are provided by its member countries, primarily through payment of quotas, which broadly reflect each country's economic size.

Activities of IMF

- The IMF is generally, responsible for promoting the stability of the international monetary and financial system-the system of international payments and exchange rates among national currencies that enables trade and financial transactions to take place between countries.
- The IMF works to promote global growth and economic stability-and thereby prevent economic crisis-by encouraging countries to adopt sound economic policy.
- Usually once a year, the IMF conducts in-depth appraisals of each member country's economic situations and policies, and advises on desirable policy adjustments.
- In the event that member countries do experience crises, the IMF resources may be trapped to help finance balance of payments needs.
- In low-income countries, the IMF provides financial support through its concessional lending facilities-the Poverty Reduction and Growth Facility (PRGF) and the Exogenous Shock Facility (ESF)- and through debt relief under the Heavily Indebted Poor Countries(HIPC).

Special Drawing Rights (SDR)

Special Drawing Right was created by the IMF in 1969 to support the Bretton Woods fixed exchange rate system. The SDR is neither a currency, nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. Today, the SDR has only limited use as a reserve asset, and its main function is to serve as the unit of account of the IMF and some other international organizations.

A country participating in this system needed official reserves-government or central bank holdings of gold and widely accepted foreign currencies- that could be used to purchase the domestic currency in world foreign exchange markets, as required maintaining its exchange rate. But the international supply of two key reserve assets- gold and the US dollar – proved inadequate for supporting the expansion of world trade and financial development that was taking place. Therefore, the international community decided to create a new international reserve asset under the leadership of the IMF. However, only a few years later, the Bretton Woods system collapsed and the major currencies shifted to a floating exchange rate regime.

India and IMF

India joined the IMF on December 27, 1945. As a founder-member of the IMF, India was initially assigned a quota of 400 million dollar or 5.2 percent of the total. Being the fifth largest quota holder, India was also given a seat on the IMF's Executive Board with successive reviews, however India's quota share has dwindled.

The finance minister is the ex-officio founder member of IMF Board of Governors. Till 1970, India was among the first five nations having the highest quota with IMF and due to this status India was allotted a permanent place in Executive Board of Directors. After the recent review of IMF's General Quota share has been raised from 2.44% to 2.75% placing India at eighth position in General Quota. In July 2004, Joint India-IMF Training Programme at the National Institute of Bank Management, Pune was established. The training programme will provide policy oriented training in economics and related operational fields to Indian officials and officials of countries in South Asia and East Asia.

As a member of the IMF, India has derived following benefits:

- a) Foreign exchange for meeting balance of payments deficits.
- b) Oil facility from the IMF.
- c) Assistance under the extended credit facility.
- d) Financial assistance.

India has been one of the major beneficiaries of the Fund assistance. India borrowed eight times between 1957 to 1975. Besides receiving loans to meet deficits in its balance of payments India has benefited in certain other respects from the memberships of the Fund. The role and responsibility of the IMF has been increasing with passage of time since its inception. Thus, it has been helping members especially developing countries in many ways for the promotion of economic development and stabilization of balance of payment.

WORLD BANK

World Bank is one of the Bretton Woods twins and came into existence in December 27, 1945. The World Bank group is a family of five international organizations that provide leveraged loans, generally to poor countries. Its five agencies are the following.

1. International Bank for Reconstruction and Development (IBRD)
2. International Development Association (IDA)
3. International Finance Corporation (IFC)
4. Multilateral Investment Guarantee Agency (MIGA)
5. International Centre for Settlement of Investment Dispute (ICSID)

The chief functions of WB are to help in reconstruction and development of its member countries by facilitating investment and productive deployment of capital, to arrange for loans for taking up infrastructural and social development projects.

India and World Bank

India has been borrowing from the WB through IBRD and IDA for various development projects in the areas of poverty alleviation, infrastructure, rural development etc. IDA funds are one of the most concessional external loans for Government of India and are used largely in social sector projects that contribute to the achievement of Millennium Development Goals. IBRD funds are relatively costlier but cheaper than external borrowings. In India the Government utilizes IBRD loans primarily for infrastructure projects. The Government of India and the WB signed a Credit Agreement of \$1billion for the National Rural Livelihoods Project (NRLP). This project will strengthen the implementation of the newly launched National Rural Livelihood Mission (NRLM).

WORLD TRADE ORGANIZATION(WTO)

The World Trade Organization is an international organization designed by its founders to super view and liberalizes international trade. The organization officially commenced on January 1, 1995 under the Marrakesh Agreement, replacing the General Agreement on Tariffs and Trade (GATT), which commenced in 1947. The WTO deals with regulation of trade between participating countries. It provides a framework for negotiating and formalizing trade agreements and dispute resolution process aimed at enforcing participants' adherence to WTO agreements. Its head quarter is in Geneva, Switzerland.

The WTO has 154 members, which represents more than 95% of total world trade. The WTO is governed by a Ministerial Conference, which meets every two years; a General Council, which implements the conference's policy decisions and is responsible for day-to-day administration; and a director general, who is appointed by the Ministerial Conference. The inaugural ministerial conference was held in Singapore in 1996. Disagreement between largely developed and developing economics emerged during this conference over four issues initiated by this conference, which is also known as "Singapore issues".

Issues in WTO

Agriculture has become the linchpin of the agenda for both developing and developed countries. Three other issues have been important. The first, now resolved, related to compulsory licensing of medicines and patent protection. Second deals with a review of provisions giving special and differential treatment to developing countries. Third addresses problems that developing countries are having in implementing current trade obligations.

The “Singapore issues” refers to four working group set up during the WTO Ministerial conference of 1996 in Singapore. These groups are tasked with the issues like: transparency in government procurement, trade facilitation (customs issues), trade and investment, and trade and competition. These issues were pushed at successive ministerial by the European Union, Japan and Korea, and opposed by most developing countries. The United States was lukewarm about the inclusion of these issues, indicating that it could accept some or all of them at various times, but preferring to focus on market access.

Agreements

The WTO oversees about 60 different agreements which have the status of international legal texts. Member countries must sign and ratify all WTO agreements on accession. Some of the most important agreements follow.

- a) *General Agreement on Trade in Services (GATS)*: This was created to extend the multilateral trading system to service sector. The Agreement entered into force in January 1995.
- b) *Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS)* : This agreement sets down minimum standards for many forms of Intellectual Property regulation. It was negotiated at the end of the Uruguay round of the GATT in 1994.
- c) *Sanitary and Phyto-Sanitary Agreement (SPS)*: Under this agreement, the WTO sets constraints on member’s policies relating to food safety as well as animal and plant health (imported pests and diseases).
- d) *Agreement of Technical Barriers to Trade (TBT)*: The object of the TBT Agreement is to “ensure that technical negotiation and standards, as well as testing and certification procedures, do not create unnecessary obstacles to trade.

India and WTO

The organization is currently endeavoring to persist with trade negotiation called Doha Development Agenda (Doha Round), which was launched in 2001 to enhance equitable participation of poorer countries. The Doha Round of trade negotiations is important for the developing countries like India. The main negotiating issues in the WTO from India’s perspective are

1. In the case of agriculture, there has been reduction in overall trade-distorting support by developed countries.

2. The Special and Differential (S&D) treatment for developing countries must be substantial. And the Non-Tariff Barriers such as horizontal mechanism must be taken up.
3. Clarifying and improving, anti dumping Agreement and the Agreement on Subsidies and Countervailing Measures.
4. Establishing a clear linkage between the TRIPS Agreement and the Convention on Biodiversity.

ASIAN DEVELOPMENT BANK

The Asian Development Bank is a regional development bank established in 1966 to promote economic and social development in Asian and Pacific countries through loans and technical assistance.

It is a multinational regional development bank established for the purpose of lending funds, promoting investment and providing technical assistance to the developing member countries and generally for fostering the economic growth and co operation in the asian region. Its head quarters are located at Manila in Philippines.

ADB is managed by a Board of Governor, a Board of directors, a president, four vice-presidents and the heads of departments and officers. Each member country nominates one governor and alternate governor to vote in its behalf. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their citizen. The bank was conceived with the vision of creating a financial institution that would be "Asian in character" to foster growth and cooperation in one of the world's poorest region.

Objectives and functions of the ADB

The basic objective of the ADB is to promote economic development of and mutual cooperation among the countries of Asia. The ADB's objective is to help accelerate the process of economic development of developing countries in the Asian region. To realize the objective the ADB performs the following functions.

1. To promote investment of public and private capital for economic development of Asian countries.
2. To channelize the funds of the ADB for the implementation of those projects which are important for the development of major sectors of the country's economies.
3. To render assistance to member countries in co-ordinating their programmes and policies of economic development and at the same time to promote inter- regional trade and cooperation among countries of the Asian region.
4. To promote technical assistance for the execution of projects.
5. To mobile fund for economic development of member countries by extending cooperation to the World Bank and other UN bodies and public as also private institutions located among member-countries.

India and ADB

It may be noted that India has started borrowing from the ADB since 1986. India's borrowing from the ADB amounted to 250 million US Dollars in 1986. India had received 65 loans amounting to 5.8 billion US dollars at the end of 2000 for infrastructure, energy and financial sectors.

There are many criticisms that are generally made in regard to the role and functioning of the ADB. Most importantly, it is alleged that the role and working of ADB is greatly influenced by United States. And it is also alleged that ADB provides 'tied' loans and complex borrowing, countries to use those loans only for the specified projects.

Although recent economic growth in many member countries have led to a change in emphasis to some degree, throughout most of its history the Asian Development bank has operated on a project basis, specifically in the areas of infrastructure investment, agricultural development and loans to basic industries in member countries. Although by definition the ADB is a lender to governments and government entities, it also provides direct assistance to private enterprises and has also participated as a liquidity enhancer in the private sectors of regional member countries.

EXTERNAL BORROWING AND BALANCE OF PAYMENT PROBLEM IN INDIA

India's external debt has increased over time and India is one of the highly indebted countries of the world in terms of total debt outstanding. External debt increased from US \$83.8 billion in 1990-91 to US \$326.6 billion at end September 2011. The increase in the external debt was primarily on account of higher commercial borrowing and short term debt which together contributed over 80% of the increase in the country's external borrowing.

The maturity profile of the India's external debt indicates the dominance of long term borrowings. The long term external debt at US \$ 255.1 billion at end of September 2011, accounted from 78.1% of total external debt, while the remaining 21.9% was short term debt. However, India's external debt has remained within manageable limits as indicated by the external debt to GDP ratio of 17.8% and debt to service ratio of 4.2% in 2010-11.

Trends in Balance of Payment

India had faced pressure on balance of payment since planning period due to either internal or external factors. The whole period of planning is more than six decades, can be divided into four sub-periods depending on the nature of BoP problems, overall economic environment and external aid situation.

Period I (1956-57 to 1975-76)

This period comprising the second, third and fourth plans and first two years of fifth plan saw heavy deficit in balance of payments and extremely tight payment position. This period witnessed three wars, several droughts and the first oil shock in 1973, though the government resorted to serve import controls and foreign exchange regulation etc.

Period II (1976-77 to 1979-80)

This was relatively short period and was a golden period as far as BoP is concerned. In this period, India had a small current account surplus of 0.6% of the GDP, and also possessed foreign exchange reserves equivalent to about seven months imports. The country had got relatively comfortable position on the BoP front due to the rapid increase in private remittance from oil exporting countries and there was a strong growth in export too. The elimination of large price gap between domestic and foreign markets of gold was also helped to strengthen the BoP in India. Aid receipts were reasonably buoyant and India drew on various IMF facilities during this period.

Period III (1980-81 to 1990-91)

This period broadly corresponds to the period of sixth and seventh plans and was marked by severe BoP difficulties. Widening trade deficit, gradual decline in net receipts from invisibles, the reductions in flows of concessional assistance from World Bank and the third oil shock during 1990-91 were the chief reasons for the problems in BoP in India during third period.

Period IV (1991-92 onwards)

In 1991, India found itself in its worst balance of payments crisis since independence. The inflow of foreign borrowing had increased at a rapid rate during the late eighties. This was due to the excess domestic expenditure over income-the fiscal deficit of Centre and the States soared to over 11 per cent in 1991. During this period total public debt as the proportion of GNP doubled reaching the level of 60 per cent and foreign currency reserves were depleted rapidly.

The reforms of 1990s have facilitated India to move away from closed economy framework towards a more open and liberal economy. Due to the liberalized foreign trade deregulated industrialization and the thrust on globalization had made the country's balance of payment become stronger. The foreign exchange reserves were built to very comfortable positions and the problem of BoP has come under control.

Reasons for Deficits in India's Balance of Payments

The important reasons for deficit in India's BoP position can be listed as follows.

1. *Rise in imports* :- The reasons for rapid rise in imports are building industrial base, increase in export related imports (gems, jewellery, capital goods) increase in imports of industrial raw materials, rise in the price and imports of POL (petroleum, oil and lubricants)products etc.
2. *Devaluation and depreciation of the rupee*: - The devaluation and depreciation of the rupee have led to an increase in the price of imports. Exports have become cheaper, the low price and income elasticity of demand for exports have resulted in slow increase in exports.
3. *Slow rise in export earnings*: - Export earnings rose, however, they were not sufficient to meet the rising imports. Thus, rise in exports has neither been substantial nor continuous. Therefore, the growth in export has not been enough to finance the rising imports.

4. *Debt-Service*: - The balance of payment problem has also aggravated due to the rising obligation of amortization payments in 2008-09, debt-service ratio was 4.4% with the ever increasing imports and slow pace of exports, the most effective solution for India's balance of payments problem is cost reduction and competitiveness in global market.

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