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GROWTH AND DEVELOPMENT

Preamble: The paper aims at introducing concepts, theories and policies regarding growth and development. The meaning of development as it has evolved over the years is clarified. The contemporary as well as classic theories of growth, development and underdevelopment are considered in detail. Theories and issues related to population, poverty and human resources are considered. Urban and rural aspects of the development process are studied as so too are the international aspects of development. The approach has been to cover all important areas of development economics. The paper should be taught with reference to Indian economic conditions.

MEANING OF DEVELOPMENT AND RELEVANT CONCEPTS

1.1 INTRODUCTION

Economic Growth is a narrower concept than economic development. It is an increase in a country's real level of national output which can be caused by an increase in the quality of resources (by education etc.), increase in the quantity of resources & improvements in technology or in another way an increase in the value of goods and services produced by every sector of the economy. Economic Growth can be measured by an increase in a country's GDP (gross domestic product)

Economic development is a normative concept i.e. it applies in the context of people's sense of morality (right and wrong, good and bad). The definition of economic development given by Michael Todaro is an increase in living standards, improvement in self- esteem needs and freedom from oppression as well as a greater choice. The most accurate method of measuring development is the Human Development Index which takes into account the literacy rates & life expectancy which affects productivity and could lead to Economic Growth. It also leads to the creation of more opportunities in the sectors of education, healthcare, employment and the conservation of the environment. It implies an increase in the per capita income of every citizen.

1.2 ECONOMIC GROWTH

The modern conception of economic growth began with the critique of Mercantilism, especially by thephysiocrats and with the Scottish Enlightenment thinkers such as David Hume and Adam Smith, and the foundation of the discipline of modern political economy. It is an increase in the value of goods and services produced by an economy. It is conventionally measured as the percent rate of increase in real gross domestic product, or *GDP*. Growth is usually calculated in *real* terms, i.e. inflation-adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced. In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e. production at "full employment," rather than growth of aggregate demand.

Economic growth is the increase of per capita gross domestic product (GDP) or other measure of aggregate income. It is often measured as the rate of change in real GDP. Economic
growth refers only to the quantity of goods and services produced.

Economic growth can be either positive or negative. Negative growth can be referred to by saying that the economy is shrinking. Negative growth is associated with economic recession and economic depression.

In order to compare per capita income across multiple countries, the statistics may be quoted in a single currency, based on either prevailing exchange rates or purchasing power parity. To compensate for changes in the value of money (inflation or deflation) the GDP or GNP is usually given in "real" or inflation adjusted, terms rather than the actual money figure compiled in a given year, which is called the nominal or current figure.

Economists draw a distinction between short-term economic stabilization and long-term economic growth. The topic of economic growth is primarily concerned with the long run. The short-run variation of economic growth is termed the business cycle.

The long-run path of economic growth is one of the central questions of economics; despite some problems of measurement, an increase in GDP of a country is generally taken as an increase in the standard of living of its inhabitants. Over long periods of time, even small rates of annual growth can have large effects through compounding (see exponential growth). A growth rate of 2.5% per annum will lead to a doubling of GDP within 29 years, whilst a growth rate of 8% per annum (experienced by some Four Asian Tigers) will lead to a doubling of GDP within 10 years. This exponential characteristic can exacerbate differences across nations.

1.2.1 India's Growth Strategy:

India's Growth strategy has evolved over successive five year plans. It reflected the growing strength of our economy, structural transformation taking place in the domestic economy and also developments in the world economy. In the early stages of planning, government was viewed as the principal actor in development exercising strict control over private investment, ensuring a dominant role for the public sector in all important industries,. Trade policy was inward oriented and it focused on industrial development through import substitution. The limitations of this policy became evident by the end of the 1970s and early 1980s. It was realized that these policies reduced efficiency and competitiveness and economic growth was much lower than targeted.

Some efforts were made to reform the system in the second half of the 1980s by trying to remove the shortcomings in our development strategy. In 1991 a wide ranging programmes of economic reforms aimed at decontrolling and debureaucratising the economy was initiated. The Indian economy has responded well to change in policy direction. GDP growth in the post reform period has increased from an average of about 5.7 percent in the 1980s to an average of about 6.1 percent in the Eighth and Ninth Plan periods, making India one of the ten fastest growing countries in the world.

1.2.2 Economic Growth is the basic aim:

The basic aim of economic planning in India is to bring about rapid economic growth through the development of agriculture, industry, power, transport and communication and other sectors of the economy. Increase in real national income is taken as the basic measure of economicgrowth.

Accelerating the growth rate of the economy with stable prices is central to the attainment of a number of objectives such as poverty reduction, employment generation and so on. Rapid growth has strong poverty reducing effects especially when it is complimented by a public policy which is sensitive to the needs of the poor. Accelerated growth will also help to increase employment and through that, spread of income generation and poverty eradication. However, the linkage between growth, employment and poverty reduction depends crucially upon the sectoral pattern of growth and oh the degree to which the poor sections of the population and the backward regions of the country are integrated into the growth process.

The growth objective also subsumes a number of subsidiary objectives which have, at one time or another, been explicably identified as objectives in the Five Year Plans. Agricultural development, industrialization, productivity growth and infrastructural development are examples of such subsidiary objectives. The objective of economic growth demands that most of these subsidiary objectives are met in order to achieve the primary objective of accelerating the overall economic growth.

However, it must be recognized that the growth rate of the economy is probably the most important summary measure of the degree of success of the development strategy and macroeconomic management. Economic growth is the outcome of numerous factors interacting with each other. In a developing economy like India, which is constrained by lack of resources, capital accumulation or investment is the most important factor for increasing the productive capacity of the economy as well as for improving the productivity of the other factors of production. Thus, the Indian Five Year Plans have emphasized on investments as well as on the allocation of investible resources among different sectors.

1.2.3 Growth Performance in the Five Year Plans:

The growth performance of the Indian economy, relative to the targets in the various plans, is given in Table. It can be seen from the table that except for the Third and Fourth Plans, the economy has performed better than the target in five of the nine plans, and even in the Second Plan, the gap was not large. During the Third and Fourth Plans, the shortfalls were largely due to exogenous shocks that could not possibly be predicted. The Third Plan witnessed the drought years of 1965 and 1966, and the Indo-Pakistan war of 1965. The Fourth Plan experienced three consecutive years of drought (1971-1973) and the first oil-price stock of 1973. It may be noted that since the Fourth Plan, the growth rate of the economy had improved steadily until the Ninth Plan. The growth rate has increased to 6.02 per cent in the Seventh Plan and further to 6.68 per cent in the Eighth Plan. However, in the Ninth Plan the growth rate has come down to 5.35 per cent. This shows that the Indian Economy has responded well to the changes in policy direction introduced since 1991.

Table 1: Growth Performance in the Five Year Plans (Percent per annum)

		Target	Actual
1.	First Plan (1951-56)	2.1	3.60
2.	Second Plan (1956-61)	4.5	4.21
3.	Third Plan (1961-66)	5.6	2.72
4.	Fourth Plan (1969-74)	5.7	2.05 5.
5.	Fifth Plan (1974-79)	4.4	4.83 6.
6.	Sixth Plan (1980-85)	5.2	5.54
7.	Seventh Plan (1985-90)	5.0	6.02 8.
8.	Eighth Plan (1992-97)	5.6	6.68
9.	Ninth Plan (1997-2002)	6.5	5.35
10.	Tenth Plan: (2002-2007)	8.1	7.7
11.	Eleventh Plan(2007-2012) AIM: Rapid and inclusive growth.(Poverty reduction		
12.	Twelfth plan(2012-2017)	8.2	

Note: The growth targets for the first three plans were set with respect to national income. In the Fourth Plan it was net domestic product. In all plans thereafter it has been gross domestic product at factor cost.

1.2.4 Growth Performance in the Recent Years:+

According to Economic Survey 2004-2005, GDP at factor cost has grown by 8.5 per cent in 2003-04, mainly due to a strong agricultural recovery of 9.6 per cent in 2003-04. Besides agriculture, the industry and service sectors also maintained the momentum with GDP growth. While industry maintained the higher growth of 6.6 per cent observed in 2002- 03, the services sector improved its performance significantly from 7.9 per cent in 2002-03 to 9.1 per cent in 2003-04. A growth rate in GDP higher than 8 per cent has been achieved in the past only in three years : 1967- 68 (8.1 per cent), 1975-76 (9 per cent) and 1988-89 (10.5 per cent).

Table 2: Sectoral Real Growth Rates in GDP (at Factor Cost)

		2003-04	2001-02	2002-03
1.	Agriculture and Allied	6.3	-7.	9.6
2.	Industry	3.6	6.6	6.6
3.	Services	6.8	7.9	9.1
4.	GDP at Factor Cost	5.8	4.0	8.5

Source : Economic Survey 2004-05

According to Economic Survey 2003-04, growth in Indian economy has steadily accelerated since 1979. India has an impressive 23 year record of growth averaging 5.7 per cent per year. However, many countries in East Asia have sustained higher growth rates over longer periods than 23 years. This can be observed from following Table.

Table 3: Growth Experiences of Some East Asian Countries (1961-1996)

Country	GDP Growth (per cent)
Hong Kong	7.97
Indonesia	6.39
Korea	7.96
Malaysia	7.22
Singapore	8.74
Thailand	7.71

***Source :** Economic Survey 2003-04.*

1.3 TRENDS IN NATIONAL INCOME

The growth rate of the economy is probably the most important summary measure of the degree of success of the development strategy. Since the growth rate is measured in terms of national income of the country, we analyse below the trends in national income.

The trends in national income are shown in the following

Table.
The national income of the country (NNP at factor cost) at current prices increased from Rs. 9,142 crore in 1950-51 to Rs. 22,52,070crore in 2003-04, that is, by 246 times. This large increase in national income at current prices is largely on account of rise in prices.

Table 4: **Net National Product at Factor Cost Rs. Crore**

	At Current Prices	At Constant Prices (93-94 Prices)
1950 – 51	9,14	1,32,367
1980 – 81	1,18,236	3,63,417
1990-91	4,50,145	6,14,206
2003-04	22,52,070	12,66,005

Q: Quick Estimates
Source : Government of India; Economic Survey 2004-05
The national income at constant prices shows the real increase in national income, that is, the increase in the production of goods and services. The NNP at factor cost at 1993-94 prices increased from Rs. 1,32,367 crore in 1950-51 to Rs. 6,14,206 crore in 1990-91 and further to Rs. 12,66,005 crore in 2003-04. The national income at constant price increased only by 9.6 times during the period 1950-51 to 2003-04.

1.3.1 Annual Growth Rate of National Income:

The annual average growth rate of national income at constant prices during the Fiver Year Plans is shown in the following Table.

It shows that growth rate of national income has been very uneven and till Fifth Five Year Plan (1974-79), the growth rate was below 5 percent. During the Fifth Plan the national income has grown at 5 percent and thereafter the growth rate have surpassed the much sought after 5 percent. The annual average growth rate of national income during the Eighth Plan was 6.7 percent. However it was only 5.5 percent during the Ninth Plan.

Table 5: Annual Average Growth Rate of NNP at Factor Cost at 1993-94 Prices during the Fiver Year Plans.

First Plan (51-56)	3.6
Second Plan (56-61)	4.1
Third Plan (61-66)	2.5 3.3 5.0 5.4 5.8
Fourth Plan (69-74)	6.7
Fifth Plan (74-79) Sixth Plan (80-85) Seventh Plan (85-90) Eighth Plan (92-97) Ninth Plan (97-02)	5.5

Source : *Economic Survey 2004-05*

1.4 TRENDS IN PER CAPITA INCOME
Per capita income is one of the important indicators of the 'Human Development Index'. Besides other things, it shows an increase in the standard of living. Traditionally the level of per capita income has been regarded as a summary indicator of the economic well being of the country. The trends in per capita income are shown in the following Table. The per capita NNP at 1993-94 prices increased only by 3.2 times during the period 1950-51 to 2003-04, from Rs. 3687 in 1950-51 to Rs. 11,797 in 2003-04.
The rise in per capita income has been very slow one. Poor
growth rates coupled with rapid increase in population are the main reasons for such dismal performance. Since Sixth Plan the growth rate of per capita income has been above 3 percent. The average annual growth rate in per capita income was 4.6 percent in the Eight Plan and 3.6 percent in the Ninth Plan.

Table 6: Per Capita NNP at 1993-94 Prices (Rs.)

1950-51	3,687
1980-81	5,352
1990-91	7,321

2003-04 11,797

Source : *Economic Survey 2004-05, S-3*

1.4.1 International Comparison of per capita income:

Per capita income of selected countries for the year 2003 is given in Table 7. Table 7 brings out the difference between India and other countries in terms of per capita income. India has only $530 per capita income as against the advanced countries having a per capita income of $20,000 and above. At the top Norway has a per capita income of $43350 in 2003. As pointed out earlier, poor growth rate and rapid increase in population are main reasons for such a low per capita income in the developing countries.

Table 7: Per Capita Income of selected countries

Country	Per capita Gross National Income in 2002 (in dollars)
Norway	43350
Switzerland	39880
United States	37610
Japan	34510
United Kingdom	28350
Canada	23930
China	1100
Sri Lanka	930 530
India	470
Pakistan	

Source: *World Development Report 2005*

1.5 SHORTCOMINGS IN GROWTH PERFORMAN

Despite improvement in the growth rate after 1980, the growth performance of Indian Economy has lagged behind expectations in many dimensions. They are:

i) Faster growth has not reduced poverty as much as it should have done.

ii) Growth has not created sufficient number of high quality jobs to satisfy the aspirations of our increasingly educated youths.

iii) Growth has not been as regionally balanced as it should have been.

iv) The deficiencies in social development indicators such as primary education, primary health care, safe drinking water, nutrition, sanitation, etc., have also continued to exist. The low level of social development is a major constraint on reaching an average growth rate of 8 percent in the recent years.

Despite progress in many areas, we are woefully lacking in providing basic services such as healthcare, education, safe drinking water, etc., to the majority of our population especially in rural areas.

From the above analysis we can conclude that there is a need to articulate a development strategy which reaffirms and builds upon what has worked well, initiates corrective steps where needed, and takes new initiatives to meet the new challenges which face the economy in the years ahead.

1.6 ECONOMIC DEVELOPMENT

The latter half of the 20th century, with its global economy of a few very wealthy nations and many very poor nations, led to the study of how the transition from subsistence and resource-based economies to production and consumption based-economies occurred. This led to the field of development economics, including the work of Nobel laureatesAmartyaSen and Joseph Stiglitz. However this model of economic development does not meet the demands of subaltern populations and has been severely criticized by later theorists.

Economic development is the increase in the standard of living in a nation's population with sustained growth from a simple, low-income economy to a modern, high-income economy. Also, if the local quality of life could be improved, economic development would be enhanced. Its scope includes the process and policies by which a nation improves the economic, political, and social well- being of its people.

Gonçalo L Fonsesca at the New School for Social Research defines economic development as "the analysis of the economic development of nations.

―Economic development' is a term that economists, politicians, and others have used frequently in the 20th century. The concept, however, has been in existence in the West for centuries. Modernization, Westernization, and especially

Industrialization are other terms people have used when discussing economic development. Although no one is sure when the concept originated, most people agree that development is closely bound up with the evolution of capitalism and the demise of feudalism."

The study of economic development by social scientists encompasses theories of the causes of industrial-economic modernization, plus organizational and related aspects of enterprise development in modern societies. It embraces sociological research on business organization and enterprise development from a historical and comparative perspective; specific processes of the evolution (growth, modernization) of markets and management-employee relations; and culturally related cross-national similarities and differences in patterns of industrial organization in contemporary Western societies. On the subject of the nature and causes of the considerable variations that exist in levels of industrial-economic growth and performance internationally, it seeks answers to such questions as: "Why are levels of direct foreign investment and labour productivity significantly higher in some countries than in others?"Mansell and Wehn state that development has been understood since the Second World War to involve economic growth, increases in per capita income, and attainment of a standard of living equivalent to that of industrialized countries.

Economy Development can also be considered as a static theory that documents the state of economy at a certain time. According to Schumpeter (2003) the changes in this equilibrium state to document in economic theory can only be caused by intervening factors coming from the outside.

1.7 IMP: DISTINCTION BETWEEN GROWTH AND DEVELOPMENT

There are significant differences between economic growth and economic development. The term "economic growth" refers to an increase (or growth) in real national income or product expressed usually as per capital income. National income or product itself is commonly expressed in terms of a measure of the aggregate output of the economy called gross national product (GNP). Per capita income then is simply gross national product divided by the population of the country. When the GNP of a nation rises, whatever the means of achieving the outcome, economists refer to it as economic growth.

The term "economic development," on the other hand, implies much more when used in relation to a country or an entire economy. It typically refers to improvements in a variety of indicators, such as literacy rates and life expectancy, and it implies a reduction in poverty. Critics point out that GDP is a narrow measure of economic welfare that does not take into account important non-economic aspects such as more leisure time, access to health & education, the environment, freedom, or social justice. Economic growth is a necessary but insufficient condition for economic development.

Economic Growth does not take into account the size of the informal economy. The informal economy is also known as the black economy which is unrecorded economic activity. Development alleviates people from low standards of living into proper employment with suitable shelter. Economic Growth does not take into account the depletion of natural resources which might lead to pollution, congestion & disease. Development however is concerned with sustainability which means meeting the needs of the present without compromising future needs. These environmental effects are becoming more of a problem for Governments now that the pressure has increased on them due to Global warming.

1.7.1 Different View related Growth and Development:

For a layman, the terms economic development and economic growth are synonyms. For a long time, the terms, economic development, economic growth, economic progress, economic welfare, secular change and other similar terms are being commonly used in day-to-day life as synonyms. But some leading economists have drawn a line of demarcation between them. Under the above heading we shall discuss the difference between the above two concepts, *i.e.,* economic development and economic growth which is given below:

Mrs. Ursula Hicks, "Development should relate to underdeveloped countries, where there is possibility of developing and using hitherto, while the term growth is related to economically rich and advanced countries where most of the resources are already known and developed."

This definition draws a vivid distinction between the economic development and economic growth. The first term relates to the problems of underdeveloped countries and their solution, whereas the second term is related to the problems of developed countries of the world.

Prof. A. Maddison, "the rising of income levels is generally called economic growth in rich countries and in poor countries it is called economic development."

This definition also points out the same fact that economic development is concerned with the rising of income level in underdeveloped countries like India, whereas economic growth refers to the rising of income levels in advanced and rich countries like America, U. K., France, Germany etc.

Prof. J. A. Schumpeter, "Development is a discontinuous and spontaneous change in the stationary state, which for ever alters and displaces the equilibrium state previously existing; while growth is a gradual and steady change in the long run, which comes about by a general increase in the rate of savings and population||.

This explanation emphasizes that the economy is in the stationary state before the process of development starts and in that stationary state, equilibrium exists among the different development variables such as investment and savings, income and expenditure, demand and supply etc. The view of Schumpeter has been widely accepted and elaborated by the majority of economists.

C. *P. Kidleberger*, "Economic growth means more output and economic development implies both more output and changes in the technical and institutional arrangements, by which it is produced."

This explanation states that growth is synonymous with higher output. Any increase in the quantity of development variables is termed as growth. It has nothing to do with the means and methods of production. Development, on the other hand, implies not only higher output, but also the changes which help in raising the level of output. Kindleberger has further explained the difference by an analogy with human beings. According to him, "Growth involves focussing on height or weight while development draws attention to the change in functional capacity."

Prof. J. *K.* ***Mehta*** has summed up the above discussion in the words, "The word Growth has quantitative significance while the Development has by comparison qualitative significance."

Byrns and ***Stones***, "Economic growth occurs when more goods can be produced. Economic development entails improvements in the quality of life, in the qualities of goods available or in the ways production is organized."

Dr. Bright Singh, "Economic development is a multi-dimensional phenomenon, it involves not only increase in money incomes, but also improvement in real habits, education, public health, greater leisure and in fact all the social and economic circumstances that make Tor a fuller and happier life. On the contrary, in case of economic growth, there is increase in national income alone. There is no structural change in the economy."

The distinction between economic development and economic growth may further be explained by means of the table
given below :

1.7.2 Difference between Economic Development and Economic Growth

S. N.	Basis of Difference	Economic Development	Economic Growth
1.	Utilization	Economic Development relates to the utilization and development of unused resources in the underdeveloped countries.	Economic Growth relates to optimum utilization and development of under-utilized resources of developed countries
2.	Implication:	progressive changes in socio-economic structure of country (institutional and technological changes)	output of goods and services in the country like increase the income in savings, investment etc.
3.	Concerned with	Development relates to underdeveloped countries.	Growth relates to developed countries.
4.	Effect:	Brings both qualitative and quantitative changes in the economy	Brings quantitative changes in the economy
5.	Prof. A. Maddison's View	The rising of income levels is generally called economic growth in rich countries.	The rising of income levels is generally called economic development in poor countries.
6.	Nature and cause change	According of Schumpeter, "Economic development discontinuous and spontaneous state in the stationary state."	According to Schumpeter, "Economic growth is a gradual and steady change in the long run."
7.	More out put and changes	According to Kindleberger, economic development implies more output and changes in the technical and institutional arrangements.	According to Kindle- berger, economic growth means more output.
8.	Significance	According to Prof. J. K. Mehta, economic development has qualitative significance.	According to Prof. J. K. Mehta, economic growth has quantitative significance.
9.	Bryns and Stones' views	According to Bryns and Stones, economic development entails	According to Bryns and Stones, economic growth occurs when goods can be produced.

		improvement in the more quality of life and goods.	
10.	Dr. Bright Singh's view	Economic development is a multi-dimensional single phenomenon.	Economic growth is a dimensional phenomenon.
11.	Scope	Economic development is a wider concept than economic growth.	Economic growth is a narrower concept than economic development.
12.	Importance	Economic development Economic development economic growth.	Economic growth is possible without economic development.
13.	Character	Economic development is regulated and controlled in character.	Economic growth is spontaneous in character.
14.	John Fried man's view	Economic development is an innovative process leading to the structural transformation of social system	Economic growth is an expansion of the system in one or more dimensions without a change in its structure.
15.	Real National Income	Economic development is the process as well as increase in real national income.	Economic growth is simply the rise in real national income and not the process.

In spite of the above apparent difference, most of the economists are of the opinion that there is no difference between economic development and economic growth and hence they use both these terms as synonyms. According to *Arthur Levis,* "Most often we shall refer only to growth but occasionally for the sake of variety, to progress.
Economic growth is a necessary but not sufficient condition of economic development.

1.8 SUMMARY

While economists do not agree on exactly how to promote economic development, there is general agreement that development requires economic growth, a real increase in per capita income, and the social and political institutions necessary to support an expansion of the national economy. It also requires citizens who can work effectively in the enterprises. As the production of goods and services rise at a rate higher than increases in population there is economic growth. Economic development, in addition to increased per capita income, also includes fundamental changes in the structure of the economy. These changes are characterized by a growing industrial sector combined with a declining agriculture share of Gross Domestic Product (GDP) as well as significant changes in population growth, rural to urban migration, and employment opportunities.

DEVELOPMENT INDEX AND SUSTAINABLE DEVELOPMENT

2.1 INTRODUCTION

Human Development**:** India's high growth rates have been a matter of boastful self-congratulatory publicity for the Indian Government, with the recent recession being projected as a temporary setback, soon to be overcome. The latest Human Development Report released by the UNDP in India recently serves to confront and challenge the tall claims with the rude realities of India's poor human development performance in the very midst of its much-touted economic success story.
The Human Development Index ranking, based on 2007 data, finds India at a shocking 134th place out of 182 countries. India's ranking in a statistical update based on 2006 data, released by the UNDP last year was 132; the 2007-2008 HDR based on 2005 data ranked India at 128, while in the preceding year India was at 126.

Undeniably, in the very phase when the Manmohan Singh Government was boasting of high growth rates, India's performance in terms of providing the basics required for a life of dignity continued to slide steeply. If this is true of the high-growth period, the fate of human development indicators in India in times of Recession can only be imagined.

The Four Elements in Development:

Having seen what it means to be a developing country, we now turn to an analysis of the process by which low-income countries improve their living standards. We saw in the last chapter that economic growth in the United States—growth in its potential
output—rides on four wheels. These are:
(1) Human resources, (2) Natural resources, (3) Capital formation, (4) Technology.

The sources of growth are no different in other countries, no matter how rich or poor. Let's see how each of the four wheels operates in developing countries and consider how public policy can steer the growth process in favorable directions.

2.2 PROGRESS OF HUMAN DEVELOPMENT IN INDIA

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

India has been categorized by the *Human Development Report 2001* as a medium human development country. The Human Development Index has risen gradually from 0.406 in 1975 to 0.510 in 1990 and stands at 0.590 in 2001. In fact, it can take quite long for India to cross the mark of 0.8 in HDI to join the rank of high HDI countries.

A major impediment to progress in human development is the very fast growth of population experienced in India. India's population increased from 620.7 million in 1975 to 1,033 million in 2001 giving a growth rate of 2.0 per cent per annum during the period (1975-2001), which is fairly high. It is expected that the growth rate of population during 2000-2015 will come down to 1.3 per cent. This would provide a welcome relief to push forward the process of human development.

Urbanization is considered to be a factor, which promotes human development. The share of urban population, which was 21.3 per cent in 1975, has reached a level of 27.8 per cent in 2001, but by 2015, urban population would reach the level of 32.2 per cent. In absolute terms, urban population was 285 million in 2001 and would reach a level of407 mill ion in 2015. This would certainly help to enlarge human development because it has been observed that urban areas are better looked after in terms of education and health facilities.

Another healthy feature of likely demographic transition is the proportion of children or population under age 15, whose proportion stood at 33.7 per cent in 2001 but is likely to decline to 27.7 per cent by 2015. In absolute terms, population under age 15 was 348 million in 2001 and would get reduced to 345 million in 2015. This will imply decreasing population pressures from below in future which would also help in releasing resources to improve human development.

It would be quite useful to consider factors related with the education of the population that are likely to promote human development. The most important factor is adult literacy rate, which was 58.0% in 2001. This implies an adult illiteracy rate of 42 per cent. In absolute terms, 288 million adults were illiterate in 2001. The share of India in the world's illiterate population is 33.3 per cent. According to the Human Development Report 2001, a total of 854 million persons were illiterate in the world in 1999 and nearly one-third of these were accounted for in India. As compared with the total world population, the share of India in world population is only 16.6 per cent. In other words, in the total world population, India's share is one-sixth, but among the world's illiterates, its share is one-third. This only underlines the need for strengthening literacy rate still further to reduce adult illiteracy in India. Although evidence of substantial increase in literacy during the decades of the nineties has become evident, still India has a long way to go. Compared to China, which has improved its adult literacy rate to 85.8 per cent in 2001, India lags behind considerably in this very important area of human development.

Another important indicator is the combined Gross (Primary, Secondary and Tertiary) Enrolment Ratio, which was only 56.0 per cent in India. China had a gross enrolment ratio of 73 per cent in 2000-01. India is lagging behind and has to catch up, not only with reference to developed countries, but also with reference to some developing countries like China.

Public expenditure on education as a percent of GNP is considered as an indicator of state policy towards promoting education. This proportion has remained unchanged between 1985-87 to 1998-2000 as 4.1% of GNP. According to the Report of the Education Commission (1964-65), this expenditure should have been raised to 6% of GNP. Although it is nearly four decades now, but the target set by the Education Commission has yet to be realized.

The proportion of education expenditure devoted to pre- primary and primary education has marginally increased from 35% in 1985-86 to 39.4% in 1998-2000. There is a strong need to enrich state-run schools at the primary level so as to bring about a decline in dropout rates. Since the children belonging to upper middle class and affluent sections are now going to the so-called public schools, it should be possible for the state to improve facilities both in terms of human and material resources deployed in state-run primary schools.

The Information Technology revolution has necessitated an increase in the proportion of tertiary students in science, math and engineering to be stepped up. Their proportion was only 25% during 1994-97 in India. As against this, their proportion in China was 53%. This proportion was about 49 per cent in Russian Federation. India has to bring about a shift to meet the changing demands of the new economy.

So far as youth literacy rate is concerned, it is 73.3% in 2001, but ironically in a majority of medium human development countries, youth literacy rate is above 90 per cent. India has, therefore, to improve its literacy rate among the youth (i.e. population in the age group (15-24).

a) Health Indicators:

Life expectancy at birth has shown a continuous improvement from 50.3 years during 1970-75 to 63.3 years in 2001. However, the probability at birth not surviving to age 40 is 15.3% in 2000-05. India has to improve health facilities as well as nutrition levels so that it can reduce the probability at birth not surviving to age 40 at the level of China (7.1 %) which is half that of India. Several medium human development countries have much better survival rates. A few worth mentioning are Philippines, Thailand, Malaysia and Sri Lanka.

In this context, it would be relevant that 47% of the children under five were underweight in 2001. In absolute terms, 178 million children under five were underweight. The country should support a programme of improving nutrition in poor families to reduce this massive number of underweight children.

Population not using improved water sources was 16% in 2000. This is a very healthy development, but in absolute terms 165 million persons are unable to make use of improved water sources and thus become victims of all kinds of water-borne diseases. Similarly, improved sanitation facilities were not available to 72% of the population. In absolute terms, 740 million persons were living under insanitary conditions. India's record in the sphere of sanitation is, to say the least, tragic. Even in medium human development countries, population using adequate sanitation facilities ranged from 70 per cent to 99 per cent, but the proportion in India was palpably low at 28 per cent in 2000. India has a long way to go in this area of access to health services.

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

The proportion of under-nourished people in India in 2000 was 24%. This implies that 244 million people were under- nourished. This under-nourishment is primarily due to the existence of poverty. There is a need to strengthen poverty eradication strategies to reduce under-nourishment.

The survival rate has considerably improved in India. In 1970, infant mortality rate per 1,000 live births was 127; it has been brought down to 67 in 2001. Similarly, under-five infant mortality rate has been reduced from 202 per 1,000 live births to 93 in 2001. These are healthy developments. Likewise, maternal mortality rate per 1,00,000 live births have been brought down to 540 during 1985-2001. Control of diseases and improvement in hospital facilities has contributed to improvements in survival rate.

b) Economic Indicators:

GDP per capita of India was $ 2,840 in 2001 (PPP US $). The average annual growth rate of GDP during 1980-90 was 5.8 per cent and during 1990-2001, it declined to 4.1 per cent during 1990-2001.

However, the measures of inequality of consumption revealed that the share of the poorest 10% in total consumption in 1997 was just 3.5 per cent and that of the richest 10% was 33.5 per cent. Thus, the ratio of consumption between the richest 10% to the poorest 10% was 9.5. Similarly, the poorest 20 per cent shared only 8.1 per cent in total consumption, but the richest 20 per cent shared 46.1 per cent. Thus, the ratio of consumption of the richest 20% to the poorest 20% was 5.7. Compared with medium human development countries, India shows moderate inequality. A very large number of countries in this group show much higher inequality of income or consumption. However, there is a need to improve the condition of the poorest 10 per cent or 20 per cent of the population so that India is able to reduce inequality still further and compare herself favorably with high human development countries.

Data on priority in public expenditure on education reveals that it was 3.2% of GNP in 1985-87 and has slightly improved to 4.1 per cent in 1998-2000. But public expenditure on health was distressingly low at 0.9% of GDP in 2000. There is, therefore, an urgent need to improve the proportion of public expenditure both on education and health so as to foster human development. This, however, should not mislead us to conclude that India is spending more on military expenditure or has to use a big proportion of GDP in total debt service. Data available on both the indicators reveals that military expenditure accounted for 2.7 per cent of GDP in 1990, but it has shown a decline to 2.5 per cent of GDP in 2001. Similarly total debt service payments were of the order of 2.6 per cent of GDP in 1990 and they also shown a decline to 1.9 per cent in 2000. Obviously, India is neither using a big proportion of its public spending on military expenditure nor on debt service payment. We have, therefore, to search for some other areas like general administration and subsidies, which may be appropriating a big proportion of public expenditure.

Lastly, we may consider fuel consumption as a proximate measure for industrialization or modernization of our economy. Data reveal that traditional fuel consumption in total energy use declined from 31.5% in 1980 to 20.7% in 1997. This was natural and is in accordance with the process of development. However, commercial energy use measured in terms of kg. Of oil equivalent improved from 424 kgs. in 1990 to 497 kgs. in 1997—indicating a growth rate of 1.9% per annum. It may be noted that per capita electricity consumption sharply improved from 130 KWH in 1980 to 355 KWH in 2000. This only underlines the fact that sources of energy other than electric energy, such as coal and oil, have contributed more to energy use. Energy is a basic constraint on development. India has become more dependent on non- renewable sources of energy like coal and oil and less on renewable sources like hydropower. It would be more desirable to tap hydro resources more effectively.

2.3 HUMAN DEVELOPMENT INDEX

The HDI - human development index - is a summary composite index that measures a country's average achievements in three basic aspects of human development: health, knowledge, and a decent standard of living. Health is measured by life expectancy at birth; knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratio; and standard of living by GDP per capita (PPP US$).

The Human Development Index (HDI) is a composite statistic used to rank countries by level of "human development" and separate developed (high development), developing (middle development), and underdeveloped (low development) countries. The statistic is composed from data on life expectancy, education and per-capita GDP (as an indicator of standard of living) collected at the national level using the formula given in the Methodology section below. The HDI has been used since 1990 by the United Nations Development Programme for its annual Human Development Reports.

Human Development Index measures achievements on average on the basis of three following criteria. Areas which are of significance to human development:
Life expectancy at birth which measures the longevity of life.
Knowledge which is based on the following two factors: Adult literacy rate
Gross enrolment ratio at primary, secondary and tertiary level.
Per capita GDP measures the standard of living of the people.

On the basis of above criteria an index is created for each of the above dimensions. This is done on the basis of maximum and minimum values for each of the above three indicators.

Table 2.1: Maximum and Minimum Values for Calculating HDI

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

The actual values for each country are compared with the maximum and minimum value and for each country the values of all the indicators would range between 0 and 1. The following formula is used:

Actual value Minimum value Index for each indicator
Maximum value Minimum value

Table 2.2: Human Development Indicators, 2003

Human Development Index

Norway	India	Burundi
HDI Rank:	HDI Rank:	HDI Rank:
1	127	171

Table 2 gives the Human Development index of selected countries as given by the UN Human Development Report, 2003. According to this report, India is ranked 127 among a total of 175 countries. India is classified on the basis of HDI as a country of medium human development.

2.3.1 Three dimensions in the HDI:

The HDI combines three
dimensions:
Life expectancy at birth, as an index of population health and longevity
Knowledge and education, as measured by the adult literacy rate (with two-thirds weighting) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weighting).
Standard of living, as indicated by the natural logarithm of gross domestic product per capita at purchasing power parity.

2.3.2 Methods of HDI measures:

A) Life Expectancy Index:

Life expectancy is the expected (in the statistical sense) number of years of life remaining at a given age. It is denoted by e_x, which means the average number of subsequent years of life for someone now aged *x*, according to a particular mortality experience. (In technical literature, this symbol means the average number of *complete* years of life remaining, excluding fractions of a year. The corresponding statistic including fractions of a year, the normal meaning of life expectancy, has a symbol with a small circle over the *e*.) The life expectancy of a group of individuals is heavily dependent on the criteria used to select the group. Life expectancies usually calculated separately for males and females. Females live longer than males in countries with modern obstetric care.

In countries with high infant mortality rates, the life expectancy at birth is highly sensitive to the rate of death in the first few years of life. Because of this sensitivity to infant mortality, simple life expectancy at age zero can be subject to gross misinterpretation, leading one to believe that a population with a low overall life expectancy will necessarily have a small proportion of older people. For example, in a hypothetical stationary population in which half the population dies before the age of five, but everybody else dies exactly at 70 years old, the life expectancy at age zero will be about 35 years, while about 25% of the population will be between the ages of 50 and 70. Another measure such as life expectancy at age 5 (e_5) can be used to exclude the effect of infant mortality to provide a simple measure of overall
mortality rates other than in early childhood—in the hypothetical population above, life expectancy at age 5 would be 70 years. Aggregate population measures such as the proportion of the population in various age classes should also be used alongside individual-based measures like formal life expectancy when analyzing population structure and dynamics.

Women tend to have a lower mortality rate at every age. In the womb, male fetuses have a higher mortality rate (babies are conceived in a ratio of about 124 males to 100 females, but the ratio of those surviving to birth is only 105 males to 100 females). Among the smallest premature babies (those under 2 pounds or 900 g) females again have a higher survival rate. At the other extreme, about 90% of individuals aged 110 are female.

In the past, mortality rates for females in child-bearing age groups were higher than for males at the same age. This is no longer the case, and female human life expectancy is considerably higher than those of men. The reasons for this are not entirely certain. Traditional arguments tend to favor socio-environmental factors: historically, men have generally consumed more tobacco, alcohol and drugs than females in most societies, and are more likely to die from many associated diseases such as lung cancer, tuberculosis and cirrhosis of the liver. Men are also more likely to die from injuries, whether unintentional (such as car accidents) or intentional (suicide, violence, war). Men are also more likely to die from most of the leading causes of death (some already stated above) than women. Some of these in the United States include: cancer of the respiratory system, motor vehicle accidents, suicide, cirrhosis of the liver, emphysema, and coronary heart disease.

These far outweigh the female mortality rate from

breast cancer and cervical cancer etc.
Some argue that shorter male life expectancy is merely another manifestation of the general rule, seen in all mammal species, that larger individuals tend on average to have shorter lives. This biological difference occurs because women have more resistance to infections and degenerative diseases

B) Education Index:

The Education Index is measured by the adult literacy rate (with two-thirds weighting) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weighting). The adult literacy rate gives an indication of the ability to read and write, while the GER gives an indication of the level of education from kindergarten to postgraduate education.

Education is a major component of well-being and is used in the measure of economic development and quality of life, which is a key factor determining whether a country is a developed, developing, or underdeveloped country.

c) Adult literacy index:
The Adult literacy index (ALI) is a statistical measure used to determine how many adults can read and write in a certain area or nation. Adult literacy is one of the factors in measuring the Human Development Index (HDI) of each nation, along with life expectancy, education, and standard of living.
The **gross enrolment ratio** (**GER**) or **gross enrolment index** (**GEI**) is a statistical measure used in the education sector and by the UN in its Education Index. The GER gives a rough indication of the level of education from kindergarten to postgraduate education - known in the UK and some other countries (mostly in the Commonwealth of Nations) as primary, secondary, and/or tertiary - amongst residents in a given jurisdiction.

In the UN, the GER is calculated by expressing the number of students enrolled in primary, secondary and tertiary levels of education, regardless of age, as a percentage of the population of official school age for the three levels

D) Gross domestic product:
The **gross domestic product** (**GDP**) or **gross domestic income** (**GDI**) is a measure of a country's overall economic output. It is the market value of all final goods and services made within the borders of a country in a year. It is often positively correlated with the standard of living, alternative measures to GDP for that purpose.

Gross domestic product comes under the heading of national accounts, which is a subject in macroeconomics.

GDP can be determined in three ways, all of which should in principle give the same result. They are the product (or output) approach, the income approach, and the expenditure approach.

2.4 GENDER RELATED DEVELOPMENT INDEX (GDI)
The **Gender-related Development Index** (GDI) is an indication of the standard of living in a country, developed by the United Nations (UN). It is one of the five indicators used by the United Nations Development Programme in its annual Human Development Report. It aims to show the inequalities between men and women in the following areas: long and healthy life, knowledge, and a decent standard of living.
While HDI measures average achievement, the GDI adjusts the average achievement to reflect the inequalities between men and women. The three components used for the purpose are: (i) female life expectancy, (ii) female adult literacy and gross enrolment ratio, and (iii) female per capita income.

If gender inequality were not penalized, the value of GDI and HDI would be the same, but if gender inequality exists, the value of GDI would be lower than that of HDL The greater the difference between HDI and GDI, the greater is the gender inequality. Table 2.4 provides data both for HDI and GDI for selected countries. It may be noted that near gender equality exists in Norway, Canada, United States, United Kingdom, Japan, Mexico, Russian Federation, Malaysia, Venezuela, Philippines, Sri Lanka, China, Vietnam and Indonesia. Countries which indicate higher gender inequality are Saudi Arabia, Pakistan, Iran, India, Egypt and Nigeria.

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

2.4.1 GDI in India:

In India, Life expectancy at birth of females in 2001 was 64 years, but for males, it was 62.8 years. Comparing with medium human development countries, Indian achievement, though good, is still much lower in relation to Mexico, Venezuela, Russian Federation, Thailand, Philippines, Sri Lanka, Iran, Vietnam, to name a few among them.

Although gap between life expectancy of females and males is very small, but in other gender-related development indicators, this gap is very wide. For instance, adult literacy of females was barely 46.4 per cent as against 69.0 per cent of males in 2001. Similarly, combined Gross Enrolment ratio of females was 49 per cent as against 63.0 per cent for males in 2001. Likewise, Estimated Earned Income of females was $ 1,531 as compared with that of males to be $ 4,070 in 2001. This implies that female income was just 38 per cent of male income. Obviously, either females suffered from gender discrimination in wage income or they did not have regular employment and a big proportion was employed as casual laborers or a large proportion of females worked part time. There may be many more factors, but it cannot be denied that females suffered gender bias both in education and employment.

The UN uses a different standard for male and female life expectancy, basically assuming that it is natural that women should live about 5 years longer than men. If the life expectancy index was set at an equal age of 85 years, the GDI calculated would increase, reflecting the superior life expectancy of women in almost all countries. Just replace 87.5 years and 82.5 years with 85.0 years and replace 27.5 years and 22.5 years with 25.0 years to equalize it. Iceland, for example, would have a GDI of 0.992 instead of 0.962 under this method.

2.6ENVIRONMENTALSUSTAINABILITY AND DEVELOPMENT

The concept of sustainable development is of very recent origin. This term was first used by the world conservation strategy presented by the International Union for the conservation of Nature and the Natural Resources in 1980. In 1983, the United Nations set up the world commission on Environment and Development (called the Brundland Commission) to examine the problems related with this area. The commission in its report entitled on *'Our CommonFuture'* submitted in 1987, for the first time introduced the concept of 'Sustainable Development' which meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Sustainable development is development, that last long. There is growing realization of environmental problems like air pollution, water pollution, deforestation, soil erosion, acid rains, solid and hazardous wastes, ozone depletion etc. in the world in modern times. The concept of sustainable development tries to find suitable solution of all these global problems.

2.6.1 Meaning:

Sustainable development means that development should *'keep going'.* Sustainable development is development which is everlasting and contributes to the quality of life through improvements in natural environments. Natural environments, in turn, supply utility to individuals, inputs to the economic process and services that support life. The concept of sustainable development assigns equal emphasis on development, environmental protection and preservation. It emphasizes the creation of sustainable improvement in the quality of life of all people through increase in real income, per capita income, national income, improvements in health, education, general quality of life and overall improvements in quality of natural environmental resources. As a matter of fact, environmental degradation has to be stopped at all cost so as to preserve health and to promote welfare of the community as a whole. According to D. W. Pearce and E. Barbier, *"Sustainable Development describes the process in which natural resources base is not allowed to deteriorate. It emphasizes the hitherto unappreciated role of environmental quality and environmental inputs in the process of raising real income and quality of life."*

2.6.2 Objectives:

To achieve the goal of sustainable development, it is necessary to control the gross exploitation of the natural resources which is going on a wide scale by all countries whether underdeveloped, developing and developed countries on account of which the human life is becoming difficult day by day. Thus, the main objective of sustainable development is the creation of sustainable improvements in the quality of life for all people on the earth.

2.6.3 The main objectives of sustainable development are:

1) accelerating economic growth,
2) meeting basic needs,
3) lifting living standards,
4) helping in ensuring clean environment — free from all types of pollution,
5) maximizing the net effects of economic development,
6) preservation and enhancement of the stock

of environmental, human and physical capital,

7) intergenerational equity,

8) Overall strict control on gross exploitation of the natural resources of each country. We must give more to mother land than what we extract from it. Today, sustainable development is the only available alternative which can make the future of the future generations bright.

Market and State as Agencies of Development:

While markets do act in a manner that they tend to encourage competition and thus bring about efficiency and increase in productivity, the market failure has been noticed in the following:

(i) In case of imperfect competition, markets generate situations in which state intervention becomes necessary to ensure competition.

(ii) In case of monopoly, market failure is obvious and the state must intervene to break monopoly by anti-monopoly legislation or other measures.

(iii) Market failure has also been noticed in public goods like education and health. In these areas, unless the state establishes schools, colleges, universities, primary health centres and hospitals, it would not be possible to take care of the weaker sections of the society.

(iv) Market failure has also been noticed in areas of economic infrastructure like irrigation, roads, railways, telecommunications etc. Private sector loves to use infrastructure, but would not like to invest in infrastructure, more especially in remote areas, where the rate of return may be very small. Thus, it is generally expected that the public sector should create infrastructures and thus create an environment which facilitates direct investment by the private sector.

The question arises: market failures necessitate state intervention so that the imperfections of the market mechanism can be corrected. For instance, markets set prices on the basis of demand and supply forces. But to quote Michael Lipton, setting prices right is quite different from letting prices come from state inaction. Obviously, the function of the State is to set right prices so that correct signals for allocation of resources can be made. State failures, however, do not justify the use of market in all situations. It is quite possible that there is a need to change policies or to take strong administrative measures to correct state failures.

This only underlines the fact that even if markets are to be used more extensively, this does not eliminate the role of the State. *Rather than arguing for minimal state intervention, it would be more prudent to argue for effective state intervention.*

World Development Report (1999-2000) has also stated that in development thinking so far as the regulatory sphere is concerned, "the focus has shifted from deregulation to building an effective regulatory framework."

2.8 SUMMARY

1. India has been categorized by the Human Development Report 2001 as a medium human development country. A major impediment to progress in human development is the very fast growth of population experienced in India.
2. The Human Development Index (HDI) is a summary composite index that measures a country's average achievements in three basic aspects of human development: health, knowledge and a decent standard of living. Health is measured by life expectancy at birth; knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio and standard of living by GDP per capita.
3. Following are the methods of HDI measures:

A) Life Expectancy Index: Life Expectancy is the expected (in statistical Sense) number of years of life remaining at a given age. It is denoted by e_x, which means the average number of subsequent years of life for someone now aged x, according to a particular mortality experience.

B) Education Index: The Education Index is measured by the adult literacy rate (with two-third weighing) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weighing).

C) Adult literacy Index: The Adult literacy index is a statistical measure used to determine how many adults can read and write in a certain area or nation.

D) Gross Domestic Product: The gross domestic product or gross domestic income is a measure of a country's overall economic output. It is the market value of all final goods and services made within the borders of a country in a year. It is often positively correlated with the standard of living, alternative measures to GDP for that purpose.

4. The Gender related Development Index (GDI) is an indication of the standard of living in a country, developed by the United Nations (UN). It is one of the five indicators used by the United Nations Development Programme in its annual Human Development Report. It aims to show the inequalities between men and women in the following areas: long and healthy life, knowledge and a decent standard of living.
5. The Sen's capability approach involves concentration on freedoms to achieve in general and

the capabilities to function in particular. The major constituents of the capability approach are functioning's and capabilities. Functioning's are the beings and doings of a person, whereas a person's capability is the various combinations of functioning's that a person can achieve. Capability is thus a set of vectors of functioning's, reflecting the person's freedom to lead one type of life or another.

6. Sustainable development is development which is everlasting and contributes to the quality of life through improvements in natural environments. Natural environments, in turn, supply utility to individuals, inputs to the economic process and services that support life. The concept of sustainable development assigns equal emphasis on development, environmental protection and preservation. It emphasizes the creation of sustainable improvement in the quality of life of all people through increase in real income, per capita income, national income, improvements in health, education, general quality of life and overall improvements in quality of natural environmental resources.
7. The main objective of sustainable development is the creation of sustainable improvements in the quality of life for all people on the earth.

POVERTY MEASURES AND POLICYOPTIONS FOR ALLEVIATION OFPOVERTYOBJECTIVES

In spite of significant strides in development over the past half century, extreme poverty remains widespread in the developing world. The poor suffer from under nutrition and poor health, are illiterate, live in poor conditions, have little political voice and they earn a living on small or marginal farms or in urban slums. This unit explains the measures of poverty and the indices used for the same. More importantly the objective of this unit is also to explore the policy options for alleviation of poverty.

INTRODUCTION

Poverty is multidimensional in nature. It implies deprivation of income, illiteracy, malnutrition, mortality, morbidity, lack of access to pure water and sanitation and vulnerability to economic shocks. According to the World Bank poverty is ―the inability of people to attain a minimum standard of living. Attaining high rates of development will not be meaningful unless the fruits of development reach the poor. It is seen that through a number of development efforts were initiated, poverty is still a problem for the people in the developing countries. As per the World Bank Report 2005, South Asia has 1.4 billion or 22.7% of the World's population and 43% of the World's poor. It is widely recognized that the condition of poverty is unacceptable and it is necessary to find ways to eradicate it. Thus poverty alleviation measures have become a way important part of Government measures for long term development.

CONCEPTS OF POVERTY

Two concepts of poverty are popularly used by the statistical agencies and researchers throughout the world.

Absolute Poverty :

Absolute poverty is a situation in which there is a lack of a minimum set of resources required to maintain ―a minimum standard of living‖ or the minimum resources for survival. Absolute measure is considered as the line below which existence becomes difficult. It refers to a state of extreme deprivation, hunger, premature death and suffering. The absolute poverty measure is typical of the less developed countries in Latin America, Africa and Asia. The situation faced by these countries can be described as chronic poverty which is an extended version of absolute poverty. Chronic poverty is deprivation for significant periods of their lives and is continued into the next generation. It is a situation where the poor find it difficult to escape from. In India more than 130 millions are caught in the web of chronic poverty. This category of poor are below the poverty line which means they are denied three square meals a day and are living in sub-human conditions.

Relative Poverty :

As the term indicates it is a relative or comparative measure. It compares an individual's life situation in relation to the others in the population. It relates the living conditions, income levels and consumption standards of one group of population to the others. This measure is typically used by developed countries like USA, Canada and Australia. It is obvious that absolute poverty is a situation for which remedial steps must be taken since poverty is now considered as the root of all social evils. Relative poverty is important as a concept since it enables the government to formulate policies to reduce it since inequalities in wealth and income are not conducive to develop

MEASUREMENT OF POVERTY

For formulating poverty reduction programmes it is necessary to define poverty and measure poverty. The extent of absolute poverty is the number of people who are unable to command sufficient resources to satisfy basic needs. They are counted as the total number living below a specified minimum level of real income or an international poverty line. Absolute poverty is measured in terms of the basic needs a person has to meet in order to survive adequately in modern society. However, the expressions like ―adequately‖ and ―modern society‖ are vague.

Another approach to explain the concept of absolute poverty is to estimate the minimum intake of calories required for survival so the search for measuring poverty led to the concept of poverty line. The poverty line indicates the income level below which poverty exists. For this data is needed with respect to the income or consumption. The common statistical instruments are used for estimation of poverty.

1. Surveys with regard to income, consumption standards, nutritional contents.
2. Surveys are also conducted to gather information with regard to employment, housing conditions.
3. Census data also enables the estimation of poverty

Human Poverty Index :

The Human Poverty Index was introduced by the United Nations Development Programme (UNDP) in the Human Development Report 1997. HPI is a composite index to measure poverty which is based on three indicators.

i) Life Expectancy ii) Basic Education

iii) Access to public and private resources.

Life expectancy is an important indicator of human development. Life expectancy in developing countries is 40 whereas in the developed countries it is 60. Life expectancy is a reflection of the overall living conditions, health and sanitary measures, food and nutrition.

Literacy is another indicator of the level of development. The level of illiteracy is high in developing countries inspite of globalization and changes in technology literacy is important to keep pace with changes happening in the country and at the global level. It is also essential to take advantage of economic opportunities.

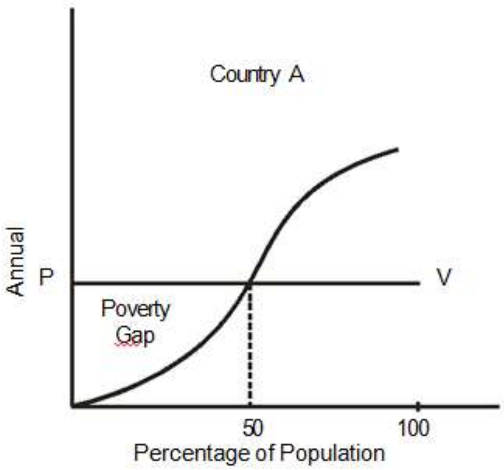
The third indicator of HPI is the standard of living. Though this criteria cannot be easily defined, it is a combination of three variables. Standard of living is based on three variables i.e. the percentage of people with access to health services, to safe water and the percentage of malnourished children under five. The HPI is published for each country. Though HPI is an overall index showing the level of development, individual indicators are also prepared separately, so that policy makers can study the specific problems are formulate policies for human development. For example, health and sanitation may be a problem area for a particular country. Policies can be tailor made to remedy the situation.

Alternative Poverty Measures :

A)Head Count Ratio: Absolute Poverty may be measured by the number of ―headcount‖, H of those, whose incomes fall below the absolute poverty line Y_p . When the head count is taken as a fraction of the total population, N, it is called the headcount Index, H/N. The poverty line is set a level that remains constant in real terms so that we can chart our progress on one absolute level once time. The level is set at a standard below which we would consider a person to live in ‖absolute human misery‖ such that one's health is in danger. It is difficult to define a ―minimum health standard that is fixed over time since technology changes over time. It is more practical to establish a reasonable minimum standard which is applicable over a few decades so as to understand the progress made. The international poverty level is defined at a level of 1 dollar per day. This may not be practically useful in the Indian extent when anti-poverty programmes have to be designed. Another more practical method of determining a local absolute poverty line is to define the combination of food or basket of food on the basis of nutritional requirements surveys and data collected from the households will make clear the nature and type of goods purchased by people and how they are not meeting the standard set by the basket of food which is supposed to by nutritionally balanced and ideal. Food alone is not sufficient to determine the poverty line. Hence the expenditures of the households on basic needs such as clothing, shelter and medical care have to be included to determine the local absolute poverty line. Calculating by this method has shown that the poverty line may come to more than 1 dollar per day.

B) Poverty Gap : Depending on the poverty line and simply counting the number of people below the accepted poverty line can be misleading since it has a number of limitations. If the poverty line is set at US 360 dollars per person, there may be people earning 355 dollars or 300 dollars or any other category. To put everyone into a homogeneous group is misleading since all will be given the same weights when calculating the proportion of the population that lies below the poverty line. The seriousness of the poverty problem may be different for different income level. The concept of ‗Poverty Gap' which measures the total amount of income necessary to raise everyone who is below the poverty line up to that line.

Poverty gap is illustrated in the diagrams below.



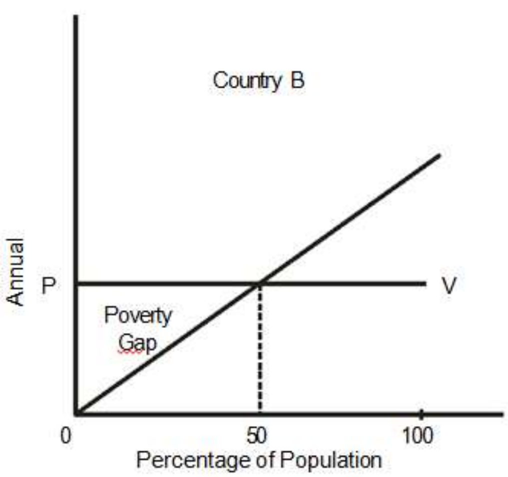


Figure 7.1 : Measuring the Poverty Gap

The poverty gap is the shaded area between the poverty line PV and the annual income profile of the population. In both countries A and B, 50% of the populations are falling below the poverty line. But the poverty gap is more for country ‗A' then 'B'. Hence the poverty situation is more serious for a country like ‗A' and more efforts will be needed to remove poverty. The extent to which the incomes of the poor lie below the poverty line can be calculated. The ―total income shortfall‖ or total poverty gap of the poor is defined as,

$$TPG = \sum_{i=1}^{N} (y_p - y_i)$$

TPG is also defined as the amount of money per day needed for bringing every poor person in the economy upto the minimum income standards. The average poverty gap

Check your progress :

1. What is the meaning of poverty?
2. What is the need to remove poverty?
3. Explain the concepts of absolute and relative poverty.
4. How is poverty measured?
5. What is Human Poverty Index?
6. HPI is based on three indicators. What are they?
7. What is the standard basket of goods? What does it represent?
8. What is a poverty gap? .
9. How is it better than poverty line as an indicator of poverty?
10. What is the formula for measuring the poverty gap?
11. What is average poverty gap?

POLICY OPTIONS FORALLEVIATION OFPOVERTY

The problems of poverty and unemployment are inseparable and the measures suggested for both are usually common. In the 1950s and 1960s, it was believed that poverty will be removed as a result of the ―trickle-down‖ effect. Indian planners believed that poverty alleviation was a gradual end automatic process as the economy grew. They believed that once the growth process gains momentum it will automatically benefit the entire population. Unfortunately the ―trickle down‖ theory did not help to remove poverty. In fact poverty became a serious problem over the years. This led to the adoption of four broad categories of programmes in stages for poverty alleviation.

1. Resource and income development programme for the rural poor.
2. Special Area Development Programmes.
3. Works programme for the creation of supplementary

employment opportunities.

4. The minimum needs Programme to improve the consumption levels of the poor in order to raise their productive efficiency.

A number of programmes were introduced in the first category as early as 1970s and even recently some new ones were introduced. The main thrust of such programmes was to improve the economic conditions of the rural poor so that their incomes increase. However many of the programmes like the Small Farmer's Development Agency or the Marginal Farmer's Development Agency were partially introduced and there was an overlapping of the operations. These programmes did not succeed since they failed to tackle the root of the poverty problem. They were reduced to just subsidy giving programmes. Moreover the programme was not widespread and did not cover the deprived sections of population.

To overcome the defects of the earlier programmes, during the 6th plan period, one single programme for the whole country was introduced. It is known as the Integrated Rural Development Programme (IRDP). This was meant to help the rural poor which consisted of landless laborers, small and marginal farmers, rural artisans, and other workers. IRDP aimed to create productive assets and appropriate skills. The farmers were provided inputs like water, improved seeds and fertilizers to improve the productivity of land. For enabling the poor to earn extra incomes, diversification of agriculture and programmes like animal husbandry, dairying, fishery, sericulture were encouraged. Processing and manufacturing activities were included based on local resources. Steps were taken towards improvement of post harvest technology to benefit producers and consumers from increased production. Steps were taken to economy the growth of village and cottage industries. Finance, credit and marketing services were made easily available. In fact during the 7th plan Rs.8,688Crores were spent on IRDP which covered nearly 182 lakh families. These were the various programmes to ensure reduction in poverty and unemployment.

In the second category of poverty elimination programmes, a number of programmes like the Drought Prone Area Programme(DPAP) and Desert Development Programme (DDP) were included. These were introduced with the aim of optimum utilization of land, water and livestock resources. It also included farm forestry, dairy development and development of subsidiary occupations in draught prone and desert areas so as to raise the incomes of the weaker sections of the society.

The third category included a number of employment generation programmes like NREP, RLEGP, TRYSEM and the Food for Work Programme which aim at creating supplementary employment opportunities during the lean employment periods of the years.

The urban poverty Eradication Programme was launched in the year 1995 for the achievement of social sector goals, employment generation and skill up gradation, shelter up gradation environmental improvement with a multi-pronged and long term strategy.

The most significant step taken to eradicate poverty is the Minimum Needs Programme. The basic aim was to improve the consumption levels of the poorer sections so as to raise their productive capacity. The programmes included provision for elementary education, health, water supply, roads, electrification, housing to landless labourers, nutrition and improvement of when slums. The numerous programmes like the construction of roads, housing etc. are intended to create additional employment and income to the poor.

The poverty alleviation programmes were strengthened of during the 7 plan period. Steps were taken to achieve cost effectiveness and minimization of leakages. Instead of separate programmes, the programmes were integrated for effectiveness.

During the 8th plan the Government increased the allocation of funds for social sectors. Importance was given to employment generation, population control, literacy, education, health, drinking water supply and provision of food and basic infrastructure.

The social sector programmes were modified to favor the weaker sections SC, ST and women. Steps were taken to revamp the public distribution system, especially in backward areas so that essential goods are made available at cheap rates. To supplement the Social Safety Net, the National Renewal Fund was set up in 1991 - 92 for providing compensation and to help workers who lost their jobs due to the process of structural adjustment.

EVALUATION OF THEANTI-POVERTY PROGRAMMES

Most of the anti-poverty programmes achieved their objectives only partially. There is a backlog of unemployed rural population. The poverty levels are still unacceptable and unemployment is still not eradicated. Even the PDS has not been able to achieve the objectives of providing food security. The emphasis of the poverty alleviation programmes have been more on expenditure rather than on performance. The programmes suffered from organizational inadequacy, lack of clear cut plan of development and proper monitoring. However, well intended the programmes are, unless they are implemented and monitored properly they will fail in achieving the targets. The psychological, political, bureaucratic and economic forces which are equally important were neglected.

1. Most of the employment assurance schemes had only a temporary and seasonal stabilization effect on the incomes of the poor and did not help the poor to sustain themselves.
2. The work done on land development schemes and irrigation projects benefited the land owners rather than the workers.
3. Most of the employment schemes were not able to benefit the workers. Though wages are paid to the workers, at the end of the work, people are left unemployed as before. The rural work schemes should be re-oriented to provide permanent self employment to the people involved.
4. In many of the schemes like IRDP and SGSY, it is not clear whether the planning aspect has been done on a definite basis and whether the recipients of the loans and grants were provided sufficient training.

Check your progress :

1. What was the main thrust of the poverty alleviation programmes from 1970's onwards?
2. What was the focus of the programmes like IRDP?
3. DPAP and DAP were also introduced. What type of developmenta lprogrammes did they support?
4. Programmes like NREP, RLEGP and TRYSEM were initiated. What was their purpose?
5. What is minimum need programme?
6. What are the problems with the anti-poverty programmes? Where did they actually fail to reach target and why?

SUMMARY

Though India has achieved significant progress in the developmental efforts, poverty is a problem plaguing the Indian economy even today. The condition of poverty is unacceptable and it is necessary to find ways to eradicate it. The poverty alleviation programmes can be categorized into four groups.

1. Resource and income development programme for the rural poor.
2. Special Area Development Programmes.
3. Works Programme for the creation of supplementary employment opportunities.
4. The Minimum Needs Programme to improve the consumption levels of the poor in order to raise their productive efficiency. Over the planning period, the poverty alleviation programmes were given increased importance. There was integration of programmes and steps were taken to minimize the leakages. Social sector development including population control, literacy, education, health and drinking water received importance.

In spite of the numerous poverty alleviation programmes, there is still a backlog of poor, unemployed people. The programmes failed at the implementation lend and were not monitored properly. Unless efforts are taken to have an integrated and practical approach, the programmes will not achieve the targets.

INCOME INEQUALITY, MEASUREMENT AND IMPACT ON DEVELOPMENT

OBJECTIVES

Besides poverty, growing income inequalities are at the core of all development problems. In this unit there will be discussion of the type of inequality causes, the measurement of inequality as well as the impact of inequality on development. It is true that rapid strides have been taken by India in achieving high growth rates. However, India has not been able to bring about equality in the distribution of income and wealth. Bringing about a more equal distribution of income and wealth is essential for sustainable development. The unit explains the significance of equality in income distribution in the context of development.

INTRODUCTION

Economic inequality is a situation characterized by fundamental disparity that permits a few individual certain material choices and denying the choices to a few others. In the context of development, it is necessary to examine whether the gap between the haves and the haves not has widened since the beginning of planning. Most of the findings arrived at the conclusion that the gap between haves and haves not has evidenced and there has been a concentration of wealth and economic power in a few hands which adversely affected the common people. Even Karl Mark firmly believed that inequality will bring the doom of capitalism. In comparison to developed countries the developing countries are characterized by low per capital income and more unequal distribution of income, wealth and power.

The inequality is due to the following factors.

1) Inequalities arise due to differences in education, qualification, skills, abilities and experience.
2) Differences in opportunities or access to education and jobs.
3) Differences on the basis of race, ethnicity and gender may lead to inequalities.
4) Ownership and inheritance of wealth are also sources of inequality.

MEASUREMENT OF INEQUALITY

Economists usually distinguish between two principal measures of income distribution for analytical and quantitative purposes. They are the personal or size distribution of income and the functional or distributive factor share distribution of income.

1.The personal or size distribution of income : This measure is most commonly used by economists. It simply deals with individual persons or households and the total incomes they receive. The distribution across income size classes is commonly called the ―size distribution of income‖. Income inequality among the households is commonly measured by the distribution of income according to the size of income per household. The higher the share of the low income classes in income, the more equal the distribution of income.

Methods of Measurement :

a)A very popular method to analyze personal income is to arrange all individuals by ascending personal incomes. For this the population has to be divided into distinct groups i.e. deciles (tenths) or quintiles (fifths). Then it is determined as to what proportion of the total national income is received by each income group.

b) The second method to analyze personal income statistics is to construct a Lorenz curve. The numbers of income recipients are plotted on the horizontal axis in cumulative percentage. The vertical axis shows the share of total income received by each percentage of population. Both are cumulative up to 100% meaning that both the axes are equally long. Every point on the Lorenz curve represents a statement. For example, the bottom ‗X' share of households has ‗y' share of the total income. Suppose there are 100 households, they are arranged in ascending incomes. The Lorenz curve is constructed by plotting the cumulative share of households on the horizontal axis and the cumulative share of household income on the vertical axis. The figure is enclosed in a square. A diagonal line is drawn from the origin or the lower left corner of the diagram to the upper right corner of the diagram. On the diagonal line, at every point, the percentage of income received is exactly equal to the percentage of income recipients. The diagonal line represents ―perfect equality‖ of distribution of income. For example, if we take the mid-point of the diagonal, i.e. halfway, 50% of the income is distributed to exactly 50% of the population.

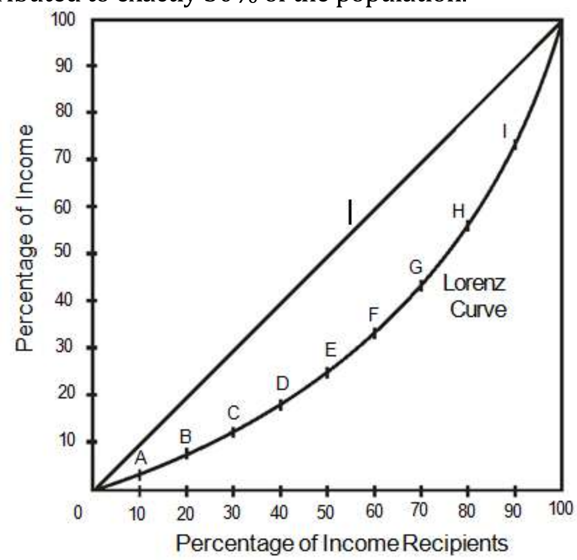
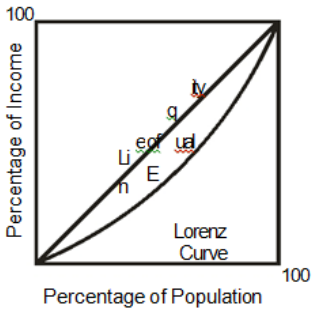


Figure 8.1

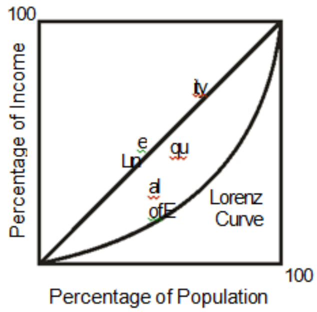
The Lorenz curve shows the actual quantitative relationship between the percentage of income recipients and the percentage of the total income they received during a given year. In the above diagram, the Lorenz curve has data plotted in terms of docile groups. It is clear from the Lorenz curve that 50% of the population is receiving a little less than 20% of the income. In the same way, 80% of the population is receiving less than 50% of the total income. This is clear from point *H* on the Lorenz curve.

The population of the Lorenz curve will make clear the degree of equality or inequality. If the Lorenz curve coincides with the diagonal line there is perfect equality and all the people in the households get the same income. As the Lorenz curve moves away from the diagonal line, inequality also increases.



Relatively equal Distribution

Figure 8.2(a)



Relatively unequal Distribution

Figure 8.2(b)

In diagram (b), we can see the example of a relatively unequal distribution as compared to (a).

c) Gini concentration ratio or calculation of the Gini co-efficient is another measure of the relative degree of income inequality. This is obtained by calculating the ratio of the area between the diagonal and the Lorenz curve divided by the total area of the half square in which the curve lies.

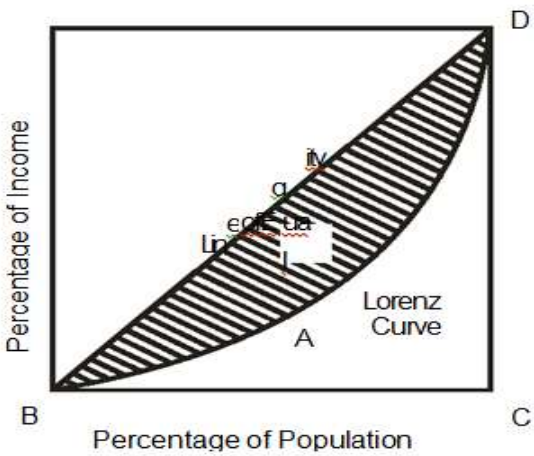


Figure 8.3 Estimation of the Gini Co-efficient

Shared Area A

Gini co-efficient =

Total Area BCD

This ratio is known as the Gini Co-efficient, named after the Italian statistician who first formulated it in 1912. Gini co-efficients are aggregate inequality measures and can vary anywhere from zero (perfect equality) to one (perfect inequality). Gini co-efficient is commonly used to study the income and wealth distribution.

2.The Functional Distribution or Factor share of Distribution of income : The functional distribution of income attempts to explain the share of total national income that each of the factors of production (land, labor, capital) receives. This method looks at the income received by the factors as a whole in the form of rent, interest and profit. This method is not concerned with specific individual incomes. Functional distribution of income has emerged as a very important branch of study. It explains the income of a factor of production by the contribution that this factor makes to production. Supply and demand curves are assumed to determine the unit price of each productive factor. When this unit prices are multiplied by quantities employed, we get the total payments to each factor Example - the supply and demand for labor determine the wage rate. When this wage is multiplied by the total level of employment, we get the total wage payments called the wage bill. Thus functional distribution of income is a very relevant and important part of distribution studies.

ECONOMICGROWTHANDINCOME INEQUALITY

Income inequality is a critical factor in determining the level of progress and well being of the citizens of a country. In spite of the growth and development achieved by developing countries, the vast majority of population remains poor. Thus inequalities have increased in spite of economic progress.

There are aspects of inequality. Vertical inequality is the traditional measure of inequality which is discussed in the development policy. Horizontal inequality is concerned with how the different groups in society are treated, based on race, religion, language, class, gender etc. Both the measures help to evaluate the well being of the people.

It has been experienced that as an economy grows from a traditional to a modern economy, growth is accompanied by widening disparities in the personal income distribution. The disparities may occur due to various factors like industrious nature of people and skills. Even opportunities may not be available for all which may lead to inequalities. Lack of appropriate taxation system, and differences in individual ability may result in inequalities. Later with more developmental efforts, the inequalities will reduce.

Horizontal inequality shows how economic differences, social limitations and political power together create inequalities among different groups in a society. The groups may belong to different race, religion, gender, class or language. Horizontal inequalities can lead to conflicts within a society which adversely affect the development process.

Inequality affects an economy adversely in various ways. As far as economic growth is concerned, increased inequality creates dissatisfaction, ill feeling and frustration among the poor which may even lead to a civil war. Extreme inequality leads to economic inefficiency. Inequality may lead to inefficient allocation of resources. For example, high inequality leads to an over emphasis on higher education at the expense of good quality universal primary education. High inequality leads to actions like excessive lobbying, large political donations, bribery and cronyism.

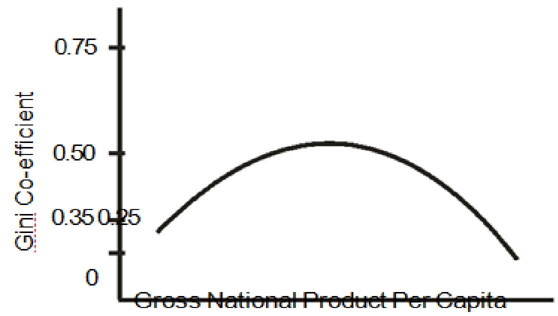
KUZNET'S' INVERTED 'u' HYPOTHESIS

It has been a controversial issue among economists over the question whether economic growth increases of decreases income distribution. Prof. Kuznets was the first economists to study this problem empirically. According to his observation in the early stages of economic growth relative income inequality increases, later it stabilizes for a time and then declines in the later stage.

An empirical study was conducted by Kuznets. He look the data with regard to the income share for the poorest countries like India, Ceylon and Puerto - Rico and the richest countries like U.K. and U.S.A.

The study revealed that in less developed countries, 60% of the poorest received 30% of less of national income. At the same time in developed countries, they received more than 30% of national income. Kuznets reached the conclusion that the size distribution of income was more unequal in LDCs than in DCs. It was 1.67 to 2.33 in LDCs and low 1.25 to 1.29 in DC's.

In 1963, Kuznets developed his inverted u-shaped hypothesis by taking the data of 18 countries by size distribution of income. On the basis of the collected data he constructed different Lorenz curves for DCs and LDCs. He also derived their Gini Co-efficient. He came to the conclusion that income inequalities were higher in LDCs than in DCs. The change in the distribution of income as measured by the Gini co-efficient in relation to the increase in per capita income trace out the Kuznets inverted u- shaped curve K.



The inverted „u" Kuznets Curve

Figure 8.4

In the early stages of growth inequality occurs due to the structural changes. For example, growth will be concentrated in the modern industrial sector, where employment potential is less. But wage and productivity will be high. Another reason for the inequalities in the early stage and more equal distribution in the later stage is the fact that returns to education may first rise due to the demands of the modern sector and later stabilize or fall with increased supply of skilled labor.

The increase in inequalities can adversely affect the welfare of the people. High income inequality may increase poverty. It can adversely affect the quality of the health, education, nutrition etc. Inequalities may increase social and political tension and endanger a country's long run development plans. Thus there is no doubt that inequalities will lead to problems for a country. However, it is difficult to reduce inequalities because of the peculiar nature of the developing countries. The specific problems of the developing countries are as follows.

a) The dualistic nature of the economies which implies inequalities to start with

b) Lack of opportunities like educational facilities for the poorest of population.

c) Problems of disguised unemployment in rural areas and underemployment in urban areas are other characteristics of these countries which perpetuate inequalities.

d) These developing countries are still deficient in capital for investment and do not have appropriate technology to gear up production.

IMPACT OF INEQUALITY ON DEVELOPMENT

The experience and empirical evidence in the recent past revealed that income distribution pattern has a significant impact on the growth process. Inequality can adversely affect growth in a number of way.

a) Inequalities lead to imbalances in distribution of resources within a developing country. There is no guarantee that the wealthy classes will utilize the profits into productive channels. If the profits are spent on conspicuous consumption, there will be no growth. In some cases, it can lead to flight of capital in the form of deposits in banks abroad and hoardings in foreign currencies and gold. This type of savings will not encourage growth.

b) Inequalities retard development. Inequality will lead to socio- political instability. This will reduce investment and growth.

c) Inequality may lead to high fertility and will adversely affect human capital investment. This will reduce growth.

d) Inequality results in lower saving and lower consumption which can harm the productive capacity. Increased equality leads to more demand, thus encouraging production.

e) Another economic waste arises due to the loss of human capital. Since the way only of the people are poor will low levels of income and low levels of living, their nutritional standards are low and they have no access to formal education and training. These factors will reduce their production efficiency and will result in low rate of growth.

f) Inequalities can result in economic inefficiency. In a society with large inequalities only a small fraction of the population will qualify for loans. As a result the poor will not be able to borrow and invest.

g) Inequalities can adversely affect social stability. Higher inequality makes this rich people richer and more politically powerful. It will further encourage actions like bribery, donations etc. Thus resources will be diverted and not used productively.

Therefore, it is necessary to narrow down the inequalities and there is a need to take deliberate efforts for long term development goals of a country.

SUMMARY

Economic inequality is a situation in which a few people are allowed access to resources and opportunities whereas the same are denied to others. In spite of developmental efforts initiated by developing countries, the gap between the rich and the poor has widened. The developing countries are plagued by the problem of low per capita income and unequal distribution of income, wealth and power. The inequalities arise due to difference in education qualification, skills, abilities, experience, inheritance of wealth etc.

There are two ways of studying income distribution, personal and functional. There are various methods of measuring inequality in personal income distributions. One is to divide population into distinct groups and study how much income is received by each group. Another method is to construct a Lorenz curve which shows the actual quantitative relationship between the percentage of income recipients and the percentage of the total income received during a given year. The diagonal shows perfect equality. The position of the Lorenz curve represents the degree of inequality. Another method of measuring inequality is to estimate the Gini co-efficient. Another method of studying income distribution is functional distribution.

The economic growth of a country may lead to inequalities initially. But as the economy achieves development, inequalities become less. Prof. Kuznets had studied empirically the experience of different countries. The inverted ‗u' shaped Kuznets curve explain the inequalities experienced at different stages of development. The unit also discusses the causes of inequalities and how inequalities can affect economic development adversely. Inequalities can lead to imbalance in distribution of resources and can retard economic and social development. It can adversely affect production and lead to inefficiency. It can also affect social stability. Thus it is necessary to take appropriate steps to reduce inequalities in income and wealth distribution.

DEMOGRAPHIC TRANSITION AND THE PROBLEM OF HIGH FERTILITY IN DEVELOPING COUNTRIES

OBJECTIVES

In this unit, we will be examining many of the issues relating to population growth and their impact on economic development. The theory of demographic transition and its relevance to less developed countries will be explained in the unit. The micro economic household theory of fertility which explains how children are assets to the poor dealt with in this unit. For the richer parents, children means more expenditure and investment and hence it becomes a cost factor. The unit also examines the causes and consequences of high fertility.

INTRODUCTION

The world population was estimated to be almost 6:1 billion at the beginning of the twenty first century. As per United Nations' estimates by the year 2050, it will reach 9.1 billion. The more distressing factor is that over 90% of the population will inhabit the developing world. The rapid growth of population is a threat to the developmental efforts taken in developing countries. Rapid population growth is a manifestation of the fundamental problem of under employment and unequal utilization of global resources between rich and poor nations, according to some economists. It is necessary to explain the demographic concepts and then discuss the causes and co sequences of population growth in the Less Developed countries.

According to Thomas Robert Matthew, a classical economist, population has a tendency to increase in a geometric progression, whereas the food supply is growing slowly in an arithmetic manner. According to Malthus, population must be controlled through preventive measures such as late marriage, celibacy and self control. If preventive steps are not taken positive checks in the form of famine, disease and natural calamities will control the population growth. It was feared that Malthus theory will come true for the developing countries. Though the population in absolute numbers is facing a serious problem for the developing countries, the 21st century marked a new trend since they started experiencing a declining trend in the growth rate of population. India also had a growth rate of less than 2%. The reversal of the trend in population growth makes the demographic transition theory very relevant and significant.

THEORY OF DEMOGRAPHIC TRANSITION

The process by which fertility rates eventually decline to replacement levels has been explained with the help of a famous concept in economic demography called the demographic transition. The demographic transition theory attempts to explain why all the contemporary developed nations have more or less passed through the same three stages of modern population history. Before their economic modernization or pre-industrialization period, the advanced countries were in stage 1 with stable or very slow growing population. In the stage one, both birth rates as well as the death rates are high. This led to stable growth of population. The birth rates were high due to early marriages and lack of birth control devices. Since the survival rate was uncertain, people opted for more children. Due to high infant mortality rate, death rate also remained high. Lack of proper medicines also increased the death rate. The combined effect was a stable population growth rate. However, population did not pose a problem for development.

During stage II, the birth rate is high whereas the death rates fell due to better medical care and improved health care facilities. The sharp decline in death rate with birth rates remaining high results in population explosion. This is the stage which most of the developing countries are facing now.

During stage III, the death rate and birth rates fall as a result of which the rate of growth of population also becomes less. During this stage, the society is enlightened and is more aware of the need to limit the family size and raise the standard of living. The society becomes more advanced and settled. During this stage, the survival rate of children is greater, emphasis on female education is more and higher aspirations for better living are the factors which lead to reduced birth rate. The population size stabilizes during the third stage.

The birth rate in many of the underdeveloped countries is still high. This is due to the early age of marriage. Most of the developing countries have been in stage II till recently. The application of highly effective imported modern medical and public health technologies caused the death rates in LDCs to fall much more rapidly. Towards the end of the last century countries like U.S.A. Canada, Argentina, Australia, New Zealand, Europe, Brazil, Sri Lanka, South Korea, Singapore, China, Turkey, North Korea and a few other countries were in the third stage. The diagram 9.1 depicts the three stages.

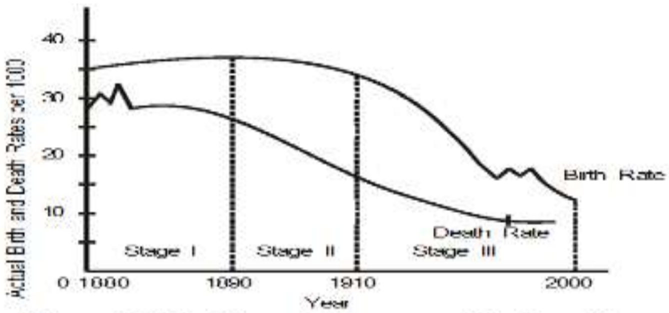


Figure 9.1 The Stages in Demographic Transition

In stage I, birth and death rates are high with the possible increase of only around 5 per thousand. Population did not pose a problem. In stage II, death rate shows a sharp decline whereas the birth rate is remaining the same as in stage I. The situation of population explosion experienced by the LDCs is represented in stage II. The death rate and birth rate show a dip and converge at a low level in stage III.

CAUSES OF HIGH FERTILITY IN DEVELOPING COUNTRIES

The developing countries are in the second stage of demographic transition. The very high birth rates in these countries have been due to a variety of factors which are social, religious, economic and psychological. Traditionally, large population has been considered as the strength of a nation and in an era where mortality rates were high, population increases did not seriously matter. Even in an agriculture dominated economy more children did not pose a problem since more people were required to work on land. Religious and social reasoning also favored huge family sizes. Religious beliefs supporting the new that marriage and children are a part of the duty to be performed in life. As a result high fertility rates are common. The fertility rates of developing countries is 2.9 and that of the least developed countries is 4.9. The fertility rate in South Sahara Africa is 5.5. Accordingly the population growth rate is also high. The following are the causes for the high fertility rates on developing countries.

1) Poverty : The state of poverty itself has a driving factor which encouraged the people to go in for more children. Low income and religious belief encouraged people to have more children. Religious beliefs enforced view that children are god's gifts and it was considered immoral and sinful to limit the number of children.

2) Children are considered as assets : Due to poverty, people opt for more children. Religious belief, fatalism and poverty have all led to increase in fertility. Thus the poor opt for more children and they do not consider children as burden, but gift of god.

3) Children are considered as insurance against old age : The majority of the poor do not have access to security and financial help in old age. Most of the people are in the informal or unorganized sector which does not guarantee pension or other retirement benefits. Hence the poor people feel more secure having more children so that they can depend on them when they become old.

4) The preference for male child : The social customs, religious beliefs and superstitions encourage families to continue having children till they get a male child. This increases the number of children.

5) Low level of education and awareness regarding the benefits of small families : As the people become more educated, they are ready to accept the need to control fertility.

It is seen that in states like Kerala which have high levels of education, the levels of fertility have reached the replacement level. Hence, lack of education and awareness are important factors determining fertility.

6) Ignorance : Lack of education which results in ignorance regarding the methods of controlling fertility has been the main reason for high population growth rates. Lack of knowledge regarding family planning methods and reluctance to take advice and counselling are major problems caused by ignorance.

7) The cost of bringing up children is low : The richer parents who are educated generally aspire to give the best education and upbringing to their children. They want their children to be better than them. Hence they are ready to increase expenses on food, clothes, education etc. On the other hand, the cost of bringing up children is low for the poor. The mothers have no alternative work and being illiterate, they feel that the cost of bringing up additional children is low as compared to the benefits in the form of more hands to work and earn.

8) Religion and Political factors : It is seen that religious and political leaders are interested in having more followers and hence they encourage people to have more children. A number of ignorant and innocent people are influenced by such propaganda to increase family size.

THE MICROECONOMIC HOUSEHOLD THEORY OF FERTILITY

The economists are now interested in studying the microeconomic determinants of family fertility. They want to provide a better theoretical and empirical explanation for the falling birth rates during the stage III of demographic transition. To study the behavior of households, the economists have made use of the traditional neo-classical theory of household and consumer behaviour. They made use of the principles of economy and optimization to explain the family size decisions.

The size of population and its implications on development is a macroeconomic problem. It has its impact on the socio-economic as well as political issues. But if we analyze this macro problem, we can trace its root cause to the micro level which is the household or the family.

In fertility analysis, children are considered as a special kind of consumption good so that fertility becomes a rational economic response to the consumer's demand for children relative to other goods. Other factors remaining constant the desired number of children can be expected to vary directly with household income. The desired number of children also depends on the strength of demand for children relative to other consumer goods and to the sources of increased income, female employment. The desired number of children vary inversely with the strength of taste and other goods

The implications are

1) The higher the household income, the greater the demand for children.

2) The higher the net price of children, the lower the quantity demanded.

3) The higher the prices of all other goods relation to children, the greater the quantity of children demanded.

4) The greater the strength of tastes for goods relation to children, the fewer the children demanded.

The neo-classical theory of consumer behavior is applied to explain the falling fertility rate. Based on the principle of diminishing marginal utility and equimarginal utility, a rational consumer invests capital in such a way that the marginal productivity of a unit of money or resource from different investment is equalized. There is an inverse relationship between the price of a good or service and the demand for them. This theory is applied a household or family to enable them to take a decision to have a child. According to the theory children are considered as ―consumption good‖ and also an investment. They are consumption good since the parents, enjoy the pleasure or satisfaction from children. Children are also investment as the parents expect the children to be a source of security in their old age. Therefore, the number of children desired by the family depends on their consumption and security needs. For the purpose of deciding, the parents have to weigh the cost and benefit of having an additional child.

a) The cost factors in bringing up children : Bringing up children will mean additional costs to the parents. The parents have to incur expenditure on education and training for making the children socially and economically productive. It also involves an opportunity cost for the mother in the form of time spent specially by the mother in looking after the child could have been spent in earning an income or in some social, religious or political activities. Better off parents with higher expectations are ready to spend more money on there children. Hence cost increase. The cost for poor parents is negligible and the opportunity cost of bringing up children is almost nil for the poor. Due to the fact that the poor are illiterate and of a low economic and social status they do not have any alternative or their opportunity cost is nil.

b) Benefits of having children : Poor people consider children as assets since there is hardly any investment. The poor parents provide minimum subsistence needs of children. On the other hand, more children means more work and hence more income for the family. Children work as child laborer and hence they are considered productive even at a young age. They are also considered as support for old age. The prevailing social customs, religious beliefs and the value system expect the children to take care of the parents. Thus children are considered assets by the poor.

For the rich people, children are a responsibility and a liability. The rich parents will want their children to be better than them. Hence they try to provide the best education and training. The opportunity cost for a mother is high in terms of income and time. The mother may have to sacrifice income and time to bring up the children. Generally, the rich parents do not depend on their children in old age for financial support and security. Thus the rich people opt for less children. Thus, the decision regarding the number of children depends on cost benefit considerations. The developing countries are still facing the problem of illiteracy and poverty. Children are considered as assets due to these factors. Only with the spread of education, the people will change their attitudes.

CONSEQUENCES OF HIGH FERTILITY

The serious issues related to population growth have been a highly debated topic among development economists and other social scientists. There is no denying the fact that uncontrolled population growth can undermine the developmental efforts. But a huge population has a number of advantages also. This section deals with the negative and positive effects of high population growth.

It is argued that population growth is a serious issue, but there are other more problems which are a source of concern. They argue that population growth is a false issue deliberately created by dominant rich country agencies and institutions to keep the LDCs in their underdeveloped dependent condition. They also are of the opinion that for many developing countries and region population growth is in fact desirable. There are four issues which are responsible for the underdevelopment of LDCs.

1. Underdevelopment : According to many, underdevelopment is the real problem and development should be the only goal. They believe that if appropriate strategies are followed, it can help the LDCs to attain better standards of living. With better self esteem and freedom, the population will take care of itself when the country adopts steps to improve itself, populations will no more remains a problem. The problems of overpopulation will not be solved and birth control programs will not succeed unless the poor families are not motivated to limit the size of their families.

2. Depletion of world resources and environmental damage : It is necessary to consider the population size in relation to the availability and utilization of scarce natural and material resources. Population becomes a problem only if the resources are not matching the needs of population. It is seen that the developed countries are using a higher proportion of resources as compared to the developing countries. Hence it is argued that the developed countries should reduce their excessive consumption standards instead of asking the poor countries to restrict the population growth. A large population can lead to over use of resources and exert pressure on the environment. This may lead to many environment related problems of health, global warming, rising sea level etc.

3. Distribution of Population : It is argued that the distribution of the population is a more serious issue than the size of population itself. In many countries the population is concentrated in certain areas. It is necessary to reduce migration and bring about a spatial distribution of the population to match land availability.

4. The status of Women : It can be seen that the women get a very bad deal when it comes to poverty, education, jobs and social mobility. Due to their inferior roles and low status they have less access to birth control methods. This results in high fertility. Hence it is necessary to empower women and make available better health, education and other facilities. This is the ultimate solution to bring down the population growth.
The other consequences of high fertility are the following:
a) Excessive pressure on food supplies :Inspite of the fact that most of the LDCs are agricultural, they face the problem of food shortage. This is true of many of the African and some Asian countries.
b) Adverse effect on saving and capital formation : High fertility leads to a high dependency ratio. The percentage of dependents or unproductive population is high. This increases the consumption expenditure and adversely affects saving and investment. As a result the vicious circle of poverty will prevail.
c) Increase in unemployment : The increase in population growth unmatched by an increase in employment opportunities results in a high incidence of unemployment. The growth rate is not high enough to provide employment to the people. Moreover the use of new technology reduces employment opportunities further.
The positive effects of increase in fertility and population are the following.
(i) Demand induced investment and growth. To meet the needs of the growing population, the governments are forced to provide minimum facilities like health and education, transport and communication as well as

other services. This can stimulate more employment, demand and income generation. Hence some positive effects will be generated which may help to improve the quality of life.

(ii) Improvement in Agriculture - An increasing population will require more agricultural goods. This will force the government to take steps to increase productivity of agriculture. Eg.Green Revolution.

APPROACHES TO POPULATION POLICY

It is necessary to frame and implement appropriate population policies as per the state of development of the countries. Population poses different problems for different countries. Some of the developed countries are facing the problem of declining population and some others about their ageing population. However, the developing countries are concerned about over population. The developing countries with their problems of widespread illiteracy and lack of education and resources have to seriously take steps to bring down fertility rate and keep population growth under control.

The developed countries on the other hand are concerned about the problem of falling population growth rate and ageing population. These countries are offering incentives to produce more children.

Policy Initiatives taken by Developing Countries to Control Population :

The huge size of population and the high rate of growth of population are major concerns for the developing countries. The LDCs are passing through the second stage of demographic transition characterized by falling death rates and stagnant and high birth rates. In India, the death rate is 7.4 per thousand which is very near to that of developed countries. In order to control the size of population, it is essential to check fertility at the micro or household level. The population policy must be designed to control the factors which lead to increase in population. There is no doubt about the fact that development is the best contraceptive. Development naturally leads to higher income, equitable distribution of income, reduction in poverty levels, higher levels of education, employment opportunities, empowerment of women, improvement in health and hygiene and better services. However, development takes time and are long term solution. The LDCs need to take certain time bound and specific policy measures to control the fertility rate in the short run. A practical policy of population control may include the following measures.

1. Creating awareness through media : It is necessary to increase the awareness about the disadvantages of having more children. Media can help to convey the problems of a big family and also the need to limit the size of the family for the welfare of its members. Through advertisements and other methods it is possible to create awareness among the people.
2. Making available educational facilities : Evaluating the masses is initially important to control population. High population growth rates are found in states where literacy and education levels are low. Expansion of educational facilities makes it easier to control population growth. Educated couples readily accept family planning methods.
3. Effective implementation of family planning programmes: Government sponsored family planning programmes need to be implemented through which people are provided with free health services and contraceptives. Setting up clinics and enabling the poor to avail of their services is crucially important in a country like India where there is a large percentage of poor people.
4. Empowerment of Women : For any programme of family planning to be successful, it is necessary to improve the social and economic status of women. If the women are educated and are able to earn an income it will help them to make decisions regarding the number of children.
5. Introducing a system of economic incentives and disincentives : Economic incentives like free education, more maternity leave, free health services, promotion in jobs, guarantees of jobs for families with only two children may be helpful in controlling population growth. At the same time a system of disincentives like taxes or denial of benefit like free education may discourage people from expanding the family size.
6. Initiating steps for rural upliftment : Poverty is more widespread in rural areas. Poverty, illiteracy and low employability encourages population growth. It is a fact that facility rates are high among the poor. If steps are taken to improve livelihood and uplift the social and economic status of the poor and women in particular it is possible to convince them to accept the idea of a small family. It is essential to initiate measures which will encourage and motivate the people to accept the small family norm. Forceful methods will not work.

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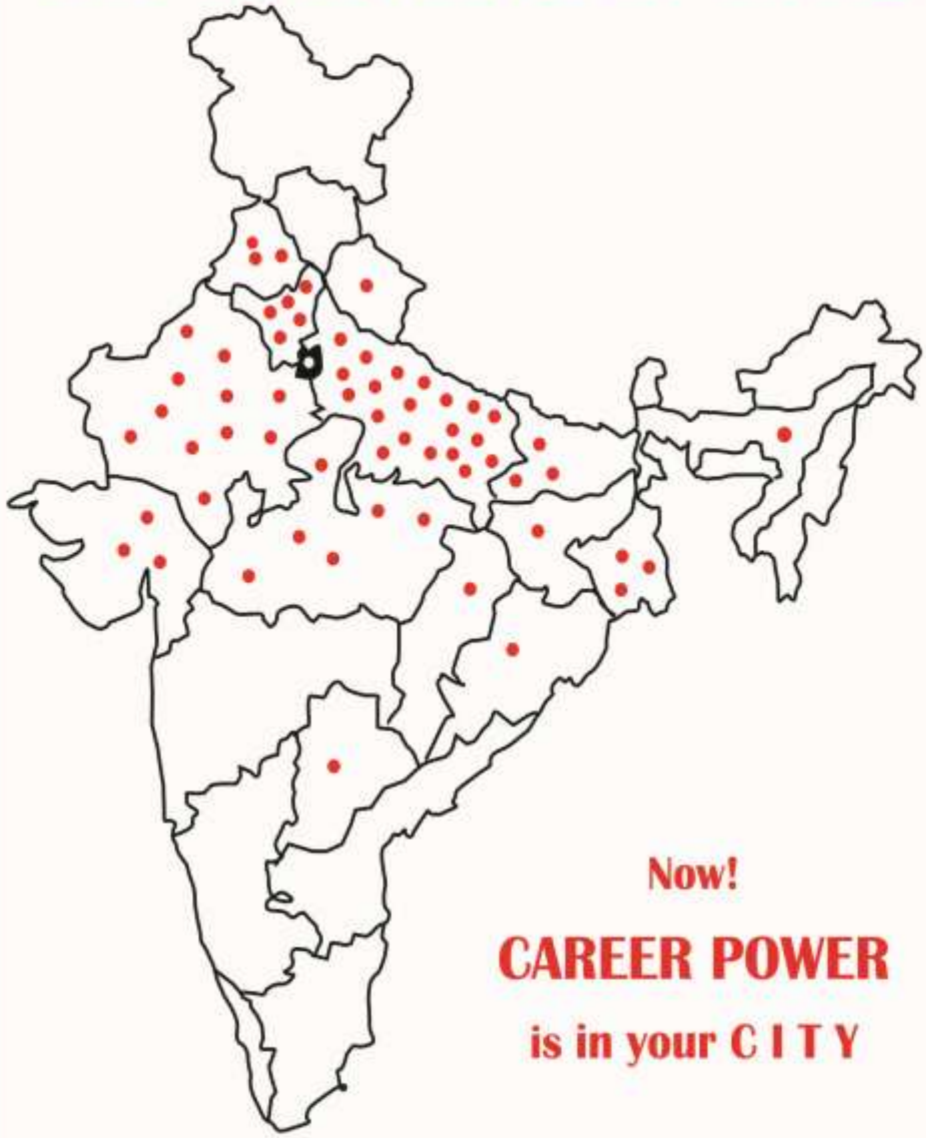

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7. Population control programme must be made the responsibility of all sects of people. It is essential to include the political leaders and spiritual heads to propagate the idea of a small family. Family planning programmes will not succeed unless they get the active, support from all sections of people. It should be made a peoples programme. A number of family planning programmes were introduced in India right from 1950s. The latest one is called _National Population Policy - 2000'. India has a long way to go in bringing down the population growth rate to tolerable levels.
8. The developed countries can assist the developing countries with their population programs. The developed countries can offer assistance by way of providing financial assistance, improved trade relation, more appropriate technology transfers and bringing about a more equitable sharing of the world's scarce natural resources.

SUMMARY

The rapid population growth faced by the developing countries is a threat to its development efforts. It is necessary to control population growth rate. The developing countries are passing through the second stage of demographic transition characterized by declining death rates and high birth rates. This has resulted in a high population growth rate. The first stage of demographic transition is not so harmful because both birth rate and death rates are high and as a result the population growth rate is not so high India has to get reach the stage III. During this stage the society becomes aware of the need to limit the size of the family and raise the standard of living.

The reason for the high population is basically high fertility rates in LDCs. The reasons for high fertility rates are poverty, low level of education, superstitions and religions beliefs, ignorance etc.

A study of the microeconomic household theory of fertility reveals that, children are considered as a special kind of consumption good. Other factors remaining constant, the desired number of children can be expected to vary directly with household income. It can be inferred that, the higher the household income, the greater the demand for children. The module also deals with the consequence of high fertility. High fertility and the resultant high population growth rate can lead to underdevelopment, depletion of world resources, environmental damage. High fertility also can lead to concentration of population in certain regions causing imbalances, lowering of the status of income, pressure on food supplier, increase in unemployment. The positive effects of increased population are the stimulus provided by increased demand and improved infrastructure and other facilities, which the government will be forced to provide for the expanding population.

Population policy should have a long term goal as well as short term objectives. Development is the best solution to the problem of overpopulation. The other steps are expanding educational facilities, effective implementation of family planning programmes, empowerment of women introducing a system of incentives and disincentives, rural upliftment etc. Population control programmes should get the active and positive involvement of political, social and religious groups. The developed countries also must assist with technology, sharing of resources, financing the developing countries etc.

THE ROLE AND CONTRIBUTION OF EDUCATION AND HEALTH TO ECONOMIC GROWTH AND DEVELOPMENT

OBJECTIVES

The module discusses the importance and significance of education and health to the development process. The experience of many countries has proved that progress in health and education can transform a country and help to achieve speedy growth and development. The two topics are closely related and both are forms of human capital. The contribution of education in the development of a country will be discussed. The health indicators and the need to tackle the health issues in LDCs will be dealt with in the module.

INTRODUCTION

Education and health are the basic objectives of development. The well-being of people depends on health. Education is essential for a satisfying and rewarding life. Development of country depends on how it tackles the issues of health and education. Health is a pre requisite for increased productivity and well being of the people. Education plays a crucial role in the ability of a developing country to absorb modern technology. It helps in developing talents, skills and development will be sustainable only if health care programmes are taken care of. They are inputs as well as outputs of the production function.

From 1950s to 2000, the infant and child mortality rates have been controlled in the developing countries. Many of the killer diseases like small pox have been eliminated. A number of illnesses such as polio and rubella have been largely controlled through the use of vaccines. On the literacy front also the developing countries have progressed. Inspite of noteworthy achievements, the developing countries have not been able to improve health facilities as well as educational facilities to the required extent. The expansion of health and education is as important as income distribution. Problems of malnutrition and high child mortality rates still remain unsolved. The twin human capital issues of health and education must be tackled to ensure the success of development programmes. Improved health and education help families to break out of vicious circles of poverty.

ECONOMIC DEVELOPMENT AND HUMAN CAPITAL

Human capital are important inputs in production. Human capital takes the form of labour or entrepreneur. In reality, human capital is not homogeneous. They differ in efficiency and capabilities. The difference in efficiency of human capital is brought about by education and health when the labourers are of higher levels of literacy and education, efficiency will be higher and hence output will be more. The studies conducted by various economists like Schultz and Kendrick establish the fact that education is a very important determinant of progress and the level of development of a country. Providing just basic education will help to bring about development only up to a certain level. The type of education provided should match the requirements of the country. Hence human capital includes a variety of manpower resources like semi skilled and trained labour, clerks, technicians, management personnel, engineers, doctors, administrators, teachers at various levels etc. Depending on the developmental needs education has to play appropriate role. For example, changing technology, social set up, organizational set up may demand different types of education. Hence, when the question of economic development is discussed, it is necessary to take into account the quantitative as well as qualitative education. To build up human capital which will help economic development, it is necessary to invest in expanding education both horizontally and vertically. This will necessitate efforts in the following directions.

a) Basic education at the primary, secondary and tertiary levels.
b) On the job training
c) Study programmes for adults and skill improvement
d) Extension programmes
e) Research and Development

THE IMPORTANCE OF EDUCATION AND HEALTH IN ECONOMIC DEVELOPMENT

With higher incomes, people and governments can afford to spend more on education and health. This will help to increase productivity and incomes. The development policy of a country needs to focus on income, health and education simultaneously. In other words, in order to address the problems of poverty and to achieve development, there is a need to use a multi pronged strategy.

It is seen that people tend to spend more on human capital when income is higher. However, one cannot be sure that increase in income will necessarily lead to increase in investment in children's education and health. If the mothers are educated, the health of the children will be better. Health status affects the performance of children in school. Hence, education and health are related issues. Better health and nutrition leads to earlier and longer school enrollment, better school attendance and more effective learning. In order to improve the effectiveness of schooling, it is necessary to improve the health of children in developing countries.

There are important spillover benefits to an individuals' investment in health and education. An educated person provides benefits to people around her such as reading for them or coming up with innovations that benefit the community. According to WHO (World Health Organization), the ultimate responsibility for the performance of a country's health system lies with the government. It is necessary to understand the inter relationship between health, education and incomes and form an integrated strategy for development.

CONTRIBUTION OF EDUCATION

Labor differs from other inputs since it is in the form of human beings. The fact that labor is capable of thinking learning and applying makes it different from other inputs. There are certain characteristics of labor which are unique. In the case of labor, after an initial investment is made, a stream of higher future income can be generated from both expansion of education and improvement in health. This is done by estimating the present discounted value of the increased income stream made possible by these investments and then comparing it with their direct and indirect costs. According to the human capital approach education and health have the indirect ability to increase utility by increasing incomes.

(i) **Increased Efficiency :** As the labor becomes more educated, the degree of efficiency increases. This is true if we take the case of India. Since India has a well developed information, technology industry, Indian engineering and software talent is in demand in the global market.

(ii) **Ability to innovate and progress :** There is a close and positive relation between innovation and development as proved by Joseph Schumpeter. Education and development of science and technology proves way for innovations. Education makes the people think, reason, experiment and innovate which will lead to new technological developments, which will lead to growth and prosperity. An educated labour force will be in a position to comprehend and apply the new technology which will be more efficient and productive.

(iii) **Education gives a boost to Research and Development :**Research and development is the basis of innovations and progress. Importance to higher education and research will induce more innovation which will help development. A country which invests in research and development can hope to progress faster as the experiences have proved.

(iv) **Education helps the people to earn better incomes :** Education enables individuals to widen their horizons and develop their talents. It is empirically proved that the poor people even in developed countries are poor due to lack of education. In the context, it is necessary to explain the social costs and benefits as well as private costs and benefits of education.

Private Versus Social Benefits and Costs of Education

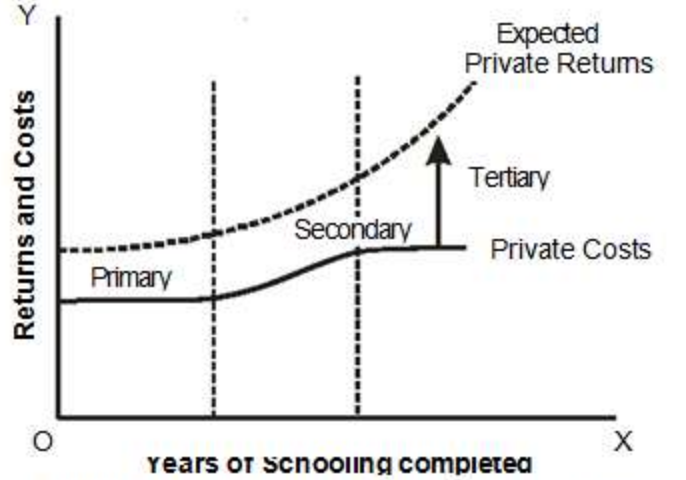


Figure 10.1 Private Returns and Costs

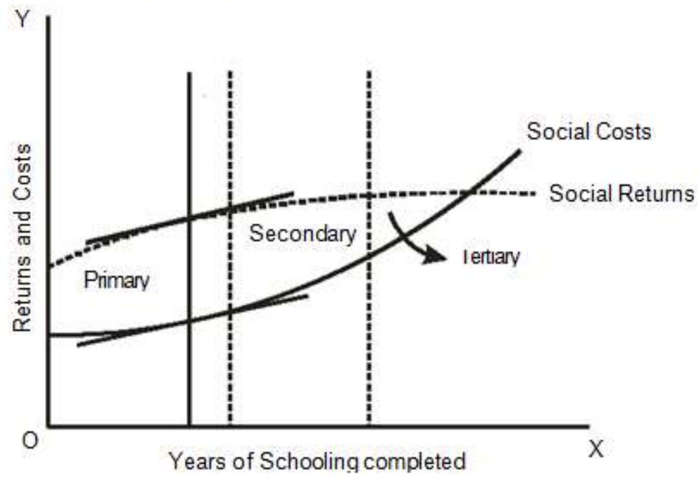


Figure 10.2 Social Returns and Costs

Fig.10.1 shows the divergence in private costs and expected private returns from education. It is clear that expected private returns are much more than private costs at the tertiary levels of education. Though private costs show an increasing trend private returns are much more than costs. In the case of LDCs, these costs may be subsidized also which enables the people to enjoy the benefits of lower costs in higher education.

Fig.10.2 shows the social returns and social cost of education. The social returns are maximum at the primary and secondary levels. For tertiary level of education social benefits from education stops. Later social costs become more than social benefits. This indicates the high costs which the society has to bear if more money is allocated for higher education.

LITERACY RATES ANDINVESTMENT INEDUCATION

The literacy rates in the developing countries have gone

up to 53%. But the enrolment rate at the secondary level is very low as compared to developed countries. It is obvious that the enrolment rate is much less at the tertiary level. In general, India's literacy rate has been better than south Asia's performance. In LDCs, where there is an un favourable sex ratio against females, their education is also neglected. Todaro and Smith explain the reasons for advocating women's education. They argue that the rate of return on women's education is higher compared to men's education. Educated women will help in control of fertility and population. They make good mothers and help in the overall development of the country.
For improving the quality of human capital, the government must invest in this sector. Investment in human resources is equally important in bringing about development as has been proud by America's experience. It is seen that most of the poor countries spend much less than 5% of their GDP on education. In this respect India has not performed well. India spend only 3.8% of the GDP roughly on education. In India, the problem is that the government spends more on higher education while qualitative education is lacking at the basic and secondary levels. This has widened inequalities in society.

ROLE AND CONTRIBUTION OFHEALTH FACILITIES

Like education, health is an important form of human capital investment necessary for development. In India, the public expenditure on health is a little more than 5% and public health investment is at a very low level of 0.9% of the GDP. The world health organization (WHO) defined health as a ―state of complete physical, mental and social well being and not merely the absence of disease and infirmity‖. WHO has provided an alternative measure of health which is known as DALY which stands for ―disability adjusted life year‖. Though this measure is controversial, a study for the 1993 World Development Report estimated that a total of 1.36 billion DALYs were last in the baseline study year, 1990 in the developing countries.

Health is crucial to the people since it helps a person to perform better. It helps students to attend school regularly. They are able to understand and perform better. Good health improves attendance in the workplace and productivity and efficiency will improve. A healthy person need not incur heavy expenditure on medicines and treatment. A healthy population will be positive, productive and resourceful. Unlike other factors of production human capital is unique and has to be nurtured and eared for. However, LDCs are faced with a host of health problems. Developing countries face a much more crippling disease burden than developed countries. Every year about 12 million children under the age of 5 die in developing countries. Most of these children die of causes that could be prevented for just a few cents per child. It is said that the real underlying disease is poverty.

HEALTH CHALLENGES FACED BY DEVELOPING COUNTRIES

It is seen that health problem are particularly severe in sub-Saharan Africa, where about 20 countries are poorer than they were a generation ago. In at least 16 Sub-Saharan Africa countries, a child is more likely to die before the age of 5 than attend secondary school. About 40% of the children in this area are malnourished. Some diseases are deadly when combined with other diseases. The interaction between malaria and acute respiratory infections or anemia is also deadly. Another important lethal combination is AIDS and TB. According to WHO, 5 conditions acute respiratory infections, diarrhea, measles, malaria and malnutrition account for 70% of deaths among children less than 5 years of age.

AIDS - This is the leading cause of death of working age adults in the developing countries. There is an urgent need to control AIDS to prevent these countries from prolonged poverty and misery. Malaria once again seems to have made a comeback especially in Africa where it kills 2 million people each year.

Tuberculosis claims about 3 million lives each year. Hepatitis B kills about 1 million people every year. Cholera, once in retreat has come back to many countries in Africa, Asia and Latin America. Dengue fever is spreading rapidly with millions of cases each year.

The above mentioned are some of diseases which has rendered the workforce inefficient and sick. Due to these diseases, absenteeism has gone up and productive efficiency has suffered.

HEALTH INDICATORS

The common health indicators are water, sanitation and nutritional status. Survey reveals that the developing countries have a poor record in improved sanitation. Though in the case of water source, the developing countries are reasonably better off, still they are far behind the high income OECD group. The undernourished population in the developing countries constituted 17% in the year 2004. Though life expectancy has gone up and infant mortality rate has decreased, the developing countries have a long way to go in achieving a higher rank in the Human Development Index.

INVESTMENT IN HEALTH SERVICES AND HEALTH POLICY

If improved health facilities have to be provided, it is necessary to invest sufficiently in both public and private sector. People should be in a position to spend on health services and the government should invest in improving health facilities at reasonable cost. The public expenditure on health services in India is very low at 0.9%. However the private expenditure is 4.1%. At the same time developed countries spend more than 6% of their GDP on public health. This is alarming since it indicates the low preference given by India for building human capital expenditure on setting up infrastructure like dispensaries, hospitals, medicines at low prices, improved sanitary conditions are crucial to the building up of human capital, health and education are areas which need an integrated policy approach. To make improvements in education quality there is a need to improve child health. Similarly, one of the most effective investments we can make in health is to improve the quality of education. For example, a well-known programme is that of the Mexican programme on education, health and nutrition named PROGRESA : It provides cash transfers to poor families, family clinic visits and other in-kind nutritional supplements and other health benefits for pregnant and lactating women and children under the age 5. India can also demise integrated policy programmes for promoting education and providing basic health facilities. Health and education are the two important factors that affect an individual's economic and social life. Both health and education are interlinked and both are essential to build up human capital.

SUMMARY

The development of a country depends on not only the financial capital but also on the human capital. The development of a country depends on how it tackles the issues of health and education. Education helps to increase productivity skill and nature talent. Basic education helps in development up to a certain level. The type of education provided should match the needs of the society. Both horizontal and vertical investments are needed to enhance the quantitative and qualitative requirements. Both education and health are interrelated issues. Better health and nutrition leads to earlier and longer school enrolment, better school attendance and more effective learning. To improve the effect of education, it is essential to improve the health of children in developing countries. Education increases efficiency, encourages innovation, research and development. Education increases the earning capacity of individuals.

The literacy rates in developing countries have improved over the years, though there is still scope for improvement. There is an increased need to give importance to women's education since it helps in controlling fertility. The expenditure on human capital is very low in the case of developing countries. Roughly, India spends 3.8% of GDP on education.

Health is a crucial area which has to be improved if the development process is to be speeded up. Good health enables people to perform their jobs better. A healthy population will be productive and resourceful. LDCs lag behind in health facilities. Poverty is the worst disease. TB, AIDS, dengue, Hepatitis B are some of the diseases which kill thousands of people in developing countries. Health indicators reveal that India is very low in ranking. There is a need to increase government expenditure on health services. A proper health policy should be designed which will be affordable to people. Since education and health are related issues are integrated policy approach is needed to improve the quality of human capital in developing countries.

URBANIZATION AND INFORMAL SECTOR

OBJECTIVES

In this module, we focus on one of the most complex issues of the development process i.e. the phenomenon of massive movements of people from the rural countryside to the cities, especially in developing countries like Africa, Asia and Latin America. It is also necessary to study the role of cities and the urban informal sector in fostering economic development. The module also deals with the theoretical model of rural - urban labour transfer in the context of high urban unemployment. Finally the role of migration in development will be discussed.

INTRODUCTION

There is a close link between economic growth and urbanization. As the rural economy undergoes transformation from agriculture based system to industry and service based system, there will be a number of changes in an economy. A number of people may shift to urban areas in search of jobs and better wages. It is necessary to study the causes of this migration as well as its impact. This helps in understanding the issues of migration and the problems resulting from it. It also enables us to understand the nature of benefits enjoyed and the negative effects as well.

URBANIZATION ANDCAUSES OFURBANIZATION

An urban area is a geographical area, constituting a city or town. Urbanization means the growth of cities. According to the United Nations definition, settlements of over 20,000 are urban and those with more than 1,00,000 are cities.

Urbanization is a process in which an increasing proportion of an entire population lives in cities and the suburbs. It is related to the process of industrialization. Urbanization was at its peak in the late 19^{th} and early 20^{th} century. This was the period of industrial revolution. During this period, better opportunities come up in the cities due to the setting up of factories and industries. When human productivity increased due to industrialization, surpluses were generated in both agriculture and industry. Increasing number of population started living in cities. The factories and industries were set up in cities due to a number of advantages. The benefits of science, research and technology directly benefit the people who reside in cities.

Urbanization which is the result of industrialization and modernization involves a shift of population from the rural to the urban areas. Urbanization is the increase over time in the population of cities in relation to the regions' rural population. It is the proportion of the total population or area in urban localities over time. Urbanization can also be defined as the increased spatial scale and the density of settlement as well as business and other activities in the area. People are attracted to more to the urban areas since there are opportunities for business expansion. This involves a shift of people from agriculture to other activities like trade, manufacture etc. Urbanization leads to a number of changes like change in attitude, beliefs, values and behavior patterns. The various facilities provided by the urban areas like better education, health care system, employment chances, civic facilities and social welfare attract people to urban areas.

Urbanization and India :

The urban areas in India have a major role towards the growth of the country's economy. Urbanization is an integral part of the process of economic growth. Only 1/3 of Indians live in cities.

But these urban areas generate more than $2/3^{rd}$ of the country's GDP and account for 90% of government revenue. There has been an uncontrolled growth of India's towns and cities as more
have migrated to these areas in search of economic opportunity. In
cities like Mumbai slums constitute 1/4 of urban housing and 50%
of the population reside in slums.

Generally, the more developed the country measured by per capita income, the greater the share of population living in urban areas. The highest income countries like Denmark are also the most urbanized while the very poorest countries such as Rwanda are the least urbanized. A very important question as far as LDCs like India are concerned is that how they will cope, economically, environmentally and politically.

CAUSES OF URBANIZATION

The large cities and towns are the result of various socio- economic and political factors. The urbanization has led to changes in the land use pattern and there has been change, in the organization as well as governance. Various factors have contributed to urbanization process.

1. The increase in population has been a major reason for urbanization. There has been an increase in population due to high birth rate and low death rates. Another reason for the population increase is the large scale migration of rural population to urban areas in search of livelihood and better wages. Rural economy has failed to give gainful employment to the rural population and there is over crowding and uncertainty in agriculture. People migrate to urban areas in search of better opportunities in education, job and general standard of living.

2. Urbanization and migration are prompted by competition, diversity and opportunities which are

absent in the villages.

3. With agriculture the only occupation, the farmers may find it difficult to grow beyond a certain limit. Agriculture has become very unpredictable and risky since it depends on environmental factors, climatic conditions, floods, pest attacks etc. The farmers have limited choice and crop failures have become common. Somehow the government schemes have not been able to improve the conditions in farming. Cities offer various opportunities to earn a living.

4. The industries and businesses are located in the urban centers. Industrial and service sectors offer opportunities for growth. People can always find work and earn money through various activities which the rural areas lack.

5. With regard to education, transport, housing and other basic services urban areas are far ahead and are able to cater to the needs of the people. The presence of better health facilities and hospitals are attractive to people since the elders and sick people in the family can be looked after. Even in the field of entertainment urban areas offer a variety.

6. One of the causes for the urbanization and migration is also industrialization and commercialization of farming operations which resulted in unemployment. Thus unemployment caused due to mechanization has also contributed to migration. Moreover urban life is projected as glamorous and superior by mass media which is also encouraging increased migration.

7. Urban sprawl or increasing urbanization has led to the prolific growth of suburbs. Government has been investing in the development of suburbs by creating better infrastructure facilities. The advantages are cheap housing, nearest to cities, less population, low taxes etc.

EFFECTS OF MIGRATION

There are positive and negative effects of urbanization. The positive effects are the following.
a) Urbanization helps in enhancing productivity. Productive activity in urban centres allows for a larger scale of operation, leading to specialization and economies. The size of operation allows sharing and risk pooling. There will be mutually beneficial activities and cost efficiency which will make the firms more efficient.

b) Urbanization leads to a total change in the character of local areas. The nature of occupation, services and the way the various activities are conducted undergo a thorough change. For example, one major change will be the shift from the agriculture and service oriented sectors to large scale industries and business which becomes specialized and there will be more professionalism in their dealing. The business houses or industries become independent, risk taking and resourceful, fit to face competition and risk.

c) There will be specialization of goods and services in larger cities and they will provide the goods to the smaller cities like wholesalers. In this manner business grows and there will be expansion of capital and financial services. The wages paid also will be higher in larger cities.

d) Due to the facilities available in urban areas the urban productivity will be much higher as compared to rural productivity. This will further induce migration from rural to urban areas.

e) Another effect of urbanization is that it encourages the growth of commercial activities and promotes efficient utilization of resources. This will encourage the optimum production and distribution of goods.

f) City life helps in improving the quality of life : It helps individuals to grow socially, culturally, widen their horizons and learn new technology and applications. It enable a person to keep up to date and active in various fields and enables people to excel in their activities.

g) Urbanization will necessitate better housing, sanitation and transport facilities. There will be increased health awareness and people consciously try to improve their living styles. The families start opting for lesser children and better education for them. Hence urban life has a strong socio cultural impact on the people. Since the cost of bringing up children is more they start limiting the family size.

h) Urbanization helps in social and cultural integration since the cities function as the melting pots of cultures. The diverse culture merge and people learn from each other. They also learn to live with each other in harmony.

i) Urbanization leads to agglomeration economies. These economies arise and are enjoyed by the business houses, workers and consumers when they are localized in a particular area. The benefits result from the economies of scale and network effects. The benefits arise due to factors like the growth of infrastructure like schools, hospitals and other services. Benefits also arise in productive activities due to cost benefits, increased demand, competition, specialization and division of labour etc.

Urbanization also leads to many problems and it is necessary to arrest the negative effects of urbanization in view of the welfare of the society as a whole. The negative effects are the following.

1. Urbanization leads to overcrowding in cities. In countries like India urbanization has led to the growth of slums. The infrastructure facilities like water, electricity housing etc. have not expanded sufficiently to accommodate the large number of migrant population. There is too much pressure on the infrastructure facilities. This leads to adverse living conditions. Housing and sanitation become problems. Over crowding and congestion make life miserable. The governments are not in a position to cope with this situation.

2. Urbanization may co-exist with unemployment also. Anti social activities become common. This leads to activities like alcoholism drug abuse etc.

3. Pollution of air and water are the other serious harmful effects of urbanization. Polluting vehicles and un thoughtful expansion of construction and other activities adversely affect the environment. More and more lands will have be cleared for construction purposes. Eg. Destruction of mangroves in Mumbai. This results in loss of bio diversity. There will be serious environmental losses due to pollution in various forms like water pollution, air pollution and noise pollution. Overuse of transport leads to an pollution and noise pollution. Safe drinking water is a problem in urban areas. Pollution due to the industrial wastes and drainage get mixed with the drinking water.

4. Increased demand for housing results in hike in rents and overpricing of residential areas. This makes decent housing unaffordable for most of the people. This leads to the growth of slums. Moreover uncontrolled expansion of cities have been a strain on public utility services like energy, education, health care sanitation, transportation etc. The pressure on infrastructure leads to traffic congestion, lack of sanitation, poverty, lack of recreational activities, global warming, loss of forest cover and resulting overheating. It also leads to destruction of agricultural land and wildlife. Urban sprawl or development of suburbs increases traffic and destroys open space. There will be a scattering of resources. The growth of urban sprawls leads to neglect of infrastructure, waste of resources and heavier traffic with its ill effects. The economies of agglomeration turn into diseconomies as a result of too much competition. However, with the advancement of technology and the use of internet even in the rural areas, another trend is also developing which is the idea of working from home. This trend, if continuous can solve many of the problems and ill effects of urbanization.

RURAL - URBAN MIGRATION

The economic development which took place in Western Europe and the United States also led to the movement of labor from rural to urban areas. There was a gradual reallocation of labor out of agriculture and into industry through rural urban migration both internal and international. However, the experience of developing countries was somewhat different. In the case of developing countries there was a massive migration of rural population into urban areas despite rising levels of unemployment and underemployment. The rural - urban migration model attempts to explain the apparently paradoxical situation of accelerated rural - urban migration in the context of rising urban unemployment. This theory is known as the Harris - Todaro Model.

TodaroModel :
Assumptions :

1. Migration is primarily an economic phenomenon.
2. For the individual migrant migration is quite a rational decision in spite of the existence of urban unemployment.
3. The Todaro model postulates that migration occurs due to urban - rural differences in ―expected income‖ rather than actual earnings.
4. The fundamental assumption is that the migrants consider the various labor market opportunities available to them in the rural and urban sectors and choose the one that maximizes their expected gains. Then the theory assumes that numbers of the labor force, both actual and potential compare their expected income for a given time horizon in the urban sector with the prevailing average rural incomes. Migration takes place only if the expected returns are attractive.

The Theory of Migration :

The theory can be understood with the help of an illustration. We consider a situation in which the average unskilled or semiskilled rural worker has a choice between being a farm laborer for an annual average real income of 50 units or migrating to the city where he can earn upto 100 units real income. If we go exclusively by the income differential factor, the choice is obvious. The worker will go for the higher paying job in urban sector. The model assumes full employment which is a normal situation in developed countries. This is not true for LDCs due to the following reasons.

1. LDCs suffer from chronic unemployment problem. Hence the migrants may or may not secure a high paying urban job immediately.
2. The unskilled, uneducated migrants may remain unemployed or make get casual or part time employment as daily wage earners, vendors etc. in informal sector. It is easier to find employment in this sector since the scale of operation is small and wages are competitively determined.
3. Those migrants who are educationally qualified may find formal jobs easily.

Thus it is clear that in deciding to migrate, the individuals must balance the probabilities and risks of being unemployed or underemployed for a considerable proof of time against the positive urban - rural real income differential. Here the time span becomes very relevant and significant in taking decisions.

Short time span situation :

Suppose a migrant gains a modern sector job. He expects to earn twice the income in urban area as compared to rural area. But this will not be attractive of the actual probabilities securing the high part urban job within a period of one year is one chance in five. There is only 20% chance of securing the job. Hence his expected urban income during this one year is only 20 units and not 100 units. The urban full time worker gets 100 units. Hence it becomes irrational for this migrant to seek an urban job even though there is 100% wage differential. But if the probability increases to 60%, the migrant may consider it worth which to try his luck in spite of high urban unemployment.

Longer Time Span Situation :

Longer time horizon is more realistic in taking decision regarding migration. Majority of the migrants belong to the age group of 15 - 24. Permanent income calculations will influence the decision to migrate. If the migrant feels that the probability of finding a regular wage employment in the initial period is low, but this probability increases over time as he is able to broader his urban contacts and establish himself. Therefore it will be rational for him to migrate even though expected urban income during the initial periods may be lower than the expected rural income. As long as the present value of the net stream of expected urban income over the migrants' planning horizon exceeds that of the expected rural income, the decision to migrate is justifiable. Hence in this model, rural - urban migration acts as an equilibrating force that equates rural and urban expected incomes.

The Model :

The Policy Implications of the Model :

The Harris - Todaro model has relevance to the developing countries problems. It has important policy implications for development strategy in the area of wages, incomes, rural development and industrialization.

Firstly, the development strategies should be such that the imbalances in urban rural employment opportunities caused by urban bias must be reduced. The imbalances or differences in economic opportunities between rural and urban areas should be minimized. Other use image differentials will stimulate heavy influx of people into urban areas which may result in many problems. Secondly, urban job creation is an insufficient solution for the urban unemployment problem. If the migration continues, a policy designed to reduce urban employment will not work. Moreover heavy migration may result in lower levels of agricultural output due to induced migration.

Thirdly, indiscriminate educational expansion will lead to further migration and unemployment. The employers will hire people with more education even though extra education may not contribute to better job performance. It will also result in a situation of educated unemployment.

Fourthly, wage subsidies and traditional scarcity factor pricing can be counterproductive.

Finally, it is necessary to encourage programmes of integrated rural development. Policies which affect the demand side and supply side of the urban employment problem are equally important in solving the issues.

Migration and Development :
Migration means the long time relocation of an individual, household or group to a new location outside the community of origin. Urbanization leads to migration. Rural urban migration was once though normal and natural in the economic development literature. Internal migration was considered as a natural process in which surplus labour was gradually withdrawn from the rural sector to provide needed manpower for urban industrial growth. Today besides internal migration, international migration is also on the increase.

Causes of Migration :
There are various factors which lead to migration.
1) The conditions in the place of origin may not be sufficiently rewarding for the people. The migrants feel that they are not getting economic security and well being due to limited job opportunities. They feel that they will be better off with their skills and better education. These factors constitute the push factors.
2) The migrants may be attracted by the potential opportunities in the new place. Better wages, better living conditions, infrastructure may induce people to migrate. The movement usually is a more developed place with better amenities and life styles. These are the pull factors.
3) Government policies have an important role to play in migration. Government policies may encourage large produces or farmers for efficiency and economies of large scale production. The small farmers of producers may be discouraged. They may be forced to migrate in such a situation.
4) Policies for increasing competition and efficiency calls for minimum government intervention. As a result, concessions and benefits like farm subsidies and cheap credit policies meant to help the farmer will not be given to the farmers. This implies more burden on the farmers since they do not get any financial support. This situation may force the farmer to sell the land and migrate to cities. Policies to reduce the urban cost of living and distribution and sale of food at fair prices under the government scheme adversely affected the rural farmers. The prices of food grains are not sufficient even to cover the cost. Farming feel them is no more attractive. Hence they tend to look for better opportunities in cities. Internationally, migration policies affect migration.

5) Industrialization with s the major factors which stimulated a migration in the 19 and 20 centuries opportunities for work in factories and industries led to large scale migration. At present there is so much surplus migratory labor in cities which are available cheap. This lowers the cost of production, which is attractive for foreign investment companies.
6) Though wage differentials are the prime cause for migration. There are many social and circumstantial factors like marriage, migration of family members, disasters, famine which may induce migration.

Effects of Migration :
1) The experience of LDCs have shown clearly that rural - urban migration is harmful in many ways. The job creation in urban areas is not sufficient to absorb the migrants and the migrants are a burden on the infrastructure in urban areas.
2) Migration results in rural urban structural imbalances both on the supply side and the demand side. The educated skilled workers migrate from the rural areas in search of better opportunities. This will lead to a drain of human capital from the rural areas which may affect rural development adversely.
3) Migration to the urban areas increases pressure on job creation for the surplus labour force. This is so because urban job creation may mean use of more capital and other scarce complementary resources which may be difficult especially for LDCs.
4) The industries may be forced to adopt capital intensive technology due to rising wage rates and other benefits which have to be given to the labor force. Moreover these countries may not be able to select the appropriate labor intensive production technologies. If the job creation lags behind it will result in a situation of increasing urban surplus labor. Too much migration reflects the underdevelopment of the economy. Migration upsets the pattern of sect oral and geographic economic activity, income distribution and even population growth.
5) The policies of the government may have a direct and immediate impact on migration. For example, policies related to land tenure arrangement commodity pricing, taxation export promotion import substitution, exchange rate policies etc. affect migration. All the above effects imply that it is necessary to formulate development policies taking into account the internal and international migration and the issues of population distribution.

SUMMARY

Economic growth and urbanization are inter related factors. Urbanization is a process in which an increasing proportion of an entire population lives in cities and the suburbs. It is related to the process of industrialization. Urbanization and modernization results in a shift of the population from the rural to the urban areas. Opportunities of employment and better living standards attract people to urban areas. It involves a shift of people from agriculture to other activities. The urbanization was caused by a number of factors like the increase in population, declining opportunities in the agricultural sector, better opportunities, transport, education, housing and other basic services.

Urbanization led to a number of positive and negative effects. The positive effects are increase productivity, increased commercialization professionalism, growth of capital and financial services, efficient utilization of resources, better housing and sanitation and transport facilities and social and cultural integration. Moreover, urbanization leads to agglomeration economies. The negative effects are overcrowding, anti social activities, pollution, increase in rents, strain on public utility services etc.

The theory of migration implies that the labourers compare their expected incomes for a given time horizon in the urban sector with the prevailing average rural incomes. Migration takes place only if the expected returns are attractive. In deciding to migrate, the individuals must balance the probabilities and risks of being unemployed or under employed for a considerable period of time against the positive urban-rural real income differential. Rural- urban migration acts as an equilibrating force that equates rural and urban expected incomes. The model explain the co-existence of rural to urban migration and high unemployment in the urban sector. The Harris - Todaro model is relevant to the developing countries.

The module also explains the causes for migration. Migration is encouraged by prospects of better economic security, job opportunities, industrialization and wage differentials. Migration leads to a number of problems like lack of sufficient job opportunities, burden on infrastructure, rural-urban structural unbalances, increasing wage rates. Therefore, it is necessary to formulate policies with regard to migration, both internal and international.

POLICIES FOR THE URBAN INFORMAL SECTOR, WOMEN IN THE INFORMAL SECTOR AND THE MICROFINANCE REVOLUTION

OBJECTIVES

The informal sector witnessed a high growth rate in recent times. An estimated 60% of the non-agricultural workforce is employed in the informal sector in Asia. The informal sector has become crucial to support a large percentage of unemployed poor in India. In this module, we will be discussing the features, role and policy issues of the urban informal sector in India. The features and policies for women in the informal sector are important issues since women empowerment is the key to development. This importance, feature and the need for microfinance are also discussed in this module.

INTRODUCTION

The urban informal sector is defined by ILO as ―the non- structured sector that has emerged in the urban centers as a result of the incapacity of the modern sector to absolute new entrants.

As per the definition given by the international conference of labor statisticians all unregistered enterprises below a certain size are belonging to the informal sectors. These may be micro - enterprise owned by informal employers who hire one or more employees on a continuing basis or self operated enterprise employing family workers and employees occasionally. The informal sector plays an important role in the India economy in terms of employment generation. The public and the private formal sector are not able to absorb the unemployed people. Hence the people are forced to join the informal sector for their livelihood. In fact the informal sector enables the poor people to subsist. The informal sector consists of petty traders, street vendors, coolies, porters, artisans barbers, shoeshine boys and so on.

Informal employment can be divided into two groups.
1. The first group consists of self employed individuals and unpaid family workers.
2. The second group covers informal wage workers, including employees of informal enterprises, casual workers without a fixed employer, domestic workers, contract workers.

THE CHARACTERISTICS OF THE INFORMAL SECTOR

The employees are considered to be in the informal sector when their employment relationship in law or practice is not subject to National labor legislation, income taxation social protection or entitlement to certain employment benefits like sick leave, paid annual leave etc. The informal sector is characterized by a large number of small scale production and service activities that are individually or family owned and use labor intensive and simple technology.

The units tend to operate like monopolistically competitive firms with ease of entry, excess capacity and competition. The self employed workers in this sector have little formal education, are generally unskilled and lack access to financial capital. Therefore, worker productivity and income tend to be lower in the informal sector as compared to the formal sector. The workers in the informal sector do not enjoy the measure of protection like the formal sector in terms of job security, decent working conditions and old age pensions. Most of the workers entering this sector are recent migrants from rural areas enable to find employment in the formal sector.

The workers in the informal sector are basically interested in obtaining sufficient income for survival. Many members of the household are involved in income generating activities, including women and children. They often work for very long hours. They live in shacks and slums which lack minimum public services such as electricity, water, drainage, transportation and educational and health services. They get occasional or temporary employment in the informal sector.

Another feature of the informal sector is that it is not homogeneous. It covers a wide range of activities. The service sub sector is an important component of the informal sector and manufacturing accounts for a small share.

The outstanding features of the urban informal sector jobs are the following.
a) Self-employment and skills developed outside formal education. b) Low productivity and low level of technology and skills.
c) Use of indigenous resources and use of family labor or family owned enterprises.
d) High levels of working capital and use of labor intensive and adapted technology.
e) Ease of entry for migrants

However, informal sector also faces a number of problems due to the following reasons :
i) There is no recognition of this sector formally and hence no protection is given.
ii) The informal sector is outside the purview of minimum wage legislation and social welfare.
iii) The sector does not come under trade union organization.
iv) The income or wage levels are low and there is no job security.
v) The informal sector does not receive any fringe benefits from institutional sources.
vi) People can enter or exit based on the demand in the market.
Hence there is no security of employment. Personal and social relations form the base of the informal sector.

POLICIES FORTHEURBANINFORMALSECTOR

It is an accepted fact that the informal sectors has become an integral part of the Indian economy. This sector has attracted attention from development economists due to its advantages like high labor absorbing potential, low wage cost and forward and backward linkages to the urban formal sector. Considering the high unemployment levels in countries like India and the inability of the public sector and formal private sector to absorb the labor force, the informal sector is a boon since it enables the very poor to subsist. There is a need to devise appropriate policies to develop and nurture this sector. Depending on the type of activities and areas of operation, suitable policies need to be taken to support this sector. For example, those people who are engaged in the marginal and subsistence activities can be supported and enabled to increase their incomes and better their working conditions. Another component of the informal sector is the modern and dynamic sector which has the potential for growth. This part of the informal sector which has the potential to grow should be assisted to move up to the formal sector. This may be done gradually and it helps in improving the income levels and bettering the standards of living. It is difficult to devise a common policy for the informal sector due to its heterogeneity.

However, it is necessary to introduce innovative policies and laws which provide protection for the informal workers. This will help to reduce the unfavorable impact of trade liberalization policies followed by organizations like WTO.

1. It is necessary to improve the productivity of informal workers by improving their efficiency. It is also necessary to provide sufficient working capital and raw materials.

2. It is necessary to make easy finance available at reasonable rates. Tax incentives will help the informal sector to reduce costs. For example subsidized credit can be given to the informal sector. It is important to reduce procedural delays and improve the access to financial services. Local association informal enterprises and non governmental organizations can provide easy credit.

3. Education and Skills Training : Human capital development is very important for improving the performance of the informal sector. Basic education, vocational training and adult literacy programmes should be provided to the people. NGOs and private sector can play a useful role in imparting skill and educational training programmes. The provision of training and credit should be combined as in the case of the Grameen Bank. Workshops can be organized to train workers in specialized areas. It is necessary to ensure a secure place of work since most of the informal businesses are located in public places or in unregistered shops. Lack of security affects their productivity and performance. Besides government help, NGOs and other voluntary agencies can also provide the necessary infrastructural services.

4. Social Welfare and Protection : It is necessary to evolve a social insurance scheme like the health insurance, disability allowance which can provide protection against illness, disability, unemployment, old age or the death of the main income earner. The finance for this may be provided by contribution of members, taxation etc. Ex-SEWA, is a women's Association of women which has the largest contributory scheme and which provides health insurance, life insurance etc.

5. To protect the informal workers from various funds of exploitation, it is necessary to pass legislation and regulation. Care should be taken to avoid excessive regulation and laws since these will adversely affect the employment generating potential.

6. Protection against Harassment : The rules and regulation should not lead to harassment by government officials. It is necessary to make the informal sector participants aware of the rules and regulations. This will reduce chances of harassment sensitization of government officials about the importance of the formal sector will also help. The members can also form associations to protect themselves.

7. Setting up of Self Help Groups and Associations : Formation of self help group, provision of credit and training programmes are helpful in empowering the members of the informal sector. They can take collective decision and actions for the welfare of all ―clustering‖ helps in solving the problems of groups which have common problems.

8. Promoting Linkages with the Formal Sector : There is a need to strengthen the linkage between the formal and informal sectors, complementary linkages will be mutually beneficial to both the sectors. The informal sectors can be assisted by supply of inputs, marketing of products, supplying work assignments or contracts, supplying credit or technical help. There is a tendency for the formal sector to exploit the informal sector. This should be reduced by providing adequate information on market conditions and price. The informal sector can also form business associations in order to strengthen their bargaining power. Steps should be taken to make the formal sector more competitive since this will require the informal sector to improve its efficiency and lower the cost. Thus mutually beneficial policies can be taken.

9. Programmes to Speed Awareness : Though the Government has launched a number of programmes to benefit the informal sector participants, very often people are unaware of such programmes. It is necessary to spread awareness of the usefulness of these programmes through mass media.

Check your progress
1. Define the urban informal sector.
2. What are the features of the urban informal sector jobs? 3. Why informal sector faces problem? Give reasons.

WOMEN IN THE INFORMAL SECTOR

In certain regions of the world, women constitute the predominant rural urban migrants. A large number of women migrants also seek to better their economic condition. Many of the women are not able to find employment in the formal sector which is usually male dominated. As a result women constitute the bulk of the informal sector labour supply, working for low wages at unstable jobs with no employee or social security benefits. The increase in the number of single female migrants has also contributed to the rising proportion of urban households headed by women. These women tend to be poorer, and their fertility rates are high. Their productivity will be low and they are malnourished. They are denied formal education, health care and sanitation.

Low income women in the informal sector constitute one of the most vulnerable groups in the Indian economy. The reasons are lack of bargaining power, poverty, irregular work, need to balance work at home and outside, lack of control over own earnings, lack of access to credit, training, information, assets and also unequal gender relations.

Features and dimensions of women's position in the informal sector :

1. Employment in the Informal Economy : The informal sector is the primary source of employment for women in most developing countries. In most of the developing countries like Sub-Saharan Africa, the entire female non-agricultural labor force is in the informal sector. The proportion of women workers in the informal sector exceeds that of men in most countries. It is seen that women's share of the total informal workforce outside the agricultural sector is higher than men's share in 9 out of 21 developing countries. The type of activities undertaken by men and women are also different in the informal sector. It is seen that the male trader deal with non-food items and the females deal with food items. The competency of women is lesser than that of men in various markets and this is due to the low levels of education and skills. The women are constrained by social and cultural norms. This has led to the low status of women.

2. Wider gender and income gaps in the Informal sector : There is a widening gender gap in income and wages in the informal sector. Certain factors are responsible for this. For example, it is a fact that informal incomes worldwide tend to decline as we move from employer, to self employed, casual wage worker to sub-contract worker. More women are employed in low income activities like sub contract work. It is also seen that the employers prefer women in their workforce with insecure contracts, low wages and few benefits. Even the self employedwomen producers find it difficult to retain their position in the internal and international markets.

POLICY MEASURES FOR WOMEN IN THE INFORMAL SECTOR

Due to the low status and income earning capacity women face more problems then men in the informal sector. Hence policies should be devised to protect and empower women.

1. It is necessary to ensure that the benefits of various schemes actually reach the women. For example, provision of credit must be made simple and formalities should be made simple. Since women bear the burden of looking after the children, facilities like day-care centers for the poor working women must be provided. Both the government and NGOs must take the initiative for these activities.

2. There is a need to encourage the formation of women's groups or organization so that discussion and collective action can be taken. The role of women's organization is very important for enhancing the bargaining capacity of women and increasing awareness of their exploitation. These organizations are instrumental in taking united action for the welfare of women.

3. Many international development agencies have positively contributed to establish a global research policy network to promote better statistics, research programs, and policies in support of women in the informal economy. The network WIEGO (Women in Informal Employment Globalizing and Organizing) was set up in early 1997. This network helped to frame policies to promote and protect street vendors, social protection measures for women and in representation the women in policy making at various levels. Women's organizations like SEWA and WIEGO are encouraged to actively participate in policy making also.

Hence a number of steps are being initiated to empower the women and economic and political empowerment are needed to protect and enable women to improve their status.

THE MICROFINANCE REVOLUTION

Microfinance refers to the provision of small scale financial services to economically active people. The provision of financial services like credit facilities to operate small enterprises or micro enterprises. These units may be engaged in a variety of activities. They may be people who work for wages or commissions. They may be people who make an income from renting out their land, vehicles, draft animals or machinery and tools. These households have multiple sources of income.

More than 500 million of the world's poor population areeconomically active. These poor population earn their livelihood by being self employed or they work in micro enterprises. They produce a variety of goods in small workshops, trading and retail activities, making pots, furniture or sell fruits and vegetables. It is difficult for these people to secure capital and they have hardly any access to financial services. Since the institutional sources are not ready to finance these poor people, they depend on family, friends etc. Microfinance is the solution to the needs of the people for finance. Though the movement was originally started for providing micro credit, it started covering a variety of financial services. In India NABARD (National Bank for Agricultural and Rural Development) finances more than 500 banks. These banks lend money to Self Help Groups. The bank ability of the rural poor was discovered. With new lending methods, the rural poor repaid loans on time. There has been a tremendous growth in the number of successful micro finance institutions which are reaching out to a number of poor people and that are becoming commercially viable.

FEATURES OF MICROFINANCE SERVICES

1. Micro finance loans can be used for a number of purposes : It enables the poor to accumulate assets and enable the poor to be economically independent. It helps the poor to invest in income generation activities. They can improve their standard of living through better education health and housing. The people have flexibility in loan use. It is understood that the clients themselves know about how best to manage their funds.

2. Microfinance gives importance to financial services and not subsidies : The low income entrepreneurs are more interested in getting working capital and run their business. They require capital and continued access to financial services rather than subsidies. The small entrepreneurs borrow small amounts and are able to comfortably pay off the loans while making a profit for themselves. The people find it better to borrow from micro finance institutions rather than from money lenders or the government.

3. The micro finance revolution has helped in women empowerment : Since women constitute the most vulnerable section of the society, MFIs have a special role to play in the up liftment and empowerment of women. Women face a number of disadvantages and problem since they have fewer economic opportunities and they hear the burden of domestic work, child bearing, education, health and nutrition of children. MFIs have found to the very helpful especially for women. Experience has proved that women are sincere and regular in repayment.

4. Microfinance supports institutions and not projects : There is a stress on the creation of institutions rather than projects for meeting the financial needs of the poor on a sustained basis. It has been proved that successful microfinance institutions reach large numbers of clients and become financially self - sufficient. The objective of setting up micro finance institutions is to reach out to the very poor people and provide them with quality financial services. The success of microfinance is due to the following features.
(i) It is possible to know the needs of the clients and design appropriate products. For example, the institutions are able to meet specific requirements of the people like short term loans, high liquidity, saving services etc.
(ii) Reducing risk and increasing value to the clients : There is no pressure to produce collateral security. The borrowers are motivated to repay. For example the idea of poor group lending is adopted. In this several people guarantee one another's loan and incentives are given to people who repay on time.
(iii) Low administration cost : Since the operations are efficient and simple, the administrative expenses are low.

5. The microfinance movement has brought out the fact that institutions can serve the poor and still be sustainable.
6. There are a variety of financial services tailored to

meet the specific requirements of poor population. For example, micro credit is a part of microfinance. Experiments with micro credit in Bangladesh have shown that it is possible to help extremely impoverished people to engage in self employment projects that allow them to generate an income and enable them to create wealth thus getting rid of poverty. The success of the micro credit policy is urging the mainstream finance industry to consider micro credit as a source of future growth. This brings out the various possibilities for the growth of micro finance which can revolutionize the society by empowering the poorer sections of the society.

SUMMARY

The informal sector has emerged as a very significant sector in India. About 60% of the nonagricultural workforce is employed in this sector in Asia. Since the public sector and the private formal sector are not able to absorb the unemployed people, the informal sector is a source of employment to the people in India. The informal sector provides livelihood to petty traders, street vendors coolies, porters, artisans, barbers, shoeshine boys and so on. The informal sector is characterized by a large number of small scale production and service activities that are individually or family owned and use labor intensive and simple technology. The workers in this sector have little formal education, are unskilled and lack access to financial capital. As a result, worker productivity and income tend to be lower in the informal sector in comparison to the formal sector. There are no facilities like job security, good working conditions and benefits like old age pensions. Most of the workers are migrants. Most of them are contract workers temporary workers who live in slums. The service sub sector is an important component of the informal sector. The outstanding features of the urban informal sector are self employment, no formal education, low productivity and low level of technology and skills, labor intensive technology, high level of working capital and ease of entry. The informal sector faces a number of problems like no formal recognition, no minimum wage legislation and social welfare schemes and lack of trade unionism. Besides the above problems, the income and wage levels are low, no security of employment and lack of institutional funding.

Though it is difficult to devise a common policy for the informal sector due to its heterogeneity, some steps can be taken to protect the informal workers. Easy availability of finance, education and skills training, social welfare measures, appropriate legislation and regulation, setting up of self - help groups and associations and promoting linkages with the formal sector are a few of the measures which must be initiated to support and sustain this sector which has become very important in recent times.

Most of the poor migrants are women. These women are poor and their fertility rates are high. Their productivity is low and they are malnourished. They are denied formal education, health care and sanitation. They suffer from lack of bargaining power, poverty, irregular work, lack of access to credit, training and unequal gender relations. The informal sector is the primary source of employment for women in most of the developing countries. The female workers deal with food items whereas the males handle non-food item. Also there are wide gender and income gaps in the informal sector. The policy measures in the informal sector for women include provision of credit, facilities like day care centers for working women.

It is necessary to encourage the activities of women's groups and organizations. Microfinance is the solution to the needs of the people for finance. In India microfinance facilities are offered to the poor by NABARD through more than 500 banks. The bankability of the rural poor was discussed. They are commercially viable also. The features of microfinance are that they provide financial services and support institution. Another feature is that microfinance institution can cater to the specific needs of the people. There is no collateral security and the administrative costs are low. Micro credit has also encouraged the growth of industries and has helped extremely poor people to engage in self employment projects. Thus, the micro finance movement has helped to serve the poor and still be sustainable.

AGRICULTURE TRANSFORMATION AND RURAL DEVELOPMENT

OBJECTIVES

To study the importance of agriculture since Independence To study the role of agriculture in economic development To study the relation between International trade and Indian agriculture
To study the relation between agriculture and other sectors
To study the rural Credit market in India
To study the role of W.T.O. in Indian agriculture
To study recent policy measures of government affecting Indian agriculture

INTRODUCTION

Agriculture in India, the prominent sector of the economy, is the source of livelihood of almost two thirds of the workforce in the country. The contribution of agriculture and allied activities to India's economic growth in recent years has been no less significant than that of industry and services. The importance of agriculture to the country is best summed up by this statement: "If agriculture survives, India survives".

Early Years of Independence :

The early years of Independence witnessed accentuation on the development of infrastructure for scientific agriculture. The steps taken included the establishment of fertilizer and pesticide factories, construction of large multi-purpose irrigation-cum-power projects, organization of community development and national extension programmes and, above all, the starting of agricultural universities as well as new agricultural research institutions across the length and breadth of the country However, the growth in food production was inadequate to meet the consumption needs of the growing population which necessitated food imports.

Green Revolution :

Policy makers and planners, in order to address the concerns about national independence, security, and political stability realized that self-sufficiency in food production was an absolute prerequisite. This perception led to a program of agricultural improvement called the Intensive Agriculture District Programme (IADP) and eventually to the Green Revolution. The National Bank for Agriculture and Rural Development (NABARD) was set up. All these steps led to a quantum jump in the productivity and production of crops.

White and Yellow Revolution :

The Green revolution generated a mood of self-confidence in our agricultural capability, which led to the next phase characterized by the Technology Mission. Under this approach, the focus was on conservation, cultivation, consumption, and commerce. An end-to-end approach was introduced involving attention to all links in the production-consumption chain, owing to which progress was steady and sometimes striking as in the case of milk and egg production.

Present Times :

Indian agriculture continues to face internal and external challenges. While monsoon dependence fragmented land-holding, low level of input usage, antiquated agronomic practices, lack of technology application and poor rural infrastructure are some of the key internal constraints that deter a healthy growth, while subsidies and barriers have been distorting international agricultural trade, rendering agri-exports from developing nations such as India uncompetitive.
Today, India ranks second worldwide in farm output. Agriculture and allied sectors like forestry and logging accounted for 16.6% of the GDP in 2007, employed 52% of the total workforce and despite a steady decline of its share in the GDP, is still the largest economic sector and plays a significant role in the overall socio-economic development of India.

India is the largest producer in the world of milk, cashew nuts, coconuts, tea, ginger, turmeric and black pepper, Coffee. It also has the world's largest cattle population (281 million).It is the second largest producer of wheat, rice, sugar, groundnut and inland fish. It is the third largest producer of tobacco. India accounts for 10% of the world fruit production with first rank in the production of banana.

ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

i) **Share in national income :** Agriculture is India's big economy. Although the share of agriculture in the total national income has been gradually decreasing on account of development of the secondary and tertiary sectors it's contribution continues to be significant. IN 1950, the share of agriculture was 57% but it is only 26% now. The more developed a country is the lesser is the contribution of agriculture.

ii) **Source of Employment :** Today almost 60% of the population depends directly or indirectly on agriculture. The greater independence of working population on agriculture indicates the underdevelopment of non-agricultural activities in the country.

iii) Importance in industrial development : Agriculture provides raw materials to pour leading industries such as cotton textiles and sugar industries. Not only this the workers in industries depend on agriculture for their food. Agriculture also provides the market for a variety of goods.

iv) Importance in international trade : A number of the agricultural commodities like tea, coffee, spices and tobacco constitutes our main items of exports. These amount to almost 15% of our total exports. Hence agriculture provides foreign exchange which helps us to buy machines from abroad. It also maintains a balance of payments and make our country self- sufficient.

v) Development of tertiary sector : Tertiary sector provides helpful services to the industries and agriculture like banking, warehousing etc. Internal trade is mostly done in agricultural produce. For example, various means of transport get bulk of their business by the movement of agricultural goods.

vi) Revenue to the government : State government get a major part of their revenue in terms of land revenue, irrigation charges, agricultural income tax etc. Central government also earns revenue from export duties on the agricultural production. Moreover our government can raise substantial revenue by imposing agricultural income tax. However this has not been possible due to some political reasons.

vii) International importance : Our agriculture has brought fame to the country. India enjoys first position in the world as far as the production of tea and groundnuts are concerned.

viii) Internal trade : agriculture plays a important role in the internal trade. It is because of the fact that 90% of our population spends 60% of their income on the purchase of the items like food, tea, milk etc.

INTERNATIONAL TRADE AND INDIAN AGRICULTURE

Agricultural Export: India's total exports of agricultural and allied products at $10.5 billion in 2005-06 constitute 10.2% of its export share. Developed country markets account for nearly 35% of India's agri-exports. In agricultural exports there are varied performances across commodities. Contribution of various agricultural commodities in world exports has been listed below.

Product	Percentage share in World Export
Lac, gums, resins, vegetable products	**10**
Vegetable planting materials, vegetable products	4.9
Coffee, tea, mate and spices	3.7
Marine products	2.3
Residues, waste of food industry, animal fodder	2.1
Cereals	1.3
Fruits and nuts	1.1

***Source : NCTI based on UN-ITC Trade Map Data.**

Export of Marine products, which after a decline in 2003-04 had picked up in subsequent years, grew by 6.3% in April- October- 2006.In terms of export earnings, among marine products, frozen shrimp contributed to be the largest export item, followed by frozen fish, cuttlefish, squid, and dried items. European Union accounted for the largest share of India's export of marine products, followed by US and Japan. This sector, however, faced a number of hurdles in the major export destinations. Indian shrimp imports to USA have been subject to anti dumping duty of 10.17% from August 2004. In European markets, India's marine products have been facing problem due to multiplicity of standards-in addition to the EU's own standards, the standards of each of the own member states.

Agricultural Imports :

Agricultural import contributes about 3% in total merchandise import to India. Major imports during April-October 2005 included vegetable oils (US$ 1237.3 million), raw cashew nut (US$ 287.8 million), pulses (US$ 281.8 million) and sugar (US$ 138.7 million).

Vegetable oils and pulses are largely imported to augment domestic supplies and raw cashew is imported for processing and re-exports, as domestic production is not adequate to meet the demand of processing capacity installed in the country.

Agriculture Export Zones: In the Export Import (EXIM) Policy 2001-02, the Government of India announced the proposal to set up Agri-Export Zones for the purpose of developing and sourcing raw materials and their processing/packaging leading to final exports. The concept essentially embodies a cluster approach of identifying the potential products and the geographical region in which such products are grown and adoption of an end to end approach of integration of the entire process, right from the stage of production to consumption.

Under the Scheme, the State Government identifies products with export potential, which have comparative advantage in local production. Agricultural and Processed Food Products Development Authority (APEDA) is the nodal agency of the Central Government to promote setting up of Agri Export Zones. Till December 2005, 60 Agri Export Zones of different products had been set up in different parts of the country.

AGRICULTURE AND OTHER SECTORS

1. Agriculture and Employment :

About 65% of Indian population is dependent on agriculture for their livelihood. This sector has strong forward and backward linkages and its performance affects each and every sector of the country.

2. Sustainable Agriculture : Organic Farming :

In the recent decades, there is an increasing demand of organic foods in the developed world. Organic farming is an important pillar of sustainable agriculture, which is beneficial for producers and consumers both. India has a great potential for organic farming using traditional wisdoms prevailing in the villages of India. In fact, a large section of Indian agriculture uses more or less organic method of farming using minimum level of chemical inputs. Promotion of organic farming in India could prove beneficial
to increase share of Indian agricultural export in the world export.

3. Role of Agriculture Allied Sectors :

a. Dairy :

India ranks first in the world in milk production, which was around 100 million tones in 2006-07. Strong networks of Milk Cooperatives, have been instrumental in this phenomenal performance of dairy sector in India. Presently, 1.13 lakh village level cooperative societies spread over 265 districts in the country form part of the national Milk Grid. This Grid links milk producers throughout India and consumers in 700 towns and cities. De- licensing of dairy sector in 1991 has directed considerable amount of private funds both from inside and outside country in this sector especially in manufacturing facilities while investment in cooperative sector are concentrated largely in procurement and processing of milk.

b. Livestock :

Livestock sector contributes about 27% of the G.D.P. from agriculture and allied activities. This sector has excellent forward and backward linkages, which p- promote many industries and increase the incomes of vulnerable groups of the society such as agricultural laborers and small and marginal farmers. India possesses the second largest livestock population in the world. Production and export of poultry products have shown considerable growth in the recent decades. Export of such products to countries including Bangladesh, Srilanka, Middle East, Japan, Denmark, USA, and Angola augers well for this industry.

c. Fishery :

Fishing, aquaculture and a host of allied activities are a source of livelihood to over 14 million people and a major source of foreign exchange earner. In 2005-06, this sector contributed about 1% of G.D.P. and 5.3% of G.D.P from agricultural sector. 8,118 k.m. of coastline gives geographical basis for the development of marine fishery sector and cultural factor boosts the inland fishery sector in India.

RURAL CREDIT MARKET

Credit :

In India a multi-agency approach comprising co-operative banks, scheduled commercial banks and RRBs has been followed for purveying credit to agricultural sector. The policy of agricultural credit is guided mainly by the considerations of ensuring adequate and timely availability of credit at reasonable rates through the expansion of institutional framework, its outreach and scale as also by way of directed lending. Over time, spectacular progress has been achieved in terms of the scale and outreach of institutional framework for agricultural credit. Some of the major discernible trends are as follows :

Over time the public sector banks have made commendable progress in terms of putting in place a wide banking network, particularly in the aftermath of nationalization of banks. The number of offices of public sector banks increased rapidly from 8,262 in June 1969 to 68,355 by March 2005.

One of the major achievements in the post-independent India has been widening the spread of institutional machinery forcredit and decline in the role of non-institutional sources, notwithstanding some reversal in the trend observed particularly in the 1990s.

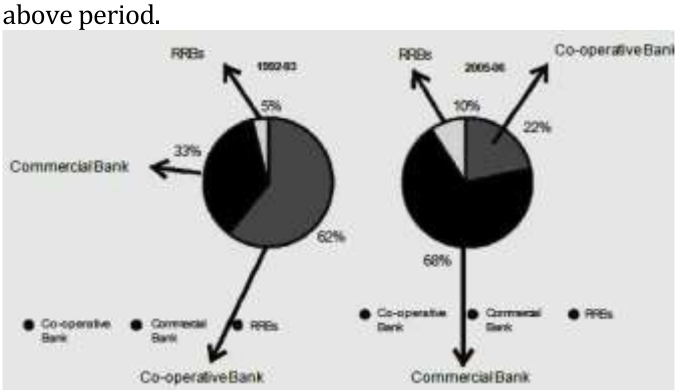
- The share of institutional credit, which was little over 7 per cent in 1951, increased manifold to over 66 per cent in 1991, reflecting concomitantly a remarkable decline in the share of non-institutional credit from around 93 per cent to about 31 per cent during the same period. However, the latest NSSO Survey reveals that the share of non-institutional credit has taken a reverse swing which is a cause of concern (Table 1).

Notwithstanding their wide network, co-operative banks, particularly since the 1990s have lost their dominant position to commercial banks. The share of co-operative banks (22 per cent) during 2005-06 was less than half of what it was in 1992-93 (62 per cent), while the share of commercial banks (33 to 68 per cent) including RRBs (5 to 10 per cent) almost doubled during the above period.

Source Credit	1951	1961	1971	1981	1991	2002
1	2	3	4	5	6	7
Non-Institutional	**92.7**	**81.3**	**68.3**	**36.8**	**30.6**	**38.9**
Of which Money Lenders	69.7	49.2	36.1	16.1	17.5	26.8
Institutional	**7.3**	**18.7**	**31.7**	**63.2**	**66.3**	**61.1**
Of which Cooperatives Societies / Banks	3.3	2.6	22.0	29.8	23.6	30.2
Commercial Banks	0.9	0.6	2.4	28.8	35.2	26.3
Unspecified	-	-	-	-	**3.1**	-
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source : All India Debt and Investment Survey and NSSO.

- The efforts to increase the flow of credit to agriculture seems to have yielded better results in the recent period as the total institutional credit to agriculture recorded a growth of around 21 per cent during 1995-96 to 2004-05 from little over 12 percent during 1986-87 to 1994-95. In terms of total credit to agriculture, the commercial banks recorded a considerable cent) including RRBs (5 to 10 per cent) almost doubled during the above period (Chart 1). growth (from around 13 per cent to about 21 per cent), while cooperative banks registered a fall (over 14 per cent to over 10 per cent) during the above period.



However, the growth of direct finance to agriculture and allied activities witnessed a decline in the 1990s1 (12 per cent) as compared to the 1980s (14 per cent) and 1970s (around 16 per cent). Furthermore, a comparative analysis of direct credit to agriculture and allied activities during 1980s and since 1990s reveals the fact that the average share of long-term credit in the total direct finance has not only been much lower but has also decelerated (from over 38 per cent to around 36 per cent), which could have dampening effect on the agricultural investment for future growth process.

Availability of adequate credit is vital for every sector and agriculture is not an exception. In India, Commercial Banks, Cooperative Banks, and Regional Rural Banks (RRBs) are responsible for smooth flow of credit to agricultural sector. But a huge unorganized market exists for credit to agricultural sector in India, which provide timely fund to this sector but at the exorbitant rate of interest. Among organized credit disbursement to agriculture commercial banks play a vital role with a share of about 70% where as cooperative sector and RRBs contribute 20% and 10 % respectively. Kisan Credit Card (KCC) scheme was introduced to provide adequate and timely support from the banking system to the farmers for their cultivation needs. This scheme has made rapid progress and more than645 lakh cards issued up to October 2006.

The 'Farm Credit Package' announced by the Government of India in June 2004 stipulated doubling the flow of institutional credit for agriculture in ensuing three years. Annual targets for this package are being surpassed in the two consecutive years from its introduction and it is likely to surpass in the third year also.

Insurance :

Insurance is a prime necessity to mitigate uncertainty that persists in agriculture. In India, agriculture is still affected by such factors, which are beyond control of human being. So, there is a great need for agricultural insurance in India. Keeping this in mind, Government of India in coordination with the General Insurance Corporation of India (GIC), had introduced National Agricultural Insurance Scheme (NAIS) from rabi 1999-2000 season. The main objective of this scheme is to protect the farmers against losses suffered by them due to crop failure on account of natural calamities. Agricultural Insurance Company of India (AICIL) which was incorporated in December 2002 took over the implementation of NAIS.

AICIL introduced Rainfall Insurance Scheme called 'Varsha Bima' during 2004 southwest monsoon period. Varsha Bima provided for five different options suiting varied requirements of farming community :

1. Seasonal rainfall insurance based on aggregate rainfall from June to September.
2. Sowing failure insurance based on rainfall between June 15 and August 15.
3. Rainfall distribution insurance with the weight assigned to different weeks June and September.
4. Agronomic index constructed on the basis of water requirements of crops.
5. A catastrophe option covering extremely adverse deviation of 50% and above in rainfall during the season.

During kharif 2006, this Varsha Bima scheme is being implemented in around 150 districts covering 16 states across the country. AICIL is also piloting another weather related insurance product for mango and coffee.

Rural Infrastructure Development Fund (RIDF): RIDF was announced by the Government of India in 1995-96 to boost public sector investment in agriculture and rural infrastructure. The Fund is raised from the commercial banks to the extent of their short fall in agricultural lending as priority sector. The activities, which have been made eligible for loans from RIDF, include rural roads and bridges, irrigation, mini and small hydel projects, community irrigation wells, soil conservation, watershed development and reclamation of waterlogged areas, flood protection, drainage, forest development, market yard, go-downs, apnamandi, rural haats and other marketing infrastructure, cold storages, seed / agriculture / horticulture farms, plantation and horticulture, grading and certifying mechanisms such as testing and certifying laboratories, fishing harbors/jetties, reverine fisheries, animal husbandry, modern abattoir, drinking water supply, infrastructure for rural educational institutions, public health institutions, construction of toilet blocks in existing schools and 'pay and use' toilets in rural areas, village knowledge centers, desalination plants in coastal areas, infrastructure for information technology in rural areas, and construction of anganwari centers.

Micro Finance :
Micro finance scheme has been introduced by National Bank for Agriculture and Rural Development (NABARD), the apex bank for agriculture and rural development in India, to improve the access of the rural poor to formal institutional credit and other financial products. In all 547 banks, which include 47 commercial banks, 158 RRBs, 342 cooperative banks are now actively involved in the operation of Self Help Group (SHG)- Bank Linkage Programme to spread the facility of micro finance to the needy small and marginal farmers and tiny entrepreneurs. The programme has enabled nearly 329 lakh poor families in the country to gain access to micro finance facilities from the formal banking system.

Capital Formation in Agriculture :
The share of the agriculture sector's capital formation in G.D.P. declined from 2.2% in the late 1990s to 1.9% in 2005-06. Stagnation or fall in the public investment in irrigation is partly responsible for this fall. However there is indication of a reversal of this trend with public sector investment in agriculture accelerating since 2002-03.The share of public investment in gross investment in agriculture increased by 6.5 percentage points from 1999-2000 to reach 24.2% in 2005-06.

W.T.O. AND INDIAN AGRICULTURE
India and other developing countries have been insisting that special and differential treatment for developing countries must be integral to all aspects, including to negotiated outcome, on agriculture under the Doha Round in the WTO. Mitigating the risk facing the low income, resource poor, and subsistence farmers associated with price declines, price volatility, and predatory competition and other market imperfections, including the huge amount of production and trade-distorting subsidies provided by some developed countries to their agricultural sector, remains paramount.

Therefore, along with other developing countries, particularly it's alliance partners in the G-20 and G-33, India has been emphasizing that the Doha agricultural outcome must include at its core :

1. Removal of distorting subsidies and protection by developed countries to level the playing field, and
2. Appropriate provisions designed to safeguard food and/or livelihood security, and to meet the rural development needs in developing countries.

India has also taken the stand that governments must able to foster stable and remunerative prices for domestic producers in order to increase productivity and gradually move away from dependence on low productivity agriculture. For these, meaningful and effective instruments i.e. Special Products and the Special Safeguards Mechanism is important for developing countries like India. At Hong Kong, where 6th ministerial meeting of the WTO took place it has been argued that Special Products and Special Safeguard Mechanism shall be an integral part of the modalities and the outcome of the negations in agriculture. Moreover, developing countries shall have the right to self designate an appropriate number of special products, guided by indicators based on the three fundamental criteria of food security, livelihood security, and/or rural development needs.

These designated products will attract more flexible treatment. Developing country members will also have the right to have recourse to a Special Safeguard Mechanism based on import quantity and price triggers, with precise arrangements to be further defined.

National Commission on Farmers :

To improve the condition of Indian farmers, National Commission on Farmers have been set up by the Government of India. It has been submitted five reports between December 2005 and October, 2006Key recommendations of the commission have been incorporated in the Revised Draft National Policy for farmers. These include: asset reforms covering land, livestock and bio reserves, farmer friendly support services covering extension, training and knowledge, connectivity, credit and insurance, assured and remunerative marketing, inputs and delivery systems, and curriculum reforms in the agricultural universities.

RECENT GOVERNMENT POLICIES AFFECTING INDIAN AGRICULTURE

In the recent Union Budget (2007-08), agriculture has got considerable attention with the various policy initiatives from the side of finance ministry. Some of the imp0ortant policies are :

During 2006-07 (until December 2006), 53.37 lakh new farmers were brought into the institutional credit system. A target of Rs. 225,000 crore as farm credit and an addition of 50 lakh new farmers to the banking system have been fixed for the year 2007- 08. The two per cent interest subvention scheme for short-term crop loans will continue in 2007-08, and a provision of Rs.1,677corer has been made for that purpose.

A special purpose tea fund has been launched for re-plantation and rejuvenation of tea. Government soon plans to put in place similar financial mechanism for coffee, rubber, spices, cashew and coconut.

Accelerated Irrigation Benefit Programme (AIBP) has been revamped in order to complete more irrigation projects in the quickest possible time. As against an outlay of Rs.7,121crore in 2006-07, the outlay for 2007-08 has been increased to Rs.11,000 crore. Rs.17,253crore had been budgeted for fertilizer subsidies in 2006-07. However, according to the Revised Estimates, this will rise to Rs.22,452crore. The National Insurance Scheme (NAIS) will be continued for Kharif and Rabi crops during the year 2007-08. The two per cent interest subvention scheme will continue in 2007-08. Rs. 100 crores have been allocated to new Rain fed Area Development Programme, set up for coordinating all schemes for watershed development.

Research and Extension :

Government of India has created a widespread network of agricultural universities and institutes all over India to facilitate research and extension works in Indian agriculture. The Indian Council of Agricultural research (ICAR) is an apex body in India at the national level, which promotes science and technology programmes in the area of agricultural research, education, and extension education.

SUMMARY

1. Agriculture is a prominent sector in Indian economy, which is the source of livelihood of almost two thirds of the workforce in the country. However, the growth in food production was inadequate to meet the consumption needs of the growing population which necessitated food imports.
2. India's total exports of agricultural and allied products at $10.5 billion in 2005-06 constitute 10.2% of it's export share. Agricultural import contributes about 3% in total merchandise import to India.
3. In India, a multi-agency approach composing co-operative banks, scheduled commercial banks and RRB's has been followed for purveying credit to agricultural sector. The policy of agricultural credit is guided mainly by the considerations of ensuring adequate and timely availability of credit at reasonable rates through the expansion of institutional framework, its outreach and scale as also by way of directed lending.
4. Insurance is a prime necessity to mitigate uncertainty that persists in agriculture. Government of India in coordination with the General Insurance Corporation of India (GIC), had introduced National Agricultural Insurance Scheme (NAIS) from rabi1999- 2000 season. Agricultural Insurance Company of India (AICIL) which was incorporated in December 2002 took over the implementation of NAIS.
5. India and other developing countries have been insisting that special and differential treatment for developing countries must be integral to all aspects, including to negotiated outcome, on agriculture under the Doha Round in the WTO.
6. To improve the condition of Indian farmers, National Commission on Farmers have been set up by the Government of India. It has been submitted five reports between December 2005 and October 2006 key recommendations of the commission have been incorporated in the Revised Draft National Policy for farmers.
7. The Indian Council of Agricultural Research (ICAR) is an apex body in India at the national level, which promotes science and technology programmes in the area of agricultural research, education and extension education.

QUESTIONS

1. Explain the importance/role of Indian agriculture in

economic development since Independence.
2. Explain the impact of W.T.O. on agriculture in India.
3. Discuss the recent measures adopted by Government of India affecting Indian agriculture.

TRADE STRATEGIES AND FINANCING DEFICIT IN BALANCE OF PAYMENT

OBJECTIVES

The objective of this module is to understand the main trade strategies for development and also to understand how the balance of payment deficits are financed. The module explains the trade strategies for development in Export Promotion and Import substitution and analyses the appropriate development strategy for developing countries. The module also explains the financing or reducing the payments deficits.

INTRODUCTION

Trade strategies are significant for the development policy of economies. The principle of specialization is the basis of international trade. Countries specialize in the production of goods and productivity. After the requirements of domestic consumption are met the rest of the output can be exported and foreign exchange can be earned. In trade relations countries may follow an outward looking free trade strategy and other follow a protectionist trade policy. This section also deals with the concept of deficit in the balance of payments and the various methods of financing deficit.

OUTWARD LOOKING TRADE STRATEGY

In the words of Paul Streeten outward looking development policies encourage not only free trade but also free movement of capital, workers, enterprises and students, the multinational
enterprise, and an open system of communications.‖

The debate between the free traders who advocate outward looking export promotion strategies of industrialization and the protectionists who are proponents of the inward looking impart substitution strategies has been going on since 1950s. The classical economists like Adam Smith, Ricardo and J. S. Mill advocated free trade and Robertson was of the view that trade is an ―engine of growth‖. An outward looking or export promotion policy was supported by many economists since it contributes to prosperity and growth. They cite the efficiency and growth benefits of free trade and competition, the importance of substituting large world markets for narrow domestic markets, the distorting price and cost effects of protection and the tremendous successes of the East Asian Export oriented economies of South Korea, Taiwan, Singapore and Hong Kong. The following are the advantages of an outward looking trade strategy.
1. Free trade allows for overall increase in production. Countries can specialize in the production of goods for which they are suited best. This will lead to higher income for all the countries. Resource endowment determines a country's nature of production and specialization. Specialization and large scale production helps countries to enjoy economies of production.
2. Free trade enables to sell the surplus in another country. Free trade allows specialization. A country need to concentrate in the production of only goods for which it is suited. At the same time if surplus is produced, it can be sold in the international market.
3. Higher production Efficiency is another advantage. The cost of production will be very low. The resource will be efficiently utilized due to competition in the world market.
4. Availability of a variety of goods to consumers results due to the outward looking trade strategy international trade allow choice for consumers which will be beneficial to consumers.
5. Improves the standards of living and encourages competition :Due to competition, specialization and economies of production, the cost of goods will be less since there is free trade, there will be competition and quality improvement of goods. competition prohibits the domestic firms from setting very high prices.
6. Countries are able to enjoy the benefits of better technology :International trade encourages transmission of technology. There is more information transfer about new products and production processes. this enables higher growth levels in all participating countries.
7. Free trade or outwards looking trade strategy increases savings and investment. Trade leads to increased incomes and savings which promote growth.
8. Outward looking trade strategy leads to social and political benefits. Free trade brings people of different cultures and traditions together. Besides economic benefits there are other benefits from free trade like exchange of ideas, and beliefs.

INWARD LOOKING TRADE STRATEGY

Inward looking development policies stress the need for the LDCs to evolve and develop their own styles of development and to control their own destiny. This means that such policies encourage indigenous ―learning by doing‖ in manufacturing and encouraging technologies appropriate to a country's resource endowments. The supporters of inward looking trade policy or protectionists believe that a country can become self reliant if trade is restricted and multinational enterprises are kept out since these enterprises produce wrong products and engage in wrong want stimulation. Some economists like Frederick list attempted to make a strong case for protection. Other economists like Raul Prebisch, Hans Singer, Gunnar Myrdal and others argued for protection of industries in LDCs. The following are the arguments for inward looking trade strategy.

1. The infant industry argument : The industries which are in the developing stages require protection. If the developing countries give protection to these industries they may be able to gain comparative advantage over time. Hence in the initial stages of development protection will allow them to progress and gain experience which will enable them to compete in the international market. After the period of protection, the industries will mature and will be able to face world competition. However, there are practical difficulties in deciding the industries which need protection and at what stage to remove protection.

2. Diversification of industries : Concentrating on the production of goods for which a country has comparative advantage which is the basis of outward looking trade strategy has its drawbacks. For example if countries rely on agricultural products alone is risky. Prices can fluctuate due to various reasons and primary products have a low income elasticity of demand. Hence diversification is important in the case of domestic production and export. Diversification reduces risk. Hence investing in various industries helps to spread the risk.

3. Reduction in trade and current account deficit : It is argued that free trade has resulted in large trade and current account deficits. It is felt that there is no control on the growing deficit and how the deficits will disappear. The adjustment may be disruptive also. Though reducing imports is one solution to the problem, it may lead to retaliation from the other countries.

4. Protection helps to promote employment supporters of protection feel that it is necessary to regulate trade for protecting certain industries and jobs from foreign competition. They believe that international trade will destroy domestic jobs. There are several concerns about trade and jobs. One viewpoint is that rise in imports lowers employment and unemployment rate increases due to shifting of jobs overseas. Another concern is that import competition can lead to loss of jobs. Recent experiences have shown that outsourcing of computer programming talent to India and other low wage countries is creating the fear of unemployment in the developed countries like U.S.A.

5. Better Terms of Trade : A country may have to use tariffs in the initial stages of development. Otherwise high tech industries may not develop. It will end up in producing goods based on favourable raw materials or climate. As a result, in the long run the terms of trade may become unfavorable for that country. Hence initially a country may have to develop industrial capacity by imposing tariffs.

6. Protection against Dumping : Dumping is selling at a lower price in the international market to capture the market. If a foreign country adopts dumping the domestic country's firm will not be able to compete. The dumping country will gain entry into the domestic market and later will increase the price. Hence it is necessary to protect the domestic industries by tariffs and import quotas.

Balance of payments of a country is a systematic record of all economic transactions between the residents of the reporting country and the residents of the foreign countries during a given period of time. A double entry book keeping method is adopted and the payments received from foreign countries are entered as credit and the payments made to other countries as debit.

The current account focuses on the export and import of goods and services, investment income debt-service payments and private and public net remittances and transfers. It subtracts the value of imports from exports and then adds flows of net investment income received from abroad. Taking this total (A + B + C), subtracting item D (debit service payments) and adding E (private and public remittances and transfers we get the final result. A positive balance is called surplus and negative balance is called deficit.

The capital account records the value of private foreign direct investment, foreign loans by private international banks, and loans and grants from foreign governments. It then subtracts the resident capital outflow. (Capital flight) The balance on capital account is therefore calculated as items G + H - I - J. Here also, a positive balance is a surplus and a negative one a deficit.

It is the current account which is of major concern. The deficit or surplus in current account gets adjusted in the capital account. After adjustment surplus if any is transferred to the services, which is indicated by a minus sign. If both accounts turn out to be in deficit, then it is financed either by reducing the reserves which will be indicated by a plus sign.

METHODS OF FINANCING DEFICIT

1. Autonomous flow of foreign exchange : Foreign exchange inflow takes place in the form of foreign direct investment and portfolio investment. Foreign direct investment is brought into a country by the multinationals. The foreign firm starts a subsidiary office or takes over the control of an existing firm. The foreign brings capital and technology and starts investment and production in the home country.

Portfolio investment refers to the purchase of shares and debentures of business concerns of a country by foreigners. The investor countries can buy the shares of the business though they have no control over the management. The investors invest in shares for earning a profit either in the form of interest and dividends or sale of financial assets at a higher price. Portfolio investment is done by financial institutions and brokers, companies etc. Portfolio investment differs from direct investment. In portfolio investment there is no direct control whereas in direct investment the investor has control over the firm. Both the investment flows are possible only if there are favourable monetary, fiscal, political and economic conditions.

2. Foreign Exchange Reserves have become the most important means of meeting deficit in the balance of payments. The foreign exchange reserves consists of foreign currency assets, special drawing rights, gold reserves etc. The central Bank of the country can use any of these to correct and stabilize the exchange rate of the country. Financing of the deficit is done by drawing firm the foreign exchange reserves. It is excepted that a country must have a minimum amount of reserves which are sufficient to pay at least for 3 months imports.

3. Accommodative flow or external assistance is another method of financing the deficit. International institutions like IMF or the governments of other countries form important sources of external assistance for financing deficit. Borrowing from the IMF is called Drawing Rights. A member can draw a sum of money in a particular national currency by surrendering an equivalent amount of its own currency. The loans are repaid or its own currency is repurchased by retaining the foreign currency borrowed. There are various schemes of borrowing from IMF, viz, gold tranche, credit tranches and standby arrangements. In all these methods quota system is followed on the basis of which countries are allowed to borrow. IMF also has a number of lending schemes for its members in order to help the member countries overcome the deficit. The special facilities are compensatory and contingency financing facility, buffer stock financing facility, supplemental resource facility etc. Under structural adjustment facility, resources are provided on concessional terms to low income developing member countries facing protracted balance of payments problems. Enhanced structural adjustment facility is the principal means by which the IMF provides financial support in the form of highly concessional loans to low income member countries facing protracted balance of payments problems.

IMF in recent times has introduced programmes and policies to avoid further balance of payment problems. They are Poverty Reduction and Growth Facility (PRGF), Multiteral Debt Relief Initiative Assistance (MDRI), Assistance to Heavily Indebted Poor Countries (HIPC) and Emergency Assistance for natural disaster and countries emerging from armed conflict.

Special Drawing Rights (SDRs) is an international reserve asset, created by IMF to supplement its member countries official resources. It is used for transactions between the governments. Its value is determined by a basket of currencies and the value is usually expressed in U.S. dollar. SDRs are also used to finance deficit of countries.

4. External Commercial Borrowing : External Commercial borrowings are used to finance deficit when other sources are not sufficient. External commercial borrowings include commercial bank loans, buyers credit, suppliers credit, securitized instruments such as floating rate notes, fixed rate bonds, credit from official export credit agencies and commercial borrowings from private sector window of multinational institutions such as International Financial Corporation, Asian Development Bank etc.

SUMMARY

Trade strategies are significant for the formulation of development policy of economies. The principle of specialization is the basis of international trade. Specialization and production on a large scale enables to reduce cost, increase efficiency and productivity. The major trade policies are outward looking free trade strategy and inward looking protectionist trade policy. Supporters of free trade like Adam Smith, Ricardo, Robertson were of the firm view that the prosperity and growth of countries depends on outward looking free trade strategy. The arguments for free trade are specialization, increased production, surplus for international market, higher productive efficiency improvement the standard of living, better technology, increase in savings and investment as well as increase in social and political benefits. Economists like Fredrick list were supporters of inward looking protectionist trade policy. They justified protection or inward looking strategy giving the infant industry argument and diversification of industries argument. They also believed that protectionist policy will help to reduce deficit, promote employment, better terms of trade and is effective against dumping by foreign countries.

A deficit can occur in the current account or capital account of a balance of payment account. A deficit occurs when outflows are greater than inflows. There can be a deficit in the current account which is a major concern. When a deficit or surplus occurs in current account it gets adjusted in the capital account. If both the accounts happen to be in deficit, then it can be financed by
reducing the reserves which will be indicated by a plus sign.

There are a number of ways of financing the deficit. The common methods are autonomous flow of foreign exchange through FDI and portfolio investment, foreign exchange reserves, external assistance, IMF and its various financing schemes, SDRs, and external commercial borrowings.

FOREIGN DIRECT INVESTMENT, PORTFOLIO INVESTMENTS, MULTINATIONAL CORPORATION, IMF AND THE WORLD BANK

OBJECTIVES

The module will be focusing on the role of foreign direct investment, the advantages and isadvantages of FDI, the role of MNCs and portfolio investment and impact on developing countrieseconomies. The module also discusses the changing role of international organizations like the IMF and the World Bank.

INTRODUCTION

The past decades witnessed a prolific growth of private foreign direct investments. FDIs are important to the developing countries since it enables them to achieve speedy development and integrate with the global economy. It helps to increase the rate of investment and capital accumulation so as to further economic growth. FDI refers to the investment made by a foreign individual or company in the productive activity of another country. Foreign direct investment involves much more than the simple transfer of capital or the establishment of a local factory in a developing nation. FDI enters a country through the multinational corporations. They carry with them technologies of production, tastes and styles of living, managerial philosophers and diverse business practices including cooperative arrangements, marketing restrictions, advertising etc. They engage in a range of activities, many of which have little to do with the development agenda of the host country.

PRIVATE FOREIGN DIRECT INVESTMENT AND THE MULTINATIONAL CORPORATIONS

The growth of multinational corporations have played a critical role in international trade and capital flows during the past few decades. An MNC is defined as a corporation or enterprise that conducts and controls productive activities in more than one country. There are huge firms mostly from North America, Europe and Japan, also from newly industrializing countries like South Korea, Taiwan and Brazil. Though they present a unique opportunity, they may also pose serious problems for many developing countries in which they operate. FDI through the MNCs rose from 2.4 billion dollars in 1962 to 11 billion dollars in 1980 and 1985 billion dollars in 1999. Nearly 60% of this has gone to Asia.

Private capital flows through the MNCs are attracted towards regions and countries with high financial returns and the greatest perceived safety. Capital will not flow to countries where debt problems are severe, governments are unstable, and where risk of capital loss is high.

The multinational corporations are not in the development business. Their objective is to maximize their return on capital. That is why over 90% of the global FDI goes to other industrial countries and fastest growing LDCs. MNCs are profit seeking organizations and are not guided by the issues of the host countries. They are unconcerned with problems of poverty, inequality and unemployment which are the main developmental issues of the host country.

The multinational corporations have two central characteristics. Firstly, they are large in size and secondly, their worldwide operations and activities tend to be centrally controlled by parent companies. More than 350 largest corporations now control more than 40% of trade and dominate the production, distribution and sale of many goods from developing countries. Nearly one fourth of international exchange involves intra firm MNC sales of intermediate products or equipment from one nations' subsidiary to another. The MNCs have become global factories searching for opportunities anywhere in the world. The annual sales volume of many MNCs are more than the GDP of the developing nations in which they operate.

MNCs scale of operation is wide. The large scale of operations, combined with limited competition implies high bargaining power of MNCs. The ownership of the MNCs is in the developed countries. Five of the top 10 are based in U.S. The LDCs find it difficult to bargain with such powerful groups. The MNCs are also oligopolistic in nature. As a result they can manipulate prices and profits and restrict other producers from entering. They can dominate with their new up to date technologies, special skills and through advertising change consumer behaviour.

MNCs have been concentrating on extractive and primary industries, mainly petroleum, non fuel minerals, and plantation activities and ―agri business‖. They were also involved in export- oriented agriculture and local food processing. However, recently there has been a shift to manufacturing operations and services. Presently manufacturing and services account for more than 50% of the FDI activities in LDCs.

TRADITIONAL ECONOMIC ARGUMENTS IN SUPPORT OF PRIVATE FOREIGN INVESTMENT

1) Firstly foreign investments are needed to fill in the shortage of domestic savings and investments. They fill in the gaps between the domestically available supplies of savings, foreign exchange, government revenue and human capital skills and the desired level of these resources necessary to achieve growth and development targets. Thus, the first contribution of private foreign investment to national development is its role in filing the resource gap between targeted or desired investment and locally mobilized savings.

2) The second contribution is its function in filling the gap between targeted foreign exchange requirements and those derived from net export earnings plus net public foreign and this is known as the foreign exchange or trade gap. The inflow of private foreign capital can help in reducing the deficit on the balance of payments current account. It can also help to remove the deficit over a period of time of the MNCs can generate a net positive flow of export earnings.

3) Foreign investments help to fill the gap between targeted governmental tax revenues and locally raised taxes. By taxing MNC profits and through financial participation in their local operations, LDC governments may be able to mobilize public financial resources efficiency for development projects.

4) The LDCs have shortage in management techniques, entrepreneurship, technology and skill. This can be overcome if MNCs operate in these countries. They are capable of supplying a ―Package‖ of needed resources, including management expertise, entrepreneurial abilities and technological skills that can be transferred to their local counterparts by means of training programs.

5) MNCs bring with them the most sophisticated technological knowledge about production processes while transferring modern machinery and equipment to capital poor developing countries.

ARGUMENTS AGAINST PRIVATE FOREIGNINVESTMENT

1) It is argued that although MNCs provide capital, domestic savings and investment rates may fall. This happens when competition is stifled through exclusive production agreements with the host governments. There may be no reinvestment of profits and income generation benefits sections of people with lower saving propensities. The growth of domestic firms may be prevented since the MNCs imports the inputs from abroad MNCs may also raise capital firm domestic source. This may lead to crowding out of investment of local firms.

2) The initial impact of MNC investment may lead to an improvement in foreign exchange position of the recipient nation. However the long run impact may lead to reduction in foreign exchange earnings on both current and capital accounts. The current account will

suffer as a result of substantial import of intermediate products and capital goods and capital account may worsen because of the overseas repatriation of profits, interests, royalties, management fees etc.

3) Though MNCs contribute to the public revenue in the form of corporate taxes, their contribution is less due to liberal tax concession which they get, the practice of transfer pricing, excessive investment allowances, disguised public subsidies and tariff protection provided by the host government.

4) The multinationals may use than economic power to influence government policies so that it harms development. They extract political and economic concession from the government in the form of excessive protection, tax rebates, investment allowances, cheap provision of factory sites and essential social services. Thus private profits may exceed social benefits of MNCs. Sometimes social returns may be negative also. An MNC can avoid local taxation in high tax countries and shift profits to affiliates in low tax countries by artificially inflating the price it pays for intermediate products purchased from overseas affiliates so as to lower its stated local profits. This phenomenon is known as transfer pricing. It is a common practice by MNC and host governments can do little to prevent this. This means loss of revenue to local governments.

5) MNC may damage host economies by suppressing domestic entrepreneurship and using their superior knowledge, world wide contacts, advertising skills to drive out local competitors and inhibit the emergence of small scale entrepreneurs. MNC can ―crowd out‖ the local investors and appropriate the pro fits themselves.

6) At the political level it is feared that the powerful multinational corporations can gain control over local assets and jobs and can influence political decisions at all levels.

PORTFOLIO INVESTMENTS

Portfolio investment refers to the purchase by foreigners of host country bonds or stocks without managerial control. Todaro and Smith defines portfolio investment as financial investments by private individuals, corporations, pension funds and mutual funds in stocks, bonds, certificate of deposit and notes issued by private companies and the public agencies of LDCs. The following are the benefits of portfolio investment.

1) Foreign portfolio investment may lead to the following three development benefits.

a) Foreign investors may insist on efficient market regulation, protection of minority interest, fair trading and brokerage practices as well as adequate disclosure or listing requirements. These regulatory practices are important in bringing about discipline and control.

b) The institutional benefits result from the development of new institutions and investments and the resulting transfer of knowledge and training of local executives. The new knowledge will benefits the local executives.

c) Long term foreign investment may help to stabilize the market by discouraging speculative movements and reduce imperfections that are affecting many of the LDC markets. The above steps like regulatory measure, institutional advantages and market environment will help to increase invest or confidence and participation.

2) The Resource Effect : The shortage in domestic savings are compensated by increased foreign capital since a wider variety of securities are available for domestic investors and foreign investor.

3) The welfare Effect : The participation of foreign companies and institutions in the investment portfolio with regulations encourages the domestic investors also to invest portfolio investment involves diversification effect and individual investors feel safe about their investments.

The other benefits of portfolio investment higher growth prospects due to increase in equity flows and capital re-allocation from low-return to high return activities. Portfolio investments lead to higher liquidity and stronger international integration of stock markets.

Risks of Portfolio Investments :

Higher equity flows may lead to assets price inflation due to imbalance between small domestic asset supply and a large global assets demand. The high liquidity and low transaction cost in portfolio movements may lead to a reversal of portfolio equity flows at any time. There are many risks like exchange risk and political risk in portfolio investments. Besides these risks, institutional constraints like tax issues may also create problems. Portfolio investment may entail more future burden in the form of payments of dividends and profit remittances.

ROLE OF INTERNATIONAL MONETARY FUND AND THE WORLD BANK (IBRD)

In July 1944, as the World War II started turning strongly in favor of the Allied forces, representatives from 45 countries convened in Bretton Woods, New Hampshire, to plan the terms of
post war international economic cooperation. The Great Depression of the 1930s and the world wars led to the collapse of international financial markets and there was a marked decline in the volume of international trade. The two organizations, the international monetary fund (IMF) and the World Bank were created to rebuild international goods and capital market as well as the war ravaged economies of Western Europe. These institutions were created to oversee stability in international monetary affairs and to facilitate the expansion of World Bank. Membership in the World Bank requires membership in the IMF. The World Bank's mission was to provide long term financing for nations in need. The role of IMF was to monitor exchange rates, provide short term financing for balance of payments adjustments, provide a forum for discussion about international monetary concerns and give technical assistance to member countries.

Both the institutions are complementary to each other. The IMF, focuses on macroeconomic especially trade and financial sector issues and the World Bank in concerned with longer term development and poverty reduction. The World Bank advances loans to finance infrastructure projects, reform particular sectors of the economy as well as broader reforms.

THE ROLE OF IMF

IMF was set up at the Bretton Woods Conference to create a framework to avoid a repetition of the disastrous economic policies which results in Great Depression of the 1930s. The objectives of setting up IMF was to 1) Promote international monetary co-operation, policy advice and technical assistance to help countries build and maintain strong economies.
2) To make short term and medium term loans available to solve balance of payments problems. The following are the roles of IMF.

a) Exchange Rate Stability : The basic function of IMF is to ensure stability of the international monetary system. The IMF has to ensure that exchange rate stability is maintained and also remove the exchange restrictions which restrict trade. This is necessary for sustainable economic growth and a rise in living standards.

b) Crisis Prevention : The experience of countries like Mexico, Latin America etc. with economic crisis have made it necessary for IMF to help out the country in times of crisis. IMF emphasized the need to introduce safety measures like adequate foreign exchange reserves, efficient and diversified financial system, social safety nets and appropriate fiscal policy to stabilize and protect the system. IMF initiated a number of steps to make countries stock proof in crisis situations.

c) Crisis Resolution : IMF advises countries with regard to the measures to be taken to handle crisis and address the problems effectively. Depending on the nature of the problem, the countries are advised to reduce fiscal deficit or build up international reserves. Loans are also given to tide over the crisis with each installment conditional or targets being met. Surveillance or regular monitoring of economies and policy advice is intended to identify weaknesses that are causing problems. To maintain stability and prevent crisis in the international monetary system, the IMF receives national, regional and global economic and financial development.

d) Loan Facility : The IMF provides loans under a variety of ―facilities‖ that have evolved over the years to meet the needs of its membership. The duration, repayment terms, and lending conditions attached to the facilities differ, depending on the type of balance of payment problem. All countries except the low income countries borrow from the IMF's regular, non-concessional lending windows. They pay market related interest rates and service charges plus a refundable commitment fee. A surcharge may also be levied to discourage countries from borrowing large amounts.
Low income countries borrow under the poverty reduction and growth facility. They pay a concessional fixed, interest rate of 0.5% a year. The member countries quota in the IMF determines the limit of the foreign exchange provided by the IMF.

e) Other Facilities to help the countries in overcoming the debt problem includes The Heavily Indebted Poor Countries Initiative (HIPC) introduced in 1996, The Multilateral Debt Relief Initiative (MDRI) introduced in 2005 and the Poverty Reduction Strategy

Paper a process introduced in 1999. In 2005, the IMF and the World Bank introduced the concept of Aid for Trade for the least developed countries which combines analysis, policy advice and financial support. In order to help the least developed countries to identify the impediments to their participation in the global economy, IMF also participates in the ‗Integrated Framework for Trade Related Technical Assistance'.

f) Technical Assistance and Training : IMF has been offering technical assistance in the mid 1960s and assisting the newly independent countries to set up their central banks and finance ministries. Most of the technical assistance is given to low income and lower middle income countries belonging to Sub- Saharan Africa and Asia. IMF has been helping in the following ways.

i) Strengthening the financial systems of countries.
ii) Improve the collection and dissemination of economic and financial data.
iii) Strengthen their tax and legal system.

g) Stabilization Policies of IMF : IMF has developed new policies and operations to help the member countries face challenge of globalization and mitigate the risks of global flows of capital. The increase in capital flows have led to deepening of economic integration and interdependence of countries. However there are risks also.

Example - The Asian crisis, Sub-prime crisis in U.S.A. have occurred and IMF took efforts to help out these countries from crisis.

THE ROLE OF WORLD BANK

The World Bank has been actively involved in providing financial and technical assistance to developing countries. The mission of World Bank is to fight poverty, and to help people and their environment by providing resources, sharing knowledge, building capacity and forging partnerships in the public and private sectors.
IBRD was set up in 1944. From a single institution, it developed into an associated group of five development institutions. Originally it was made up of 2 unique development institutions owned by 186 member countries. The two institutions were
1) The International Bank for Reconstruction and Development (IBRD)
2) The International Development Association (IDA).
The IBRD helps in reducing the levels of poverty in the middle income and poor countries and IDA focuses on the World's poorest countries. They are supported by the following institutions.
3) The International Financial Corporation (IFC)
4) The Multilateral Investment Guarantee Agency (MIGA)
5) The International Centre for the settlement of Investment Disputes (ICSID)
The role of the World Bank is to promote long term economic development and poverty reduction by providing technical and financial support to help countries reform particular sectors or implement specific projects. The projects include building schools, and health centers, providing water and electricity, fighting disease and protecting the environment. Although the basic role of the
World Bank was reconstruction, it focuses on the following roles.

a) Poverty reduction and sustainable growth in the poorest countries, especially in Africa.
b) Solutions to the special challenges of past conflict countries and fragile states.
c) Developing solution and customized services as well as financing for middle income countries.
d) Taking up regional and global issues like climate change, infections, diseases and trade.
e) Gathering the best global knowledge to support development.

ACTIVITIES AND FUNCTIONS OF THE WORLD BANK
I. Borrowing and Lending Operations :
1. Borrowing Fund Generation : IBRD lending to developing countries is financed by selling AAA rated bonds in the world's financial markets. IDA is the World's largest source of interest free loans and grant assistance to the poorest countries.

2. Trust Funds and Grants : A number of private and public institutions make deposits in Trust funds belonging to the World Bank. The resources are used for a wide range of development initiatives like Carbon Finance. Global Environment Facility, the Heavily Indebted Poor Countries Initiative, Fund to fight AIDS, Tuberculosis, Malaria etc.

3. Loans : The World Bank offers two basic types of loans and credits : investment operations and development policy operations. Loans are given for investment operations which means projects which help in the economic and social development broadly. Development policy operations provide quick disbursing finance to support a country's policy and institutional reforms. The long term loan provided by IDA are interest free though they carry a small service charge of 0.75 % on funds paid out.

4. Purpose of Borrowing - Lending operations : The grants given by the World Bank gives emphasis to broad based stakeholder participation in development and strengthen the poor and marginalized groups in society, IDA grants have been given to

a) Relieve the debt burden of poor indebted countries
b) Improve sanitation and water supplies
c) Support vaccination and immunization programmes
d) Fight HIV / AIDS
e) Support Civil Society Organizations
f) Reduce the emission of greenhouse gases.

II Analytic and Advisory Services :

The World Bank provides analysis, advice and information to the member countries to bring about lasting economic and social improvements. This is done through economic research and data collection. The knowledge gathered is used to educate the clients which will help them to solve development problems and attain economic growth. This is reaching the people in the following ways.

a) Poverty Assessment
b) Public Expenditure Reviews c) Country Economic Reports
d) Sector Reports
e) Topics in Development

III. Capacity Building :

This is another core function of the World Bank. This includes making available advisory services and Ask as Help Desks, Global Development Learning Network, developing knowledge economy, setting up resource development centres and holding seminars, workshops and conferences on topics like sustainable development and poverty reduction.

IV. Globalization Initiatives :

The World Bank assists the emerging economies to adjust to the opportunities provided by globalization as well as to eradicate the evils of globalization, up gradation and infrastructure, debt relief measures, good governance, help in reducing the incidence of poverty, ensuring gender equality focus on health and nutrition and eradication of trade barriers are the main global initiatives taken by the World Bank.

V. The other roles and activities of the World Bank are in the area of cultural Heritage and Development of countries, development of human rights, ensuring good governance, fight against corruption, bringing about equality in development and Protection of the vulnerable sections of society.

SUMMARY

There has been an increased flow of FDI and portfolio investment in the international scene over the past few decades. FDIs are crucial for the speedy development and integration of developing countries with the global economy. FDI involves more than simple transfer of capital or setting up of a factory in the developing nation. MNCs carry with them technologies of production, tastes and styles of living, managerial philosophies and diverse business practices, private capital flows through the MNCs are attracted towards regions and countries with high financial returns and greatest perceived safety. Capital does not flow to countries with debt problems, and where the governments are unstable and where the risk of capital loss is high.

The reasons for advocating private foreign investment are lack of domestic savings, foreign exchange earnings, higher tax revenues, to overcome shortage in management techniques, technology and skill. The arguments against are stilling the domestic investment, reduction in foreign exchange earnings in the long run, concessions, harmful to domestic countries development, under control over domestic assets and jobs.

Portfolio investment refers to the purchase by foreigners of host country bonds or stocks without managerial control. Portfolio investment has a number of benefits like bringing about regulation discipline and transparency in the home country's dealings long term portfolio investments bring about stability, supplements domestic resources and stronger international integration of stock markets. However, there are risks also like asset price inflation, reversal of capital flows, exchange risks and political risks. Tax issues and the burden of payments of dividends and profit remittances are other risks related to portfolio investment.

With the increased liberalization of the domestic financial markets in LDCs and the opening up of these markets to foreign investors, private port folio investment now accounts for one third of overall new resource flows to the developing countries. In the early 90's the emerging markets were attractive destinations for portfolio investment. However, the crisis which countries like Mexico, Argentine etc. had to undergo led to reduced portfolio capital movements. For LDCs portfolio capital inflows are beneficial since it helps to augment capital formation, enable domestic investors to diversify their assets. However, the main concern of LDCs is about the volatile nature of capital flows. The experience of the emerging economies clearly bring out the need to focus on putting the fundamental conditions for development in place initially since MNCs and other investors follow growth and not lead the growth process.

Both the IMF and the World Bank were born out of the Bretton Woods Conference in 1944. Their aim was to rebuild international goods and capital markets as well as the war ravaged economies of Western Europe.

The IMF was set up to promote international monetary co-operation, offer policy advice and technical assistance and make available short term and medium term loans to solve the balance of payments problems. Hence the main roles of IMF were exchange rate stability, crisis prevention, crisis resolution, providing loan facility, technical assistance and training and stabilization.

The mission of the World Bank is to fight poverty and to help people help themselves and their environment by providing resources sharing knowledge, building capacity and forging partnerships in the public and private sectors.

IBRD or the World Bank was set up in 1944. It developed into 5 associated groups of development institution i.e. IBRD, IDA, IFC, MIGA and ICSID. (The International Centre for the settlement of Investment Disputes.)

The role of the World Bank is to promote long term economic development and poverty reduction by providing technical and financial support to help countries reform particular sectors orimplement specific projects. The World Bank grants assistance to poor countries through IDA, extends Trust Funds, Grant, advisory services, capacity building, up gradation of infrastructure debt relief, ensuring gender equality, health and nutrition and eradication of trade barriers to global trade.

The IMF and the World Bank makes use of stabilization and structural adjustment programmes respectively. IMF is associated with the stabilization programmes. This refers to short term measures to restore the balance of payments. The structural adjustment measures of the World Bank are implemented on a longer term basis to ―restructure the economy and generate economic growth‖. The roles of IMF and the World Bank are complementary and helping the countries to achieve balance of payment equilibrium and welfare are their primary concerns.