ECONOMICS

ECONOMICS OF DEVELOPMENT

Dr. B. R. AMBEDKAR OPEN UNIVERSITY

EDUCATION AT YOUR DOORSTEP

Dr. B. R. AMBEDKAR OPEN UNIVERSITY
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Introduction to the Course

The study of underdeveloped economies has emerged as a separate field of Economics during the past 30 years. Like other Applied Branches, Economics of Development has been motivated as much by the needs of policy makers as by opportunities for theoretical analysis. Its theoretical dimensions have come to be evolved from the application of Marxian, Neoclassical and Keynesian concepts in the 1950s to the more recent formulation of distinctive models designed to explain the observed phenomena of development. Indeed the subject of Economics of Development has developed as a result of the interaction between theory and observation in which the samples studied include both developed and under/less developed economies. Two types of contributions can be distinguished under the Economics of Development : The first type includes those based on the generalization of existing theories by testing them against a larger and more diverse body of experience and the second those utilizing the new concepts evolved to explain empirical phenomena. These two types of contributions are explained in these lessons.An attempt is made in this book to introduce some of the theories and concepts of development. Then it concentrates on the Indian economic problems such as national income, planning, agriculture, industry, foreign trade and the twin problems of poverty and unemployment.

This book deals with the topics in Economics of Development included in the syllabus for the Second Year of the B.A. course offered by the Andhra Pradesh Open University. These topics generally cover the 'core' area of the subject to be studied in the Second Year of the Three Year Degree Course in Economics (B.A.). The syllabus for the sake of convenience is divided into blocks, each of which comprises a number of units. Each block generally covers a specific area of the subject.

The first block deals with the characteristics of underdeveloped countries, the factors that hinder and factors that are conducive to economic development. It also explains the theories of capital formation and of choice of techniques and choice of goods. The objectives of economic development are dealt with in the last unit of the block. The second block concentrates on national income analysis and the block on planning which presents the discussion of the Indian Five Year Plans, their targets, successes and failure. The fourth, fifth and sixth blocks deal with the serious problems prevalent in the agricultural, industrial and foreign sectors and the measures to solve them. The last block is concerned with the analysis of the two most important problems facing India, viz., poverty and unemployment, in their historical and current contexts.

The Units are prepared by specialists and restructured in conformity with the University's format and so as to enable the student to read and understand them without much difficulty. Each unit begins with a table of contents of the unit followed by a statement of its aims and objectives. Short answer questions to test the students progress are incorporated in the body of the unit. At the end of each unit, model examination questions are provided to test the comprehension of the subject by the student.

The University hopes that this material will help the student to get acquainted with the principal issues in Economics of Development which make for its distinctiveness and significance.

Economics of Development

Contents

Block - I

This block on **"Understanding Development and Underdevelopment"** explains the characteristics of developing countries, the factors which are conducive to economic development, and which hinder economic development. It also discussed the theories relating to capital formation and choice of techniques and of goods. In the end, it discusses the objectives of economic development.

The Units included in the block are :

Unit - I	:	Characteristics of Underdeveloped Countries
Unit - 2	:	Factors For and Against Economic Development
Unit - 3	:	Theories of Capital Formation
Unit - 4	:	Choice of Techniques and Choice of Goods
Unit - 5	:	Objectives of Economic Development

Unit - 1 : Characteristics of Underdeveloped Economies

Contents

1.0 Aims and Objectives

This unit discusses the characteristics of underdeveloped countries in general and India in particular.

After reading the unit, you will be able to

* broadly categorize the characterictics of underdeveloped countries,
* identify the economic features of developing countries,
* recognize the demographic features of underdeveloped countries,
* explain the socio-political features of underdeveloped countries and
* analyse the historical factors of underdeveloped countries.

1.1 Introduction

Looking at the economic state of the world today, we see the countries of the world divided into two broadly distinguishable groups. In the one group we find the people enjoying a very high standard of living and in the other the majority of them living in great poverty and suffering from illiteracy, unemployment and malnutrition. The former, we know, are "developed or advanced countries", while the latter are the "underdeveloped or backward countries". When some countries of the latter group show development, they are described as "developing countries". How is it that some countries ae rich while the other are struggling to provide their populations with at least the bare necessaries of life ? What are those factors which have helped the former, while keeping the latter at low levels of living ? How can the underdeveloped countries better themselves, and what are those areas they should concentrate on ? These are the kinds of questions which will be examined in this book on "Economics of Development". We shall consider the problems and policy prescriptions of underdeveloped countries in general and of India in particular.

What are the chief features which distinguish an advanced country from an underveloped country? We have mentioned that the standard of living of the majority of the people is very low in underdeveloped countries. This is just one of the characteristics, and if we look at the different countries grouped under what is called "The Third World", we find that in spite of many differences they share some common features. About 141 countries are grouped under this category, spread over Asia, Africa and south America. Some like Middle East countires are quite rich, while others like some African countries are extremely poor. Let us first of all examine the common characteristics before we go on to define "underdevelopment".

Characteristics of Underdeveloped Countries

Underdeveloped countries range from large countries like India, with a population of 700 millions, to small countris like Zambia, with a population of only 6 million. Some are richly endowed with natural resources, while others are quite barren. However, all these countries share certain common characteristics which have been classified (by Leibenstein) under four headings - economic, demographic, technological and socio - political. Let us now look at some of these features.

1.2 Economic Features

1.2.1 Low Standards of Living

This feature is the most striking one in contrast to that of the developed countries, where the average citizen enjoys a fairly high standard of living. The per capita income (i.e., the natioal income of the country divided by its population) is the usual index of the standard of living of the people. A comparison of the per capita incomes of some of the underdeveloped countries with those of the advanced countries shows the vast difference in living standards. For instance, in 1976 India had a per capita income of $150, Bangla Desh $110 and Sri Lanka $200, while USA's per capita income was $7,900, U.K. $ 4,020 and Japan $ 4,900. This gives a rough picture of the levels of living in the underdeveloped countries as compared to those of the developed countries. There is widespread poverty in these countries, with a large section of its population, some 40 to 50 per cent, living in a state of abject poverty. Inadequate housing, poor health, limited or no education, unemployment and malnutrition are prevalent among large sections of the population.

1.2.2 Low Rates of Growth of the Economy

Not only is the per capita income low, but the rate of growth also is very slow. For example, looking at the growth of per capita income over 1962-1972, we find that it increased by 9.4% in Japan, 6.4% in USSR, while in India it increased by 1.1% only. This low rate of growth widens the existent large gap between the advanced and the underdeveloped countries. The low rate is primarily due to a slow increase in the national income. The per capita income is also affected by a high growth of population. Let us first of all examine the causes of slow growth of national income before considering the effects of population growth.

1.2.3 Preponderance of Agriculture and and Primary Sector

In most of the underdeveloped countries, agriculture, mining, fishing and forestry are the main sources of livelihood. These are known as the "primary sector". i.e., the production or extraction of raw materials directly from nature. In most underdeveloped countries, agriculture is the predominant occupation giving employment to the bulk of the population. For example, in 1970 68% of the population in India, 71% in Pakistan and 64% in Burma were engaged in agriculture and related, industries, while only 3% in the UK, 4% in the USA and 8% in Canada were engaged in this ector. As for the contribution of this sector to national income, 45% of national income in India comes from the primary sector while it is only 2% in the UK and 3% in the USA. This shows that in the advance countries the bulk of the production comes from the industrial sector, and hence the greater importance of industry and manufacturing in the developed countries. That is why the advanced countries are called "industrial countries", and the underdeveloped countries "agricultural countries".

1.2.4 Low Levels of Productivity

Although the underdeveloped countries are agrarian in far as production is concerned, they are no where near the advanced countries. For instance, the per hectare productin of rice in 1975 was 1,887 Kgs in India, 6,185 Kgs in Japan; and that of wheat 1,338 Kgs in France. There are many reasons for this low level of production. The size of holdings is very small in the underdeveloped countries. sometimes highly uneconomical, inaccessible and of very low fertility. Besides, the production is mostly for self-consumptin or what is called "subsistence farming". In many cases the landlords take away the bulk of the produce leaving very litle for future investment. Lack of proper irrigation facilities, great dependence on erratic monsoon rains, and use of inferior techniques are other reasons for the low productivity of agriculture in the underdeveloped countreis.The Block on "Agriculture Sector" has dealt with this problem in detail.

The bulk of the population tends to depend on agriculture because of lack of employment opportunities in other sectors. Thus, agriculture in undeveloped countries is over populated leading to what is called *"disguised unemployment"*. This means that the work that can be done by two persons is done by four or five persons. If these extra persons are removed, the output will not be affected.

The man/land ratio is very high in most underdeveloped countries, because of the concentration of workers in the agricultural sector. Ignorance of the benefits of rotation of crops, use of modern methods of cultivation, crop intensity and storage, lack of marketing facitlies, and the presence of "middle men" who exploit both the farmers and the consumers, are the other marked features of agriculture in underdeveloped countries.

1.2.5 Use of Inferior Techniques of Production

Apart from there being overcrowding in agriculture, in many countries the techniques used are of highly inferior nature. This results in low productivity per man. Whatever little capital that is available is often inefficiently used or frittered away and most of the work is ill-organised. Thus, with a slightly improved equipment and better organization, the output could be improved. In advanced countries high output levels are achieved by the use of capital intensive techniques. They had to adopt these techniques because of shortage of labour. However, in underdeveloped counties where labour is abundantly available, techniques need not be capital intensive. Instead, improved labour intensive techniques and better inputs (like improved plough, irrigation facilities and fertilizer) should be used to achieve higher yields.In one of the units, we learn the choice of techniques.

1.2.6 Low Rates of Capital Formation

This brings us now to one of the most important characteristics of undedeveloped countries, viz., the lack of capital. The growth of the capital sector or capital formation includes the growth of (a) basic industries which produce the basic requirements of industrial growth such as steel, electricity, coal, aluminium, copper and other metals and minerals. A comparison of per capita consumption of steel in different countries shows that in India in 1970 about 11 Kgs of steel per head was available, while it was 528 Kgs in the USA, (b) the heavy sector which includes heavy machines and equipment like the mining machinery, metallurgical machines, blast furnace, dynamos, machine tools, etc., and

(c) infrastructural facilities like railways, road, water and air transport, communications through newspapers, radio, telegraph, telephone and postal services.

Now in most underdeveloped countries these sectors are either absent or growing at very low rates. Since these factors form the foundation for the industrial development of the economy, their rate of growth has to be stepped up.

1.2.7 Low Rate of Investment

The low rate of capital formation is due to the fact that investment in these sectors is very low as can be seen from the data given above. Since the majority of the people live in great poverty, they are incapable of increasing investment in the production sectors. However, a high rate of investment does not automatically guarantee a higher rate of growth. If, for example, investment is done in industries producing inessential goods, the benefits of investment are lost to a large majority of people. Similarly, if investment is done in highly mechanised techniques, then also the rate of growth will be low. Thus not only the rate, but the form of investment also is equally important in determining the growth. Further, for the richer sections in the underdeveloped countries investment buying of gold or property and not in manufacturing or in furthering production through improvements in productive capacity. Thus, even though surpluses are available, they are used only for an extended form of consumption. Hence, production and capital formation suffer in these countries.

1.2.8 Export of Primary Products

Turning to the foreign trade of the underdeveloped countries, we find that most of the exports are of the primary products. The bulk of the world's supply of natural resources comes from these countries. Thus, tin from Malaya, Bolivia and Thailand; rubber from Ceylon and Burma; tea, coffee, sugar-cane, tobacco, cotton and other metals and minerals are exported from the underdeveloped countries. The advanced countries are the importers and users of these resources so as to feed their growing industries with these raw materials. Except for the oil-producing nations, who are able to dictate their own terms to the importing nations to some extent, the other underdeveloped countries are unable to hold their own in this respect. The foreign exchange earnings fluctuate greatly, and if the advanced countries for some reason stop imports, the economy of the underdeveloped countries will be adversely affected. Competition and rivalry among suppliers, over-production, unstable political connections and discovery of substitutes (e.g., plastics, greatly affected the rubber industries of the East Indies) are the other factors that make export earnings of the underdeveloped countries very uncertain. Moreover, the underdeveloped countries import expensive capital equipment from the advanced countries, and thus generally suffer from balance of payment problems.

Check Your Progress - I

1. List the economic characteristics of developing countries.

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2. What is primary sector ?

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3. What are the major goods which are exported from underdeveloped countries?

1.3 Demographic Features

Most of the underdeveloped countries are highly populated, and their populations are increasing at very fast rates. Let us now examine some of the features connected with the demographic or population problems of the underdeveloped countries.

1.3.1 High Birth Rates

Population expands due to high birth rates, which is about 35 to 40 per thousand per year in the underdeveloped countries as against 10 to 15 per thousand in the advanced countries. The high birth rate results in a large percentage of children being under 15 years of age. As this generation grows and reaches reproductive age, the population increases still further and so it goes on.

1.3.2 High Death Rates

Birth rates are high and so also death rates. The prevalence of many fatal diseases reduce the life expectancy of the population. Lack of medical facilities, poor sanitation and malnutrition account for high mortality rates in these countries. The death rate in the underdeveloped countries is as high as 17 to 20 per thousand persons, while in the developed countries it is about 7 to 8 per thousand.

However, the present death rate has been greatly reduced from what it was about half a century ago. The eradication of number of fatal diseases like small pox, plague, etc., has reduced the death rate in India from 40 to 43 per thousand in 1911 to 15 per thousand in 1971. However, this death rate is still quite high as compared to that of developed countries. Life expectancy here is about 50 to 52 years as against 70 to 75 years in the advanced countries.

1.3.3 High Growth of Population

Although birth rates have remained constant or even fallen slightly (from 49/1000 in 1911 to 35/1000 in 1971 in India) the decrease in death rate has resulted in a **population explosion**. The rate of growth of population in the underdeveloped countries is now about 2.5 to 3 per cent as against 0.3 to 0.8 per cent in developed countries. At this rate the population will double itself in the underdeveloped countries in 25 to 28 years thereby imposing a great burden on them. The high level of population growth reduces the growth of the per capita income as well.

1.3.4 High Rates of Unemployment

When population increases the labour force increases, but with a slower rate of growth of the economy, employment opportunities do not appreciately increase. Hence there is a great deal of unemployment in these countries. This takes the form of disguised unemployment, under-employment and open unemployment. We have already examined the first type of unemployment. In the case of under-employment it includes all those who are willing and eager to work, but who do not have employment opportunities. Unemployment has been increasing in most underdeveloped countries, in Africa from 31% in 1960 to 38% of its population in 1973, in Asia from 24% to 28%

and in Latin America from 18% to 25%. The lack of employment opportunities in rural areas lead to migration to the cities which results in over-crowding, frustration and increasing crime.

1.4 Socio-Political Features

The non-economic features also are important in classifying a country as underdeveloped. The behaviour, social organisation, literacy levels, political and historical background will now be examined to trace the common features of the underdeveloped countries.

1.4.1 Inequalities of Income and Consumption

We have seen that the national income of these countries is low and that it grows at a very slow rate. Now let us see how this income is distributed among the people. Usually, there is a very uneven and unequal distribution of national income in the underdeveloped countries. The land and asset holding classes receive the bulk of the national income. If we arrange the population in the descending order of their incomes, starting with the highest and coming down to the lowest, we find that the top 10% of the population receive 25% of the national income in India. This means that 25% of total national output goes to the high income groups, while the bottom 20% receive only 8%. This results in a great disparity in the living standards of the people with a small section enjoying a very high standard of living and the rest living in abject poverty. There is thus a "dualistic" feature in the underdeveloped country with affluence existing side by side with poverty. Thus, there is a striking contrast between urban and rural standards and between one region and another.

1.4.2 Social Behaviour

Social inequalities of caste, rank and status are predominant in the underdeveloped countries. This results in the suppression and exploitation of the lowest classes. Usually, employment is restricted to what is allowed within one's caste - and this kills initiative and enterprise. social and religious taboos, and superstition are also prevalent to a very large extent in these countries.

1.4.3 Conspicuous Consumption

Any surplus generated is used for conspicuous consumption, i.e., to "show off" one's status either by buying houses or porperty, jewellery, cars or spending lavishly and wastefully on religious and social ceremonies like weddings, festivals, etc. This boosts up the person's prestige in society. Unfortunately, such expenditures are unproductive and do not increase the output of the economy.

1.4.4 Illiteracy

The level of education is a fairly reliable indicator of the level of development of a country. Most underdeveloped countries suffer from having illiterate and uneducated population. The literacy rate was 34% in India, 16% in Pakistan, 25% in Ghana while it was 98% in Japan, and 99% in the USA and the UK. The low level of literacy spells traditional modes of behaviour in respect of a majority of the population, lack of knowledge of new methods of production and so on.

Check Your Progress - II

4. List the demographic features of underdeveloped countries.

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5. What are the major socio-political characteristics of developing countries ?

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1.5 Historical Features

It is interesting to note that most of the underdeveloped countries were former colonies of advanced countries like Britain, France, Holland or Spain. The advanced countries used their colonies for two main economic purposes-first, to secure the raw materials required for their own industrial sectors and secondly, to provide the market for the sale of their finished products. This resulted in the complete supression of the domestic economy, the discouraging of the local industries thereby destroying the market-for local products. Now that these underdeveloped countries have gained independence, they have to start from scratch to bring about their balanced economic development.

All the above mentioned characteristics go to show the tremendous changes that are to be carried out before these countries can become "advanced countries". With so many characteristics, it is difficult to define underdeveloped countries in general terms. According to the UN, "An underdeveloped country is one in which the per capita real income is low compared with the per capita real income of the advanced countries like the USA, Canada, Australia and West Europe". Here the standards of living alone are compared, but this need not be the only criterion. It is possible that the per capita income may be as high or higher than that of the advanced countries; for example, Kuwait has a per capita income of $ 15,500 in 1976, the highest in the world, though it is an underdeveloped country. A better definition would pinpoint the basic defect or deficiency that distinguishes an underdeveloped country from a developed country. Nurkse defines the underdeveloped countries as those which when compared with the advanced countries are under-equipped with capital in relation to their population and natural resources. The Indian Planning Commission introduces the concept of unemployment also into its definition : underdeveloped countries are characteristed by the co-existence in greater or lesser degree of unutilised or under-utilised man power on the one hand and of unexploited natural resources on the other.

1.6 Summing up

In this lesson we have examined the various characteristic features of the underdeveloped countries such as economic, demographic, socio-political and historical characteristics. However, these do not bring out the causes of underdevelopment, as the main factors hindering development. They only help us to identify an underdeveloped country. For development to take place the chief obstacles should be identified and removed. How this can be done will be discussed in the next unit.

-Ms.Prabha Pant.

1.7 Suggested Books

1. Datt & Sundaram : Indian Economy
2. Benjamin Higgins : Economic Development
3. Ghosh : Economics of Underdevelopment

1.8 Model Examination Questions

I. Answer each of the following questions in about 30 lines each :

1.What are the factors required for economic development ?
2.Analyse the economic characteristics of developing countries.

II. Answer each of the following questions in about 15 lines each :

1.What are the disadvantages of keeping growth rate as the objective of economic development?
2.How does increase in employment lead to economic development ?
3.Explain the demographic features of economic development.

Unit - 2 : Factors For and Against Economic Development

Contents

2.0 Aims and Objectives

The unit examines the main factors which obstruct economic progress and those factors which generate economic development.

After reading the unit, you will be able to

* describe the non-economic factors which hinder economic development,
* explain the economic factors which hinder development,
* analyse the factors which promote economic development, and
* distinguish development from growth.

2.1 Introduction

Having looked at the different features of underdeveloped countries, we now turn to the basic reasons for underdevelopment. In this unit, we will examine the main factors which obstruct economic progress, and then go on to the key sectors which should be given priority to generate changes in underdeveloped countries.

2.2 Factors which Hinder Economic Development

There must be some fundamental reason why the underdeveloped countries have remained static or nearly static, while the western countries have been forging ahead. Different explanations have been put forward by different economists to explain the causes of persistent stagnation. In this unit we shall examine some of these obstacles or "bottle-necks" which hinder development. These bottle-necks can be classified into two groups: non-economic factors and economic factors.

2.2.A Non-Economic Factors

2.2A1 Historical Factors

As mentioned in the first unit, the basic reason for the backwardness of the underdeveloped countries is that they were late starters in the race. This is due to the fact that most of them had been colonies of Western powers till recently. As we have seen earlier, this resulted in their exploitation by the colonial powers. The colonies provided the raw materials as well as an assured market for the finished products of the advanced countries. As such the latter were not interested in developing their colonies help them to achieve economic self-sufficiency, as that would retard their own economic development. It was, therefore, in their interest to keep these colonies perpetually in a state of under-development. The Western countries thus developed only those sectors which would help in furthering their own economies and facilitate exports. Thus, railways, ports, harbours were built to open up the rich hinterland for export purposes. The colonies thus grew in a haphazard manner, with most of their traditional industries destroyed due to the import of cheap foreign goods. The Indian cotton textile industry is a striking example of this type of policy followed by Britain. After attaining independence, the former colonies found themselves with practically ruined economies, some sectors well developed while others very backward; and they had to shoulder the onerous task of building up their economies from scratch, and to correct the many imbalances caused by the unfair economic practices of the colonists.

2.2.A2 Social and Cultural Obstacles

The attitude of the masses in the underdeveloped country is strikingly different from that of their western counterparts. In many underdeveloped countries, the dogmas of religion are strictly followed, and the majority of the population believe in fate, karma, suppression of desires and maintains philosophical attitude towards life. Greater stress is laid on spiritual development than on material welfare. This has resulted in a stoical acceptance of all reverses, hard-life, death and disease, with little effort being made to improve living conditions. The Western countries breaking away from the orthodox church and the narrow confines of religion were in a better position to improve their material condition. With a more rational and scientific outlook, they recognised the great potentiality of science and nature, and worked to harness them for economic development. But in the underdeveloped country, where superstition and orthodoxy prevail, understanding of natural phenomena was not put to production use.

Certain inhibiting social customs were also responsible for the low level development. The joint family system killed all initiative and enterprise, tying down all members of the family in one house. Since all the sons shared the property, fragmentation resulted thereby giving rise to small uneconomical holdings . This resulted in a closed family system and discouraged those with more initiative or enterprise who wished to take up different occupations. There was little scope for diversification or change of occupation from generation to generation. In India, many arts and sciences like medicine were lost because propagation of these was strictly castebased. Education was also restricted to a few castes, and was usually of the scriptures, arts, music and literature, which, though helpful to the development of the mind, could not help economic development.

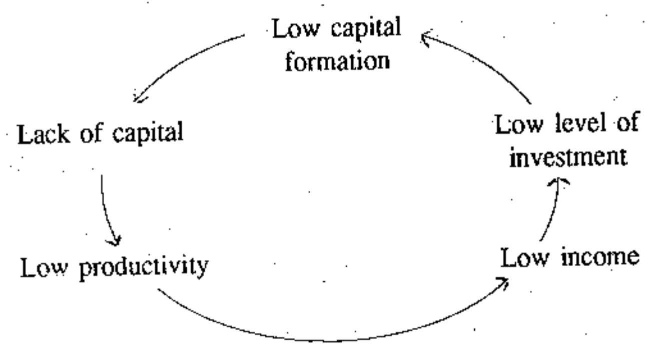
2.2.B Economic Factors Which Hinder Development

Given the non-economic factors, we can now examine the fundamental economic factors which hinder development. It has been widely accepted that it is the low level of capital accumulation and high rates of population growth that hinder economic development. Now let us look at some of these theories:

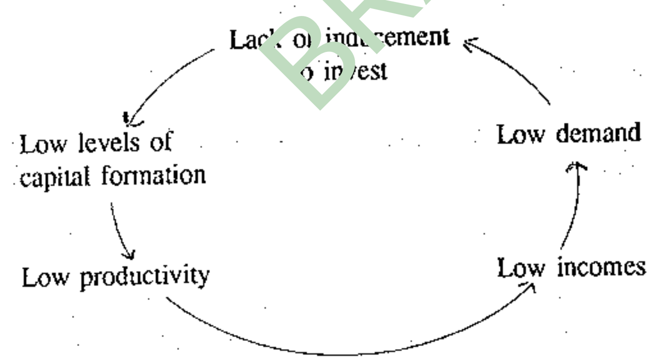
2.2.B1 Capital Deficiency

According to Nurkse, *"country is poor because it is poor"*. Thus the very cause of poverty and underdevelopment is poverty itself. This is because the underdeveloped countries are trapped in the *"vicious circles of poverty"*- i.e., a set of forces which act on and react to each other in such a way as to keep a country always in a state of poverty. These forces are so strong that the underdeveloped countries are caught in a trap with no possibility of breaking free by themselves.

Underdevelopment is the result of lack of supply and demand for capital. Thus there are vicious circles on both the demand and supply side of capital formation. **On the supply side,** capital formation can be generated throught investment of the surplus or savings. But the savings are low due to the low level of income received. The low incomes are due to the low level of production. Low productivity is caused by lack of capital. Lack of capital is due to the low level of saving and investment. Hence the vicious circles of the supply side is complete. This can be shown in the form of a diagram.



On the demand side, Nurkse says that the incentive to invest is lacking. An expansion in production is caused by increasing demand for goods and services. But in an underdeveloped country, demand is low because of low incomes. Low incomes are caused by low productivity which is in turn due to lack of capital. Lack of capital is due to lack of inducement to invest. This forms the demand side of the vicious circle. Thus:



It can be seen that low productivity leading to low income is a factor common to both circles. These circles trap the underdeveloped countries in a low income, low productivity trap at a stagnant level, and only if it can be broken at some point can development take place. How this can be done will be discussed in the next unit.

2.2.B2 Population Pressures

In most of the Asian countries, the high rate of population growth has had an adverse effect on economic development. With improvements in medical and health facilities and the eradication of many fatal diseases and epidemics, the death rate has been reduced in underdeveloped countries. With only a marginal fall in birth rate, most of the underdeveloped countries are experiencing *"population explosion'*. While almost the same conditions were experienced by the advanced countries during their development phase (in the 18th and 19th centuries) the extra population found an outlet in their colonies and in the New World like Canada, USA, Australia and New Zealand. This is not possible in the present underdeveloped countries with the result that there is over population in agriculture and other primary sectors. Population can act as an obstacle in the sense that every increase in production is swallowed up by the increasing numbers. This leaves very little surplus for investment and the development effort has to be much more than what the underdeveloped countries are capable of bearing. Increase in demand for consumption would mean a large part of investment being diverted to the production of goods meant for current consumption; and hence a reduced investment in long term projects which are required for reaching higher growth rates.

Increasing population leads to increasing unemployment, as employment opprtunities do not keep pace with population growth. This means that the burden on the employed increases. The unemployed, the children and the aged have to be looked after by the few employed persons. This results in lowering the per capita income and consumption, leading to poverty, malnutrition and frustration.

2.2.B3 Lack of Technical Knowledge

For each country there are appropriate techniques depending on its resource endowments. Failure to identify these prolong the state of underdevelopment. Further, skill formation should be directed towards the understanding of the technologies relevant to these countries. Scientific improvements, etc., should be primarily aimed at improving these techniques. Failure to do so hinders economic development. The failure could be of two kinds. (a) In some underdeveloped countries, the educational facilities required to understand these are absent due to a very low incidence of literacy. Thus, the population is not even equipped to understand these techniques and there is a large scale dominance of inferior and inefficient techniques. (b) In some other countries a large majority of people is illiterate and only a small minority is literate and highly trained. The latter are too educated to be able to handle techniques appropriate to these countries. For instance they might have been trained to perform highly sophisticated surgery but they may be incapable of planning for the provision of improved health facilities in the rural area. In such countries, we have highly trained man-power coexisting with underdevelopment. India, for example, has the third largest scientific manpower in the world, and yet it is an underdeveloped country. What is required here is a plan to reorient our education to suit our needs. Thus in the underdeveloped countries ignorance of appropriate techniques of production and the methods to improve output are the hindering factors.

2.2.B4 Dualistic Economies

In the previous unit, we have seen that the underdeveloped countries are characterised by a dualistic economic structure. With great inequalities of incomes, the high income groups are affected by the consumption patterns of the advanced countries. A small section of the rich are able to enjoy a very high standard of living, while others live in great poverty. The demand for luxury goods leads to a misuse of scarce capital goods, foreign exchange and trained manpower. The diversion of these resources leads to reduction in the real resources available for legitimate economic development. Thus a dualistic economy not only causes inequalities of income and consumption but also sets up a formidable obstacle to economic developement.

Check Your Progress - I

1. What is the vicious circle of poverty?

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2. What is meant by population explosion ?

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2.3 Factors Which Promote Economic Development

However, many of the hindering factors could, if properly managed, be made to generate development. May economists have shown that population need not be a bottleneck, but has a great potential for generating development activities. A large supply of labour can be taken advantage of in two ways:

(a) With large surplus labour, workers will be willing to work at low wage rates. Since wages are also a cost of production, the cheap supply of labour reduces costs. This leads to higher profits that can be used for investment, thus leading to more production and an increase in the rate of growth. In the case of labour shortage, higher wages have to be paid and the cost of production would increase the lowering profits and investments. Hence a surplus unemployed labour force would actually be a helpful factor in economic development.

(b) Secondly, labour surplus encourages the use of labour-intensive techniques of production. These techniques tend to use more of labour than of capital. In many of the industries, labour intensive techniques of production would mean quicker and cheaper output. For instance, in the laying of the railway lines, roads, irrigation canals or even building dams the labour-intensive techniques of production help in increasing output even without the help of complicated machinery like cranes, earth-movers, etc. This not only leads to increase in production but also ensures the availability of scarce capital goods wich can be used more efficiently, elsewhere, to build up other sectors.

(c) Other factors which promote economic development are increase in capital formation, education and change in the outlook of the masses. The two major hindrances to development, namely, population and inadequate supply of capital can be used to plan for rapid economic development. The first of the two helps us to obtain as much labour as is needed at low wage rates and the latter enables us to use labour-intensive techniques.

2.4 Growth versus Development

Having read about the characteristics of the underdeveloped countries and the striking contrast between them and the developed countries, we can now summarise what we mean by *economic development*. It is the process by which an economy changes from a low productive, labour-intensive, and some times primitive forms of production, with illiteracy, poverty and unemployment, to an economy with capital intensive, highly productive, full employment and high standards of living. This is to be accompanied by a complete change in the structure of production and distribution of income, outlook and attitudes of the people in the economy. Thus the entire social, and economic environment has to change. Economic development is, therefore, not only growth, but also growth with structural changes in the economy, a complete transformation in structure.

Economic growth, on the other hand, is mere expansion without structural changes - sheer multiplication. There can be growth without development. For instance, some of the Middle East countries have a high rate of growth of national income, bout this has not changed either the techniques of production or standards of living. This is growth, not development, because the national income is increasing due to oil-export earnings, thugh these countries are far from being self-sufficient, since most of them lack a strong capital base. Growth is, therefore, expansion without structural change, while development is expansion with changes in the structure of production, consumption, etc.

Economic development is usually measured in terms of increase in national incomes of the economies concerned. The United Nations described the 1950s and 1960s as the "Development Decades" and fixed the rate of development at 6% growth of gross national product per annum. Unfortunately, although many underdeveloped countries managed to achieve this rate of growth, it did not in any way bring about self-generating economic development in these countries. It is so because the gross national product (GNP), being an aggregate figure, cannot show the changes in the structure of the other components of the economy.

The Gross National Product does not show which sectors receive the benefits of growth. When the increase in income is cornered by high income groups causing increase in inequality, the benefits of increasing GNP do not trickle down to the poor.

Nowdays, other indices are being used to gauge the level of development in underdeveloped countries The growth of certain important sectors like per capita availability of steel and electricity, literacy rates, levels of unemployment, infant mortality rates, the number of doctors and nurses per thousand popultion, are other indices used to determine whether the benefits of development are reaching a majority of the population or not.

Check Y^ur Progress - II

3. Define economic growth?

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4. What is economic development?

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2.5 Summary and Conclusions

In this unit, we have examined some of the main economic and non-economic factors which hinder development. Some of these obstacles can be removed and others may actually be of great help in promoting economic development. Of all these obstacles, the lack of capital is the most important one. How lack of capital affects development and how it can be remedied will be the topic for out next unit.

-Ms.Prabha Panth

2.6 Suggested Books

1. Benjamin Higgins	:	Economic Development
2. Ghosh	:	Economics of Underdevelopment
3. Kindleberger	:	Economic Development

2.7 Model Examination Questions

I. Answer each of the following questions in about 30 lines :

1. Explain the major factors which hinder economic development.
2. Why does Nurkse agree that country is poor because it is poor? Explain it by using the concept of vicious circles.

II. Answer each of the following questions in about 15 lines :

1. Distinguish the economic development from growth.
2. Explain the factors which promote economic development.
3. Is excessive population growth a hindrance to economic development ? Explain.
4. Explain the concept of 'vicious circle of poverty'?
5. What do you mean by 'Population explosion'?

Unit - 3 : Theories of Capital Formation

Contents

3.0 Aims and Objectives

This unit explains the meaning of capital formation and examines the factors by which capital formation increases.

After reading the unit, you will be able to

* describe the concept of capital formation and
* examine the theories of capital formation

3.1 Description of Capital and its uses

All production requires the use of Capital - some tool or implement which helps to get a higher output. It could be a simple tool like a knife or axe or complicated machinery like computers. In the underdeveloped country, the minimum of such tools are used; firstly, because of a large proportion of workers being unemployed, labour intensive techniques are used which help to increase employment; and secondly, because of lack of knowledge about better techniques of production. As such a simple plough, axe or loom may be used; these being produced by the village iron-smith or carpenter. Thus, a few processes may be required to produce the capital goods in question, giving employment to those engaged in that trade.

But consider the industrialised countries. Here, in agriculture, tractors or combined harvestors may be used. To produce a tractor, a whole series of processes are required - tractor - building equipment, components, wheels and other parts, plus raw material like petroleum or diesel oil. To produce the components, steel mills and metal-fabricating machinery are required. For all this, the basic metals and minerals have to be produced, the mining industry developed, as also the transport, etc., required for them and electricity produced by dams, which have to be built, etc. Thus a whole range of industries have to be established, before the final product is produced. This applies not only to tractors, but also to the entire range of final goods produced in the advanced countries. You can see that the method of producing the final product is a round-about method of production. For this, all the industries producing steel and other metals, heavy machines and tools, dams, thermal stations, etc., have to be established, before the final product like, say, food can be produced. The production of all the above basic industries, therefore, constitutes **"Capital Formation."** The underdeveloped countries are deficient in these capital goods industries, and only by starting these industries i.e., through capital formation can development take place.

Check Your Progress - I

1. What is capital ?

3.2 Theories of Capital Formation

The next question that arises, is how an underdeveloped country without an appreciable industrial base can carry over this enormous task of capital accumulation. Different theories have been put forward to show how an underdeveloped country can proceed to build up its capital base. Let us examine some of these theories.

3.2.1 Increase in Savings

Most theories of capital formation stress the need for increasing savings as the first requirement for capital formation. Since capital formation has to be financed out of surplus, it is assumed that an increase in savings will automatically cause an increase in capital formation through investment. Thus, an increase in monetary savings is sometimes equated with capital formation and efforts are made to increase savings through various government policies.

This is, however, not the correct approach to capital formation. We find that in India the savings rate has increased from about 5% of Gross National Product in 1950s to about 20% in 1978-79. 20% is usually considered to be adequate for a developed economy. However, there has not been a corresponding increase in capital formation or in the growth rate in India. This is due to the inherent defect of using savings as an index of capital formation. Firstly, savings are not regarded as a physical surplus used for reinvestment. Then these real savings in the form of physical surplus bring about capital formation. But usually this mode of increasing physical savings is overlooked. Stress is laid on monetary savings, which has no direct effect on capital formation.

Secondly, increase in monetary savings is not the way to increase capital formation. Those who save need not be those who invest. In India, millions of people may be saving a small part of their incomes, but this does not mean that such savings are immediately converted into dams, railways or steel mills. The link between savings and investment is not automatic or simultaneous. Thus, increase in savings need not necessary increase capital accumulation.

In a poor country like India, savings of the majority of people may form a very small part of income, especially among the rural and urban poor. Moreover, the lack of knowledge of techniques, of basic infra-structure, skills, technical training, machinery is what constitutes the actual obstacle to capital formation, rather than low levels of savings.

3.2.2 Development Through Unlimited Supply of Labour

According to Arthur Lewis, a country with surplus population and disguised unemployment, can have the process of capital formation inherent in it. Thus, the surplus population can be diverted from the overpopulated agricultural sector to that of capital formation. The unlimited supply of labour thus forms a king of investment from the traditional sector, when labour-intensive techniques are used, in the modern sector, where its services can be used for capital formation. Since there is such large scale unemployment, the wage rate can be kept constant at a low level. Hence the surplus (difference between output and labour cost) can be maximised, and invested for further production.

The merit of the above model is that it recognises the potentialities for development that lie in the unlimited supply of labour. Further, in the initial stages of capital formation, labour-intensive techniques may have to be used to build a formation over which further capital can be accumulated. The model has been criticised on the grounds that it is inapplicable to those underdeveloped countries which have labour shortage such as the African and South American countries, and cannot be a general solution to the problem of capital formation.

3.2.3 Balanced Growth

You have already been told about the vicious circle of poverty that traps a country at a low level of development. This theory was put forth by Ragnar Nurkse, who also suggested various remedies to break out of this vicious circle. Nurkse explains that the low level of capital formation is due to deficiency of demand and supply of capital. This deficiency is caused in turn by lack of capital. Lack of demand results in a small market for any goods produced on a large scale. For example, in some backward area, if a modern shoe factory is established, once the demand for shoes is met it will reach its saturation point. Also the workers in the shoe factory will not spend all their money to buy only shoes. They would wish to buy cloths, furniture, etc. But if there are no factories producing these goods, then the shoe factory cannot expand further. It may soon have to close down due to lack of demand. Thus setting up a single industry, according to Nurkse, is futile, because of the inter-linked nature of demand for various goods by workers in various industries.

Obviously, the best way to tackle this problem is not by applying capital to one industry, but ot a whole range of industries in a balanced manner. Thus, the various industries will complement each other and support each other's growth. This *balanced growth* of investment in goods of mass consumption would break the vicious circle of poverty. Nurkse also supports Lewis's model of unlimited supply of labour as a source of capital formation. Since most underdeveloped countries have large populations with disguised unemployment, this itself could initiate capital formation. The unproductive surplus workers are being sustained by the productive workers. This shows that there is a surplus over and above what the productive workers are consuming, which goes to feed the unproductive workers. If these are removed, and employed at the same wage rate in the capital sector, then there can be a more productive use of this surplus labour. Thus, disguised unemployement can be used for the accumulation of capital by reallocating the surplus labour to the capital sector.

The above model highlights the importance of balanced growth. Since industries are complementary to each other, and supplement each other's needs, it is necessary to have investment in all these inter-connected industries to ensure a proper growth in the economy. This theory is criticised on the grounds that since underdeveloped countries suffer from lack of capital, it is impossible for them to invest in one industry much less in a number of industries at the same time. Nurkse also takes only limited demand conditions as the obstacle to development and has neglected the supply aspects. He does not show how supply of skills, infra-structure and other related capital sectors can be developed.

Check Your Progress - II

2. What is balanced growth ?

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3.2.4 Unbalanced Growth

Hirschman, another economist and advocate of *unbalanced growth*, argues that a large scale application of capital to all industries is impossible because the underdeveloped countries are themselves deficient in capital. Therefore, a better idea is to have what is called "unbalanced growth". Invesments consist of two types the infra-structural investments called *Social Overhead Capital (SOC)* that is usually provided by the public sector; and the private sector investment in final goods which he calls the *Directly Productive Activities (DPA)*. Development consists of expanding either of these two activities, which creates an imbalance which the other tries to correct. For example if Social Overhead Capital expands, the Government will provide the infra-structure and this will encourage the growth of Directly Productive Activities. The net result will be an increase in Gross National Product. Another way would be to encourage the growth of the private sectors so that as Directly Productive Activities expand, the need for infra-structure (such as roads, transport) would create a demand for Social Overhead Capital. Thus development is thought of as a series of imbalances between SOC and DPA; and deliberate unbalancing of the economy would give the necessary impetus to capital formation.

Hirschman also considers a third type of imbalance. Every industry requires inputs and its output in turn is used as an input for another industry. For example, to produce steel, inputs like iron ore, manganese, etc., are needed. Those industries which produce the inputs are called the *"backward linkages"*. Similarly, the output of steel forms the input for railways, construction, machine tools, etc. Those industries which use the output of the concerned industry as inputs are called the *"forward linkages"*. Now, if a steel plant is established, it will require raw materials, and this creates an imbalance so that the backward linkages will have to be established. Also, the output of steel has to be used somewhere, and this encourages the forward linkage industries.

Limitations of Unbalnced Growth

The doctrine of unbalnced growth is also not free from limitations. It may not be possible to correct the imbalance once it is made. Hirschman assumes that proper investments will be taken up when and where they are required. If the required DPA or SOC investments are not undertaken, then the imbalance may never be corrected. Also, how much imbalance is to be created is not specified. The direction, composition and timing of unbalnaced growth is also not given. The problems of lack of technical personnel, raw materials and basic facilities have been ignored, and may be inadequate to support the unbalanced growth's investment decisions. Deliberate unbalancing which causes shortages that are not corrected may lead to inflationary pressures. Shortages create vested interests, that give rise to rationing, hoarding and black marketing activities. This will further accentuate the problems of underdeveloped countries.

In a private enterprise or a capitalist economy, investment in capital depends on the profits expected by the sale of the output. Thus a private enterpreneur would prefer to invest in that sector which produces consumer goods, which make for high profits. Left to the market forces, the economy would therefore, tend to move in favour of the consumer goods sector.

Thus most underdeveloped countries have undertaken planning their development programmes with the public sector taking the lead in capital formation. A balanced growth of all industries can be undertaken through plans, and a systematic investment can initiate the process of economic development. Since profitability is not the main consideration, the public sector can invest in those areas/sectors in which private enterpreneurs do not come forward to invest. It can also mobilise enough public funds, get foreign knowhow and collaboration, and thus start the process of capital formation.

Check Your Progress - III

3. What is social overhead capital?

4. What is forward linkage ?

3.3 Summary and Conclusion

The various theories of capital formation do not specify which capital goods have to be produced, they also suffer from various other limitations. For economic development to take place, the proper capital sectors have to be developed. Here the growth of the capital sector is important and can be taken up by the public sector. The growth of the capital sector is not the only objective, there are others also which should be achieved in the course of development. In the next unit, therefore, we shall be discussing the objectives of economic development.

Miss. Prabha Pant

3.4 Suggested Books

1. Benjamin Higgins : Economic Growth
2. Ghosh : Economics of Underdevelopment

3.5 Model Examination Questions

I. Answer the following questions in about 30 lines

1.Discuss the relative merits of balanced versus unbalanced growth.
2.What is capital ? What is its importance to economic development ?
3.Explain how surplus labour can be used for accumulation of capital.

II. Answer the following questions in about 15 lines

1. Does an increase in savings cause an increase in capital formation ?
2. How does unlimited supply of labour stimulate development ?
3. Explain the balanced growth theory.
4. Explain Hirschman's idea of unbalanced growth.
5. Explain the following terms :

(i) Backward & forward linkages
(ii) Social overhead capital and directly productive activities.

Unit-4 : Choice of Techniques and Choice of Goods

Contents

4.0 Aims and Objectives

The purpose of this unit is to explain the importance of appropriate technology to the production process and that of choosing the type of goods necessary for rapid economic development and to know the role of import sbstitution as a policy measure.

After reading the unit you will be able to :

* explain labour intensive and capital intensive methods;
* discuss the choice between consumer and capital good ; and
* analyse import substitution as a policy measure for choice of goods and choice of techniques.

4.1 Introduction

Developing economies suffer from lack of adequate investment. A common problem that these economies often face is to determine how best the scarce investible resources could be used to attain maximum growth. First of all, it is essential to find out the relative priorities of investment. In other words, shall we give more importance to agriculture than industry? or shall we give more importance to production of consumer goods than to that of capital goods? are some important problems facing development planning. It again depends upon a variety of factors like the level of development already reached in the different sectors of the country and the inter-relationship between them etc. Having decided the relative priorities in the broad sense, the next question arises as to what type of technology should be chosen. In other words, it mainlly concerns whether a capital-intensive technology is to be preferred to a labour-intensive technology or not.

What type of goods to be produced in a developing country like ours is also to be studied. Generally, goods can be divided into two categories : consumer goods and capital goods. This unit explain them in brief.

4.2 Choice of Techniques : Labour Intensive and Capital Intensive Methods

Which type of technology is to be chosen depends upon the availability of resources and the problems facing the economy. In underdeveloped countries, there exists large scale unemployment of labour. So, if the objective is to create more employment opportunities to the growing labour force, the appropriate technology should be labour-intensive. There are another advantage in adopting the labour-intensive technology. Small and medium industries are more suited to this technology rather than heavy and large scale industries. It would be possible to decentralise the process of industrialisation in the economy. The gestation period is much shorter as compared to that of the large industries which use capital intensive technology. Consumer goods sector can easily adopt the labour intensive technology rather than heavy and large scale industries which use capital intensive technology. Consumer goods sector can easily adopt the labour intensive technology. The technology also finds place in agricultural and allied activities.These techniques would also generate a more equitable distribution of income. But there are some disadvantages in adopting the labour intensive technology. What are they?

Viewed from the point of view of the rate of growth of output and rate of capital accumulation, labour-intensive technique is not an appropriate one. Labour intensive methods will not be able to make use of the most modern technological innovation and as a result, it will not be able to maximise the productivity of labour. This means that investment projects which maximise employment do not maximise labour productivity. Another argument advanced against the labour-intensive technique is that the demand for consumer goods in the economy would increase in greater proportion than that of the output. It means that more employment generation results in more demand for consumer goods, there by leaving to inflation, if adequate attention is not paid to the type of goods being produced. Still another reason is that the volume of investible surplus would get reduced as a greater proportion of the increment in output is consumed as wages by choosing this type of technology.

Walter Galenson and Harvey Leibenstein have favoured the use of capital intensive techniques instead of labour-intensive methods. If the objective of development planning is to maximise the rate of growth of ouput and the volume of employment in future, they argued in favour of capital-intensive technology. By adopting capital-intensive techniques, the marginal per capita reinvestment quotient can be maximised. Capital intensive techniques are more suited to development of the basic and heavy industries. As the developing countries suffer from lack of adequate infrastructure, it is very essential that capital intensive techniques are adopted to create the same for achieving accelerated economic development.

Although the gestation period is long in the case of capital -intensive technology, it is advantageous in so far as the producing of important capital goods like heavy machinery, defence equipment, etc. is concerned. Sufficient availability of capital goods is a pre-condition for the economy to grow fast. The capital-intensive technology creates less employment potential for the present but more employment potential after some years (i.e. in the future).

The capital intensive technology could not be adopted extensively in the developing economies due to lack of real (i.e. physical) resources. Given the resources, it is necessary for the planners to decide whether they should be used for producing consumer goods or capital goods.

Check Your Progress - I

1. Distinguish capital intensive method from labour intensive method.

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4.3 Choice of Goods : Consumer goods and capital goods

In the short term preference is normally given to the expansion of the production of consumer goods. This will increase availability of consumer goods in the economy which means a rise in the per capita consumption by the people (assuming, however, that the population growth is less than the growth rate of consumer goods). But if all the resources are used for the production of consumer goods only, it becomes a wrong choice. As it is not possible to increase the rate of growth of output without the use of capital goods, it becomes necessary that even in the short term, capital goods producing industries have to be encouraged. And, unless the marketable surplus of consumer goods increases, it is difficult to expand production in the capital goods sector. This is obvious because the people employed in the capital goods producing sector also have to depend upon the consumer goods sector for their consumption requirements. Therefore, it is often said that the pace of development in the industrial secor is set by the availability of marketable surplus of the agricultural sector.

Then, how can we plan so that the consumer goods sector generates a surplus which helps the development of the capital goods sector? Some economists like Maurice Dobb viewed this problem in terms of the relation between labour productivity and the wages of the labourers. A surplus can be generated if the labour productivity in the consumer goods sector increases without a simultaneous increase in the wages of the labourers. In other words, the increase in production of consumer goods would not result in a surplus if it is followed by an increase in the consumption of the growers. This view often lead to the argument that instead of adopting labour intensive methods, it would be better to adopt capital intensive methods even in consumer goods producing sector so that sufficient marketable surplus could be generated. But it is not possible to do so in the initial stages of development. As the developing country suffers from not only shortage of capital but also from large scale unemployment, labour-intensive techniques are generally favoured. Another reason that these countries cannot afford adoption of capital-intensive thechniques in their early stages of development is related to the import content argument. To use the capital-intensive techniques, we must import certain machinery, services of skilled personnel, etc. This would necessitate expansion of exports with a view to paying for the imports. On the other hand, the use of labour intensive techniques does not require imports from abroad, as most of the goods manufactured by folllowing the labour intensive techniques could as well be produced at home. In other words, if a developing country adopts labour-intensive techniques in the early stages of development the foreign exchange problems may not arise.

4.4 Import Substitution - As a Policy Measure

As the objective is to achieve accelerated economic development, besides the creating of more employment potential to the growing labour force, the right choice of technology lies in making use of both labour intensive as well as capital intensive methods in the production process. This requires the maintenance of a proper balance between domestic and foreign trade. If the country can save foreign exchange by adopting a suitable policy of import substitution, the same can be used for importing only the most essential goods that are required for the country's development. These are broadly three kinds of imports, namely (a) Food imports (b) Maintenance imports, and (c) Developmental imports. In the long run, food imports should be stopped. The type of goods that should be produced and also the type of technology to be adopted depend upon the import policy followed by the developing country. Some of the aspects of import substitution may now be discussed.

Meaning

Import substitution means the replacement of the imported commodity or commodities by producing them in the home country. Several economists like H.W.Singer and Gunnar Myrdal are of the opinion that the underdeveloped countries did not benefit form the international trade. Consequently, import substitution gained momentum in the developing countries as an important policy measure, following the works of Chenery and others. At the outset, we must know what goods should be imported and what should not be. The type of technology for the production of goods in the home country has to be chosen keeping in view the goods which are substituted and those which are imported from abroad. Import substitution is advantageous in the short as well as in the long term periods. In the short term it helps to hold the price line and removes the shortage of essential goods. In the long term it helps to make the country self-reliant. However, we have to carefully select the imported commodities which we want to replace in the long run so as to get maximum advantage on the basis of comparative costs. The production of these commodities which have been replaced by substitution has to be augmented in order that the related industries may have the benefit of economies of scale.

4.5 Summary & Conclusion

A developing country shall have to choose both labour and capital intensive techniques in the development process. Depending upon the situation, a proper balance must be maintained between the production of capital goods and that of consumer goods by following an appropriate foreign trade policy. In doing so, the policy of import substitution assumes much importance.

Whatever be the choice of technology, the twin objectives of devleopment planning, namely (a) the generating of more employment potential and (b) achieving of accelerated economic development have to be given importance. So, a proper blend of labour and capital intensive methods is necessary.

-Dr.T.Divakara Rao

4.6 Suggested Books

1.	Gerald Meier	:	Leading Issues in Economic Development
2.	Agarwal & Singh (ed)	:	The Economics of Underdevelopment.
3.	Wadhwa, C.D. (ed)	:	Some Problems of India's Economic Policy

4.7 Model Examination Questions

I. Answer the folloiwng question in about 30 lines :

1. Distinguish between labour intensive and capital intensive methods. Explain the merits and demerits of the two methods

II. Answer the folloiwng questions in about 15 lines :

1. " Investment in capital goods sector is set by the availability of marketable surplus of consumer goods"- Examine the statement.

2. What is meant by import substitution? Explain its importance.

Unit-5 : Objectives of Economic Development

Contents

5.0 Aims and Objectives

The unit examines the objectives which lead to the alround development of an economy.

After reading the unit, you will be able to

* identify the major objectives of development.
* specify the proper objective in a given situation, and
* deduce/identify the appropriate strategy.

5.1 Introduction

In the previous units, we discussed the characteristics of underdeveloped countries and their spefcific problems. We have seen the differences between the consumption and production ;patterns of the under-developed countries and the developed countries, and the levels of development they have to reach. It is obvious that with all the constraints that the underdeveloped countries suffer from it is impossible to achieve all the characteristics of the developed countries immediately. What is needed is a planned and systematic change in the structure of the underdeveloped countries with immediate priority given to certain sectors, while others are postponed to a later date. The underdeveloped countries, thus, have to set up certain targets to be achieved in a given time, and they have to start planning their process of development so as to achieve these targets.Let us try to identify the major objectives of economic development.

5.2 Objectives of Economic Development

Various objectives are put forth by the underdeveloped countries and the process of development is initiated to attain them. Let us first of all examine the objectives usually put forth by the Plans, and then examine their shortcomings viewed from an over-all development strategy. The objectives can be of two types--long term ones which indicate the direction to be taken by the economy over a relatively long span of time and the short term ones which deal with particular problems that are thought to be urgent by the planners. A short term objective may be in conflict with the overall planning strategy, and a piece-meal approach to development may result in a haphazard growth of the economy. Before we examine the real objective of development, let us first of all study the various goals listed by the planners and their limitations as the objectives of development.

5.2.1 Increasing the Rate of Growth

Increasing the growth rates of their national incomes seems to be the foremost aim of underdeveloped countries. National income is assumed to show the increasing level of development, as a result of increase in the production of goods and services. Thus the UN stressed the need to increase growth rates from 5 to 7 percent per annum in the Development Decades of 1950 to 1970. Similarly, in Indian five year plans, the rate of growth is first of all fixed at about 5% to 6% per annum and then the other variables are adjusted with a view to achieving this rate.

The above target is, however, subject to various limitations:

(a) In the first place, the ratio of growth is taken to be that of the national income. Now this is an aggregated figure, including all sections and all types of goods and services. It does not distinguish between developmental activities and non-developmental ones. For instance, some countries are spending large sums of money on defence and on war. This increases their national income but it does not reflect real economic devlopment. Some of the Middle-East countries with thier monopoly over oil were able to increase the price of oil. This boosted up their national incomes but without a corresponding increase in the standard of living of their masses. Benefits of growth have not trickled down to the poorer sections of the society.

(b) Secondly it is futile to fix the optimum rate of growth of the economy as a target for development. Usually, this rate of growth is fixed based on an assumed increase in savings and the output-capital ratio. As we have already seen, in the previous lessions, the savings ratio is a null-variable in economic development. Also there is noting to show that this rate of growth of 5% is the best rate for the Indian economy, or that it can achieve all its other targets only if it grows at this rate. Various other factors such as employment, rate of investment and its pattern, type of technology and wages and price conditions in the economy, plus non-economic factors such as climatic conditions, stable political environment are the other factors that affect the rate of growth. Thus only after the initial investments are undertaken and proper techniques applied to determine the wage rate and levels of consumption, can be rate of growth be determined. The rate of growth is thus the end-product of the development plan, and to fix it beforehand is to make it play a role which it cannot play.

5.2.2. Raising the Investment Rate

Since increasing the rate of growth alone does not spell development, an alternative objective is to increase the rate of investment in the economy. The investment rates have been stepped up from one plan to another, i.e., from 7% in the 1st plan to 16% in the 5th plan. Since the captial formation is low, more capital can be generated only through greater investment of the proper type which is taken to be an initiating factor in development. A higher rate of investment leads to greater output and employment and hence a higher rate of growth.

While investment does lead to more production and hence higher output, it may not necessarily lead to development, unless the type of investment is specified in great detail. Most underdeveloped countries opting for mixed economies, with equal emphasis on both private and public sectors, encourage each and every type of investment. While public sector increases its investment in priority industries, the private sector will invest in industries which are highly profitable.

5.2.3 Increasing of Employment Opportunities

Sometimes, a growing economy may suffer from increasing unemployment (as is the case with India). Hence reducing unemployment may be taken up as a separate goal of developoment. During the course of the Indian Five Year Plans, the number of unemployed persons increased form 53 lakhs in the First Plan to about 140 lakhs at the end of the Fourth Plan. This rate has been steadily increasing over the years, and the government has, therefore, included employemnt generation as one of the specific objectives of development.

In the Fourth Plan, special schemes for rural development with a substantial employment content such as the Small Farmers Development Agency (SFDA) the Marginal Farmers and Agricultural Labourers Agency (MFALA) and the Drought Prone Area Programme (DPAP) including minimum needs programme have been set up. Manpower Planning employment generating schemes, food-for work programmes, self employment schemes, development of small-scale and tiny sections, Integrated Rural Development Programme (IRDP), National Rural Employment Programme (NREP), Jawahar Rojgar Yojana, Nehru Rojgar Yojana, etc., are the different measures used to generate employment opportunities in India.

Although employment generation is an approved objective, it cannot be taken as an end in itself. For instance, full employment can be easily achieved if highly labour intensive techniques alone are used, and if all resources are directed towards this end. This will definitely result in full employment, but there would be no further change in the structure of the economy which alone would give accelerated rate of develoopment in the long run. Hence employemnt generation should be a complementary objective, which should accompany development, but cannot be taken as an end in itself.

5.2.4 Social Justice or Securing of Poverty

With the growth of unemployment, there has also been a corresponding increase in inequalities of incomes and poverty. Different studies have shown that the number of people below the poverty line are around 40% and 50% in the rural and urban areas respectively. The number has been growing with increasing population. Thus various programmes to deal with poverty specifically have been implemented through direct help to the poorer, weaker and under privileged sections such as landless labourers, small and marginal farmers, small artisans, etc. To reduce inequalities, ceiling on urban and rural land holdings, distribution of surplus land, measures to reduce concentration of economic power, etc., were implemented. Any rational plan should, therefore, ensure that both growth and social justice (i.e., reduction of inequalities, etc) are realised simultaneously.

5.2.5 Realizing Self-Sufficiency

In the initial phases of development there might be a great dependence on foreign aid, foreign know-how and foreign capital to build the foundations of economic development as it happened in India. This may result in creating balance of payments difficulties, and problems relating to exports, and increasing foreign debt. Therefore, the objective of "self-sufficiency" should be one of the objectives as it was done in India's Fifth plan. Self-sufficiency would mean lesser dependence on imports, import substitution policies, planned expansion in exports and building up of sufficient foreign exchange reserves. However, the policies regarding imports, exports and import substitutes should be in tune with overall priorities set out in the plans.

Check Your Progress-I

1. List the major objectives of economic development.

5.3 The Chioce of the Proper Objective

All the objectives listed can be misleading and short-sighted, if they are viewed as stopgap arrangements made to fill in the gaps that appear in the course of planning. In any case, changing objectives every 5 years or so is not consistent with long term planning. On the other hand, the objectives should be fixed keeping in mind the entire time required to change the economy from its present state to that indicated by the type of production and consumption achieved by the developed countries. For this, the planners have to envisage not a five-year period, but the entire perspective plan, that takes a capital-deficient low income, and low consumption economy to full employment economy with capital intensive techniques and high income and levels of consumption. The objective of development is, therefore, to achieve the highest possible standard of living may be taken to be that of the average citizen of any developed country such as USA, Europe or Japan.]

But to achieve this standard, it would mean, for instance, a change in production and consumption. But the production of goods consistent with a high standard by of living requires steel, electricity, copper, etc., and these have to be produced. To generate electricity, dams have to be built and cement, steel, coal, petroleum, transport, skills etc., are to be produced. For a large country, a large increase in capital is required to meet its large requirements.

The objective has thus to specify (a) what has to be achieved and (b) what time is required to achieve it. Vague and unspecified goals like "self-sufficiency" or "economic development" are not the proper objectives of long-term development.

5.4 Choice of Strategy

After the objective is properly specified, the planner has to examine the various constraints or limitations on the way to reach the objective. What is available and what is not has to be specified next, so that the likely shortages or bottlenecks can be removed by proper planning. The available techniques, natural resources, labour, food-grains stocks, infrastructure, etc., will have to be listed out, so that the planner knows what he is starting out with. Given the objective and the initial conditions, the planner has to decide which is the least time path required to reach the target and since the initial conditions may differ from country to country, the paths taken to reach the targets may also differ. An economy with labour scarcity will have a different strategy compared to a labour-surplus one; a socialist country's will differ from that of a capitalist one, and so on. But the objective would be the same for all economies. The entire set of policies and plans on the path of development. The stragegy may be divided into smaller operational time periods called five year plans, but these should be consistent with the long-term objectives. Similarly all other policies such as monetary, fiscal and trade policies should conform the strategy of development and should not conflict with it. conflicts will only delay the time required to achieve the targets.

The strategy specifies not only the target, but also the most proper path to reach it. On the path, proper choices have to be exercised and the investment pattern should conform to it. Depending on the initial conditions, the strategy specifies the types of goods required, the techniques to be used and the type of capital accumulation. It would show the priorities to be given on the path, and the changes in the sequence of production so that investment in some sectors and activities can well be postponed to a later stage of development.

The expansion of the captial would give rise to more employment opportunities, lead to increase in real output, and increase in national income. This will reduce poverty and inequalities through an equitable distribution of income. It leads to self-sufficiency as the economy builds its own capital base and thus reduces its dependence on foreign economies and ensures growth with social justice in the economy. The economy whould have a balanced growth, with the growth of necessaries, keeping pace with its demand. Thus the short term objectives listed by the plans can be achieved without any conflict between them.

5.5 Summary and Conclusion

The objective of development should be the long run objective of achieving the highest standard of living per person with full employment. The other short term objectives should not clash with the long term one. Depending on the target and the initial conditions, the proper strategy that will help to achieve it in the shortest possible time has to be chosen based on this. The relevant strategy of development will have to be worked out; and through the planning process, the priorities, etc, will have to be determined, and applied to reach these objectives.

-Ms.Prabha Pant

5.6 Suggested Books

1.	Benjamin Higgins	:	Economic Development
2.	Gerald Meier	:	Leading Issues in Economic Development
3.	Ghosh	:	Economics of Underdevelopment
4.	Micheal Todaro	:	Economic Development and the Third World Countries.

5.7 Model Examination Questions

I. Answer the following question in about 30 lines.

1. What are the factors requred for economic development ?

II. Answer the following questions in about 15 lines each :

1. What are the disadvantages of keeping the growth rate as the objective of econnomic development?
2. How does increase in employment lead to economic development ?
3. What should be the proper choice of the objectives of development ?
4. Explain the following terms :
   Social Justice and Self - sufficiency

Block - II

This Block on "**National Income and Social Accounting**" explains the concepts and measurement methods relating to national income and an outline of social accounting and input-output methods. It describes the national income estimates in India.

The block consists of three units.

Unit - 6 : National Income and its Measurement

Unit - 7 : National Income Estimates in India

Unit - 8 : National Income Accounting - An Outline of Social Accounting Method.

Unit - 6 : National Income and Its Measurement

Contents

6.0 Aims and Objectives

The unit aims at discussing various concepts of national income and examines the approaches to and problems in measurement.

After reading the unit, you will be able to

* define the concept of national income;
* identify different terms used in national income analysis;
* explain the circular flow of income;
* derive national income by using three approaches to measurement;
* recognize the problems in measurement of national income;
* compare national income estimates overtime and across countries; and
* trace the relationship between natinal income and economic welfare.

6.1 Introduction

It is a common practice to classify some countries as rich and others as poor. Similarly, some countries are classified as fast growing while others are classified as slow growing countries. In order to make such statements, it is necessary to understand the level of aggregate economic activity. But an economy is very complex involving the production of a variety of goods and services. In order to understand the behaviour of such an economy, we need some indicators or measures of performance. The National income is an important yardstick of the performance of the whole economy.

The National income is commonly understood to be the total income of a nation like the income of an individual. However, the concept is not so simple because all the income of an individual cannot be considered national income. Similarly, some part of the national income will not accrue to individuals. Hence, the concept of national income deserves special attention. Further, there are many concepts which are closely related to national income. A knowledge of these concepts is essential for understanding the effects of various policies on the aggregate economic activity.

6.2 Definition

To begin with, we may define national income as the money value of the annual flow of final goods and services in this national economy. Some aspects of this definition deserve to be examined. First, it should be noted that it is a concept relating to value. Since a variety of goods and services which are heterogeneous in nature are produced in an economy, their physical quantities cannot be aggregated. Hence, the measuring rod of money should be used for aggregating these diverse outputs. Secondly, the national income is a flow concept. It represents production during a given period. It is common to take the year as the unit of time in measuring the national income. Thus the national income is the money value of the goods and services produced in a particular year. Finally, the national income represents the value of final goods and services produced during the year. The word, 'final', should be kept in mind. While estimating the national income, all the goods and services produced during the year should not be considered. Only the final goods and services can be considered. There are some goods which are used in the production of some other goods. These are called intermediate goods. For instance, wheat used in the production of bread is an intermediate good whereas bread is a final good. In other words, final goods are not used in further production. It may be noted that it is difficult to classify each good as intermediate or final because some part of it may be used as intermediate good and some other as final good. For instance, wheat when used in the manufacture of bread is an intermediate good while the same good when consumed is a final good. The value of bread includes the value of wheat, sugar, etc., used in the process of production. Hence, if the value of bread as well as the value of wheat are added, it leads to double counting. To avoid double counting only the value of the final goods and services should be aggregated.

Check Your Progress - I

1. Define National Income.

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6.3 Circular Flow of Income

Any modern economy will consist of a vast network of interlocking relationships. One of the important aspects of these relationships involves the relations among total production, income and spending. These relationships in a simplified form reveal the circular flow of income.

To understand the concept, let us consider a simple hypothethical economy in which there are two sectors - the business sector and the household sector. The business sector employs the factors of production and produces goods for sale. The household sector, which is assumed to own the factors of production, supplies factor services and consumes the output produced by the business sector. Hence, the economic agents in the household sector are called 'consumers' whereas those in the business sector are called 'producers'. Two types of transactions take place between these two sectors.

First, the household sector provides factor services to the business sector and in return receives goods and services from the business sector. These flows are in real terms and one flow exactly balances the other. They take place in terms of income and expenditure. The household sector receives income for the factor services rendered to the business sector and it gives it back to the business sector by way of compensation expenditure. These flows are shown in Fig. 1. It can be noticed that money flows are in reverse direction to real flows. This is so because when the business sector is supplying goods and services to the household sector, it in return receives money from the household sector.

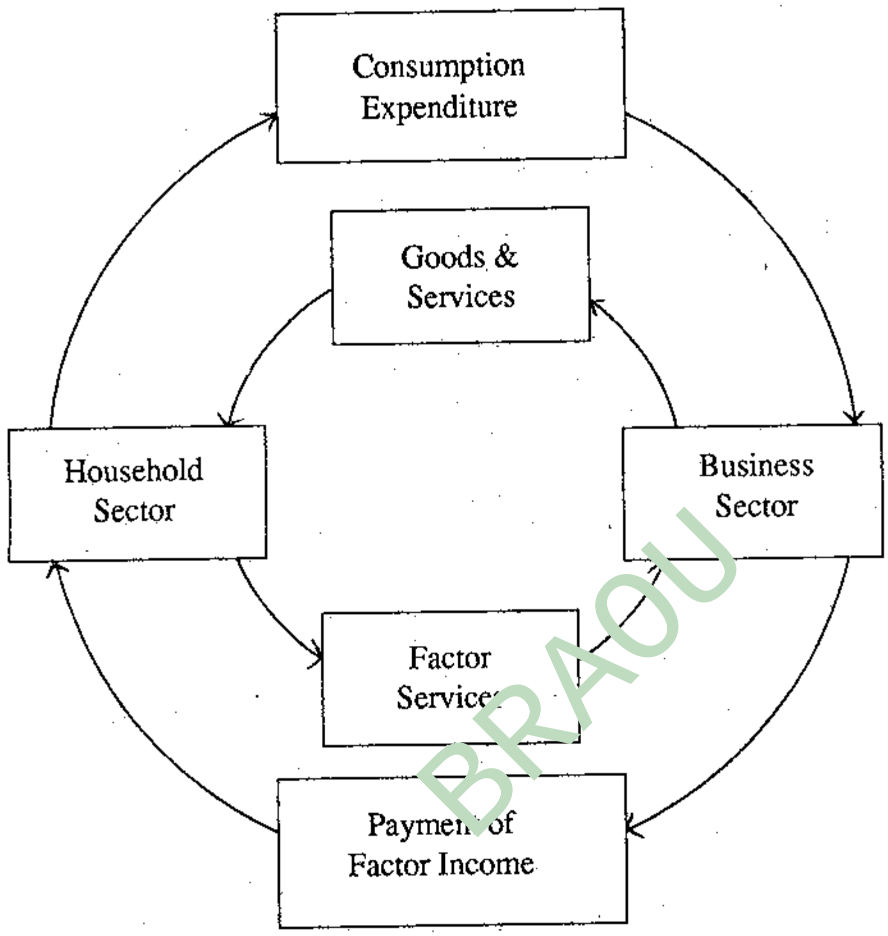

Fig. - 1 : Circular Flow of Income

The analysis given above represents a very simplified case and hence it is only hypothetical. The real world situation is more complex than it is for the following reasons. First, it is assumed that the economy has no economic relations with the outside area. Such an economy is called a **closed economy.** In reality all the economies are more or less open. Secondly, it is assumed that there are no government operations such as government expenditures and taxes. Thirdly, it is assumed that production occurs only in the business sector. But government may also participate in the production activity. Fourthly, consumers are assumed to spend their entire income in the form of consumption expenditures. It means that there is no household saving. Finally, it is assumed that the producers will sell all they produce and there is no inventory accumulation in the business sector. Given these assumptions, production equals sales and income equals expenditure. Hence the circle is complete and it will have a tendency to continue as long as it is not disturbed by external factors. Even if we drop some of these assumptions, the basic mechanism of the circular flow remains unchanged.

If we introduce the government sector without its undertaking any productive activity and if we assume that some part of the household income is saved, the relations become more complex. They are shown in Fig. 2.

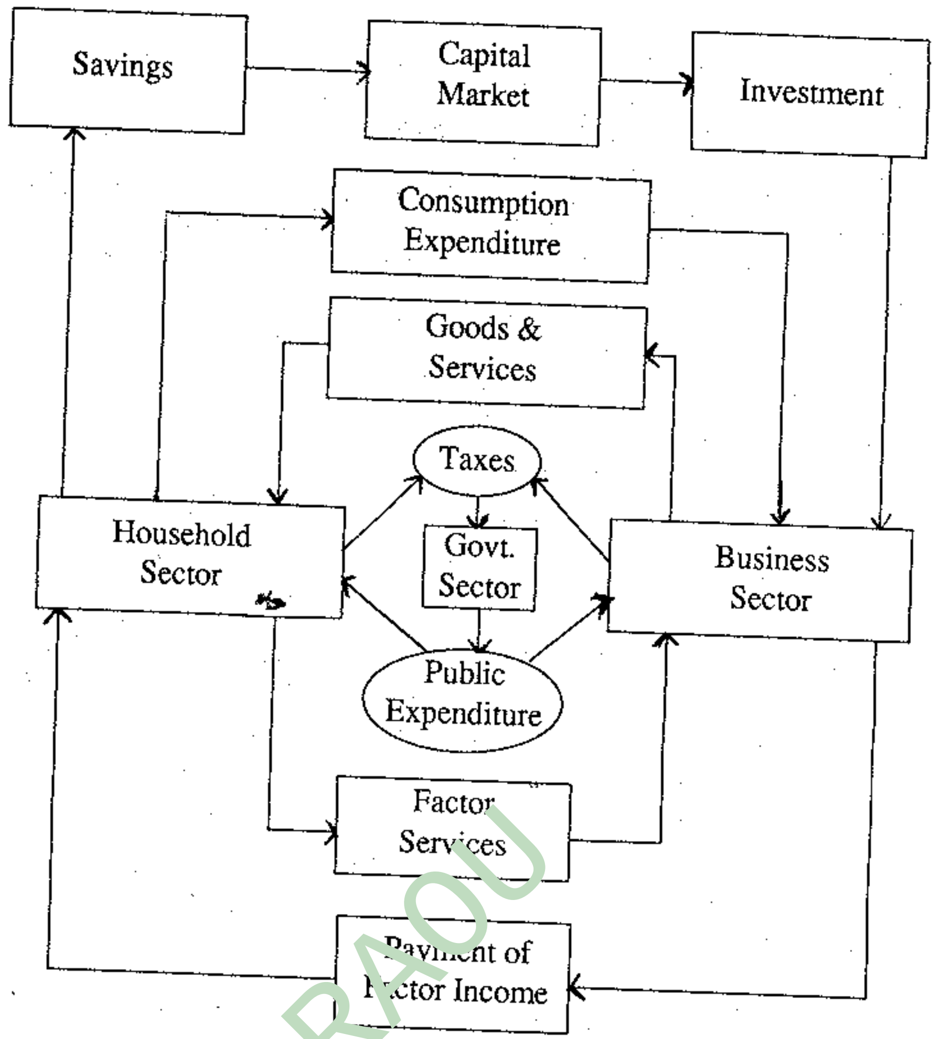

Fig - [illegible] : Circular Flow of Income

In this new situation, the household savings will go to the business sector as investment. Further, the government is receiving taxes and the amount does go partly to the household sector and partly to the business sector.

Check Your Progress - II

2. Explain the concept of circular flow of income.

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6.4 Approaches to Measurement of National Income

Basically, there are three ways of considering the circular flow of income. Production generates income and it, in turn, generates spending. We can measure the national income either at the production stage, the income stage or the expenditure stage. Measurement at these three stages give the same magnitude. These alternative ways of looking at the flow of income are known as the Product approach, the Income approach and the Expenditure approach, respectively.

6.4.1 Product Approach

The final output in a modern economy consists of a large number of goods like apples, bread, shirts, chairs, etc., and services like medical, legal, educational, domestic, etc. Let us denote the quantities of these final outputs produced in a given year by $Q_1, Q_2, \ldots\ldots, Q_n$ andthe respective market prices by $P_1, P_2, \ldots\ldots\ldots\ldots, P_n$. Then according to product approach the size of the national income will be equal to the sum of the annual flow of final goods and services valued at their market prices.

$$\text{National Income} = P_1 Q_1 + P_2 Q_2 + \ldots\ldots + P_n Q_n$$
$$= \sum_{i=1}^{n} P_i Q_i$$

6.4.2 Income Approach

According to this approach, the national income is the aggregate value of the factor earnings generated by the production of final output. The value of final output of commodity is reflected in the factor incomes, namely, rent, wages, interest and profits. Thus, if these incomes earned by the factors of production are aggregated in respect of all the goods and services, the result will again be the national income.

$$P_1 Q_1 + P_2 Q_2 + \ldots + P_n Q_n$$
$$= (R_1 + \ldots + R_n) + (W_1 + \ldots + W_n)$$
$$+ (I_1 + \ldots + I_n) + (Pr_1 + \ldots + Pr_n)$$

Where R_i, W_i, I_i and Pr_i denote respectively the flow of rent, wages, interest and profits generated by the production of good i.

6.4.3 Expenditure Approach

The National income can also be measured by aggregating the expenditures on the final goods and services. It can be measured by aggregating the flows of expenditure on final goods and services incurred by each of the three main sectors involved, viz., the household sector, the business sector and the government sector.

For obvious reasons, these three approaches yield identical results. This is evident from the circular flow diagram. If we are adopting the product approach or the expenditure approach, we are measuring the upper half of the circular flow. If we are following the income approach, we are measuing the lower half of the circular flow.

Check Your Progress - III

3. What are the methods for estimating national income ?

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6.5 A Family of Income Concepts

The foregoing duscussion brings out that the national income is always expressed in value terms. In other words, one has to use prices to estimate income. In this context we can distinguish between two types of prices. One set of prices relates to prices prevailing in the market. These are known as *market prices*. These prices include cost of intermediate products, payments made to primary factors, viz., land, labour, capital and organisation, and also the indirect taxes and subsidies. The income estimated by using these market prices is known as *national income at market prices.*

If the component of net indirect taxes, i.e., indirect taxes less subsidies, is subtracted from the market price, we arrive at another set of prices known as *'factor cost'*. Using the factor cost data, we arrive at the *national income at factor cost*. Thus the national income at market prices and that at factor cost differ by net indirect taxes :

National Income at market prices =

National income at factor cost + net

Indirect taxes

Another distinction made in the national income analysis is between gross income and net income. As has been pinted out, the total of incomes received by the factors of production yields the national income. One of these factors of production is capital. In the process of production some part of the capital will be used up and this is known as *depreciation'*. In order to maintain the level of the capital, investment should take place to recoup the used up capital. Hence it is customary to subtract the depreciation from the aggregate income. In such a case, what is arrived at is the *net national income*. If no deduction is made for depreciation, the income is called *gross national income*. Thus, the gross national income and net national income differ by depreciation :

Gross national income = Net national income + depreciation

Two more concepts of income are important. One concept relates to domestic income and the other to national income. *Domestic income* is the income which originates in the country. It is the income generated within the geographic boundaries of the country. But some part of this income may go to other countries, if the factors of production are owned by them. Similarly, the country under consideration may get some income if its residents own factors of production in other countries. If the income going out of the country is subtracted and the income coming into the country is added to the domestic income, we arrive at the *national income*. In other words, in respect of the national income we consider the income accrued to the nationals of the country whereas in the case of domestic income we consider the income which has originated in the country. From the distinction set forth we derive eight concepts of national income. They are shown below :

	Category A	**Category B**
Type I	1. Gross national product at market prices	1. Gross domestic product at market prices
	2. Net national product at market prices	2. Net domestic product at market prices
Type II	1. Gross national product at factor cost	1. Gross domestic product at factor cost

2. Net national product at factor cost	2. Net domestic product at factor cost

The difference between Category A and Category B is the net factor income from abroad. The difference between Type I and Type II is the net indirect taxes (indirect taxes less subsidies). The difference between the two concepts in each type is depreciation.

All the eight concepts of national income discussed above do not tell us anything about the income accruing to the household sector. This is so because a part of the total income which accrues to the factors of production is not paid out to the individuals who own these factors of production. For instance, corporate taxes and undistributed profits do not form a part of the income of the factor owners. On the other hand, individuals actually receive some income which cannot be considered to be payment for factor services rendered in the current year. The standard examples of this type of payments are gifts, pensions, relief payments and other welfare payments. These payments are called *transfer payments*. *Personal income* is derived by subtracting some part of factor income which is not accruing to the households and adding the transfer payments.

Personal income	=	net national product at factor cost
	-	undistributed profits
	-	corporate taxes
	+	transfer payments

Another concept of income arises because the entire personal income cannot be used by the individuals. This is so because individuals have to pay personal taxes out of personal income. The balance after deducting personal taxes from personal income is called *disposable income*. The disposable income may be used either for consumption or saving :

Disposable income	=	personal income - personal taxes
	=	consumption + savings

Check Your Progress - IV

4. Define national income at market price?

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5. What is depreciation ?

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6. Explain personal income and disposal income.

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6.6 Problems in Measurement of National Income

Many conceptual difficulties arise while measuring national income. These difficulties arise while demarcating the productive activity, evaluating the non-marketed output and distinguishing the intermediate good from the final good. Let us consider the three problems :

6.6.1 Demarcation of Productive Activity

In order to compute the national income, first of all, the activities to be included in the measurement should be delineated. It appears very simple if we say that only productive activities should be included. A *productive activity* can be defined as the one which uses scarce resources in the production of goods and services to satisfy human wants. However, not all activities that result in human satisfaction can be included because it will not lead to a meaningful measure. Hence, a demarcation has to be made between activities which can be treated as productive for measuring national income and those which are too general in nature to be included in the national income measurement.

As a general rule, all the activities resulting in the production of marketable goods and services are included in the calculation of the national income. However, the institution of market for distinguishing productive from unproductive activities is not helpful when we move from developed countries to developing countries in which household enterprise dominates the productive activity and in which goods are produced for self-consumption.

The demarcation between productive and unproductive activities is based more on convention than on logic. For instance, take the case of a boy who is given pocket money by his father and he in turn renders some personal service like cleaning his bicycle. In this case, the service redered by the boy is not included in national income on the ground that it constitutes personal service rendered within the household. On the other hand, if the boy is delivering newspapers, his services are included in the national income.

This method of exclusion of services rendered at home leads to complications. By convention, the services of housewives are not included in the national income. But the services of a cook will be treated as a part of the national income. Because of this convention, if a cook later becomes a housewife there would be a decline in the national income. Similarly, if a group of housewives makes a formal arrangement under which they cook meals for one another there would be an increase in the national income. In both the cases, there is no change in the annual flow of output in the economy but there are changes in the national income.

The general practice of excluding all types of household activities is more conventional than logical. Moreover, given the socio-cultural structure of the country, so long as the services of housewives do not undergo substantial changes, it does not matter whether this particular item is included or excluded. But difficulties arise while making international comparisons of national income or comparison of the incomes a country over a fairly long period of time.

6.6.2 Treatment of Non-marketed Output

As a rule national income includes only market activity. But there are exceptions. Some non-marketed output is also included. For instance, farmers, especially small and marginal farmers, use a large part of the output produced for self-consumption. This is included in the national income. Similarly, rental value of owner occupied dwellings is also included in the national income. On the other hand, capital gains or losses are not included in the national income. The controversy about non-marketed output is not about its inclusion or exclusion but about the statistical methods of valuation to be followed.

6.6.3 Distinction Between Final and Intermediate Goods

Productive activity involves the production of a large number of goods and services. If all these products are valued and aggregated, it leads to double counting. It is necessary, therefore, to make a distinction between final goods and intermediate goods. The value of the final goods includes the value of the intermediate goods also and hence the counting of both final and intermediate goods results in *double counting.* So the value of final goods only should be used for estimating national income. The practical difficulty here is the classification of goods into final and intermediate goods. For instance, coal is a final good to the extent used for domestic purposes, but it is an intermediate good when used in the production of steel. Hence instead of classifying commodities as intermediate and final, a method known as *value-added* is obtained by deducting the value of material inputs used from the corresponding value of output. **Value-added** at a particular stage of production represents the contribution made by the factors of production employed at that stage to the value of final output. It is, therefore, the sum of rent, wages, interest and profits earned by the factors of production at that stage of production. A numerical example may classify it. Suppose bread is the product in the production of which flour is used as the intermediate good. Obviously flour comes out of wheat. According to value added method, we consider all the three stages of production, namely, wheat, flour and bread and find the value added at each stage. The sum of value added measures exactly the value of the final output. The following table illustrates the concept :

Stage of production	Value of output	Cost of Intermediate products	Value added
Wheat	80	0	80
Flour	90	80	10
Bread	200	90	110
Total	370	230	200

The table shows that the value of the final good, namely, bread is 200 and it can be derived by summing up the value-added at different stages of its production. Thus the vlue-added in the production of wheat is Rs. 80, that of flour is Rs. 10 and that of bread is Rs. 110, the sum of which is again Rs. 200.

Check Your Progress - V

7. Explain the concept of Value-added.

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6.7 Comparison of National Income Estimates Over Time

Since the national income is always expressed in value terms and prices change from time to time, it is very difficult to compare the national income of one year with that of another. When prices are rising, a rise in the national income may be due to an increase in either the productive activity or prices or due to both the factors. In order to overcome this difficulty, the national income is computed in two ways. It is computed using the prices of that particular year, in which case the aggregate is known as the national income at current prices. It is also computed using the prices of some past year selected as the base year, in which case it is known as the *national income at constant prices.* The National income estimated at constant base year prices is also known as *'real national income'.*

In order to make comparisons of the national incomes over a number of years, it is necessary to compute real national income. *Real national income* can be obtained by deflating the natinal income at current prices by the price index. The price index is the weighted average of prices, the weights being assigned according to the importance of the product. Suppose there are only two items, namely, food and cloth produced in an economy and food accounts for 60 per cent of expenditure and clothing for 40 per cent of expenditure. Also assume that the food price rose from 5 to 10 and cloth price from Rs. 15 to Rs. 20. Then the price in the base year would be 0.5 X 5 + 0.4 X 15 = Rs. 9. In the next period, the aggregate price rose to 0.6 X 10 + 0.4 X 20 = Rs. 14. Now if we take base year price as 100 the current year price becmes 155.5. This is called 'price index'. If we have national income at current prices and the price index, we can derive the real national income in the following manner :

$$\text{Real national income} = \frac{\text{Money national income}}{\text{price index}} \times 100$$

The following example illustrates the method of deriving the real national income :

Year	NDP at current prices (Rs. in crores)	Price index	NNP at constant (1970-71) prices
1970-71	34,235	100.0	34,235
1980-81	1,04,201	220.71	47,211

Check Your Progress - VI

7. What is the real national income?

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6.8 Comparison of National Income Estimates Across Countries

The main purposes of comparing national income estimates across countries is to know the extent to which the living standards of one country differ from those of another. But there are practical difficulties in making these comparisons. First, the content and scope of economic activity may differ from country to country. For instance, the scope and coverage of non-marketed activity varies widely across the countries. In a developed country many services like motor driving, house painting, furniture repairing, tailoring, etc., are rendered by the members of the household while in an under-developed country with a semi-feudal social structure they are rendered by others. Secondly, different countries have different currencies and hence they have to be converted to a common monetary basis. It is common to use the official exchange rates for this purpose. However, the official exchange rate does not reflect the true exchange value between the two currencies involved.

An alternative to the use of exchange rates is the use of a single set of prices for both the countries under comparison. But this is operationally difficult because the commodities may differ in quality and because some of the commodities produced in one country may not at all be produced in another country.

6.9 National Income and Economic Welfare

Though the main function of the national income aggregates is to provide a satisfactory measure of aggregate economic activity, it is quite often used as a measure of welfare. More specifically, it is often assumed that the higher the GNP per capita, the higher is the economic welfare. But this is not true. In fact, the GNP includes some items that ought to be excluded from a measure of welfare while it excludes certain items that are to be included. Hence a number of additions and substractions have to be made to arrive at a measure of welfare. For instance, the value of leisure is not included in the GNP. Individuals may derive satisfaction out of leisure enjoyed by them. If there is a slight increase in the GNP after a substantial decline in leisure, it is difficult to say that welfare has increased. This difficulty will not arise if the value of leisure is added to the national income.

Similarly, there are several deductions to be made from the national income for measuring welfare. These deductions arise because certain adverse effects resulting from the output generation are ignored while estimating the national income. For instance, air pollution and water pollution may accompany the increase in industrial production but these costs will not be deducted while estimating the national income. If we need a measure of economic welfare, it is necessary to make adjustments for these costs.

Another adjustment that is to be made is in respect of costs like expenditure on the construction of elaborate subway systems in crowded cities, etc. The huge expenditure incurred in building complex and elaborate transportion systems in big cities do not reflect any increase in the welfare of the citizens. Hence such expenditures should be excluded while measuring the economic welfare.

6.10 Potential Versus Actual Income

The concepts and measurement of income relate to actual income only. But equally important is the concept of potential or full employment level of national income. *Potential income* is defined as the income that can be generated if the labour force is fully employed and if the industrial capacity is fully utilised. Full employment does not mean 100 per cent employment. Even in the best of times some workers change jobs and remain unemployed till they get another job. This is called frictional unemployment. In general, when 96 to 97 per cent of the labour force is employed, and when, on an average, the manufacturing plants are operating at 90 to 95 per cent of the capacity, we have full utilisation of capacity and full employment. If the demand for the final output is deficient; then the actual output will be below the potential. There will be unemployment and idle capacity. The gap between the potential and actual national income is the measure of depression.

6.11 Summary and Conclusion

The concept of national income is used for the measurment of aggregate economic activity. It is a flow concept and hence refers to a period of time. Usually, one year will be considered for measuring the national income. The concept of value-added helps us to measure the value of final goods and services and to avoid double counting. There are three approaches to the measuring of the national income. They are the product approach, the income approach and the expenditure approach. All the three approaches should give the same estimate of national income.

There are various concepts of income. Distinctions arise because of the difference in domestic and national concepts, gross and net concepts. These differences have given rise to eight different concepts of national income. Two more concpets are those of personal income and disposable income. Disposable income consists of consumption and saving.

Three difficulties arise in the measurement of national income which are demarcation of economic activity, treatment of non-marketed output and double counting. One must be very careful while using the national income estimates for making comparisons over a period of time and across countries. Comparisons over a period of time can be made if the cocept of real income or income at constant prices is used rather than that of money income or income at current prices. Comparisons across countries can be made only after examining the methods adopted in measurement and the validity of the exchange rate as an indicator of the true purchasing power of the currencies.

-Dr.S.Subrahmanyam

6.12 Suggested Books

1. Stone & Stone   National Income Analysis

6.13 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. Explain the different approaches to the measuring of national income.
2. Examine the various concepts of income used in national income analysis and show their inter-relations.

II. Answer the following questions in about 15 lines each :

1. What is circular flow of economic activity ?
2. How far national income can be used as a measure of economic welfare ?
3. What adjustments are needed while comparing national income estimates over time and across countries?
4. Expalin the following concepts :
   (i) Income method and Product method
   (ii) GNP and NNP
   (iii) National income at current and constant prices.

Unit - 7 : National Income Estimates in India

Contents

7.0 Aims and Objectives

The unit discusses the method followed in measuring national income in India and examines its trends.

After reading the unit, you will be able to

* recognize the attempts made by the government agencies and individuals in estimating national income during Pre-Indenpendence and Post-Independence periods;

* acquire the knowledge of estimation of national income; and

* demonstrate the growth of national income, and its sectoral distribution.

7.1 Introduction

Various concepts of national income have been discussed in the previous lesson. It is also pointed out that the three approaches, viz., the product approach, the income approach and the expenditure approach do the measuring of the same phenomenon and should give identical results. The estimation of national income is besat with many practical problems. These problems arise mainly because of data inadequacies. In fact, in estimating the national income of India, all the three approaches are adopted, applying each of them to whatever sector it is suited. This lesson discusses the methodology adopted in estimating the national income of India and its various components. This lesson also brings out the trends in various components of national income in India since 1950

7.2 Pre-Independence Estimates

2. Attempts Prior to Independence

Before independence, no attempt was made by any government agency to estimate the national income and all the estimates available were prepared by private individuals only. The first attempt was made by Dadabai Naoroji in 1876 to estimate the national income and the per capita income for the year 1867-68. He estimated the national income of British India at Rs. 340 crores which meant a per capita income of Rs. 20.Later, many such attempts were made, as summarised in Table 1. A perusal of these estimates shows that there have been wide variations. These divergences are largely due to conceptual and statistical differences as also personal bias . Personal bias affected the estimate because the nationalist economists wanted to bring out the proverty and a low standard of living in India whereas the pro-government persons wanted to show that the per capita income was not so low as it was thought to be. Moreover, these estimates were not based on the same concepts and definitions. Further, the geographical coverage was not uniform and the estimates were made on the basis of current prices.

The first scientific calculation was undertaken by V.K.R.V. Rao. In spite of a weak statistical base, his estimate was considered to be the best among the estimates prepared during the pre-independence period. He divided Indian economy into two categories. Indstry, trade, transport, public services, administration, professions, liberal arts and the domestic services were included in the first category and income method was used for this category. Agriculture, pastures, mines, forests, fishing and hunting were the major items under the second category and the output method was used for this category.

7.3 Post Indedpendence Estimates

The Government of India appointed in 1949 the National Income Committee with P.C. Mahalanobis as chairman and D.R.Gadgil and V.K.R.V.Rao as members to suggest measures for improving the quality of data, and collecting further essential statistics and to recommend ways and means of promoting research in the field of natioal income. After the release of the final report in 1954, the official series of national income estimates have been regularly prepared and published by the Central Statistical Organisation (CSO) in their annual publication entitled *National Accounts Statistics*. Subsequently, many inprovements were brought about in data base and methodology by the Central Statistical Organisation. The National Accounts Statistics is also known as White Paper. The coverage has been gradually extended so as to incorporate th estimates of capital formation, savings, private consumption expenditure and factor incomes. The detailed methodology adopted at present is discussed in the CSO publications entitled *National Accounts Statistics : Sources and Methods 1980.*

7.4 Methodology of Estimation

For estimating national income in India, the various economic activities are divided into:

1. agriculture including animal husbandry
2. forestry and logging
3. fishing
4. mining and quarrying
5. manufacturing
    1. registered manufacturing
    2. unregistered manufacturing
6. construction
7. electricity, gas and water supply
8. transport, storage and communication
9. trade, hotels and restaurants
10. banking and insurance
11. real estate, ownership of dwelling s and business services
12. public administration and defence
13. other serivces

On the basis of the data available and the estimation which the producers have adopted, these sectors are classified into three broad categories. The first category includes the first six sectors except unregistered manufacturing. For each of these sectors, data on output, input and prices is available on a regular basis. The second category consists of railways, electricity, communications, banking and insurance, real estate and public administration and defence. Annual accounts of these undertakings provide data on factor incomes for these sectors. The third category includes unregistered manufacturing, trade, hotels and restaurants and other services. No satisfactory data is available either on output and input or on factor incomes for this category.

We have already mentioned that there are three approaches, viz., the product, income and expenditure approaches to the estimating of national income. The product approach can be used only for commodity producing sectors. Hence, for the first category, product approach is used. Income approach in its direct or indirect form is adopted for the remaining two categories.

The estimate of gross domestic product for the sectors in the first category is arrived at as folows. The value of output of each sector is estimated by multiplying the quantity producted with the price. In the case of some sectors like animal husbandry, forestry and fishing, annual data is not available and hence the estimates are derived by following the methods of extrapolation. The second step is the estimation of intermediate inputs used in the production of these products. These estimates are derived from some benchmark surveys which provide the input-output proportions for the year of survey. These proportions are used for othr years also. The gross value added is obtained by deducting the total value of inputs from total value of output.

The estimates relating to sectors falling under the second category are obtained by following the income approach in its direct form. The annual accounts of the undertakings provide data on compensation for employees, interest payments, rent, operating surplus and depreciation allowance. They are used to estimate the total factor earnings which taken together constitute the value added.

The major difficulty is only with the sectors falling under the third category. Since no systematic data is available for these sectors, the estimates are derived in a round about manner. The estimates of the working force are derived from decennial census. Hence, they are available for the bench mark years 1951, 1961, 1971 and 1981. The year to year estimates are derived by interpolation or extrapolation. The estimates of the average value added per worker are obtained for bench-mark years on the basis of the sample surveys conducted specially for this purpose. Using these estimates and the estimates of the work force, value-added for each sector is computed.

The estimates for different sectors are aggregated to arrive at the gross domestic product. The consumption of the fixed capital is estimated for each sector separately and then aggregated. This aggregate is subtracted from the gross domestic product to arrive at the net domestic product.

The estimates of net factor earnings from abroad are derived from the exchange control data compiled by the Balance of Payments Division of the Reserve Bank of India. The estimates of gross national product and net national product are obtained by adding the net factor earnings from abroad to the corresponding aggregates of domestic income.

The estimates at constant prices (1970-71) are derived by deflating the values at current prices. Table-2 shows the inter-relations between different aggregates of national income along with estimates for 1979-80 and 1980-81. For sectors like agriculture, livestock, hunting, forestry and fishing the double deflation method is used. According to this method, both the output and the input are evaluated at the base year prices. For other sectors like manufacturing, construction, etc., the output is deflated and then the proportion of value added to total output at current prices is used to derive value added at constant prices. In the case of some sectors like transport, trade, hotels, etc., indices of physical activity are developed and they are used to estimate the value-added at constant prices.

7.5 Growth of National Income and Components

We shall present the estimates of national income and other macro-economic aggregates of Indian economy since the inception of planned economic development in India. As has been already pointed out, the estimates of national income and per capita income give an idea of the overall performance of the economy. The main features of the Indian economy are discussed below:

7.5.1 Trends in National Income

If a single indication of performance of an economy is to be picked up, the national income is the most convenient measure. If the estimate of national income is divided by population, we arrive at per capita income. The estimates of national income and per capita income are presented in Table-3 for five time points. It can be observed that per capita income at current prices increased from Rs. 245.5 in 1950-51 to Rs. 2201.4 in 1982-83. But a large part of this increase is due to rise in prices. If the income is measured at constant prices, (1970-71 prices), the incresase will be from Rs. 466.0 in 1950-51 to Rs. 748.6 in 1982-83.

Trends is national income and per capita income can be understood by computing the annual growth rates. One simple way of calculating the growth rate is to take the income at the beginning and the terminal years and estimate the annual compound growth rate. If A is the value in the terminal year, P the value at the beginning and 'n' the number of years covered, the annual growth rate, 'u', is given by the formula:

$A=P(1+r/100)^n$

Here 'r' will be the annual percentage growth rate.

The annual growth rates are presented in Table-4. While the annual growth rate of national income is 9.5 per cent at current prices, it is only 3.8 per cent at constant prices. Since the population growth rate was 2.2 per cent per annum, the growth rate of per capita income was only 1.5 per cent per annum during the three decades of planned development in India.

7.5.2 Sectoral Distribution of Income

In order to understand the structure of the economy, the sectoral distribution of income is to be examined. In other words, changes in aggregates have to be associated with the shifts in the relative importance of different sectors. The distribution of net domestic product by broad sectors is presented in Table-5. The economy is divided into three sectors, viz., primary, secondary and tertiary. The primary sector includes agriculture and allied sectors and mining and quarrying. The secondary sector includes manufacturing, electricity, gas and water sypply and construction. All the remaining sectors are included in the tertiary sector. The primary sector which accounted for 61.3 per cent of income in 1950-51 declined to 40.3 per cent in 1982-83 with a simultaneous increase in the secondary sector from 14.5 per cent to 21.4 per cent and in the tertiary sector from 24.2 per cent to 38.3 per cent. The gradual reducation in the share of agriculture and allied activities was not contrary to the expectation and might be considered the result of planned economic development in India. The deliberate policy of industrialisation and consequent requirements of transportation and commercial activities have been the factors responsible for this relatively higher growth of industrial and service sectors.

India adopted the system of mixed economy. Both private and public sectors play important roles. In this context it is necessary to examine the role played by the public sector during the last thirty years. Table-6 shows the shares of public and private sectors in gross domestic product. The share of public sector rose from 10.9 per cent in 1950-51 to 18.2 per cent in 1982-83. Thus the share nearly doubled. This shows the rapid growth of the public sector.

7.5.3 Expenditure on Gross Domestic Product

Another important aspect to examine is how the gross domestic product is spent on different categories. Two important categories are consumption and capital formation. It can be observed from Table-7 that there is a substantial increase in the proportion of gross domestic capital formation. It increased from 13.5 per cent in 1950-51 to 17.1 per cent in 1979-80. On the other hand, the proportion of private consumption expenditure showed a decline from 79.8 per cent in 1951-52 to 70.2 per cent in 1979-80.However, the proportion of the government final consumption expenditure showed increase from 5.1 per cent in 1950-51 to 12.6 per cent in 1979-80.

7.5.4 Rates of Saving and Capital Formation

Another aspect to be examined is the rate of capital formation and saving because the rate of growth of the economy is influenced to a large extent by these rates. Table - 8 shows the rate of capital formation and the rate of saving. The rate of capital formation is defined as the proportion of capital formation in the domestic product. Similarly, the saving rate is the proportion of saving in the domestic product. Both these rates can be expressed either in gross terms or in net terms. As has been already pointed out, the gross and net concepts differ in respect of capital consumption (depreciation) only. The data provided in Table-8 shows these rates. There has been, similarly, a substantial increase in the rate of capital formation as well as in the rate of saving. All these rates have more than doubled during the three decades under consideration. But what is puzzling in the economy is the low growth rate of income even though the rates of saving and capital formation are very high. Various explanations for it have been offered which cannot be considered here.

7.6 Summary and Conclusion

Attempts to estimate the national income of India started as early as 1876. Dadabai Naoroji was the first person to estimate the national income of India for the year 1867-68. Of the various estimates given for British India, those prepared by V. K. R. V. Rao are the best and are arrived at scientifically. In addition to the data inadequacies, the estimates relating to pre-independent India suffered due to personal biases. While the nationalist economists wanted to highlight poverty and low standards of living, the pro-government persons wanted to show that the per capita income was not very low.

The estimates of national income since 1950s have mainly been based on the methodology suggested by the National Income Committee appointed in 1949. There have been slight improvements in data collection and hence methodologies could also be improved. Even though it is theoretically possible to estimate the national income through product approach, income approach or expenditure approach, in practice it is necessary to combine these approaches. Estimates of national income of India are based on a combination of product and income approaches. The product approach is used for commodity producing sectors whereas the income approach is used for the remaining sectors.

The national income per capita increased from Rs.466.0 in 1950-51 to Rs.696.3 in 1980-81 at constant (1970-71) prices. This implies a growth rate of 1.3 per cent annum. This low growth rate is due to a high rate of growth of population at 2.2 per cent per annum. There was a shift in the sectoral distribution of income during the three decades of planned development. The share of the primary sector declined while the share of secondary and tertiary sectors increased. Similarly, the share of the private sector also declined. The saving rate increased from 7.0 per cent in 1950-51 to 16.9 per cent in 1980-81. The low growth rate of income in spite of a substantial improvement in the rates of saving and capital formation is puzzling.

-Dr.S.Subrahmanyam

TABLE 1

Past Estimates of National Income and Per Capita Income of India

Author	Estimates of the year	National Income (in crores of Rs.)	Per Capita Income (in Rs.)	Coverage
Dadabhai Naoroji	1868	340	20	British India
F.J.Atkinson	1875	574	31	British India
Baring & Barbour	1882	525	27	British India
Lord Curzon	1897-98	675	30	British India
William Digby	1899	390	17	British India
Sir B.N.Sharma	1911	-	50	British India
Findlay Shirras	1911	1942	80	British India
Wadia & Joshi	1913-14	1087	44	Whole of India
Arnold Lupton	1919-20	2854	114	British India
Shah & Khambata	1921-22	2364	74	Whole of India
V.K.R.V.Rao	1931-32	1689	62	British India
B.Natarajan	1938-39	1482	67	British India
Eastern Economist	1939-40	1934	67	British India
Ministry of Commerce (Govt of India)	1945-46	6234	198	British India

TABLE 2

National Product and Related Aggregates

(at current prices)

(Rs. Crores)

	Item	1979-80	1980-81
1.	Gross National Product at factor cost	95023	114601
2.	*add*: indirect taxes	14723	16745
3.	*less*: subsidies	2520	2822
4.	Gross National Product at Market prices	107226	128524
5.	*less*: Consumption of fixed capital	6651	8052
6.	Net National Product at market prices	100575	120462
7.	*less*: Net factor income from abroad	(+) 153	(+) 330
8.	Net domestic product at market prices	100422	120132
9.	Net domestic product at factor cost	88219	106209
10.	*less*:income from entrepreneurship property accruing to government administrative department	1985	2245
11.	*less*: saving of non-departmental enterprises	372	184
12.	Income from domestic product accruing to private sector	85862	103780
13.	*add*:National debt interest	1008	1500
14.	*add*:Net factor income from abroad	(+) 153	(+) 330
15.	*add*:Current transfers from Government administrative department	2383	2808
16.	*add*:Other current transfers from the rest of the world, net	1624	2064
17.	Private income	91030	110482
18.	*less*:Saving of private corporate sector net of retained earnings of foreign companies	736	814
19.	*less*:Corporation tax	1392	1311
20.	Personal income	88902	108357
21.	*less*:Direct taxes paid by households	2011	2275
22.	*less*:Miscellaneous receipts of government administration departments	356	381
23.	Personal disposable income	86535	105701

TABLE 3

Net National Product at Factor Cost

Year	At Current Prices Total (Rs. crores)	At Current Prices Per Capita (Rs.)	At Constant Prices (1970-71) Total (Rs.Crores)	At Constant Prices (1970-71) Per Capita (Rs.)
1950-51	8,812	245.5	16,731	466.0
1960-61	13,263	305.6	24,250	558.8
1970-71	34,235	632.8	34,235	632.8
1980-81	1,04,201	1536.9	47,211	696.3
1982-83	1,59,598	2201.4	54,276	748.6

TABLE 4

Growth Rates of Net National Product

Period	Current Prices Total	Current Prices Per Capita	Constant Prices Total	Constant Prices Per Capita
1950-51 - 1960-61	4.2	2.2	3.8	1.8
1960-61 - 1970-71	9.9	7.6	3.5	1.2
1970-71 - 1980-81	11.8	9.3	3.3	1.0
1950-51 - 1980-81	8.6	6.3	3.5	1.3
1950-51 - 1982-83	9.5	7.1	3.8	1.5

N.B. : Compound growth rates have been calculated.

TABLE 5

Composition of Net Domestic Product (percentages)

Year	Primary	Secondary	Tertiary	Total
1950-51	61.3	14.5	24.2	100.0
1960-61	56.6	17.0	26.4	100.0
1970-71	50.1	19.7	30.2	100.0
1980-81	42.5	21.3	36.2	100.0
1982-83	40.3	21.4	38.3	100.0

N.B. : Net Domestic Product at constant prices is used.

TABLE 6

Distribution of Gross Domestic Product Between
Public and Private Sectors (percentages)

Year	Public	Private	Total
1960-61	10.9	89.1	100.0
1970-71	14.9	85.1	100.0
1980-81	20.4	79.6	100.0
1982-83	18.2	81.8	100.0

TABLE 7

Expenditure on Gross Domestic Product

(percentages)

	Item	1950-51	1960-61	1970-71	1979-80
1.	Government Final Consumption Expenditure	5.1	6.1	9.4	12.6
2.	Private Final Consumption Expenditure	79.8	78.1	74.0	70.2
3.	Gross Domestic Capital Formation	13.5	14.1	15.7	17.1
4.	Changes in Stocks	1.8	2.8	2.6	3.7
5.	Exports of Goods and Services	6.1	4.5	4.6	6.7
6.	Less Imports of Goods and Services	3.4	7.0	4.5	5.1
7.	Discrepancies	-2.9	-1.4	-1.6	-5.1
	Total	100.0	100.0	100.0	100.0

TABLE 8

Rates of Capital Formation and Saving at Current Prices

(per cent)

Year	Net capital Formation as a proportion of Net Domestic Product	Net Saving as a proportion of Net Domestic Product	Gross Capital Formation as a proportion of Gross Domestic Product	Gross Saving as a proportion of Gross Domestic Product
1950-51	6.8	7.0	10.0	10.2
1960-61	12.7	9.3	16.9	13.7
1970-71	13.0	12.0	17.8	16.8
1980-81	19.0	16.9	24.2	22.2

7.7 Suggested Books

CSO, National Accounts Statistics : Sources and Methods, Govt of India, Publications Division, New Delhi, 1980.

7.8 Model Examination Questions

I Answer the following questions in about 30 lines each

1. Explain briefly the methodology adopted in the estimation of national income in India.
2. Explain the broad trends in the Indian economy as revealed by the national income estimates.

II. Answer the following questions in about 15 lines each

1. Explain briefly the attempts made in India before independence in the estimation of national income.
2. What is the sectorisation scheme adopted in national income estimation in India?

Unit - 8 : National Income Accounts - An Outline of Social Accounting Methods

Contents

8.0 Aims and Objectives

The unit introduces the concept of accounting, shows how national income can be viewed as a system of accounts, represents these accounts in the form of a matrix and briefly explains the input-output analysis.

After reading the unit, you will be able to

* interpret the system of national accounting;
* identify the basic principles of double entry system;
* present the social accounting matrix;
* explain the input-output analysis; and
* signify the uses of input-output analysis.

8.1 Introduction

Having understood the concepts of different national income aggregates and their estimations, it is necessary to examine how these aggregates can be summarised in the form of accounts. These accounts unify the different components of national income statistics. National accounts refer to an organised arrangement of transactions, actual or imputed in the economic system so as to differentiate between (i) forms of economic activity, viz., production, consumption and accumulation of wealth; (ii) sectors of the economy; and (iii) the types of transactions, viz., sale and purchase of goods and services, gifts, taxes, etc.

8.2. System of National Accounting

National accounting is based on the principles of business accounting. However, while the concept of business accounting is very old, national accounting is of recent origin. Business accounting is based on the **principle of double entry system.** In this system every transaction takes place between two parties - the one who pays and the one who receives. For example, if a shopkeeper sells a packet of tea for Rs.20 to a customer, he would show this transaction as a sale of tea on the debit side and a receipt of Rs.20 on the credit side. The same transaction can be viewed from the customer's side also. In this case, receipt of a packet of tea is on the credit side and payment of Rs.20 is on the debit side. It is necessary to understand why they are called credits and debits rather than receipts and payments. This is so because the accountant is not bothered about whether actual payment has been made or not. It is not the actual payment or receipt that is recorded but only the amount payable and receivable. Hence they are called credits and debits.

In commercial accounting, all the transactions of a firm are entered appropriately on the debit and credit sides of an account. This account gives an idea of the functioning of the business firm. In national income accounting also, all transactions have to be entered in a similar way. However, there is a slight difference between comercial accounting and national income accounting. For instance, a producer hires factors of production, obtains the output and sells it in the market. In the national income accounting the amount received by selling the output is shown on the credit side and payments made to factors of production are shown on the debit side. In an economy, countless transactions are being conducted all the time. Firms are buying raw materials and selling finished products. They are paying wages to their workers. Consumers are purchasing their daily necessities from shops. Farmers are selling their produce to traders. Old age pensions are being paid by the Government. Imports are coming into the country and exports are going out of the country. All these transactions have to be classified systematically and entered into National Income Accounts. These accounts help us to understand how various transactions are inter-related and give us an idea of the working of an economy.

All the economic activities can be classified into (1) production (2) consumption, and (3) investment. The activity of the four factors of production, namely, land, labour, capital and enterprise, is known as *production*. The process of using up goods and services for the satisfaction of human wants is known as *consumption*. Utilization of excess of production over consumption to augment the productive capacity of the economy is known as *investment*. For constructing accounts, it is possible to identify three sectors, viz., producing sector, consuming sector and government sector.

There are *two basic principles in the double entry system*. They should be internally as well as externally balanced. *Internal balance* requires that for every credit item there should be an equivalent debit item. *External balance* requires that for every debit item in one account there should be a corresponding credit item in another account, and vice versa. Let us illustrate these principles by means of an example. Suppose there are two sectors, namely, producing sector and household sector, in an economy and the value of production is Rs.200 crores. By value of production we mean value added. Hence, National income is also Rs.200 crores. Suppose wages account for Rs.170 crores and profits for Rs.30 crores. The household sector is assumed to spend the entire income on consumption. Then the accounts will be as follows.

Producing Sector Account

(Rs. in crores)

Debit			Credit	
Payments to Factors :	Wages	170	Value of Output sold	200
	Profits	30		
	Total	200	Total	200

Household Sector Account

(Rs.in crores)

Debit		Credit		
Consumption	200	Income Received :	Wages	170
			Profits	30
Total	200		Total	200

These accounts are internally as well as externally balanced since every debit in one account has a credit in another account and credit and debit tables of each account are equal. In the above example, what happens when the household sector saves Rs.40 crores out of its income? Now the accounts will be as follows.

Producing Sector Account

(Rs. in crores)

Debit		Credit	
Payments of factors of Production			
Wages	170	Value of output sold	160
Profits	30	Inventory investment	40
Total	200	Total	200

Household Sector Accounts

(Rs. in crores)

Debit		Credit	
Consumption	160	Income received : Wages	170
Personal savings	40	Profits	30
Total	200	Total	200

These two accounts are balanced internally but not externally. The producing sector's inventory investment has no corresponding debit in the household account. Similarly, the household saving has no corresponding credit in the producing sector's. To bring these accounts into external balance, another account, namely, Savings and Investment Account has to be set up.

Savings and Investment Account

(Rs. in crores)

Debit		Credit	
Inventory Investment	40	Personal Savings	40
Total	40	Total	40

We have to remember one important principle adopted in accounting. Investment is treated as a credit item in the producing sector but a debit item in the savings and investment sector. Similarly, savings is a debit item in the household sector and hence it is a credit item in the savings and investment sector account.

Having understood a few basic rules of accounting, we shall now proceed to set up accounts for different sector. We have considered five sectors, viz., production, household, capital, government and the rest of the world.

The production account consists of private final consumption, public final consumption, capital formation and exports on the credit side and household income, direct taxes on firms, firm savings and imports on the debit side. The household account consists of household income and Government transfer payment on the credit side and household consumption, savings and direct taxes on the debit side. The capital account consists of household savings, firms savings and government savings on the credit side and gross capital formation and overseas net investment on the debit side. The Government account contains taxes from households and firms on the credit side and Government savings, Government consumption and transfer payments on the debit side. The total of each account gives one kind of national income aggregate. For instance, the total of credits on the production account gives gross domestic expenditure while the total of debits in the same account gives gross domestic products. The household account gives disposable income. These accounts are illustrated below through hypothetical data:

Production Account

(Rs. in Crores)

Debit		Credit	
Household Income	400	Private Consumption	240
Direct Taxes	50	Public Consumption	80
Savings	30	Gross Capital Formation	40
Impors	40	Exports	160
Total	520	Total	520

Household Account

(Rs. in Crores)

Debit		Credit	
Savings	120	Household Income	400
Direct Taxes	80	Government Transfer payments	40
Private Consumption	240		
Total	440	Total	440

Capital Account

(Rs. in Crores)

Debit		Credit	
Net Investment Overseas	120	Household Savings	120
Gross Capital Formation	40	Firms Savings	30
		Government Savings	10
Total	160	Total	160

Government Account

(Rs. in Crores)

Debit		Credit	
Government Savings	10	Direct taxes from Firms	50
Public Consumption	80	Direct Taxes from Households	80
Transfer Payments	40		
Total	130	Total	130

Rest of the world Accounts

(Rs. in Crores)

Debit		Credit	
Exports	160	Imports	40
		Net Overseas Investment	120
Total	160	Total	160

Check Your Progress - I

1. Explain the two basic principles in the Double Entry System.

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8.3 Social Accounting Matrix

The same information can be represented more concisely in the form of matrix and the corresponding matrix is known as Social Accounting Matrix (S.A.M.).

National Income Accounts in a Matrix form

(Rs. in Crores)

	Production Account	Household Account	Capital Account	Government Account	Rest of the world Account	Row Total
Production Account	0	240	40	80	160	520
Household Account	400	0	-	40	-	440
Capital Account	30	120	0	10	-	160
Government Account	50	80	-	0	-	130
Rest of the World Account	40	-	120	-	0	160
Column Total	520	440	160	130	160	

In this presentation an entry in a row records an **incoming or credit**, while that in a column represents **outgoing or debit**. Since every item appears both in a row and in a column, we can see it from two different angles. Consider the first row. Produces are credited with R. 240 crores for the sale of consumer goods, Rs. 40 crores for gross capital formation, Rs.80 crores from the Government in terms of transfer payment and Rs.160 crores for exports. Similarly, the production sector is paying Rs.400 crores to the households towards factor payment, Rs.30 crores for savings, Rs.50 crores to government in terms of taxes and Rs.40 crores for imports. The households are receiving Rs.400 crores from producers as factor payments and Rs.40 crores from the Government in the form of transfer payments. Of the total income (Rs.440 crores) received by the households, they are spending Rs.240 crores for the purchase of consumer goods, paying Rs.80 crores to the Government towards taxes and saving Rs.120 crores. Similarly, the remaining rows and columns can be understood.

The guidelines for national income accounting were first laid down by the United Nations in 1953 and a revised system of social accounts was suggested in 1968. The major change is in the inclusion of data for opening and closing stocks in the accounts.

8.4 Input - Output Analysis

8.4.1 Introduction

Input-output is a powerful technique to understand inter-dependencies in the economy. Conditions for maintaining equilibrium between supply and demand can be determined with the help of this analysis. This technique is invented by Leontief in 1951.

8.4.2 Relationship with Social Accounting Matrix

The first step in using this analysis is the construction of input-output table. Just like the social Accounting Matrix (SAM) shown above, the input-output table also provides a descriptive set of accounts. However, it differs from the Social Accounting Matrix in one way. Social Accounting Matrix is broader and covers all the transactions that have taken place in the economy. On the other hand, in the input-output table, production activity will be divided further into some sectors and purchases by and sales from each sector will be distinguished. The number of sectors distinguised depends upon the purpose of the study and the resources at command.

8.4.3 Input - Output Table

Let us examine the content of the input-output table. For the sake of simplicity, let us divide the economy into three sectors, viz., Primary, Secondary and tertiary sectors and the output of these sectors be Rs.250, 200 and 150 respectively which are the outputs produced by these sectors. Some part of these outputs will be purchased by these sectors which is known as intermediate use and the remaining output will be used for consumption, investment and exports, the sum of which is called final demand.

The way in which the output is distributed for intermediate use and final demand is shown below:

Input - Output Table (in Rs.)

Producing Sectors	Consuming Sectors			Final Demand	Total Output
	Primary	Secondary	Tertiary		
Primary	20	60	30	140	250
Secondary	30	20	15	135	200
Tertiary	10	40	15	85	150
Total	60	120	60	360	600

The first row gives the distribution of total output of the primary sector. Out of the total output of Rs.250, Rs.20 are used as input by the primary sector itself, Rs.60 as input by the manufacturing sector, Rs.30 as input by the teritary sector and Rs.140 as final demand. The other two rows should also be interpreted similarly. If we consider each column we get the inputs used for different sectors. For instance, the third column represents inputs purchased by the tertiary sector from itself and other two sectors. We can observe that the tertiary sector requires Rs.30, Rs.10 and Rs.15 worth of inputs for thep primary, the manufacturing and the tertiary sectors, respectively. The value of total inputs used by the tertiary sector is Rs.60. The other two columns should be interpreted similarly.

The difference between the value of output and the value of intermediate input is called value added and it is the payment made to the primary factors, viz., land, labour, capital and organisation. The payments made to these factors are called rent, wages, interest and profits respectively. If the factor payments are also shown in the input-output table, it will appear as follows:

Input - Out put Table (in Rs.)

Producing Sectors	Consuming Sectors			Final Demand	Total Output
	Primary	Secondary	Tertiary		
Primary	20	60	30	140	250
Secondary	30	20	15	135	200
Tertiary	10	40	15	85	150
Total Intermediate Inputs	60	120	60		
Primary Inputs					
1. Rent	50	10	5		
2. Wages	70	20	50		
3. Interest	30	20	15		
4. Profits	40	30	20		
5. Value-added	190	80	90		
Total Output	250	200	150	360	600

The table shows that the value-added in the primary sector is Rs.190 of which Rs.50 is paid as rent, Rs.70 as wages, Rs.30 as profits. If these payments for primary factors are added to the value of intermediate inputs, we get the total value of output. Thus, the row sum and column sum are identical. This can be verified for the other two sectors also..

8.4.4 Uses of Input-Output Analysis

The Input-Output Table can be used for different purposes. Some of the uses are mentioned below:

1. Input-Output Table can be used to work out forward and backward linkages of various sectors. When a sector grows, it generates growth in other sectors by generating demand for various inputs

used by it. This effect is called back-ward linkage effect. For instance, when agriculture grows, it generates demand for fertilisers, pesticides, machinary, etc. This is known as *backward linkage effect.* Similarly, the output of agriculture may be used in various industries and hence those industries will also grow along with agriculture. For instance, when sugarcane production increases, sugar industry will expand. This is known as *forward linkage effect.* Thus, the growth of one sector results in the growth of the other sector either through backward linkage or through forward linkage effects.

2. It can be used for forecasting purposes. If we know the final demand for various sectors, we can project the output to be produced in various sectors. These projections help us to arrive at the sectoral pattern of growth that avoids bottlenecks in the production process.

3. With the projected demand for various sectors, one can work out the labour and capital requirements.

Check Your Progress - II

2. What is input-output matrix?

3. Differentiate the social accounting matrix from input output matrix.

4. What are the causes of input-output analysis?

8.5 Summary and Conclusion

National accounts refer to an organised arrangement of transactions in the economic system in order to differentiate between activities, sectors and types of transactions. These accounts help us to understand how various transactions are inter-related and give us an idea of the working of an economy.

The procedure is based on the double entry system of business accounting. Each account consists of two sides, viz., credit and debit. There are two basic principles in the double entry system. The accounts should be balanced internally as well as externally. Internal balance requires that for every credit item there should be an equivalent debit item. External balance requires that for every debit item in one account there should be a coresponding credit item in another account and vice versa. By arranging the information contained in these accounts in the form of matrix, we get Social Accounting Matrix.

In the Input-output Matrix, the production sector will be divided into a number of sub-sectors and flows of output across the sub-sectors will be tabulated. The Input-output table can be used for a number of uses. For instance, it can be used for estimating forward and backward linkage effects, and for projecting the output to be produced in different sectors and for projecting the labour and capital requirements.

- Dr.S.Subrahmanyam.

8.6 Suggested Books

1.	Stone and Stone	:	National Income Analysis

8.7 Model Examination Questions

I Answer the following questions in about 30 lines each:

1. Explain the principles of national income accounting and compare them with those of commercial accounting.
2. What is Input-Output table? How is it constructed and what are its uses?

II. Answer the following questions in about 15 lines each:

1. Distinguish between Social-Accounting Matrix and Input-Output Matrix.
2. Explain internal and external balances in accounts.
3. Explain forward and backward linkages.

Block - III

This block on **"Planning for Development"** explains economic planning in India as also the objectives, strategies, outlays and achievements of Indian Five Year Plans. In the last part of the block the achievements in this regard are analysed in terms of growth, social justice, inequalities, employment, price level and self-reliance.

The Units included in the block are :

Unit - 9	:	Economic Planning in India
Unit - 10	:	Five Year Plans in India
Unit - 11	:	Achievements of Indian Five Year Plans.

Unit-9 : Economic Planning in India

Contents

9.0 Aims and Objectives

The unit explains the planning process for economic development in Inida and the major objectives of Indian Plans.

After reading the unit, you will be able to

* emphasize the need for planning in the development of an economy.
* analyse the importance of planning in India considering the retardation during the British rule;
* describe the features of Indian Planning; and
* identify the major objectives of the Indian Plans.

9.1 Introduction - Need for Planning

Government intervention has been increasing in the economic sphere, especially during the recent past. Its influence on the social, political and economic life of the community has been far reaching. The philosophy of the nineteenth century, i.e., *laissez faire* was that the interest of society would be best served if the State interfered as little as possible with the life of the people. But there are many limitations with regard to this concept.

9.1.1 Limitations of *Laissez Faire* Policy

1. Under a *laissez faire* system, income is not fairly distributed. Goods are produced for rich people while the poor lack such bare necessaries as education, health, housing and food.

2. The market economy is ineffective in coping with major changes. Where resources need to be moved to a considerable degree, its methods are too slow. Scarcities are not quickly eliminated, with the result that a few persons receive abnormally large incomes at the cost of the vast majority of the people. Scarce commodities are unjustly distributed. At the same time, over-production is not quickly reduced, as result of which many people suffer due to abnormally low incomes.

3. The market economy leads to wasteful expenditure. Though competition induces producers to improve thier techniques, it makes them spend heavily on advertisements, which tend to misrepresent the quality of the goods.

4. The case is that foreign trade is self-regulating and there should be no interference of the government. This self-regulating mechanism led to a number of problems.

5. Market economy causes instability. In the creation of money, it produces business cycles, unemployment and misery like the Depression of 1930.

This concept of *laissez faire* has lost its meaning even in the capitalist countries and its support. The belief in non-interference by the Government was very strong in the early years of the nineteenth century but not in the twentieth century.

9.1.2 Role of Government and Planning

The government today is no more a passive observer of the economic process. It has emerged as an active participant. It has taken upon itself the roles of protector, controller, and guardian of the citizens. In fact, there is hardly any sphere of human activity today which is not in some way or other controlled and regulated by the all-powerful modern State. The national responsibility of planning is something that cannot be assumed or discharged by any authority finally other than the government which the people have elected to office to look after the affairs of the country. Now the question is whether a modern economy must inevitably be a planned economy. This has given rise to considerable differences of opinion, view points and generated debates. Some regard planning instinctively and intuitively as some form of regimentation. Others feel that planning, even if it is something that is undesirable, is, in fact, necessary. The concept of planned economy necessarily leads to the participation of the government or the State in the actual management of the economy and not merely in the regulation of the economy. The government which is committed to the objective of a socialist society is increasingly compelled to go in for planned economic development.

The functions of government which were orginally limited to the maintenance of law and order have considerably expanded. In India, the State has been enjoined upon by the constitution in general and the Directive Principles of State Policy in particular, to shoulder the responsibility for the realization of total socio-economic welfare of the people. The fulfilment of the specified aims of social and economic justice incorporated in the Constitution of India, such as labour welfare, is another reason for the State's taking up planned economic development.

Large scale participation by the government in industrial and commercial activities is bound to increase the national dividend. The income from them goes into the common pool and is available for redistribution and re-investment.

The planned economic development is indispensable for raising the national income, per capita income, for reducing inequalities in income and weath, for increasing employment opportunities and for alround development of the economy.

Planning covbers all the phases of development and ensures the smooth development of the economy without bottlenecks, inflation, unemployment or other fluctuations. It is in this context that the public sector can regulate and implement the priorities and other allocations determined by the strategy. The entire perspective plan can be divided into operational segments of five years or so, to simplify allocations over short time intervals, as well as to ensure that the required projects are implemented. The sequencing of projects, the estimation of requirements and achievements and corrective action can be taken up periodically at five yearly intervals.

Check Your Progress - I

1. Explain briefly the limitations of *laissez faire* policy.

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2. What are the responsibilities of the present day government?

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9.2 Planning in India

We have seen that planning implies a conscious effort to direct economic activity by the State to achieve certain pre-determined social and economic goals. Before Independence, the Indian economy was a classic case of a stagnant economy. For nearly two centuries, the Indian economy was in the grip of the vicious circle of poverty, while vast technical progress and growth was going on in the western countries. One reason for this was the economic policy of the British in India. The structure of production was colonial, being oriented to the securing the needs of England. It thus ecncourgaed the growth of the agrarian and plantation economy to export raw materials to England and the development of certain areas of transport - railways and ports to provide a market for the English goods.

The Indian economy has all the characteristics of an underdeveloped country. It has the lowest per capital income and per capita comsumption in the world, high population growth and density of population. A large percentage of this population was concentrated in the rural areas, with high levels of illiteracy, high death rate, prevalance of diseases, etc. Much of the land was poor and agricultural production fell very much behind population growth leading to widespread poverty and malnutrition. The distribution of income was highly skewed, with a few rich and the rest in an abject state of poverty. Large scale underemployment and disguished unemployment were also common. Transport, electricity and other infrastructural facilities were at the rudimentary leval.

After Independence, the Government faced the formidable task of tackling such an economy and putting it on the road to progress. It was debated whether the private sector could handle such an onerous task alone. Since a policy of *lassez faire* was followed by the British, the private sector had taken root in many sectors. but the private sector is motivated by profit considerations. This would lead to the problem of monopoly and economic concentration. In a democratic system, perhaps, this may be inevitable. Hence the concept of the mixed economy was evolved with the State playing a positive and guiding role in directing economic activity through the public sector, while the private sector would be allowed to function subject to its conforming to the directives laid down by the plans. In 1948 and later in 1956, the Indistrial Policy Acts were passed, which specified the role of the public and private sectors in the economy. While the task of providing the infrastructure for industrial growth was within the purview of the public sector, the private sector was given a free hand in the production of consumer goods.

9.3 Features of Indian Planning

The idea of planning the economic development of India goes back to 1934, when Sri Vishveswarayya published a book entitled "Planned Economy in India". After that many plans were drafted, but none were implemented, and planning became operative with the establishment of the Planning Commission in 1950. The Planning Commission was asked to formulate a plan to achieve the objectives of growth with social justice after assessing the material, capital, and human and technical resources of the economy. It was entrusted with the task of identifying the factors that inhibit development and to suggest ways to remove them. With the establishment of a "socialist pattern of society", the need to involve the masses in production and consumption and to ensure that the benefits of development reach the lowest strata of society was highlighted. The aim was not merely to increase national income, but to change the very pattern of production and the structure of socio-economic relations to lead to an equitable distribution of income and wealth. To achieve this social goal, the State's role would have to be a major one, and its control of the economy was envisaged to be direct in the public sector and indirect in the private sector.

Indian plans are largely *indictive* in character and are not legally binding on eitehr the public or private sector. There is no compulsion to fulfil the targets . The plans just provide the format for the future, the specific goals and targets; and it is expected that both the public and private sectors will ensure that they are implemented. While the public sector can be controlled directly, the private sector has to be regulated indirectly through the licensing system or monetary and fiscal policies.

Check Your Progress - II .

3. What is the main characteristic of Indian Planning?

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9.4 The Main Objectives of the Indian Plans

Unlike the theoretical strategy of development with one single aim of development, the actual Indian plans had different objectives and different strategies and models for each quinquennium. Different objectives are evolved to meet the different problems that cropped up as a result of certain shortcomings of the plans and they changed from plan to plan. Broadly, the different objectives can be grouped under five headings (a) the increasing of national income (b) the raising of the investment - income ratio (c) the reducing of inequalities of income, wealth and concentration of economic power (d) the providing of additional employment and (e) the alleviating of the three important bottlenecks, namely, low agricultural production, increasing manufacturing capacity for producer's goods and adverse balance of payments.

a) The plans have been aiming at *increasing the growth of national income*. In the First Plan a growth rate of 11% for the first five years was estimated; raised to 25% in the Second Plan; maintained at this level in the Third Plan; and further increased to 5.5% per annum in the Fourth and Fifth plans. The abandoned Sixth plan had a target of 4.7% while the new Sixth plan (1980-85) restored the rate of 5% per annum. Except for the First Plan which exceeded the target, none of the other plans could achieve their objectives. But the Seventh Plan is expected to achieve the objective.

b) *Raising the investment - income ratio* : To build the industrial base and capacity of the country, the level of investment has to increase. In developed countries investment constitutes 20% of natioanal income and it is the aim of the plans to slowly increase investment to this level. The investment to income ratio in the First Plan was 7% and 11%, 14%, 14.5% and 16.3% in the subsequent plans, respectively. At present the rate has reached to 20% of national income, and it is hoped that this will help achieve the target of capital formation.

c) *Reduction of inequalities* assumed increasing importance since the Fifth plan onwards, which placed the removal of poverty as one of its basic objectives. The measures taken to help the poor were in the form of direct help to under-privileged sections such as landless labourers, small and marginal farmers, artisans, the unemployed and so on. In the sphere of wealth distribution, fixation of land ceiling for both urban and rural lands, restrictions on monopoly, regulation of large houses, higher tax rates on income and wealth were the other measures taken to reduce inequalities.

d) *Removal of bottlenecks:* Constraints were felt in three principal sectors: (i) In the first place, in agriculture, the availability of food-grains constitutes a major constraint. With increasing population and employment, the demand for food has been in excess of supply. Self-sufficiency in food grains is hence given high priority. (ii) The second bottleneck is capital deficiency. This deficiency was sought to be removed by adopting a strategy of planned development with high priority given to the development of the heavy and basic sectors. Once capital formation of the right type has been built, it accelerates the rate of growth of the economy, and opens up vast opportunities for employment. (iii) A third bottleneck is foreign exchange. Since export earnings are from primary products which have low demand elasticities, and improts are of the expensive capital goods, the developing countries usually face balance of payment difficulties. Since the Fifth plan, the high level of dependence on imports were sought to be removed and "self-reliant" growth for the economy was envisaged. To achieve this end, the plans have been fostering the growth of exports, import - substitution, self sufficiency in food grains, etc.

e) *Increasing employment* The employment objective has received special attention since the Second Plan which provided for the growth of the small scale and cottage industries for the supply of consumer goods. The same trend has continued in the subsequent plans.

Check Your Progress - III

4. List the objectives of Indian Plans?

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5. What are the major constraints in the Indian economy?

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9.5 Summing Up

The unit tried to explain the importance of planning in relation to the deficiences in *laissez faire* policy. In the present day world, the role of governement has expanded. The economic planning is indispensable for not only raising gross national product, per capita income but also for reducing inequalities of income, umemployment rate and poverty in the country. The major feature of Indian planning is its indictiveness. The major objectives of planning relate to the increasing of the national income the raising of capital - output ratio, the reducing of inequalities, the removing of bottlenecks in the economy, the increasing of employment opportunities and the alleviating of poverty, etc.,

--Ms Prabha Panth

9.6 Suggested books

1.	Govt. of India	:	Five Year Plans
2.	Ashok Rudra	:	Planning Models
3.	Datt & Sundaram	:	Indian Economy

9.7 Model Examination Questions

I. Answer the following questions in about 30 lines each:

1. What is the role of planning in the strategy of economic development with special reference to India?
2. Explain the main objectives of Indian Plans.

II. Answer the following questions in about 15 lines each:

1. What are the features of Indian planning?
2. What are the major objectives of Indian Plans?
3. Explain the importance of planning.

Unit - 10 : Five Year Plans in India

Contents

10.0 Aims and Objectives

The unit explains the six Five Year Plans and their targets and outlays. It examines their achievements. It introduces the Seventh Five - Year Plan.

After reading the unit, you will be able to

* explain the objectives, outlay, strategies and achievements of six Five - Year Plans;
* describe the objectives and outlay of the Seventh Plan;
* understand the term rolling plan ; and
* identify the concept of Plan Holiday.

10.1 Introduction

Having learnt about the need for planning and features and objectives of planning in the last unit, let us try to study each plan in detail. As you may be aware, we have so far, completed six Five Year Plans. The Seventh Plan is going to be completed by March 1990 and the Eighth Five Year Plan will be started from April 1990 for a period of five years i.e., up to March 1995.

In India planning was started in the year 1951. The First Five Year Plan was started in April 1951. The periods of Indian Plans are as given here under :

1.	First Five Year Plan	-	April 1951 to March 1956.
2.	Second Five Year Plan	-	April 1956 to March 1961.
3.	Third Five Year Plan	-	April 1961 to March 1966.
4.	Three Annual Plans	-	April 1966 to March 1969.
5.	Fourth Five Year Plan	-	April 1969 to March 1974.
6.	Fifth Five Year Plan	-	April 1974 to March 1978.
7.	Sixth Five Year Plan	-	April 1980 to March 1985.
8.	Seventh Five Year Plan	-	April 1985 to March 1990.

This unit explains the objectives, outlay, strategy and achievements of each plan.

10.2 The First Five Year Plan, 1951 - 56

It was basically a Plan that tried to lay the foundations for future economic growth of the country. It set about to rehabilitate the economy and to repair the ravages caused by the Second World War and the Partition, to integrate the various projects taken up by the Union and State Governments.

10.2.1 Objectives

There were two major objectives :

(1) to correct the disequilibrium caused by the War and Partition and
(2) to initiate a process of allround balanced economic development for the future.

Over and above these, certain subsidiary objectives were included such as (a) to raise productivity of food and raw materials (b) to implement schemes that would create economic overheads and increase employment opportunities - such as investment in multi - purpose river valley projects, irrigation, transport and so on, (c) to initiate measures of social justice consistent with the Directive Principles of the Constitution and (d) to build up administrative and other organisations required to carry out these programmes.

10.2.2 Outlay

Although the initial outlay was estimated to be about Rs. 2,069 crores in the Public sector, the estimate was later revised to Rs. 2,356 crores. The actual expenditure did not even exhaust the original estimate and was only Rs 1,960 crores.

Agriculature and irrigation received the maximum share of investment with an allotment of 31% of the total outlay, in order to make up the deficit in foodrains and materials. 27% was alloted to transport, which was another bottleneck during the war, and 23% to social and other services aimed at improving health, sanitation and education. But the industrial sector received only 4% of investment which created serious bottlenecks for the future industrial growth of the economy. The national income was expected to grow at a rate of 11% over the plan period.

10.2.3 Strategy

The First Plan was not a well - integrated programme. It was more or less a set of separate schemes of development presented in the form of a plan. The theoretical basis was weak, although subsequently the Harod-Domar model of growth was fitted to data for the purpose of projecting the savings ratio and for working out the annual rate of growth of 2 to 2 1/4% per annum over the plan period. The savings ratio was estimated to be 5 to 6% during the plan period. At best its theoretical base was a one section aggregate model of growth.

10.2.4 Achievements

The First Plan was able to achieve most of its objectives, thus sustaining the hope of the planners. The growth of national income was more than the targeted, i.e., 18%, per capita income grew by 11%, per capita consumption by 8% and investment rates by 2.3% per annum. Per capita real income rose by 6.3% the price index fell by 13% in 1955 - 56 compared to that of 1950 - 51, showing the impact of higher output of consumption goods.

In agriculture, food grain production increased by 20% and the index number of agricultural production for all crops increased from 26 in 1950-51 to 117 in 1955-56. The industrial sector also showed considerable progress, with industrial production increasing by 38%. Production of finished steel and power capacity was increased and a number of multipurpose river projects inaugurated, namely, the Bhakranangal, Damodar, Hirakund, etc. In the transport and communication sector also there was an expansion of the major roads, railway lines, bridges and of railway stock. The introduction of the Community Development and National Extension services, tenancy reforms and abolition of intermediaries were other achievements of the Plan. The balance of payment position was also satisfactory. The plan was thus successful in achieving most of its targets.

The problems of increasing unemployment and slow growth of the industrial base were the main areas of failure of the first plan. Greater impetus to the industrial sector was given by the Second Plan.

Check Your Progress - I

1. The period of I plan was ------------------------
2. List the major objectives of I Plan.

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3. The percentage of outlay allotted to agriculture and irrigation in I Plan was ....

4. Explain the major achievements of the I Plan.

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10.3 The Second Five Year Plan (1956-61)

The objectives of the Second Five Year Plan were spelt out in the context of the concept of the evolution of a socialist pattern of society. Since the First Plan had laid the emphasis on agriculture, irrigation and power, the planners thought that a lower priority could be given to this sector, and more emphasis to the growth of the industrial sector, especially the heavy and basic sectors. The introduction of a socialist pattern of society gave a new direction to the economic and social goals of planning policy so as to conform to the aims of a Welfare State.

10.3.1 Objectives

The goals of the Second Plan were similar to those of the First Plan except that the development of industries and expansion of employment opportunities were stressed. These were four fold :-

(1) *A sizeable increase in national income so as to raise the level of standards of living in the country:* The national income was to be raised by 25% over the five years of the plan at an average annual growth of 5%.

(2) *Rapid industrialisation with special emphasis on basic and heavy industies :* Iron and steel, coal and cement, heavy chemicals and machine tools should be developed rapidly, since these form the basis for industrial growth.

(3) *A large expansion of employment opportunities* was envisaged. Since the rate of unemployment had increased in the First Plan, not only was chronic unemployment and disguised unemployment taken into account, but it was also assured that there would be decentralisation of industries, so that urban concentration could be reduced.

(4) *Reduction of inequalities of income and wealth and a more even distribution of economic power* was yet another objective. This was the outcome of adopting a socialist pattern of society and the welfare state.

10.3.2 Outlay

The Second Plan was a more ambitious one in both terms of outlay and targets. The total investment in the Public sector was estimated to be about Rs. 4,800 crores, though actual investment at the end of the plan period was only Rs. 4,600 crores. Transport and communication got lion's share of this outlay, i.e., 28%; industries and minerals 20% ; agriculture and community development 11%; and power 10%. Social services received 18% as compared to 23% in the First Plan.

10.3.3 Strategy

The theoretical model of the Second Plan was two sector and four sector models developed by Prof. P.C. Mahalanobis. He observed that an increase in the standard of living of the people depended on the growth of per capita income, which in turn would depend on the growth of the capital goods sector. He, therefore, wanted to emphasize the importance of a rapid growth of the capital goods sector, and allocated a large share of investment to it. Investment in this sector steps up the expansion of the industrial base, and in turn increases the rate of growth in the long run.

10.3.4 Achievements

Although the Plan was based on a social theoretical model, with objectives and allocations clearly spelt out, it had to face a number of non-economic and economic problems and interruptions. The failure of monsoons, the crisis of the Suez Canal, the foreign exchange crisis and high rate of inflation were some of the constraints in this five year period. As a result, many of the targets were not achieved. The target of 25% growth of the national income was not achieved, the actual growth rate being only 19.5% and per capita income increased at only 8%. The national income failed to increase at the postulated rate because the expected capital output ratio was 2:1, while the high rate of investment in capital intensive, long-gestation projects boosted up the capital output ratio to 3.86 : 1. This was the result of an allocative pattern which underplayed the relative importance of output through the use of labour intensive techniques, especially of consumer goods. This resulted in an unbalanced growth in the economy, creating shortages of consumer goods, slowing down the rate of growth, and increasing prices.

The low rate of growth of per capita income was due to the underestimation of population growth. While population grew at the rate of 2.2% the plan had envisaged a growth rate of only 1.2% per annum. The plan had aimed at an increase of per capita consumption of basic goods by about 12%. But the per capita consumption of food increased by 8%, while that of cloth remained constant. Thus the effort to raise the standards of living of the people was not very successful.

Agricultural production rose by 15% and the net additional area irrigated during the plan was 14 million acres as against the target of 211 million acres. There was slow progress in the implementation of the programme of improved seeds, fertilizers, irrigation and soil conservation. Unfavourable monsoons in 1957-58 also hit agricultural production.

In the industrial sector, the overall index of industrial output (1950-51 = 100) rose from 125 in 1955-56, to 177 in 1960-61, i.e., 42%. In the case of pig iron, sugar, paper and paper board the targets were fulfilled. The boost to the industrial base was given by the establishment of three steel plants in the Public sector, with an initial capacity of 10 lakh tonnes each, at Durgapur, Bhilai and Rourkela. However, the delay in sanctioning these public sector units, especially the steel mills, the heavy electrical and heavy machinery factories was considerable. The late commissioning increased the cost of outlay as well as affected the quantum of output that could be produced by the other interlinked industries.

The foreign trade front also presented a gloomy picture. The plan assumed that the imports would be to the tune of Rs. 4,340 crores over the plan period. Actually, due to the closure of the Suez Canal and increase in prices of capital equipment, the value imports increased to Rs. 5,402 crores. This was much greater than the value of exports, and there was an adverse balance of payments to the extent of Rs. 2,339 crores, against the expected amount of Rs. 1,375 crores. On account of the balance of payment difficulty experienced within the first two years of the plan, it was considered necessary to scale down the size of the plan in 1958. The plan was divided into two parts : (1) The "core" projects including development projects, ports, power and others related to agriculture, and (2) the rest of the schemes which would be taken up only if funds were available, and which were hence dispensable. At the end of the plan, a foreign exchange crisis developed due to the import of not only heavy machines, but also of food grains caused by the failure of the monsoons and domestic production.

The prices of almost all commodities rose on an average of about 30% over the plan period. This inflationary trend lowered the real income of the people. The plan had estimated an addition to labour force of about 10 million, over the five years, and had hoped to provide employment to about 1.6 million in the agricultural sector and 7.9 million in non-agricultural activity. Actually, the non-agricultural sector could absorb not more than 6.5 million persons. At the end of the Plan, 9 million persons remained unemployed.

Though the Second Plan failed to achieve many of its targets, it was successful in laying the foundations for the subsequent industrial development of the economy. Though the public sector units did not function as well as expected, the heavy industrial units that came into existence, were important determinants of future industrial growth.

Check Your Progress - II

5. List the objectives of the Second Five Year Plan.

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6. Who developed the theoretical model of the Second Plan ?

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7. The total outlay alloted to Public sectorll in the Second Plan was ....

8. What was the growth rate of national income achieved during the Second Plan.

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10.4 The Third Five Year Plan (1961-66)

While the third plan was a continuation of the Second Plan, it also initiated the long term plan of development extending to over a period of 15 years from 1961 to 1976.

10.4.1 Objectives

The Plan set out five different objectives :

(1) to secure an increase in the national income of over 5% per annum, the pattern of investment being designed to sustain this rate of growth during subsequent plans ;

(2) to achieve self-sufficiency in food grains, by increasing the agricultural production to meet the requirements of industries and export ;

(3) to aim at the expansion of basic industries like steel, chemicals, fuel and machine building capacity;

(4) to bring about a substantial increase in employment opportunities, and

(5) to achive a reduction of inequalities of wealth and income, and a more equal distribution of income and economic power. Agricultural production was assumed to increase by 6% per annum, industrial

production by 14%, national income by 30% over the plan period, per capita income by 17% and per capita consumption of food by 10%.

10.4.2 Outlay of the Third Five Year Plan

The total investment for the Third plan amounted to Rs. 10,400 crores - with Rs. 6,300 crores in the Public sector and Rs. 4,100 crores in the Private sector. Again, the industrial and mining sectors received the largest share of investment with an allocation of 24% of the total outlay, followed by transport receiving 16.7% and social service schemes 16.3% agriculture 14% and power 10%.

10.4.3 Strategy

The Third Plan was not based on any particular strategy like the Second Plan. The plan relied on the guidelines drawn from technical papers like Pitamber Pant's "Dimensional Hypothesis concerning the Third Five Year Plan", which also emphasized the growth of heavy industries. The "Supply and Demand Balance Exercise" provided by W.B. Reddaway, and the long term planning model for India given by J.Sandee, and based on linear programming, were other models that influenced the Third Plan strategy. Similarly, S. Chakravarthy's mano model presented the Third Plan variables in a formal way. However, these models discussed consistency in target viriables, rather than the sectoral allocations.

The Third Plan relied heavily on foreign resources, the rationale being that it would be better to rely on foreign resource for a short period of time, rather than spread the dependance over the years.

10.4.4 Achievements

Unfortunately, during the Third Plan period, a number of non economic factors adversely affected its achievements and performance. The Chinese agression in 1962, and the diversion hostilities with Pakistan in 1965 led to the diversion of resources to the defence sector, and as a result, plan priorities suffered. The failure of the monsoon was another factor that plagued the economy almost every year during the plan period.

In agriculture, the plan targets were not achieved, and agricultural output increased at an average annual rate of 2.8% instead of 6%. The production of food grains reached the level of 88.9 million tonnes in 1964-65 against the target of 101.6 million tonnes. Commercial crops like sugarcane and groundnut had, however, done well. Industrial growth also showed a declining tendency, with the index of industrial production advancing at an annual average rate of 7.8% against the target of 14%. The slackened activity was due to a number of factors, such as lags in the creation of additional capacity in important industries like steel, aluminium etc., shortage of imported raw materials, spares and components due to foreign exchange difficulties and delays in the implementation of many projects. The demand for power could not be matched by supply, whic created serious bottlenecks in industrial production.

National income recorded a lower rate of growth than anticipated, increasing at an annual average rate of 4%, and the growth of per capita income fell to 1.5% over the plan period.

Due to the fall in agricultural production on the one hand increase in aggregate spending on unproductive sectors like defence, there was a steep increase in prices. The General Index Price increased by 36%, and the goal of self-sustaining growth could not be achieved.

In spite of these odds the performance of the industrial sector was one of progress in the initial years, though rates it showed retardation due to lack of key inputs and components, the imports of which could not be made due to suspension of foreign credit facilities in 1965. The short falls in physical achievements were largely due to adminstrative deficiencies, inefficient utilisation of created industrial capacities, inadequate planning in respect of several industrial projects, higher costs and lack of trained personnel.

The overall picture, at the end of the Third plan, was so discouraging that the Government decided that it coult not cope up with additional defence expenditure and a development plan simultaneously.

Therefore, the priority hitherto given to planning was shifted to the defence sector. It was decided to have annual plans for the uncertainty prevalant at that time made it difficult to visualise peace for the next five years. Hence series of Annual Plans were taken up for the next Three Years (1966-69) and worked out in great details by the Central and State Governments.

Check Your Progress - III

9. List the major objectives of the Third Plan.

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10. What was the total investment allocated to Third Plan?

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11. Explain the seasons for the failure of the Third Plan.

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10.5 The Annual Plans (1966-67, 1967-68, 1968-69)

Due to the various constraints referred to above, the Fourth Five Year Plan had to be abandoned, and a series of annual plans were implemented. This was termed a *"Plan Holiday"*.

10.5.1 Objectives

The objectives of the three annual plans were to continue the unfinished tasks of the Third plan, to ease the strains in the economy caused by unforeseen events, to secure a feasible growth rate, and to control inflationary pressures. The plans were divided into two parts, the Central plan and the State plan. The former took care of vital schemes of industry, transport and communications, and the latter gave greater priority to agriculture, power generation and irrigation.

In the industrial sector, the priority was shifted from the development of heavy and basic industries to projects which would help in defence efforts. *In the first Annual Plan (1966-67)*, severe drought resulted in the fall in agricultural production, and the overall agricultural production index registered a 1% fall, while the increase in industrial production was marginal (1.7%). The general price index rose by 15.5% in one year, while as the real national income increased by only 1%.

The rise in prices was due to poor performance in the agricultural sector, and the high costs of imports due to devaluation of the rupee in 1966.

The second Annual Plan (1967-68) gave priority to agriculture and family planning schemes. The Green Revolution was ushered in, with the introduction of the high yielding varieties of seeds. Favourable weather conditions also boosted us the production of food grains, which reached a high level of 95 million tonnes during the year, an increase of 28%. However, the industrial sector continued to drag in spite of the improved performance of the agricultural sector, and a marginal increase in the price index of 1%. The national income in real terms rose by 9% which was greater than anticipated.

The Third Annual Plan (1968-69) hade the following objectives : a 5% growth of national income with price stability, and expansion of exports to correct the balance of payments position. Agriculture and related activities were given priority. Although agricultural production went up to 94 million tonnes, it was 8% less than the targeted production. Non-agricultural crops showed a decline, and the overall index of agricultural production showed a marginal decline of 1%. Industrial production was more encouraging, with the index number of industrial production showing an increase of 6% during the year. The general price index increased by 3% over that of the previous year, but the target of national income growth of 5% was not achieved, it being only 3.3%.

10.5.2 Appraisal of the Annual Plans

The "pigmy", as they were called, were actually instrumental in pulling the economy from the morass of 1965-66. They witnessed the birth of the Green Revolution and helped in increasing agricultural production and overcoming recession. Due to the devaluation of the rupee, exports moved up and imports registered a decline, thus improving the balance of payments position.

Check Your Progress - IV

12. What is meant by "Plan Holiday"?

10.6 The Fourth Five-Year Plan (1969-74)

With the reconstitution of the Planning Commission in 1967, and the appointment of Prof. Gadgil as the new Deputy Chairman, a new *Indictive Planning Strategy* was introduced, with production targets being more flexible. The two dominant themes of the new Fourth Plan were "growth with stability" and the achievement of "self-reliance', with increasing dominance of the public sector.

10.6.1 Objectives

The major targets of the plan are the following :

(1) *A 5.7% annual rate of growth of national income* was postulated for the Fourth Plan. This rate was

to be achieved by increasing food production at the rate of 5% per annum, industrial production at the rate of 8-10% per annum and exports at the annual rate of 7%.

(2) The second main objective was to ensure economic stability. The plan sought to provide for the building of sizeable buffer stocks to stabilize food grains prices and the price level in general.

(3) The Fourth Plan envisaged *increasing self-reliance*, and reduction of dependence on foreign aid. Food imports were to be reduced and eventnally stopped by 1971.

(4) Fourthly, the progressive *attainment of equality with social justice*, and the care of the common-man, the weak and the underprivileged were to get extra priority in the plan. The Monopolies Act, the new industrial licensing policy and re-orientation of nationalised banks' lending policy, and of public financial institutions to help control and regulate concentration of economic power were are other objectives.

(5) *Correction of regional imbalances* between and within States and regions was also given priority. Growth and diversification of economic activity in various regions should help in bringing about overall economic development of the country, and lastly,

(6) *Employment opportunities* in the rural and urban sectors were to be increased. Labour intensive schemes, extension of irrigation facilities in the rural areas, and the expansion of public sector industries, of minerals, transport, communications and power. The planning Commission did not, however, quantify the new employment opportunities to be created.

10.6.2 Outlay

A total outlay of Rs 24,882 crores was provided for the Fourth Plan. Of this, the public sector outlay amounted to Rs 15,902 crores, and the private sector investment was anticipated to be Rs 8,980 crores. The industrial and mining sector received 21.5% of total outlay, followed by transport and agriculture, which received 17.2% and 16.5% respectivly. The target rate of growth was assumed to be 5.5% per annum and assuming population growth to be 2.5% the per capita income was to grow at 3% per annum. Investment was to increase from 11.3% to 14.5% by the end of the Plan. The emphasis shifted from industry to agriculture, to achieve self-reliance. In the industrial sector, the emphasis was shifted from expansion of industries to better utilization of existing capacity.

10.6.3 Strategy

For the first time, a quantitative frmework was used by the Economic Division of the Planning Commission. The Perspective Planning Division also conducted a similar exercise, and these formed the basis of the Fourth Plan. Detailed sectoral allocations and output targets were worked out for the final year of the Plan. To arrive at the sectoral allocations, an inter-industry table was computed.

10.6.4 Achievements

Although the national income rose by 5% in the first two years of the plan, it later slowed down due to certain unforeseen contingencies. The inflow of refugees from Bangladesh, and hostilities with Pakistan, conditions of drought in certain regions and floods in others, plus the severe power shortages, all affected achievement of the Plan targets adversely.

It was not surprising that the national income at constant prices registered a fall in the first four years and the average annual rate of growth ws 3.2% as against the target of 5.7%. The per capita income rose by only 3.5% over 1969-70. The production of food grains declined by 9% in 1972-73. Price stability could not be achieved, and the index number of wholesale prices rose by 32% between 1968-69 to 1972-73.

Though the IV Plan exports target of 7% growth rate per year and the non-food imports target of 5.5% per year were realised, the imports of food grains did not decline. At the end of the plan. The picture of the

Indian economy was very gloomy being stagnant with inflationary pressures, (stagflation) and growing disparities of income and increasing poverty. The emergence of the energy crisis due to increase in the oil prices further accentuated the alarming economic situation. The IV plan was thus a failure on the growth, stability and equality fronts.

Check Your Progress - V

13. The annual growth rate of national income postulated for the Fourth Plan was ....

14. The total outlay provided for the Fourth Plan was ....

15. What are the major achievements of the Fourth.

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10.7 The Fifth Five Year Plan, 1974 - 79

Though the Draft Plan was presented in April 1974, it was considered prudent to bring about stability in the economy before launching yet another Five Year Plan. The failure of the IV Plan on the price stability front resulted in highly inflationary conditions in the Indian economy. One of the contributing factors was the low production of food grains on one hand, and the rise in international oil prices on the other in 1973.

The introduction of the 20-Point programme was another measure to control inflation, through a package of social and economic reforms to streamline production, procurement and distribution of essential commodities.

The Fifth Plan scheduled to be in operation from 1974 could only be approved in 1976. Due to the poor performance of the economy during the Fourth Plan and due to the inflationary situation, the Annual Plans were taken up as discussed below. The political crisis, the state of internal emergency were the other factors that delayed the implementation of the Fifth Plan.

The First Annual Plan (1974-75) had programmes meant to improve the lot of the small farmers and small industries. Export promotion and import substitution were yet another objective of the plan. Though agricultural production declined by 3.1% and industrial growth by 2.5%, the inflationary rates were also reduced by 7.1%. However, the plan could not achieve either the target growth rate of national income or of investment.

The Second Annual Plan (1975-76) had the two - fold objective of growth with stability. Sectors like agriculture, power, coal, oil and fertilizers received priority. The excellent harvest resulted in a fall in the price level by 8%. There were improvements in the foreign exchange reserves; agricultural production increased by 10%, national income by 6% and industrial production by 5.7%. The main reason for the success of this annual plan was the excellent monsoon and natural factors rather than the planning exercise. It was assumed that the 20 - point programme had a salutory effect on the economic performance of the country.

Again, Third Annual Plan (1976-77) was unable to reach its targets. Growth rates fell, reflecting the decline in agricultural production by 7.8%. This resulted in an increase by 11.9%. On the credit side, industrial production rose by 10% and there was also a substantial increase in foreign exchange reserves.

10.7.1 Objectives

The primary obectives of the Fifth Plan were removal of poverty and attainment of self-reliance. Since poverty cannot be removed in five years, it was assumed that the Fifth Plan would initiate the programme of the removal of poverty.

10.7.2 Theoretical Base

The plan had a mano model for estimating investment, a static Leontief type of input-ouput model for estimating sectoral consumption levels under alternative assumptions.

10.7.3 Achievements

Agriculture : The food grans production increased due to the use of the high yielding varieties, creation of irrigation facilities and increase in the use of fertilizers. Favourable weather conditions were also responsible for the good performance.

Industry : The Industrial performance was quite discouraging with increasing industrial sickness, and a growth rate of about 6% from 1974 to 1978. Industrial production of cotton textiles, jute and sugar also registered decline.

Prices : Prices rose rather sharply in the last two years of the plan, ie., from 1976 to 1978. Prices of minerals, fuel and power also rose significantly.

Employment : The rate of employment creation also declined during this period, and the number of jobs created was 1.4 million as against 1.8 million in the period from 1971 to 1974

The last year of the Fifth Five Year Plan was implemented as an Annual Plan for in early 1977. There was a change of government. The Janata Party which came to power wanted time to formulate its plans. Thus the Fifth Plan virtually came to an end in 1977-78.

The Fifth Plan had to face heavy odds during its implementation. The political upheavel, the state of emergency and later the change in the government were some of the factors responsible for the failure and the eventual abandonment of the plan. The rate of growth of National Income was only about 3.5% per annum, over the four year period. The new government, set up in 1977, after reviewing the plan performance over the 25 years of planning, realised the need to change the emphasis and the priorities, since none of the previous plans were able to achieve the twin goals of growth and social justice.

The economic policy of the Janata Pary reflected the ideology of the Party, but its economic content was too weak to form the basis of a viable strategy of development. The government identified three glaring ills of the economy-poverty, unemployment and inequalities of wealth and income. To comfat these, the Janata Party decided to adopt planning based on Gandhian Socialism which implied political and economic decentralisation.

Check Your Progress - VI

16. What are the primary objectives of the Fifth Plan?

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10.8 Rolling Plans

Since the earlier plans could not adequately provide for unforeseen fluctuations and contingencies which arose during the plan period, they could not adjust their targets and performances, or accommodate these disturbances into their working. It was, therefore, decided that the concept of "rolling plans" would be more relevant and useful in accommodating fluctuations, and being more flexible, these could be revised annually to accommodate such fluctuations. Under this system, a year in the light of the performance of the various sectors of the economy, and the availability of resources. That is, it was an annual operational plan for each year, with a five year perspective. Year to year targets would be set up for sectoral outlays and outputs for the important sectors, within the five year plan. The horizon of the plan would be a moving one, for as soon as one year of the 5-year plan was completed, one more year would be added to it. Though the implementation of the five year plan would be on an annual basis, each annual plan had a five year perspective. Thus unlike the earlier plans, which had a fixed time period, the Rolling Plan was thought of as a continuous process of planning. The advantage lay in the possiblility of revision in the short period based on failures or achievements with a perspective of the next five years in view.

10.8.1 Objectives

The Rolling Plan for the five year period (1978-83) aimed at the removal of poverty and unemployment and reduction in inequality through an annual growth rate of 7%. More emphasis was to be placed on the supply of inputs to the agricultural sector, which was to receive priority in the Plan. The industries supplying inputs to the agricultural sector were also to receive priority. The market for industrial goods was to be restricted, while small and village industries were to be encouraged. Price stability was to be achieved through control of money suppy and augumentation of consumption goods of a basic nature. The unemployment problem was to be tackled through creation of jobs in the rural sector, further maximisation of employment per unit of land and of capital investment in industry. Within a period of ten years it was proposed to remove unemployment, provide basic needs like drinking water, health care, rural housing, roads, and elementary education, and to raise the standard of living of the poorest sections of the population.

10.8.3 Outlay of the Plan (1978-83)

In line with the economic policy of the Janata Party, the outlay on the rural development schemes was doubled from Rs. 14,751 crores in the Fifth Plan to Rs. 29,925 crores in the Sixth Plan. There was a significant increase in outlays on villages and small industries from Rs 388 cores to Rs 1,410 crores, while the outlay on large and medium industries increased by about 33% from Rs. 6,852 crores to Rs. 8,940 crores. The outlay on the energy sector was also doubled from Rs. 9,855 crores to Rs. 20,150 crores.

10.8.4 Revision of the Draft Sixth Plan

The Draft Plan had to be revised in 1979 due to two main reasons. The plan outlays were considerably eroded by inflation, which was to the extent of 20% and secondly due to the recommendation of the VII Finance Commission which suggested the transfer of resources to the tune or Rs. 23,063 crores from the Centre to the States for the five year period 1979-84. Due to the extra burden imposed on the Centre, almost seventy one centrally sponsored schemes had to be abandoned.

10.8.5 The Performance of the Economy During 1977-80

In spite of a good start, with a buffer stock of 18 million tonnes of food grains, foreign exchange reserves of Rs 28.6 crores, the economy's performance during the Janata regime was dismal. The rate of growth decelerated in three important sectors: industry, power and exports. The rate of growth of national income would have been much sharper but for the fact that the weather conditions remained unfavourable throughout the Janata rule.

The set-back in the in the industrial sector was due to the infrastructural inadequacies developed during the earlier plans which were further intensified by a drastic shift in priority to the agricultural sector. The overal shortage of power was another constraint on industrial development. Inflationary pressures increased as endorsed by the price index being higher by 11% as compared to that of 1974-77. Thus the two Annual Plans - 1978-79 and 1979-80 - during the Janata rule had a negative impact on the performance of the Indian economy.

Chek Your Progress - VII

17. What is 'Rolling Plan'?

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10.9 Sixth Five Year Plan, 1980-85

The Rolling Plan and the Draft Sixth Plan were abandoned later. The new Sixth Five Year Plan was redevised and put into effect from 1980 onwards.

10.9.1 Objectives

The Sixth Plan was cast in the frame of a long term perspective of 15 years from 1980-85. The Plan's objectives were attainment higher growth rates of the economy and reduction of poverty and unemployment. The objectives were to be achieved through greater efficiency in the use of resources, the accelerating of the rate of modernisation in order to achieve economic and technological self-reliance, eccouragement for the growth of the indegenous sources of energy, introduction of a redistributive bias of public policies, control of the growth of population and improvements of the quality of life of the weaker section of the population.

10.9.2 Outlay

The Sixth Plan with a total outlay of Rs. 1,58,710 crores at 1979-80 prices had a target of 5.2% increase in per capita income. The rate of growth of agriculture was to be around 4% per annum and that of industry between 8 to 9% per annum. The development of energy received high priority with the largest share of investment i.e., Rs. 26,535.4 crores. The integrated rural development approach was yet another feature of the Sixth Plan. It emphasised the provision of infrastructural developmental schemes such as irrigation, electrification and subsidies to small farmers and provision of credit. Completion of 'on going' schemes and completion of projects started in the earlier plans were the other objectives. To that extent, investment in new schemes of development were to be limited. The plan also had special schemes for the removal of poverty and unemployment.

Out of the total plan investment, the share of the Public Sector component was Rs. 84,000 crores which constituted 53 per cent and that of the private sector component Rs. 74,710 crores which amounted to 47 per cent. The Sixth Plan Outlay by Heads of development indicated that 27.2 per cent and 15.4 per cent of the plan outlay (Rs. 97.500) were allocated to energy and industrial sectors, respectively. Social services (14.4%) and transport (12.8%) were the other sectors which got next top priority. These were followed by agriculture including irrigation and flood control.

10.9.3 Strategy

The Sixth Plan followed the conventional strategy of rapid economic growth via heavy industries. In this strategy employment would continue to occupy a secondary place and social justice would be achieved through a minimum needs strategy. Obviously, planners had not discarded the strategy associated with Nehru and Mahalanobis from the Second Plan onwards.

10.9.4 Achievements

The plan succeeded in achieving the original target growth rate of 5.2 per cent. The performance of agriculture was more than what was anticipated. The actual annual agricultural growth was 4.3 per cent as against the target growth of 3.8 per cent. The services sector also achieved a growth of 6.6 per cent which was higher than the target of 5.5 per cent. However, the industrial sector performed poorly during the Sixth plan period and the actual growth rate in this sector (3.7%) was about half of what was originally targeted (6.9%)

The Sixth Plan expected a saving rate of 24.5 per cent in 1984-85 but the actual rate came up to only 23.3 per cent. The shortfall in the rate of saving was largely due to public sector savings being below the targeted rate.

The annual growth of commercial energy increased at an annual rate of 12 per cent during the plan period. An outstanding feature of this growth was the increase in crude oil production from about 12 million tonnes in 1979-80 to 29 million tonnes in 1984-85 at an annual compound growth rate of nearly 20 per cent as compared to the targeted growth rate of about 13 per cent. Despite the progress in the output of commercial energy, the country was faced with power shortages on account of which many basic industries such as steel, fertilisers and cement had suffered.

One of the major objectives of planning in India has been the progressive reduction of unemployment and poverty. The Sixth Plan estimated the back-log of unemployment at around 12 million in March 1980 and anticipated a net addition to the labour force of the order of 34 million during the plan period. The Sixth plan had to generate employment of the order of 46 million persons. Additional employment was generated through employment/beneficiary oriented programmes for specific target groups such as IRDP, NREP, RLEGP TRYSEM, SEEUY (the scheme for providing self-employment to the educated unemployed youth). However, the lower rate of growth in manufacturing industries during the Sixth Plan and the poor agricultural production in the terminal year of the plan were responsible for the significant shortfall in the plan's employment target. The back-log of unemployment at the end of the Sixth Plan estimated at 9.2 million persons. The proportion of population below the poverty line had declined from 48.3 per cent in 1977-78 to 37.4 per cent in 1983-84 and it got further reduced to 35 per cent in 1984-85. This reduction was possible due to the achievement of a high rate of economic growth so also due to the implementation of poverty eradication programmes.

10.10 The Seventh Five Year Plan (1985-90)

The Seventh Plan came into operation from April 1, 1985. The conditions on the eve of Seventh Plan were quite favourable in contrast to unfavourable circumstances that prescribed on the eve of the Sixth Plan. The Plan was formulated against the background of a perspective covering a period of 15 years from 1985 to 2000.

10.10.1 Objectives

The main objectives of the Seventh Plan were the same as those stated in the earlier plans. Hence, under the current plan the stress was on growth, modernisation, self-reliance and social justice. It seeks to emphasize growth in food grains production, increase employment opportunities and raise productivity. In the Seventh Plan, employment is treated as a direct focal point of policy. It aims at achieving non-inflationary growth in employment. It also aims at ensuring the desired results from investments in the infrastructural development. Apart from these major objectives, the seventh plan has listed a few other objectives. These include improvement in technology in the fast growth rates, control of inflation and improvement in the physical well-being of the people and the environment in which they live.

The Seventh Plan aims at 5 per cent growth in GDP (at factor cost) per annum.

10.10.2 Outlay

The Seventh Plan provides for a total outlay in the Public Sector of the order of Rs. 1,80,000 crores at 1984-85 prices. If we exclude the current outlays of Rs. 25,782 crores, the Public Sector's investment will be of the order of Rs. 1,54,218 crores. Investment in the Private Sector is expected to be Rs. 1,68,148 crores. Taking the Public and Private Sectors together, the Seventh Plan provides for a total investment of Rs. 3,22,366 crores. The ratio of the Public Sector to the Private Sector investment will be 48 : 52.

Energy sector gets a high priority in development and accounts for around 30.4 per cent of the Public Sector outlay. Agriculture including rural development, special area programmes and irrigation has been allocated around 20 per cent of the resources. The allocations to industry (including minerals) and transport are 12.5 per cent and 12.7 percent, respectively.

10.10.3 Strategy

The strategy of the Seventh Plan makes a complete break with that of the past. Mahalanobis strategy is not followed. Industry was given less priority. The Seventh Plan aims at a direct attack on the problems of poverty, unemployment and regional imbalances. The rural development programmes and the expansion of labour construction activities in both rural and urban areas are the other measures whereby a frontal attack would be made on the existing unemployment problem. The Seventh Plan emphasises the increasing of the production of commodities of mass consumption.

10.10.4 Assessment

The Seventh Plan concluded in the year 1990. The performance of the plan during the first 4 years of the Plan has been quite impressive. It may achieve and even cross the targeted growth rate by the end of the Plan.

Check Your Progress - VIII

18. What are the total plan outlays of Sixth and seventh Plans?

19. Does the Seventh Plan follow the Mahalanobis strategy?

20. What is the targeted growth rate of Seventh Five Year Plan?

10.11 Summary and Conclusion

We have studied, in detail, the targets and achievements of the plans. In the next unit we shall be looking at the plan performance in its entirety, i.e., with respect to its conformity to the strategy of development. We shall examine the growth of the different sectors over time, the structural changes and the impact on poverty and unemployment during the course of implementation of these plans.

Ms. Prabha Pant
K. Sateesh Reddy

10.12 Suggested Books

1. Datt and Sundaram : Indian Economy
2. Misra & Puri : Indian Economy

10.13 Model Examination Questions

I. Answer the following questions in about 30 lines each

1. Explain the objectives and achievements of the Sixth Five Year Plan.
2. Explain the strategy followed in the Second Five Year Plan. What are the objectives and achievements of the Plan?

II. Answer the following questions in about 15 lines each :

1. What is meant by 'Plan Holiday"? Explain the three annual plans.
2. Explain the concept of 'Rolling Plan'. What are its objectives?
3. What are the objectives of the Seventh Five Year Plan?

Unit - 11 : Achievements of Indian Five Year Plans

Contents

11.0 Aims and Objectives

The unit explains the present economic conditions in India and examines the progress made towards self-sustained growth after 35 years of planning with respect to their objectives laid down in each plan.

After reading the unit, you will be able to

* examine the role of planning in agricultural development;
* explain the pattern of industrial production during the planning era;
* identify the trends in the national income over the period of plans;
* analyse the role of planning in providing social justice, self-reliance, and employment opportunities;
* find out whether inequalities have been reduced during the plan period;
* recall the changes in the price level during the plan period.

11.1 Role of Planning in Agricultural Development

When the Five year Plans were formulated, there was no clear cut policy regarding agricultural development. The emphasis was on the use of traditional skills and techniques to meet the current requirements of the economy. The plans only recommended the increasing of provision of irrigational facilities, agricultural extension and community development programmes. It was in the Annual Plans (1966-69) that when the Green Revolution was introduced improved agricultural techniques were used.

In India, both in terms of employment and output generated, the agricultural sector remains the major sector. It is the source of wage goods, such as food grains, as well as that of a number of industrial raw materials like cotton, jute, coffee, tea, etc. The performance of the agricultural sector is very important in the assessment of the performance of the economy. The steady supply of wage goods ensures that the increasing demand for them, generated by the industrial sector, is matched by increasing supply, and hence can put down inflation.

There are two major components of agricultural production - the food grains and the non-food commodities. The former makes up roughly two-thirds of total agricultural production.

Table - 1: Rates of Growth of Agriculture

	1952-53 to 1964-65	1964-65 to 1972-73
Total agriculture	3.42%	2.18%
Food grains	2.75%	2.73%
Non-food commodities	4.79%	1.25%

The above table brings out roughly the miserable performance of the agricultural sector. Both food and non-food have experienced a retrogression in twenty years (1952 to 72), thus bringing down the rate of agricultural growth, too.

Table - 2 : Investment and Production in the Agricultural Sector

	I Plan 1951-56	II Plan 1956-61	III plan 1961-66	Annual Plans 1966-69	IV Plan 1969-74	V Plan 1974-79
% of Investment in the Agricultural sector and Irrigation	31%	20%	21%	24%	24%	22%
Production of Food grains (in million tons)						
Target	NA	81.5	100	105	129	166
Actual	65.8	79	72.3	98	114.7	114.6

As seen in the above table, the highest share of investment went to agriculture in the First Plan as compared to the other plans. The high rate of growth achieved resulted in falling prices and increase in real per capita incomes. But the Second Plan shifted the emphasis to industry at the expense of agriculture. Though the output increased it failed to achieve the targets. This gave the necessary impetus to the raising of investment in this sector in the III plan. But the poor performance of agriculture during this plan period, due to the failure of the monsoons, offset the efforts made to improve agricultural production. The Annual Plans were crucial to the introducing of the Green Revolution techniques. So also in the IV % V Plans the major emphasis was on agricultural production. However, none of the plans except the first was able to achieve its targets.

The major weakness of the agricultural growth in India was that it was never considered to be major sector in planned economic development. Thus the supply of wage goods has been the base of Indian Planning. The haphazard and piece-meal policy of granting more investment whenever targets were not achieved did not help in the achieving the smooth and continuous growth of wage goods. As discussed earlier, the growth of the heavy sector leads to higher employment and with the high growth rate of population necessitates a corresponding growth rate of agricultural goods to meet an increasing demand. The low rate of growth has had two negative effects - on the one hand it has generated inflation causing greater impoverishment of the masses as well as scaling down the size of the plans, and on the other, it has resulted in high dependance on food imports, thus diverting scarce foreign exchange to consumption. The higher investment allocation to agriculture did not result in higher output, in relation to population and employment growth. The crucial reason is the regular failure of the monsoons. The plans instead of emphasising the provision of small and medium irrigation facilities went in for large irrigation projects, which had very large gestation lags, were more expensive and could not be made available to all farmers. In spite of the plans, the growth of agriculture is still dependent on the weather Gods.

11.2 Industrial Production During the Plans

The task of capital accumulation faced by the planners on the eve of planning was quite formidable. The role of the heavy and basic industries in development was recognised in the First Plan itself though only a small share of total investment was alloted to it. But even this helped in laying the foundation for a number of industrial projects in the Public Sector such as the HMT, ITI, the Integral Coach Factory, Locomotives etc. The II Plan was basically an industrial growth oriented plan. With the formulation of the Industrial Policy of 1956, a number of industries received a major fillip, especially heavy machinery building, electriacal machinery, steel, machine tools, ferrous and non-ferrous metals. The III Plan, similarly, gave importance to the growth of the heavy sector. Coal, steel, electrical power, chemicals, machine tools and engineering received emphasis. The growth of petroleum, basic metals, metal products, transport equipment, electrical and non-electrical machinery was satisfactory.

The three Annual Plans shifted the emphasis from industrial growth to the defence sector. Thus planning was suspended for a while. The use of existing capacity was highlighted rather than its expansion. This resulted in a drastic fall in industrial production from the growth rate of 35% over the III Plan to that of 11% during the Annual Plans. The IV Plan, similarly, highlighted the importance of agriculture as against industrual growth. No new investments were undertaken in the heavy sector. This further added to problems of unused capacity. It was wrongly assumed that with the diversion of industrial production to consumer goods industries, the problem of excess capacity in the heavy industry could be solved. This resulted in marked production of the consumer durables and a complete volte-face in the strategy. The production of consumer durables through capital intensive techniques received official sanction and encouragement. Over the five years, the industrial growth was only 18.5%. The extence of excess capacity was itself the result of the recessionary trend during the Annual Plans, and the further restriction on the growth of the heavy sector during the IV Plan only worsened the situation.

The three Annual Plans (1974-77) were again a stop-gap arrangement and with the introduction of the Rolling Plan the emphasis again shifted to agriculture. This resulted in a steep fall in industrial production and capacity. The VI Plan, introduced in 1980, continued to give a so-called priority to the agricultural sector. Again, the growth of the heavy and basic sectors were affected. Completion of on-going projects and use of capacity meant the continuation of the IV Plan strategy of low priority to the heavy sector.

Table - 3 : Pattern of Industrial Growth and Investment

	I Plan	II Plan	III Plan	Annual Plans	IV Plan	V Plan	VI Plan
% of Investment Industry and Mining	4%	20%	20%	23%	18%	23%	21%
Growth Rates							
Actual	38%	52%	35%	18%	18.5%	31.0%	NA
Target	NA	NA	55%	NA	50%	25.0%	40%

The adhoc shifts in priority, as seen in the investment rates in the above table, resulted in an inadequate attention to capital formation. The drastic changes in policy resulted in low rates of capital formation on one hand, and an equally unbalanced growth of agriculture on the other. The shifting investment rates did not help either, as they were changed from agriculture to industry and back to agriculture, without a proper strategy that recognised the importance of a balanced growth of both sectors. It was specifically mentioned in the II Plan that an investment in basic industries, created demand for consumer goods, but it does not enlarge the supply of consumer goods in the short run nor does it directly absorb large quantities of labour. A balanced pattern of industrialisation, therefore, requires a well-organised effort to utilise labour for increasing the supplies of much needed consumer goods in a manner which economises the use of capital. Unfortunately this dictum remained only on paper and was never implemented. Over the above this fundamental limitation of the lack of a proper planning policy or strategy, other non-economic factors were also responsible for the breakdown of planning. Changing political ideologies, wars, natural calamities, international crises, and the emergence of a strong Private Sector resulted in total chaos in so far as the implementation of planning priorities was concerned. Hence the role of capital formation in the development of the economy has been underplayed since the IV Plan onwards. This meant that only the II and III Plans, i.e., only a decade of capital formation was considered sufficient to provide the basic foundation for industrial development of the country. This was woefully inadequate for the needs of a large country with a high rate of population growth.

More damaging was the emergence of the Private Sector virtually free of all controls and restrictions. Since the Industrial Policy of 1956 gave full sanction to the growth of the consumer goods industries in the Private Sector, there was virtually no holding back the direction of its growth. The direction and regulation of the Private Sector in industry was one of the weakest areas in Indian Planning. It resulted in the complete break-down of all planning priorities and achieved none of the objectives, so carefully laid down by the planners. It distorted investment allocations and growth of various industries, increased concentration and monopoly, increased disparties in income and consumption, and was the single factor contributing to the low rates of ploughback and growth of the heavy sector.

The importance of the choice of goods and techniques is brought into sharp focus,when we look at the growth of the private industrial sector. Being a mixed economy, i.e., a combination of Public and Private Sectors, the latter had to be left completely to the decisions of persons outside the purview of planning. To add to this, the consumption-goods sector is relatively unimportant to planned economic development.

However, the Private Sector being profit-motivated went in for those very inessentials when the plans aimed at avoiding. The lack of controls as well as the existing income inequalities were very favourable for the growth of the consumer durables. Shetty observes in his report that since the 60's there has been a rapid growth of the consumer inessentials catering to the demands of the richer sections of society and a relatively slower rate of growth of basic and capital-goods industries.

Table - 4 : Rates of growth of industrial production (%)

	1960 - 6[illegible]	1966 - 72
Total	[illegible].98	4.47
Basic industries	1[illegible].45	6.66
Capital goods	19.53	2.49
Intermediate goods	7.02	3.81
Consumer non-durables	3.42	5.31
Consumer durables	10.72	7.97

The above table shows the poor performance of the heavy and basic sectors as compared to the consumer goods sector in spite of so -called priority given to the heavy sector and capital formation. Especially in the capital goods sector, the growth rates have fallen by 17% which is alarming, when the growth of the industrial base was of the utmost importance. Over the years, the relative performance of the consumer goods sector has surpassed that of the capital and heavy sector. This is the very reverse of the plan priority. Shetty called this "Structural retrogression" meaning a change in the structure of the economy, alright, but not in the desired direction.

What was preached in the plans were not put into practice. Right from the II Plan itself the production of consumer goods through the "factory method" has been included as one of the variables in the plan. Thus the germ of the present lop-sided development was initiated in 1956 itself. In the III Plan, similarly, a number of consumer durable goods industries were permitted to be established. The Dutt Committee reporting on the licensing policy in India, in 1967, found that the so called "priority" given to the heavy sector was a total farce. It found that over 74% of licences were granted to the Private Sector during the period 1956-66, while the Public Sector received only 3%. Not only in the production of consumer durables but also in the capital and core industries sector, there was a steady inflow of private goods enterprise under one pretext or another. The classification of heavy goods in the Public Sector under the Industrial Policy was not followed in practice. The entire production of aluminium was granted to the

Private Sector as well as 226 licences for the production of machine tools while only 9 were given to the H.M.T. Similarly in all other sectors, the Private Sector crept into and upset the entire frame of planning. The objection is not to the ownership of assets but to the end-use being made of those scarce heavy goods. The Private Sector, being profit-oriented, diverts these goods for the production of consumer luxuries, durables and inessentials. The Dutt Committee reported the high level of mechanisation in the Private Sector, where the investment on machinery and capital equipment was 67.5% while it was only 19% in the Public Sector, in the same decade (1956-66). The share of the Private Sector in the import of capital equipment was 86% of the total, while that of the public sector was barely 4%. The mechanised light machines producing these consumer durables depend on the public sector for their inputs of all raw materials, infrastructure and equipment. The heavy sector output was thus being drained into the production of the light machines and the consumer durables. Thus priority to the heavy sector is not the amount or percentage of investment alloted to it in the plan, but the rate of ploughback allowed within itself. In the Indian plans, the low rate of ploughback is an indication not of high priority, but of low priority due to the heavy drain of the output of the heavy sector into the light sector.

Again, within the heavy sector itself the shifting of emphasis in the different plans led to different industries being given emphasis at different times. This resulted in very unsteady growth of the industrial sector, creating surpluses and deficits depending on the plan priority. The shifting pattern of investment resulted in haphazard growth of the different heavy sector industries creating serious shortages of cement, electricity, steel, chemicals, etc. Sometimes, there was over production, and the supply of many items like coal, etc, rose so much that there was a glut in the market. The low investment in the industrial sector in the First Plan created serious bottlenecks in the supply of industrial raw material to the industrial growth initiated by the II plan. Steel, machine tools, heavy equipment, heavy electrical, transport, power, etc, require a steady inflow of raw materials like iron-ore, steel, structurals, and other non-ferrous metals, electricity, etc. Since these industries were not established on the scale required they created serious bottlenecks to production in the Second Plan. The serious bottlenecks to production were recognised in the III Plan, so that there was again a change in priority from the heavy sector to the basic sector to provide raw materials to the industries. The III Plan aimed at establishing such industries, that would provide the industrial raw material, so that growth of the country could become self-generating within ten years.

The outbreak of the wars with China and Pakistan created inflationary conditions, so that there was a Plan Holiday. Capital accumulation was halted and resources shifted to the defence sector. But ;in the IV Plan emphasis to the heavy sector was not restored, and the use of existing capacity instead of expansion was highlighted. This was a serious mistake for a developing country, for it meant a slowing down of capital formation. The introduction of the Green Revolution again meant a change in the strategy, since mechanised means of producing agricultural goods was sanctioned. This againt spelt a drain of heavy sector goods into the light sector, and further accentuated the recessionary trends in the economy. Neither the Fifth nor the Sixth Plan changed the priorities, both stressing fuller utilisation of capacity. Ineffect, therefore, the entire base of the industrial sector was supposed to have been achieved in one decade (1956-66) i.e., the Second and Third Plan periods. Ten years are not sufficient for a country of India's size to initiate a process of self-generating growth. This is evidenced by the frequent occurance of shortages and bottlenecks, especially in transport, power and raw materials, as well as the continued excess capacity in the Heavty sector.

Considering the role of the foreign sector sector in terms of foreign collaboration, the actual policy went against the very rational of growth with social justice. In practice, the government allowed foreign collaboration in many inessential consumer goods items on the feeble ground that the names of foreign firms lend prestige to their Indian counterparts. This was a gross misappropriation of scarce foreign exchange and the import of these disturbed the plan priorities without contributing anything to economic growth. This trend has been increasing with foreign collaboration and import substitution being permitted in the inessential industries.

All efforts at planning have been to create the right climate for the growth of inaqualities. The Private Sector has been a parasite on the scarce goods produced by the Public Sector, so that all efforts at planning have been wasted with the dominance of the Private Sector producing exactly those goods that are harmful to the achievement of growth with social justice. The very growth pattern, that was sought to be avoided, has been achieved.

Check Your Progress - I

1.What was the percentage of investment for agricultural and irrigation sector during the V Five Year Plan?

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2. What are the major effects of low growth rate on the agricultural sector?

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3. What was the percentage of investment allocated to individual and mining sector during the Five Year Plan?

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4. Differentiate the trend of the production of consumer non-durables during the Third Five Year Plan?

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5. What was the major finding of the Dutt Committee regarding the licences granted to Private and Public Sectors?

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11.3 Planning and the Growth of the Economy

The plans have uniformly assumed average annual growth rate of national income at 5% and more, over the successive plan periods. At that rate it was assumed that the country could soon achieve self-sufficiency and would double its standard of living in twenty five years. The targets and actual growth rates achieved are shown in the table below:

Table.5 Growth of National Income and Per Capita Income

	I Plan	II Plan	III Plan	Annual	IV Plan	V Plan	VI Plan
	1951-56	56-61	61-66	66-69	69-74	74-79	80-85
Average Annual Growth of National Income							
Target	2.3%	5.0%	5.5%	5.5%	5.7%	5.5%	5.2%
Actual	3.6%	3.9%	2.2%	2.5%	3.5%	3.9%	NA
Growth of per capita income Average Annual Rate							
Target	0.9%	3.3%	3.2%	NA	3.0%	NA	3.3%
Actual	1.8%	2.1%	0.3%	2.4%	-1.2	2.9%	NA

The above table shows the poor performance of the Indian plans with respect to their overall rates of growth. Except for the First Plan, none of the others was able to achieve more than half the postulated growth rates. The Plans had all along estimated the growth of national income of at least 5% per annum. The firrst decade of planning (1951-60) achieved a growth rate of only 3.8% and the second (1961-70) only 3.7%. The next decade (1971-80) experienced an even lower rate of only 3% per annum. Along with a growth rate of population of about 2 to 2.5% the per capita income has been growing at a negligable rate of 1 to 1.5%. At this rate, the abolition of poverty and a doubling of the standard of living of the masses would be a distant dream.

The method of first fixing the growth rate, and then setting about achieving it, is not the proper procedure in planning. It is the end product and not the initiating factor in development. The rate of growth depends on various factors like the wage rate, the investment potential, the capital-output ratios, the techniques of production, thriftiness conditions and so on. To fix the growth rate first is to put the cart before the horse.

However, mere achievement of the target rate of growth is not enough. The disaggregated picture of the different sectors and their performance is more important in knowing whether the priority sectors are growing at the proper rates or not. It would also help in knowing whether the fruits of planning are going into the proper sectors, and whether the required structural changes are being achieved. We have seen that in the industrial sector various studies have shown the spectacular growth of consumer inessentials catering to the needs of the upper-income groups. Thus the mal-allocation of funds in the Private Sector has resulted in a lopsided growth of the Indian economy with none of the sectors following the priorities laid by the plans. Hence a mere increase in growth rates does not constitute development.

Check Your Progress - II

6. What is the performance of the Indian Plans with respect to their overall rates of growth?

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11.4 Planning and Social justice

The Five Year Plans have been repeatedly emphasizing the need to achieve growth with social justice. Social justice would imply (a) reduction of inequalities of income and wealth and (b) removal and reduction of poverty by improving the standard of living of the masses. From the Second Plan onwards, the reduction of inequalities and control of monopoly have been high-lighted.

11.5 Reduction of Inequalities

As regards the objective of reduction of inequalities it has been found that the inequalities and disparities have been increasing steadily over the plan periods. Several studies taken up by various authors have shown that the degree of inequality in the distribution of national income has become quite severe. Way back in 1964, the Mahalanobis Committee reported that the top 5% of the households received 20% of the national income (1960) while the share of the bottom 20% was only 8%. The NCAER in the year 1964-65 estimated that the bottom 20% received only 8.47% while the top 20% of the population received 42.39% of total consumption. Dandekar and Rath, in their analysis of poverty, showed that the per capita consumption of the poorest 5% declined by 1% from 1960-61 to 1967-68, while that of the upper middle and richer classes increased by 4.4%. Thus the process of development has had a favourable impact on consumption standards of the rich at the expense of the poor. This shows that in spite of repeated avowals to reduce inequality, the problem has worsened.

Neither has poverty been reduced, nor has the standard of living been raised. A number of studies have been undertaken to estimate the number and percentage of the poor in India. Dandekar and Rath estimated the "poverty line" (i.e., the minimum expenditure required to achieve the subsistence level of consumption) as being Rs.170.80 per head per year in the rural areas, and Rs.271.70 in the urban areas at 1960-61 prices. Based on this they found that roughly 40% of the rural population and 50% of the urban were living below the poverty line in 1960-61. Estimates of 1967-68 showed that this percentage had not significantly changed. In 1977-78, the number of people living below the poverty line was 48.13% showing that all efforts to check poverty had come to naught. It was reduced to 37 percent by 1984-85

Check Your Progress - III

7. What do you mean by Social Justice?

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8. What is 'Poverty Line'?

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9. Did the Five Year Plans reduce inequalities of income and wealth?

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11.6 Planning and Employment

The reduction of unemployment was yet another objective set forth by the Five Year Plans. Except for the First Plan, all the other explicitly included 'employment creation' as one of their major objectives.

Table 6 : Unemployment levels during plans (in million tonnes)

	I Plan	II Plan	III Plan	Annual Plans	IV Plan	V Plan	VI Plan
Total level of unemployment at the end of each Plan	5.3	7.1	9.6	23.0	39	44	47.2

The high growth of unemployment was the result of two faulty planning procedures. Firstly, the growth of population was repeatedly under estimated, and as such the actual growth of labour force exceeded the estimates. Secondly, and a more fundamental reason could be the increasing mechanisation of the consumer goods sector, and the low priority given to the labour intensive methods of producing wage goods. As discussed earlier, the plans have not properly involved the consumer necessaries goods sector in their strategy of development, nor they specified the techniques to be used. The growth of capital intensive technology means of producing consumer goods, especially in the urban areas, competed unfairly with the labour-intensive production in the rural areas. Patchwork programmes added in a haphazard manner at different stages of planning have not solved the problem, since the basic strategy of development has never been framed properly.

Check Your Progress - IV

10. List the reasons for the increase in unemployment?

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11.7 Price level and Planning

Since economic development leads to changes in the structure of production, it is inevitable that the changing composition of investment and output will create imbalances that will result in fluctuations in the general price index. The importance of planning is that it can estimate the effects of investment in different sectors, and the increase in demand can be calculated at the planning stage, and investment could be so allocated as to keep supply in tune with demand. Since the developmental projects require a long gestation period to increase output, their short-run contribution is only on the demand side demand for consumer necessaries by the workers, and for raw materials by industries. The supply of consumer necessaries has to be maintained, through quick yielding, labour intensive means of production. Similarly, the linkage effects and the input-output tables help in identifying the crucial shortages and bottlenecks, and proper investment can help to ensure that industrial production does not suffer. Hence the balanced growth of all inter-linked industries is important.

In the Indian economy, the fluctuating output of wage goods due to the vagaries of the monsoons, the shortages of vital inputs, the lack of co-ordination in the agricultural sector, the effects of wars and natural calamities and the soaring petroleum prices, all added their share to inflation.

Table 7 : Rate of Inflation During the Plans

	I Plan	II Plan	III Plan	Annual Plans	IV Plan	V Plan
% of increase in general price level	-13%	30%	32%	27%	60%	20.5%

Except for the first plan that registered a fall of prices by -13% all the other plans have been experiencing highly inflationary conditions. Hence the objective of non-inflationary growth has not been achieved by the plans.

The increasing prices have had two or three counter productive effects on the economy. On the production side, the higher prices meant that, given the financial allocation of investment, the real or physical investment had to be scaled down with every price increase. Thus inflation reduced the size of the physical plan allocation. The result was a lower rate of real investment, as happened in the Second Plan, and hence of growth rates. This worsens the situation, as lower output in the face of rising demand, results in still higher prices.

On the distribution side, the inflationary conditions resulted in greater misery to the poor, the low income and the fixed income groups. While the traders, entrepreneurs and high income groups can compensate for the higher price level with the higher profits earned, the disparities in income and consumption are further accentuated.

11.8 Planning and Self-reliance

Early in the planning exercise the demand for capital equipment, technical know-how and raw material made it imperative for the economy to depend heavily on the foreign sector. The establishment of a number of heavy sector projects resulted in a large inflow of foreign collaboration and capital. However increasing dependance on the foreign sector and the continuous balance of payment difficulties led to the recognition of the need for self-reliance and import substitution.

While dependance on the foreign sector is inevitable as far as the imports of capital equipment and of food grains is concerned, it is inexecusable in the case of consumer luxuries. But as the Dutt Committee reported, the number of licences given to foreign collaboration and the multi-national corporations in the non-essential consumer goods sectors had been unwarranted.

The balance of payments have, as all other variables, been fluctuating over the plans. The surplus in the V plan period was

Table 8 : Balance of Payment During the Plans (Rs. Crores)

	I Plan	II Plan	III Plan	Annual Plans	IV Plan	V Plan	VI Plan
Balance of payments	42	-1724.6	-2,384	-2,075.5	-2521	+1145.5	-9063

Largely due to the inflow of funds from overseas Indian nationals. The Indian economy has yet to achieve the goal of self-reliance.

11.9 Summary and Conclusion

The Indian planning procedure and performance have committed sins of both omission and commission. A Well-defined strategy of development was absent, especially in terms of long-term objective of choice of goods and techniques. Priorities in terms of both fixation and implementation were lacking. The ad hoc changes in emphasis on different sectors resulted in a lop-sided growth of the economy.

Secondly, the objectives were reduced to mere slogans by the very fact that the actual implementation went in opposite to that direction of the priorities. The increasing levels of poverty, low standards of living in respect of basic amenities like health, medical, water, civic and educational facilities, inflation, low growth rates, increasing foreign dependence, and high unemployment rates show that the three decades of planning have not brought about the desired structural changes in the economy. The dichotomy between the rich, developed and modern India, and the increasing poverty strecken unorganised, primitive and unchanging India show that neither growth nor social justice was achieved by the plans. The very structure of society that was sought to be avoided by the palnners have been achieved in spite of the Plans.

-Ms.Prabha Panth

11.10 Suggested Books

1. Dutt and Sundaram : Indian Economy
2. Misra and Puri : Indian Economy

11.11 Model Examination Questions

I **Answer the following questions in about 30 lines each :**

1. Examine the role of plans in the agricultural development in India.
2. Examine the strcture of industrial production during the plans.
3. How far have the Indian Five Year Plans been successful in achieving the objective of growth with social justice.
4. Have the Five Year Plans been successful in eliminating poverty and unemployment in India? If not, why?
5. Why did the plans fail to achieve price stability during the three decades of planing?

II **Answer the following questions in about 15 lines each:**

1. Explain the growth of national income over the plan periods.
2. How far have the Indian Plans been successful in achieving self-reliance?
3. Explain the following terms:
   a) poverty-line
   b) self-reliance.

Block - IV

This block on **"Agricultural Sector"** Provides a profile of agriculture in India and explains the factors which help increase the agricultural productivity - factors such as institutional factors and Green Revolution. It also discusses agricultural prices and financial assistance to the agricultural sector.

The block consists of the following five units

Unit - 12	:	Profile of Indian Agriculture
Unit - 13	:	Agricultural Productivity
Unit - 14	:	Green Revolution
Unit - 15	:	Agricultural Prices
Unit - 16	:	Agricultural Finance

Unit-12: Profile of Indian Agriculture

Contents

12.0 Aims and objectives

The unit explains the various developments in Indian agriculture before and after independence and analyses the present day problems and the challenges faced by the agricultural sector.

After reading the unit, you will be able to

* indicate the importance of agriculture in Indian economy;
* explain the agricultural development during pre-independence and
* post - independence periods;
* identify the problems faced by agricultural sector; and
* suggest remedial measures.

12.1 Introduction: Importance of Agriculture in Indian Economy

Agriculture occupies a place of prominence in the Indian Economy. The importance of agriculture in a developing economy like ours can be understood from the following facts. First, nearly 70 percent of India's population depend on agriculture. In spite of the fact that steps have been taken to expand the industrial sector in our country ever since we attained Independence, a large percentage of the labour force still depend upon agriculture only. Second, agriculture supplies raw maerials like cotton, Jute, sugar cane,etc. to our agro based industries. It has been well recognised that unless agricultural sector is developed , it is not possible to expand the industrial sector in the country. The goods produced by the industries will have adequate demand if the incomes of the rural people are increased by the development of agriculture. Third, agricultural commodities form even to-day a substantial part of India's exports. And fourth, agriculture contributes significant proportion of the net national product which cannot be overlooked. For instance during the year 1977-78 the contribution of agriculture was around 44% of the NNP. Unlike in advanced countries, we find that Indian agriculture is backward. In contries like U.K.,U.S.A, etc., a very small percentage of population depends on agriculture while in India it is the main source of livelihood for a very large proportion of the population.

12.2 Agricultural Development in British India

To understand carefully the persent position of agriculture scene in India, we have to review the development of agriculture before and after Independence. Before Independence, the British Government did not evince much interet in the development of our agriculture. There was no direct link between the intermediaries such as the Zamindars and Jagirdars. They used to collect high rents from the cultivating tenants. They too did not show interest in the development of agriculture. The most important input for agriculture is 'water'. Neither the British Government nor the Zamindars took interest to provide assured supply of water to the agriculturists by improving irrigation facilities in the country. Whatever little was done in respect of irrigation was confined to a small number of projects started in the deltas of the major rivers in India. Even such projects were developed with view to getting revenue to the Government only, rather than meeting water requirements of the agriculturists. The British government's attitude and the outbreak of the Second World War gave rise, to a severe food shortage in our country, So during the war time and also in the early years after attaining Independence, the country had to import food grains in large quantities.

Then, what was the agricultural scene by the time the country attained Independence? The first and foremost was severe food shortages in the country. India had to give to Pakistan large portions of delta areas due to partition of the country.

The Indian farmers being ignorant and illiterate were exploited by the money lenders big landlords and zamindars etc., There were many institutional and socio economic obstacles to the development of agriculture. Under the institutional factors, the most important one was the defective system of land tenure. Under the socio-economic factors, we may mention the low social statues of the agriculturists, their poor economic position which made difficult to introduce any reforms in production methods, etc., The industrial and technological constraints inhibiting agricultural production would be discussed in greater detail in the next lesson (At present, we are concerned with the general features of Indian Agriculture)

In addition to institutional and technological bottlenecks, agricultural growth was adversely affected due to (i) old methods of production, (ii) lack of adequate irrigtion facilities, (iii) lack of adequate non-farm services such as institutional finance, (iv) smalll size of the holding due to excessive fragmentation, etc. So, it was immediately recognised by the Government that in order to increase agricultural productivity, all these bottlenecks had to be removed by adopting suitable strategies in the five year plans. We shall now discuss the various steps taken by the government since Independence for changing the traditional agricultural scene.

12.3 Agricultural Development in the Five Year Plans

The *First Five Year Plan* gave importance to agriculture and it aimed at correcting the economic by the Second World War and also the Partition of the country. As the country was experiencing severe food shortage by then, it was but natural to give the highest priority to agricultural along with irrigation and power. The total agricultural output had increased by 14.7 precent, of which the food grains alone had registered an increase of 20 percent,. To overcome institutional impediments, attention was focused on land reforms and promotion of co-operative credit and marketing. The Community Development Programme was launched in October, 1952.

In the *Secondfive Year Plan*,agriculture was given a lesser priority. Itwas thought that agricultural growth would keep pace with industrial growth during the Second Five Year plan. But soon it was relised that agricultural production was falling and thus leading to food shortages. To boost up agricultural production, the Intensive Agricutltural District Programme (IADP) was launched. In the *Third Plan*, the main objective was to attain self, sufficiency in food grains. Many steps have been taken to educate the agriculturists in the latest methods of production.. The need to provide remunerative prices to agricultural commodities was well recognised so as to encourage the farmers to increase their production. Therefore, in January 1965, the Agricultural Prices Commission (A.P.C.)was established to advise the Government on pricing policy for agricultural commodities. For procurement and distribution of good grains, the Food Corporation of India (FCI) was also set up. Despite all these efforts, the results of the Third Plan were disappointing . As the country faced severe drought for two consecutive yer (1965-66 and 1966-67) as also wars with china and Pakistan, agriculture suffered a setback. Public investment meant for agriculture maintain its public distribution system. As the progress achieved in other sectors also was not satisfactory, the fourth Plan could not be launched according to the original schedule. There were three annual plans from 1966-67 to 1968-69 during which time a new startegy for agricultural development was adopted. This stategy included the introducing of new technology into the production process of agriculture; use of high yielding variety seeds and chemical fertilizers and regulation of irrigation facilities. All these resulted in a significant increase in agricultural production in the country. This break-through in agriculture is generally termed 'Green Revolution'. The increase in agricultural production was, however not felt in respect of some of rice growing states like Andhra Pradesh, Bihar and West Bengal. It could be seen that the new strategy had helped very much the production of wheat in some northern States like Punjab and Haryana.

After the three annual plans, the fourth Plan was implemented in 1969-74. It aimed at continuing the emphasis on the implementation of the new strategy evolved earlier. It also aimed at land reforms mechanisation of agriculture, supply of institutional credit to the farmers, etc. During the Fourth Plan certain special programmes were also launched. For example, the Small Farmers Development Agency (SFDA); Programme for Agricultural Labourers and Drought Prone Areas Programme etc. were some of them.

Even in the Fifth, Sixth and Seventh Plan periods also, the government had shown keen interst in agicultural development. Because of the various efforts made by the Government, the Indian agriculture has recorded a substantial growth starting with the First Five year Plan. The index number of agricultural production with triennium ending 1969-70 as the base period increased from 58.5 in 1950-51 to 137.9 in 1978-79. During this period, the index for food grains production rose from 57.1 to 139.3 and the index for non-food grains rose from 62.0 to 134.8. Between 1950-51 and 1981-82, the production of food grains had risen from 51 million tonnes to 133 million tonnes. It has touched a peak level of 152 million tonnes in 1983-84. A careful analysis of the production trends reveals that there are large fluctuations over time. It has also been noticed that the levelof production in the terminal year of a plan is not always the highest for the plan period. For example, against a target of 63 million tonnes of food grains for the first plan period (1951-56) the production was 67 million tonnes in the terminal year 1955-56 and record production of 70 millions tones was reached two years earlier in 1953-54. Same is the case with other five year plans also. The erratic nature is mostly attributed to the weather conditions. It order to obtain fairly reliable idea about the increases in the potential for agricultural production it is necessary to eliminate the fluctuations caused by the variations in the weather conditions.

Increase in agricultural production is due to the play of a number of variables like area sown, intensity of cropping; intensity of irrigation; use of modern techniques in production; weather conditions, etc., In 1950-51 (pre-plan period) the area under food grains was only 97 million hectares. By 1955-56, it rose to 111 million hectares and by 1981-82 it stood at 129 million hectares.

The intensity of cropping was 123 for 1978-79. It is measured by first dividing the gross cropped area by the net sown area and then multiplying it by 100. For instance, the gross cropped area in India for 1978-79 was 1,75,177 thousand hectares while the net sown area was 1,42,938 thousand hectares. So the cropping intensity was calculated as 1751177 divided by 142938 and the resultant figure multiplied by 100. Similarly, for the year 1978-79, the intensity of irrigation was 127.

The details of area, production, yield, fertiliser consumption and irrigated area are shown in the following table:

Description	1960-61	1970-71	1980-81	Annual compound growth rate % (1960-61 to 1980-81)
Area (m-hectares)	115.6	124.3	126.7	0.46
Production (m-tonnes)	82.0	108.4	129.6	2.31
Yield (kg/hectare)	709	872	1023	1.85
Fertilizer Consumption (000 tonnes)	556	2176	3678	9.91
Irrigated area (000 Hectares)	27934	38550	48090	2.39

(Source : Regional Dimensions in India's Eco. Development-Planning. Commission, 1983)

Check Your Progress - I

1. Was the agriculture sector given the top priority in the Second Five Year Plan ?

2. How much agricultural output was produced in 1980-81?

12.4 Problems of Agriculture

The increase in agricultural production has been no doubt impressive. But this is not all. It is necessary to find out the pattern of growth in respect of the various important agricultural products and also the manner in which the resultant benefits have been distributed among different regions of the country. It has already been mentioned that the green revolution has benefited only some States in the country. During the period 1950-51 to 1964-65, wheat had registered a growth rate of 4.68% per annum while rice had shown a growth rate of 4.73%. But in the later period, 1967-68 to 1981-82, we can see that wheat has grown at 6.09% per annum. This shows that agricultural production has been lopsided in the sense that the benefits of the increase in production have gone mainly to the wheat growing areas only. This has created regional disparities in the country which is serious from the point of view of income distribution.

Another aspect of India's agricultural development is that the benefits of production and also the price rise in the recent decades have been largely appropriated by the landed rich farmers. The problems of agricultural labourers, small and marginal farmers could not be solved in spite of the increase in agricultural production. The rich farmers are able to get more institution finance; more inputs in the form of chemical fretilizers, etc., which helped them to appropriate the benefits of agricultural development in the country. The surpluses that are generated in the agricultural sector during the process of development have not been poughed back to expand the rural sector but, on the other hand, the surpluses have been utilised in the urban sector in non-farm business. Some scholars have gone to the extent of saying that the terms of trade between agriculture and non-agricultural sectors (i.e., mainly the industrial sector) have gone more in favour of the latter than that of the formar in the recent years.

The agriculture sector is still facing some of the following problems, which ultimately lead to low agricultural productivity :

(a) Defective tenure system : Even now the tenancy legislations enacted in various States could not be fully implemented. The tiller of the land is not the owner of the land. So the actual cultivator does not evince personal interest to increase the production.

(b) Poor techniques of production : Indian farmers use traditional methods of production. Only in recent years are they giving up the old and inefficent methods and methods trying to use modern implements. Although the farmers appreciate the advantage of using modern methods, they are not economicalloy sound to afford them. So, small and marginal farmers who form the bulk of agriculturists are not in a position to make use of the modern techniques.

(c) Another important problem is inadequate irrigation facilities. Though irrigation potential has been substantially increased, its utilisation has not been satisfactory in many of the States in India. For instance, out of an irrigation potential of 113.3 million hectares created the gross area irrigated was only 48.1 million hectares in the year 1978-79. This work out to be 42.5% of irrigation potential utilisation. The utilisation percentge is the highest in the northern region (73.7[illegible]%) and lowest in the eastern region (27.34%). Multiple cropping and rise in agricultural production would be possible with the expansion of irrigation facilities.

(d) Inadequate warehousing and marketing facilities create problems for small farmers who have to dispose of their produce without waithing for remunerative prices. This would benefit the commission

Crops and Areas

Now, let us discus the (crops both food and non-food) grown in India. rice, wheat, millets, maize, pulses, oil seeds, cotton, jute, sugar cane, etc., are the most important crops grown in the country. The principal rice growing areas in the country are West Bengal, Andhra Pradesh, Madhya Pradesh, Bihar, Tamil Nadu, Uttar Pradesh and Orrissa. Wheat is grown largely in Punjab, Haryana, Madya Pradesh and Uttar Pradesh. Millets an a short season crop. They are grown mostly in Tamil Nadu, Maharashta and Andhra Pradesh. Maize is grown throughout the country but the leading producers are U.P., Bihar and Punjab. Pulses belong to the category of rotation crops, mostly grown in Uttar Pradesh and some areas of M.P, Karnataka and Maharastra. Plantation crops like tea, cofee, and rubber are grown mostly in Assam. The Principal oil seeds found in our country are ground-nut, linseed, rape, mustard, castor, seasumum, etc. India is the largest producer of groundnut in the world. Jute is mostly grown in West Bengal, Assam, Bihar and Orissa.

Determinants of cropping pattern

It may be noted that cropping pattern of any region depends upon a number of factors of which the most important are the nature of the soil, the climatic conditions, rainfall, etc. Extension of irrigation facilities, and use of modern methods of cultivation can often change the existing cropping pattern. There are some economic considerations also such as the price movements, size of the farm, availability of inputs, the type of tenure system, etc, which influence the cropping pattern.

Agricultural policies to increase productivity

Agricultural policies have continued to focus on measures to step up productivity, to provide remunerative prices to producers, and to generate employment opportunities with a view to benefiting the rural masses. In regard to fixation of support or procurement prices, the Agricultural Prices Commision (APC) which is now called the 'commission of Agricultural Costs and Prices', takes into account such factors as productivity, cost of cultivation and demand and supply and need to provide incentive for higher production. The strategy for increasing the production and availability of oil seeds consists of the strengthening of research, extension and training and also the increasing of the production of major oil seeds like ground nut, etc.

12.5 Remedial Measures

So far, we have discussed some of the present problems of agriculture. What are its challenges to-day?

We can notice that the monsoon situation has continued to significantly affect the agricultural production. The development in agriculture during the last decade or so presents a clear picture of a rising trend in production and continued fluctuations in output in response to changes in monsoon conditions. The Green Revolution has been confined to the few crops which have a weight of about 55 percent in the index of agricultural production. These crops are wheat, paddy, sugar cane and potatoes. In the rest of the crops having 45 percent weight in the index, production has by and large stagnated in terms of both area expansion and yield. How are we to increase their production ? Suitable techniques have to be devised for increasing their production.

An essential requirement for sustaining the growth of agricultural production is the continued expansion of irrigation facilities. There is considerable under-utilisation of existing irrigation potential. The irrigation system itself depends on the monsoon conditions. The availability of water is affected by droughts, which in turn, affect crop yields, including those of high yielding varieties also. Concerted efforts are necessary to make full use of the existing potential.

A mojor effort is necessary for stablising and improving yields in rainfed and dry area which account for a major part of the cropped area in the country. This would depend on the development of genetically superior and hardy varieties of seeds of crops grown in arid zones and application of new techniques.

In addition, we must realise that agriculture itself is no longer confined to farming but includes many non-farming sub-sectors such as animal husbandry, farm and social forestry, marine and inland fisheries, poultry and sericulture. The task before the nation is not merely that of stepping up the rate of agricultural growth but that of integrating all these activities into the growth process.

The agricultural development should be such as to provide more employment opportunities in the allied sectors and prevent migration of labour from rural to urban areas. The disguised unemployed should be given adequate work. Regional disparties in agricultural production have to be minimised by increasing the rate of production in the affected areas. Steps should be taken to see that small and marginal farmers as well as agricultural labourers should be able to benefit from the process of development of agriculture.

The demand for food grains has been increasing with the growth of population in India in recent years. Agriculture should be able to supply adequate quantity of food grains. For achieveing this objective not only should the production go up but the public distribution stream-lined so as to hold the price line.

Above all, we cannot ignore the property relations in agriculture which are accentuating income inequalities among different sections of the rual population. Steps to correct the inequalities by enact ment of suitable legislation seem to be necessary.

12.6 Summing Up

This unit tries to explain the importance of agriculture in India and shows how it was neglected during the British rule. But the importance of agriculture was realised during the Plan Period. The First Five Year Plan allocated a lot of funds to its development. The Government had shown a keen interest in the agricultural development during the last two decades of planning.

The pattern of agricultural production is lopsided. The production of wheat has been increasing but that of other crops has not been increasing at the same rate. The other problems of agricultural production relate to defective tenure system, poor techniques of production, inadequate infrastructural facilities like irrigation, HYV seeds, fertilizers, etc.

In the last part of the unit, remedical mesures have been shown. One major remedy is the implementation of land reforms.

- Dr. T. Divakara Rao

12.7 Suggested Books

1.	Datt and Sundaram	:	Indian Economy
2.	Ojala, E.M	:	Agriculture and Economic Progress
3.	P.C.Bansal	:	Agricultural Problems of India

12.8 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. Trace the agricultural development in India during the plan period.
2. What are the various problems of Indian Agriculture? Suggest remedial mesures.

II. Answer the following questions in about 15 lines each :

1. Explain the importance of agriculture to Indian economy.
2. What was the agrarian structure in British India?
3. What are the bottlenecks affecting agricultural growth?

Unit-13 : Agricultural Productivity

Contents

13.0 Aims and Objectives

The unit explains how agricultural growth was adversely affected by institutional and technological factors during the British regime and the measures which were taken since independence to improve agricultural productivity.

After reading the Unit, you will be able to

* analyse the land tenure systems under British rule;
* identify the factors affecting agricultural productivity; and
* categorize and explain the measures which have been taken to improve agricultural productivity.

13.1 Introduction-Land Tenure System Under British Rule

By the time India attained her Independence, there were three systems of land tenure, namely, (a) Zamindari (b) Mahalwari and (c) Ryotwari. The Zamindari system was introduced by the East India Company for the first time in Bengal in 1793 and later many parts of the country were covered by this system. Under this system, the Zamindar was empowered by the British Government to collect rents from the cultivating tenants and he was allowed to pay a fixed amount to the Government towards land revenue. The responsibility of improving land was completely left to the Zamindars. This system had many defects in the sense that the Zamindars used to exploit the cultivating tenants any raising the rents very frequently. They indulged in conspicuous consumption and seldom bothered about solving the problems of land or of the actual cultivators. They emerged in a big way; as intermediaries between the tiller of the land and the owner of the land (i.e., the Government). The other system was called *Mahalwari Tenure System*. The village lands were held jointly by all the members of the village. The members were jointly or severally responsible for the payment of land revenue. This system was in vogue in Agra, Oudh and Punjab areas. There was still another system called *Ryotwari Tenure System*. Under this system, the land owner could directly make payment of land revenue to the State. But in this system also, many owners used to give their lands on lease to the tenants thus leading to 'Absentee Landlordism'. All these systems had the defects of sub letting, rackrenting, etc., which adversely affected the growth of Indian Agriculture.

13.2 Factors Affecting Agricultural Productivity

13.2.1 Institutional Factors

In addition to the defective tenure system, agriculture suffered a set back due to the small size of the farms, excessive fragmentation etc., The pressure on land had increased with the growth of population. The same bit of land had to be subdivided among the legal heirs of a cultivating family. The small size of the farm did not benefit the cultivating tenants from the economies of scale, as it was not suitable to introduce a more scientific method of cultivation. Small holdings lead to great waste of time and agricultural inputs. Even the little irrigation facilities available then could not be properly utilised.

Still another bottleneck in respect of agricultural growth was lack of adequate institutional credit and marketing facilities. The farmers had to depend on the village money lenders who charged exhorbitant rates of interest. The farmers borrowed money not only to meet agricultural investments but also to fulfil their social obligations. Due to lack of adequate ware housing facilities, the farmers had to sell away their produce immediately after harvest without waiting till such time as when they would be able to get remunerative prices. All this resulted in heavy rural indebtedness. Due to lack of adequate incomes, they could not bestow attention on schemes to improve their lands.

13.2.2 Technological Factors

Next to institutional factors, we have to consider the technological factors which had inhibited agricultural growth in our country. The Indian farmers were tradition bound and poor. Old methods of cultivation were used by them. In advanced countries, the productivity of agriculture could be increased by the use of modern methods of cultivation. In India till very recently most of the farmers were not adopting improved implements like steel ploughs, sugar-cane crusherws, small pumping sets, etc., Use of better seeds, chemical fertilisers and improved implements would increase agricultural productivity by 10 to 20 per cent. Another technological factor that adversely affected agriculture growth in India has been inadequate irrigation facilities. It should be noted that 'water' is a very important input for increasing agricultural production. Most of the farmers had to depend upon the rain water for their cultivation.

13.2.3 General Factors

In addition to these institutional and technological factors, we may now mention certain general factors which also had an adverse impact on the growth of Indian agriculture. Due to the rapid growth of population in India, the pressure on land had increased tremendously with the consequence that it led to increase of the disguised unemployment' in agriculture. In other words, the productivity of the labourers working on agriculture could not be fully utilised. Another factor relates to the discouraging rural atmosphere. Most of the Indian farmers believed in the outmoded customs and institutions such as the caste system, joint family, suprestitutions, etc., They were not motivated by economic considerations but were mostly guided by belief fate.

13.3 Measures for Removing Institutional Bottlenecks

After Independence, what action has been taken to remove these institutional and technological bottlenecks? In order to increase the productivity of agriculture, institutional and technological reforms are necessary. Among the institutional and technological reforms are necessary. Among the institutional reforms, steps were taken to redistribute land in favour of the cultivating classes. These are known as *'Land Reforms'*. The scope of land reforms includes (a) abilition of intermediaries, (b) tenancy reforms, i.e. regulation of rent, security of tenure for tenants and the conferring of ownership rights on them (c) ceilings on land holdings, (d) consolidation of holdings, and (c) cooperative farming. Land reforms are supposed to achieve two main objectives, namely, (1) to increase the productivity of agricultuere and (2) to bring about social justice.

All States in India immediately after Independence took action to enact suitable legislation to implement various land reforms. At the outset, the abolition of *Intermediaries*, mostly the Zamindars and Jagirdars, was taken up. The Zamindars were given some compensation for giving up their rights to their estates. A part of the compensation was paid in the form of bonds and the remaining in the form of cash. By the abolition of intermediaries the actual cultivators came into direct contact with the Government. However, it should be remembered that some Zamindars and big land lords immediately switched over to personal cultivation of land so that they could be treated as the actual cultivators and in that precoss many tenants had been evicted by the Zamindars. Though a part of their estates could be kept under the guise of self-cultivation, it was quite small compared to the areas they held prior to the aboliton, of estates. So, by and large the State could successfully abolish the intermediaries, mostly the Zamindars.

The next stage in land reforms, as discussed earlier, is *tenancy reforms*, which include (a) regulation of rents, (b) security of tenure, and (c) conferment of ownership rights for the tenants. Due to increase in population the pressure on land has increased. Lands were let out for cultivation by the landlords and they were charging exhorbitant rents. Most of the tenants had no security of tenure. In other words, they could be evicted at any time by the land lords. Security of tenure was there in the case of occupancy tenants but not out of tenants-at will and also not of the sub-tenants. the First and the Second Five Year Plans and had recommended that the land rents charged by the landlords should not exceed one-fourth or one-fifth of the gross produce. Many States have passed legislation restricting the land rents to a particular limit. In regard to security of tenure, the idea is that a tenant who has no right of land would not evince adequate interest for the improvement of the land. Therefore, in order to increase the productivity of agriculture, it is very essential that the tenants do have a personal interest in developing their lands. Keeping this in veiw, every tenancy legislation attached great importance to providing 'security of tenure' to the tenants.

In this context, we must understand that the Zamindari system was the creation of political expediency whereas the tenancy system was introduced on account of the worsening economic position of the agriculturists. The deep-rooted causes for the continuance of the defective *tenancy system* could be attributed to (a) pressure of population on land, (b) fall in agricultural incomes, (c) decline in alternative occupations, (d) land being treated as a freely saleable commodity, (e) apathy on the part of the Government (before Independence) towards the farmers, etc. The most important benefit conferred upon the tenants by implementing various tenancy legislations is that the tenants cannot be evicted as long as they continue paying rent to the landlords. In some States, tenancy legislation stipulated the maximum time upto which the lands could be let out to the tenants by the landlords. Many State Governments encouraged hard working tenants to become owner-cultivators by providing opportunities for them to purchase their holdings. Although the tenancy reforms were aimed at bringing institutional changes for increasing the agricultural productivity, the absentee landlords always tried to find some loop-holes in the tenancy laws so that they could continue their exploitation of the tenants. For instance, the absentee landlords tried to benefit themselves from the very definition of 'Personal Cultivation' given in the various tenancy laws. Most of the landlords entered into some pseudo-agreements with their tenants as if they were only 'farm sevants'. Another difficulty is that most of the tenants are not entered in the official records so that they could be protected from the landlords. Also, as the social status of most of the tenants is low, they cannot succeed in getting the full benefits provided by the tenancy laws.

In regard to the size of the hodings, action was taken in almost all the States in India to *consolidate the uneconomic holdings*. Most of the holdings in India are very small and are fragmented. These holdings are uneconomic and this adversely affects the productivity of agriculture. But a review of the progress attained in this regard gives a gloomy picture. The reason is not most of the small farmers are not prepared to part with their holdings. Broadly speaking, there are two ways of creating economic holdings. First, the State may take over the uneconomic holdings from the owners and reconstitute them into economic holdings. Second, a ceiling may be fixed for owning land and the remaining land taken over by the State for utilising to form economic holdings. but the progress achieved by following these two ways has not been satisfactory. Another way out is to promote cooperative farming. Under this measure, lands of various farmers are pooled together for the purpose of cultivation. The farmers would be members of the cooperative farming soceity. The farmers by parting with their lands so as to form the cooperative society, however, retain their individual rights of ownership over their lands. The objective of cooperative farming is not only to consolidate the uneconomic holdings but also to reap the benefits of economies of scale by being able to introduce modern methods of cultivation. Then, what is the progress achieved under this measure ? In our country, cooperative farming as achieved limited success. The small farmers do not have the incentives as they fear being exploited by the landed rich farmers, who also can become members of cooperative farming society. There are other problems of cooperative farming such as lack of efficient management, misuse of institutional credit, etc.

Also some of the big landlords tried to escape from the land ceiling legislation by subscribing their lands to a cooperative society. All this means that even now the productivity of agriculture has been affected by the small and fragmented uneconomic holdings.

We may now review *'Land Ceilings'* as a part of the institutional reform. The main objectives of land ceilings are briefly the following (a) disparities in land ownership have to be created and (d) a cooperative rural economy is to be evolved. By 1961-62 all States in India have passed the land ceiling legislation. Lands have been divided into different categories on the basis of soil, irrigation, etc. Every State has fixed the land ceiling limit by following its own criteria. In this measure also, the progress achieved has not been satisfactory in many States. The land owners somehow tried to escape by sub-dividing their lands through many benami transactions. Some have gone to courts to get benefits out of the loopholes of the land ceiling Acts and so on. Finally, we may say that this institutional reform could not be fully implemented

Apart from land reforms, other institutional factors like *credit and marketing*, etc, also had adversely affected the growth of Indian agriculture. Till the nationalisation of banks agricultural sector was receiving very small assistance from the banks. Even the institutional credit in the form of loans from the Co-operative societies did not meet the requirements of the small and the marginal farmers. Even after nationalisation, the institutional credit has been inadequate in relation to the financial requirements of the agricultural sector. Also it should be noticed that whatever institutional credit has been provided through the nationalised banks and other co-operative societies, etc., most of it has been appropriated by the rich landed farmers. The banks could not provide adequate credit to the small farmers as the security offered by them happened to be also small. Consequently the farmers had to depend on the village money lenders even now.

Similarly, the marketing facilities availalbe in India are insufficient to cater to the needs of the agriculturists. The warehousing and marketing facilities could help only the rich landed farmers. Thus, the defective land tenure system, small and fragmendted holdings, inadequate institutional credit and insufficient marketing facilities are the main institutional factors which stand in the way of agricultural growth even today.

Check Your Progress - I

1. What is Ryotwari system ?

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2. List the factors affecting agricultural productivity.

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3. What is the scope of land reforms ?

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4. What are the major objectives of land ceilings ?

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13.4 Technological Measures for Improving Agricultural Productivity

We shall now discuss the technological aspects of agriculture, especially after independence, to know their impact on agricultural productivity. First, the irrigation policy. After independence, the irrigation potential has no doubt been significantly expanded by constructing huge dams and reservoirs. However, the irrigation potential created could not be fully utilised for bringing more land under cultivation. It is due to a variety of reasons like, lack of coordination between different stages of works relating to irrigation, inadequate response from the farmers to make use of the irrigation facility or shortage of other complimentary inputs like chemical fertilisers, better quality seeds etc. All the States in India do not possess the same irrigation potential. Ultimately, it should not be forgotten that rainfall plays an important role in providing assured supply of water. Therefore, we can say that the agricultural productivity has been low due to inadequate irrigation facilities as well as under-utilisation of the existing potential.

Another technical aspect is concenred with method of cultivation. In India most of the farmers resist change in the method of cultivation. Modern methods of cultivation are associated with the use of irrigation, better seeds, better manure and fertilisers, plant protection, use of machines etc. In other words in order to switch over to the modern methods of cultivation, we have to ensure the supply of all these inter-related complementary inputs. Due to inadequate availability of these inputs, most of the farmers could not switch over to the new techniques of cultivation. However, after the Third Five Year Plan agriculture has been revolutionised by using all these inputs by which the productivity of agriculture has tremendously been stopped. This change is generally called 'Green Revolution'. Even then, the productivity increase has not been the same for all the crops and for all regions. The institutional problems like inadequate credit, etc., also are responsible for not adopting the modern technology.

Another technological relates to the use of chemical fertilisers, better seeds, electricity, etc. We have already discussed at some length these aspects while referring to the use of modern methods of cultivation. We should also know that chemical fertilisers are a very important technical input which helps to a large extent the productivity of agriculture. The supply of chemical fertilisers has been inadequate and its price also has been increasing in recent times. So, the farmers are unable to apply the required quantity of chemical fertilisers to their lands.

13.5 Summary and Conclusion

So far we have discussed the institutional and technological bottlenecks in the development of Indian Agriculture. Any reform, whether institutional or technical, should be taken up keeping in view clearly the specific problem to be solved. So, it is not desirable to enter into a controversy on the relative roles of institutional reforms and technological changes. In this context, it is also necessary to know that what is considered good. From the long term point of view may not get priority in the short term. In a vast country like India, large variations are there in natural endowments germane to agriculture like soil, climate and rainfall. Gains of growth are, therefore, distributed unevenly among different regions. Institutional reforms acquire greater importance in a situation in which gains of technology get unevenly distributed. For instance, technological improvements must have benefited the owners of large holdings rather than those of small holdings in a variety of ways. So, there is need for having institutional changes (or reforms). M.L.Dantwala is of the opinion "to keep the scales even between technology and institution, it may be suggested that in a technologically favoured region, the accent should be on institutional reforms and in regions with poor endowments, the accent should be on endowment enriching and infrastructure investment, development of appropriate technology and proper selection of growth sectors". (Economics & Political Weekly, Aug. '78, p. 1305). The prepared technology should be low cost, low skill and class neutral. The gains from the use of improved technology should not be appropriated by a small section of the population. Apart from the commonly suggested institutional reforms like land tenure, credit and marketing, it is necessary to innovate the kind of changes that are needed in the organisational set-up, so that the benefits of improved technology are distributed more evenly among different classes of the society. So, the policy mix should be a judicious blend of technology, institutional reform and public investment in agricultural infrastructure so that the productivity of agriculture could be increased.

- Dr. T. Divakara Rao

13.6 Suggested Books

1.	Datt & Sundaram	:	Indian Economy
2.	Bansal, P.C.	:	Agricultural Problems of India
3.	Misra & Puri	:	Indian Economy

13.7 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. Critically examine the various factors affecting agricultural productivity in India ?
2. Explain the steps taken to bring about institutional reforms in India ?

II. Answer the following questions in about 15 lines each :

1. Explain the institutional factors affecting the agricultural productivity ?
2. How will technological measures increase the agricultural productivity ?
3. What are the stages involved in land reforms ?

Unit - 14 :Green Revolution

Contents

14.0 Aims and Objectives

The unit examines the role of Green Revolution and its impact on employment and regions.

After reading the unit, you will be abe to

* recognize the characteristics of Green Revolution;
* identify the reasons for the limited impact of Green Revolution;
* discuss the growth and variability of agricultural output under the new technology; and
* explain the impact and effects of Green Revolution.

14.1 Introduction

Prior to the mid-1960's. The operations involved in Indian agriculture largely carried out traditional lines, and a substantial and protracted rise in agricultural output required a technological break-through of some kind. Although there was an extensive realization that agricultural yields could be noticeably increased through better irrigation, choice of seeds, and application of fertilizer, this realization had not become a part of policy making with regard to agricultural strategy. Further since productivity in the traditional scheme of agriculture was greater in small holdings, an effective pursual of land reform might have led to an increase in total agricultural production, though not necessarily an increase in the rate of growth of output.

We have to consider whether the package of new agricultural practices that are embodies in the so-called "Green Revolution" has meant a technological break-through for Indian agriculture, and whether such practices, as a result, have eased the technological constraints operating upon the economy. An answer to this requires an analysis of the nature of the new technology, its impact on such variables as output, employment, and distribution and the conditions that would determine its continuous spread and adaptation to changing conditions. This would, in short, mean viewing the "Green Revolution" in retrospect and considering its prospects.

A distinctive feature of the new technology is the substitution of traditional low-yielding varieties of seed with high-yielding varieties (HYV). The latter variety of seed has the capacity of utilizing soil nutrients to maximize grain yield rather than leaf growth. However, the pre-condition to this lies in the greater use of fertilisers to supplement natural soil fertility, which in turn means an adequate supply of water, since fertilizers cannot be absorbed by plants in their original concentrated form. The effective use of this technology calls for better agricultural practices, such as fertilizer-water input at appropriate stages of growth, effective weeding, a supply of pesticides, and better water control and drainage in order to maximise yields.

Two other physiological attributes of the HYV seeds are that they mature faster irrespective of the length of their exposure to sunlight. This undertaking multiple cropping resulting from shorter harvesting periods, and to a land hungry South Asia, this land-saving innovation is of great importance.

14.2 Characteristics of Green Revolution

The basic 'technological' characteristic of the 'Green Revolution' strategy is thus an application of complementary inputs in order to ensure yields of much larger volumes of foodgrain output, largely due to increase in yield per acre. However, an assessment of this technological impact must take into account its economic characteristics. Agriculture in India is organised largely with family labour or low paid labour. Labour is abundant in this country and has low levels of alternative earning. The most expensive input other than land is bullock-power. However, the new technology in contrast makes use of manufactured inputs and is independent of rains, thereby becoming capital-intensive. This additional expense for the farmer has three implications.

First, the application of fertilizers is subject to diminishing returns, and as a result the economically optimum dosage of inputs becomes smaller than the technological optimum. Again, the use of one input (say fertilizer) would depend on the availability of, and the ability to purchase other inputs (say water). *Secondly,* higher yields, and substantially so, are necessary to offset higher variable costs of cultivation so as to make the use if technology worthwhile in terms of private benefit. *Thirdly,* the HYV seeds are prone to greater damage on account of their being non-acclimatized strain, and the farmer might fall a prey to debt-burdens in case of crop failure in the face of higher capital costs.

The new technology was introduced in India from the middle 1960s. The importance of the economic characteristics of this new technology is to be seen in relation to mechanization and unequal incidence of acceptance by large and small farmers, as also that of the regional and interpersonal gains resulting from the adoption of such technology. Studies made with regard to output show that substantial increase in the growth rate of agricultural output has not resulted from the use of "Green Revolution" technology, except in the case of wheat. According to Srinivasan, there has been no significant change in the rate of growth of foodgrain output other than wheat, after the introduction of the technology. For wheat an increase in the rate of growth of output is noticeable and, therefore, Srinivasan has called the new technology the 'wheat revolution'. Hanumantha Rao points out that between 27 and 41 per cent of the additonal output can be attributed to the "Green Revolution" between 1964-65 and 1970-71; therefore, most of the increase can be explained by natural trend factors which have been evidently increasing since the 1950s, that is, before the "Green Revolution". While the rising man/land ratio has to be seen as a detracting factor, there is no indication in the output figures of a major sustained technological breakthrough in agricultural production in India.

Check Your Progress - I

1. What is meant by 'Green Revolution' ?

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2. What is the basic technological characteristic of Green Revolution ?

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3. What are the implications of the new technology ?

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14.3 Reasons for Limited Impact of Green Revolution

The disappointing effects of the apparently productive new technology can be explained by referring to the exaggerated hopes arising from results of ideal trial conditions as also to rice or millets which are major food crops in India. Again, indigenous HYV varieties such as Jaya and Padma are less prone to damage under local conditions than such exotic varieties as the Taichung or IRRI strains. The lack of any breakthourgh in producing HYV seeds for jowar, bajra, pulses, sugarcane, cotton, and jute means that the impactg as been limited to crops making up a small part of the total agricultural production, and that too in some regions at the expense of some non-food crops. While individual farmers have benefited, the new technology has not eased the overall constraints imposed by low rates of production growth.

There are other reasons for the limited impact of the "Green Revolution". As mentioned earlier, farmers do not apply recommended dosages of inputs, since they weigh the relative prices of inputs and outputs, and avoid risks. Besides, the demand for fertilizers is not adequately met. Government policy has restricted the geographical spread of new technology as a result of the inability to provide inputs, but the increase in output demands an expansion of area under such technology. Since adequate and controlled water supply is critically important to the "Green Revolution", the proportion of irrigated area to total cultivated area must increase, but the facts are to the contrary. The proportion is 33% in India with very slow enhancement. As a result, the proportion of total foodgrain area under HY varieties went up from 5% to only15% between 1967-68 and 1971-72. It might be argued that limited and regionally unequal growth is a result of using water-intensive techniques in a land where the monsoons are an important source, but government initiative in the exploitation of ground-water resources might help to ease the situation.

14.4 Growth and Variability of Output

Apart from the level of output, the question of variablity in levels of output is important in the Indian context. It has been noticed that increases in output have been accompanied by increasing instablity, and moreover, the bulk of the increase is due to factors from the side of yield rather than fluctuations in acreage. While most people stress the role of supply factors in output, some have pointed out the role played by demand. A sustained expansion of output from agriculture would require a sustained expansion of demand for agricultural products, and thus the relatively poor performance of rice can be explained by the low-expansion of domestic incomes and the lower expenditure elasticity of demand for rice, since there is only a limited export possibility for foodgrains in India. The slow growth of incomes of poor farmers (who constitute the majority) explains how supply and demand factors have interacted to prevent the wider adaption of the new technology and hence limited its effects on agricultural output.

The discussion on the growth and variability of agricultural output under the new technology would be incomplete without an examination of the effect of weather on output. Although there is no systematic relationship between the degree of deficiency of rainfall and food production, the fall in agricultural output by 20 million tonnes in the 1966 drought year, and by 11 million tonnes in the 1972 drought year, shows that the slackening in growth of agricultural output in these years is not simply a statistical illusion.

14.5 Impact of Green Revolution

The effect of the new technology on employment revolves around the question of mechanization of Indian agriculture. The seed-fertilizer technique is favourable with respect to land-demand, but this is not so as regards labour demand. Although the need for better planting and careful weeding, as also larger harvests, tends to increase the demand for labour, the necessity of mechanization in order to maximize yields, as in soil preparation between harvest and the next planting in multiple cropping, offsets this demand. Mechanization has increased with the under pricing of tractors and harvesters, as also increased access to subsidized credit by large farmers. However, it is not possible to say before hard weather mechanization would tend to reduce or increase unemployment. Studies have shown that mechanization in any case is not widespread and that its net effect has not significantly touched employment levels. A great deal of attention has been devoted in the literature on "green revolution" to the distributional aspect of agrarian change. There have been criticisms of the unequal regional incidence of technical change and of the increase in the gap between the rich farmers, to whom benefits are channelled, and the poor peasants and landless labour at whose expense this is done. The available data points quite clearly to the fact that both the small peasants and the landless labourers have tended to lose out under new technology conditions, both in relative and absolute terms. While poor farmers have not gained as much as rich farmers owing 10 to 20 acres of land or more, the condition of landless labourers is worse due to little improvement in their real wages, as also the substitution of cash payment for in kind payment in the context of rising food prices.

Check Your Progress - II

4. How does the mechanisation of agriculture affect employment in rural areas?

5. Does Green Revolution lead to regional inequalities ?

14.6 Effects of Green Revolution

The perverse distributional effects of the "Green Revolution" are not accidental. Farmers owning large holdings have become richer which is significant, since they take advantage of market imperfections to get capital and labour at more favourable prices under which it is profitable to adopt the new technology while the poor farmers struggle under a higher set of prices. Besides, 'large' farmers monopolize the use of scarce inputs due to their easier access to credit which is denied to small farmers facing budget constraints. In the absence of any government policy of insurance, the poor farmer is more susceptible to risks and has smaller savings to fall back on. Again, HYV seeds and fertilizers are more easily avaialbe to rich farmers, and their rising productivity means larger incomes and investment

The uneven effects of the "Green Revolution" on regional development are more difficult to understand. Thus, the 'Green Revolution' has brought prosperity to well-irrigated wheat producing areas like Punjab, whereas in some other areas, there. has been no sustained rise in output. Again, part of the reason for this unsatisfaction situation lies in the fact that agricultural output, both food and non-food is highly sensitive to changes in climatic conditions that have nothing to do with the Green Revolution. With the exception of relatively rich states like Punjab and Gujarat, most have fared badly in terms of rates of growth of 'per captia' food output. There is also evidence of uneven rates of growth of percapita outputs of foodgrain as a number poorer states like Bihar, Madhya Pradesh, and Maharashtra have been faring worse than Punjab or Gujarat.

The failure to achieve a breakthrough in food production has implied that nothing much has happened to ease the wage goods constraint facing the economy. However, purely localized gains have been made by rich farmers in some regions. This has led to the accumulation of wealth on a large scale by a small group of farmers. But a higher availability of foodgrains which would have offset this growing inequality has not come about. Furthermore, the economy has not experienced a more stable level of output and remains very sensitive to the vagaries of nature as before, given the critical role of water in the resources. In addition, the increaseed dependence on manufactured and imported inputs for higher yields has made output sensitive also to the availability of input such as fertilizers, diesel oil, etc.

14.7 Summing Up

This unit has dealt with the successes and failures of Green Revolution in India. Technological break through was achieved during the Sixties. Effective use of the new technology, application of HYV seeds, fertilizes and pesticides lead to Green Revolution. But as is seen the impact of Green Revolution is limited to some states/areas and to few rich landlords.

- Dr. Pradipto Chaudhary

14.8 Suggested Books

1. Datt & Sundaram	:	Indian Economy
2. P.C. Bansal	:	Agricultural Problems of India
3. Misra & Puri	:	Indian Economy

14.9 Model Examination Questions

I. Answer the following questions in about 30 lines each

1. What is the role of Green Revolution in India's Economic Development?
2. It is often argued that the beneficial effects of Green Revolution have not spread uniformly in the Indian agriculture. Do you agree ?
3. What is meant by Green Revolution? Explain its characteristics.

II. Answer the following questions in about 15 lines each ?

1. Explain the characteristics of Green Revolution?
2. Give the reasons for limited impact of Green Revolution.
3. What are the effects of Green Revolution?
4. What is the impact of Green Revolution on India's agricultural Producjtion?

Unit-15: Agricultural Prices

Contents

15.0 Aims and Objectives

The unit describes the role of agricultural prices, different concepts pertaining to agriculture such as marketable surplus, marketed surplus, procurement prices, terms of trade etc.,
After reading the unit, you will be able to

* emphasize the role of agricultural prices;
* discuss the need for a commission of Agricutral costs and prices'
* explain the responsibilities of the Food Corporation of India;
* recognize the concepts of marketable surplus and marketed surplus and their role in economic development;
* identify the criteria used in fixing procurement prices; and
* interpret the concept of terms of treade.

15.1 Introduction

Price of agricultural commodities directly influence the allocation of the resources availble to the economy and play an important role in shaping the course and character of economic development in many of the countries where the agricultural sector contributes a considerable part of the national income. The determination of agricultural and non-agricultural prices and their relative movements are influenced by a number of factors. Government policies of fixing the procurement and support prices, providing incentives to producers, operation of price contorls and their interaction with the interests of the farmers go a long way in the determining the production and distribution of the agrilcultural commodities and their price level. The institution arrangements of credit for marketing too affect the prices.

15.2 Functions of Agricultural Pricing System.

Price determination is a process of balancing demand with supply. In any capitalist economy, the price system is an important means of allocating the country's scarce resources among different activities. In a competitive economic system pricing performs four main functions.

1. It directs the consumption of goods and services. It helps a consumer in deciding what to buy and how much income to spend on each product taking into account the relative prices of the products and services as well as the amount of satisfaction expected from them.

2. It directs the use of the resources in a production process. The farmer producer decides what to produce, when to produce and how much to produce after taking the price structure into consideration.

3. It helps to distribute the income among the oweners of the productive resources. Price variations result in the redistribuion of incomes and property values with differnt consequences.

4. It influences the capital formation in the country. Thus pricing of agricultural goods is an important part of the development process of a developing country like India.

15.2.1 Price Structure and Consumption

Consumption find a number of agricultural products in the market, some of them being substitutes. One cannot purchase as much as he wants of each of them with his limited income. The consumer tries a particular combination of the available goods that would yield him the maximum satisfaction.

15.2.2 Price as an Allocator of Resources

Changes in the relative prices of various agricultural commodities would have a significant effect on re-allocation of resources among agricultural commodities. Empirical studies of sugar in U.P. cotton in Punjab and Jute in Bengal showed that the supply responses to price changes were very high for these commodities. The relatively high supply responses in these situations should lead one to assume that the elasticities will be high for all agricultural products.

It is generally accepted that the supply elasticity for the basic foodgrain crops, wheat and rice are much lower than that for the commercial crops, sugar, cotton, jute, tobacco, etc. The reason is simple. The major foodgrain crops comprise a high proportion of the aggregate agricultural production and therefore, respond much more like the aggregate with consequent lower supply elasticities in response to relative prices. It is conceivable that a crop with 5% of the total acreage in a district would have more elastic supply response than the aggregate. But the same thing is not possible in the case of a crop accounting for 95% of the acreage. The minor crop can easily double or treble in acreage at the expense of the major crop; but the major one cannot.

In general, the aggregate supply response to price changes is low, and very low in the traditional agriculture because of the low use of purchased inputs and the limited opportunity for the transfer of labour resources to and from productive use in the other sectors of the economy.

15.2.3 Price as a Distributor of Income

A change in agricultural prices affects the transfer of income between agricultural and non-agricultural sectors of the economy. It also affects income distribution between high and low income persons. A rise in agricultural prices redistributes income away from low income urban consumers towards high income agricultural producers.

Changes in agricultural prices affect the incomes of the cultivator in proportion to the sales of their produce. In general, the lower income cultivators are those who sell a small proportion of their produce. For a cultivator who sells only 10% of his total produce (the rest being kept for own use/consumption) a 10% relative increase in agricultural prices increases his real income only by 1%. But the real income of the cultivator who sells 90% of his total production rises by 9% with a 10% relative rise in agricultural prices.

Roughly the converse is the situation with the consumers. Rising prices of food affect the real incomes of consumers in proportion to that which they spend their incomes on agricultural commodities. Lower income urban consumers who spend a much higher proportion are affected more than the high income urban consumers who spend much lower proportions on food requirements. Thus for example, for a low income consumer who spends 70% of his income on food, a 10% increase in food prices will represent a 7% decline in real income. For a high income urban consumer who spends only 20% of his income on food a 10% rise in food prices accounts for only 2% decline in his real income. Of course a consumer from the high income group spends a larger sum in rupees on food than does a consumer from the low income group. Therefore, the high income consumer experiences a greater absolute change in real income than his counterpart in the low income group, with a given change in the prices of food.

15.2.4 Effect of Price Changes on Capital Formation

An increase in agricultural prices encourages increased investment in agricultural sector. It does this in two ways, one of which is indiscriminant between high income and low income cultivators and the other discriminates in favour of the higher income cultivators.

Higher prices increase the returns to investment by increasing the value of output. One can assume that all of the output from increased investment would be proportionate to the price increase. In so far as lower income farmers do market less than 100% of an investment-induced increase in output, they will have the real returns increased somewhat less by higher relative prices than do higher income cultivators.

The second effect of higher prices of investment on agriculture is the income effect. Higher incomes make farmers better credit worthy and thereby encourage lenders to advance large amounts. This influence is in direct proportion to the income effect which in turn depends on the marketing. Farmers who sell only a small proportion of their outputs receive only a small proportionate increase in income and consequently very small addition to their capacity to invest.

Rising agricultural prices tend to discourage industrial investment. Rising food prices cause an upward pressure on money wage which, in turn causes a squeeze on industrial profits thereby reducing not only the incentive to invest by lowering returns, but also the ability to invest by lowering the pool of profits.

The policy of providing subsidized food to the urban workers increases industrial profits and capital formation. The provision of subsidized food would reduce the cost of living in urban areas, attract more labour into the urban labour force, and cheapen the supply price of the urban labour.

Rising agricultural prices might appear to favour industrial investment because of an increase in demand arising from higher rural incomes. But, in fact, high agricultural prices simply transfer income from the non-agricultural to the agricultural sector in proportion to the marketings of agricultural commodities.

15.3 Agricultural Production, Prices and Income

Agricultural income depends on the level of prices and the level of production. An increased agricultural income may be due to a change in relative prices of agricultural and non-agricultural goods or it may be due to increasing yields in the agricultural sector. The former type of change brings about only a marginal change in economic growth, while the latter contributes to economic growth in a very substantial way.

The extent to which production and the price level often move counter to each other may offset their respective influences. The nature and extent of such an offset depends on the price elasticity of demand and the marketed surplus.

15.4 Commission of Agricultural Costs and Prices

The Government of India appointed the foodgrains Price Committee in 1964 with L.K.Jha as Chairman, to advise on the determination of producers prices for foodgrains on an all-India basis, the reasonable margins for the wholesalers and retailers and the consumer prices. The committee also had to suggest suitable terms of reference for an agency which would provide such advice on a continuing b asis. Consequently, the Agricultural Proces Commission was established in 1965 to advise the government on the price policy of agricultural commodities with due regard to the interests of the producers and consumers. The Commission, renamed as Commission of Agricultural Costs and Prices, was required to keep in view:

(i) the need to provide incentive to the producer for adopting improved technology and for maximising production;

(ii) the need to ensure rational utilisation of land and other resources of production; and

(iii) the likely effect of the price policy on the rest of the economy, particularly on the cost of living, level of wages and industrial cost structure.

The Commission generally recommends the minimum support prices which are in the nature of an insurance against an excessive fall in prices in the wake of an increased output. Also it formulates the procurement prices at which the government should procure the grains, besides recommending on related matters like storage and distribution.

15.5 Food Corporation of India (FCI)

Established in 1965 FCI undertakes purchasing, storage, movement, transport, distribution and sales of foodgrains in the country mainly through the public distribution system. It has set up a number of regional and district offices in the different States. It operates some rice mills and mechanical paddy dryers, besides taking care of importation of foodgrains.

With the transfer of the Food Department to it in 1969, the FCI has become the sole agency of the Government of India for State trading in foodgrains. The procuring operations are increasing in volume every year and during 1983 84, it could procure a record level of foodgrains, about 15 million tonnes, chiefly of wheat and rice.

The Jute Corporation of India and the Cotton Corporation of India are also important agencies running on almost the same lines as the FCI. They undertake the functions of imports and exports too.

15.6 Marketable Surplus - Marketed Surplus

It is not the agricultural production but the surplus it generates for the market that plays a pivotal role in the development.

15.6.1 Marketable Surplus and Marketed Surplus

Marketable surplus is the theoretical surplus available for disposal with the producer after meeting his requirements of family consumption, wages feed, seed and the necessary wastages. Marketed surplus, on the other hand, is that portion of the marketable surplus which is actually marketed. In the case of a commercial farmer, the marketed surplus may exceed the marketable surplus in the sense that he may sell out his entire produce and buy his food requirements from the market. A subsistance farmer may sell out only a nominal quantity of his product to the market. Frequently, distress sales may increase the marketed surplus of the subsistence farmers but this is only apparent, since they again purchase from the market. Also sometimes, hoarding in expectation of further rise in prices may reduce the marketed surplus. This too is accused an apparent phenomenon, since it has to be sold out at some point of time. Thus the real marketed surplus is that which is purchased by the urban population and the non-agricultural rural population.

On an average, it is generally stated by the official sources that the marketable surplus in foodgrains is 1/3 of the total production: 32% of rice, 35% of wheat and 25% of millets. In case of cash crops the marketable margin is an high as 90%.

15.6.2 Marketed Surplus and Economic Development

In a developing country like India the increasing marketed surplus plays a crucial role in its economic development.

1.An increasing marketed surplus helps in releasing labour force from agriculture to work in a non-agricultural sector.

2. It would contribute to the capital formation in the agricultural sector with the help of the increasing net incomes.

3. Export of marketed surplus helps in importing capital goods like machinery for rapid industrialisation

4. It would raise the standard of living of the agricultural population.

5. It generates demand for industrial products and leads to industrial progress.

The most important means of effecting the transfer of agricultural surplus is through price mechanism. Land revenue and irrigation charges can be collected in the form of the grain. government can establish enough number of regulated markets and can save the cultivators sellers from the clutches of the middlemen and prevent malpractices.

15.6.3 Factors affecting Marketable Surplus

The size of the marketable surplus differs from region to region and from crop to crop or from farmer to farmer. Some of the chief determinants are the following:

1.*Level of Production :* Intensity of cropping is a crucial determinant. Double and multiple cropping helps to increase the marketable surplus.

2. *Size of the Farm :* Generally the bulk of the marketed surplus comes from the large and medium sized farms. Small and subsistence farms contribute very litte.

3. *Consumption Habits :* Most of the farmers of Punjab and Haryana whose staple food is wheat market almost their entire rice crop. The opposite is not true of the rice producing belt of India.

4. *Nature of Crops grown :* Generally a large part of cash crops are marketed as compared to food crops. In addition the price level of the specific grains and the cash requirements of the framers help in determining the volume of marketed surplus.

15.6.4 Measurement Problems

Many problems areencounteredin the actual measurement of the marketable and the marketed surplus. It is difficult to isolate the closing balance of the preceding year's harvest at the beginning of the current year. Also the amount of seed requirements vary from year to year. For instance, the failure of the seed beds require their replacement.

Marketable surplus too is not easy to be estimated, since the of the cost of cultivation, the payments made in cash and in kind and the consumption requirements of the different farm families are not readily available.

Check Your Progress - I

1. What is marketable surplus ?

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2. What is marketed surplus ?

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15.7 Procurement Prices

The Government of India has been fixed uniform minimum support prices and issue prices for the country as a whole for all the principal crops like paddy and wheat. Some of the States are coming forward to offer extra incentives in the form of additions to the floor prices fixed by the Government of India. This pushes up the actual procurement prices offered in such States.

15.7.1 Procurement Prices : Alternative Criteria

The principle of cost of cultivation is generally adopted in India in fixing the procurement prices of different food grains. There are some other alternative criteria followed in other countries like the following:

1. parity criterion
2. inter-crop parity criterion, and
3. ruling price criterion.

Parity means a reasonable relationship of the procurement price with the other prices paid by the farmers for inputs and goods of their domestic consumption. The first method is simpler than the second.

The inter-crop parity criterion emphasizes the need for maintaining an appropritate relationship between the prices of different crops. This directs the allocation of land among different crops grown in the country.

The ruling prices criterion links the current price to the market prices in the recent period. this method takes a pragmatic view of the relative changes in the supply and demand over a given period that guide the current and future prices.

15.7.2 Procurement Prices in India

Costs of production of crops in different regions and States of India are not uniform. Therefore, a uniform price of a crop, throughout the country is likely to penalise the less fertile lands and less efficient cases of production in spite of their potential viability. A number of marginal farmers and backward areas are adversely affected, and the consequent change in cropping pattern and shift to cash crops may result in the decline of the total output of foodgrains.

Notwithstanding the official control on prices of food the open-market the prices of almost all the food grains had increased sharply after 1975. Such a phenomemon calls for an appropriate enhancement of the procurement prices, too.

There is every reason for suggesting substantially higher procurement prices in view of the sharply increased prices of the agricultural inputs.

Check Your Progress - II

3. What is ment by procurement price ?

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15.8 Terms of Trade

15.8.1 Concept of Terms of Trade

Terms of trade refer to the level of relative prices of agricultural commodities sold out by the farm sector and the industrial goods purchased by the farm sector. A negative price policy resulting in unfavourable terms of trade for agricultural sector cheapens agricultural products in the short-run, but in the long-run it may check agricultural growth and result in scarcity of agricultural commodities. On the other hand, the reverse case of cheapness of industrial goods to the agricultural sector may lead to a wastage of resources. Therefore, a positive and development oriented price policy should always maintain the terms of trade at an appropriate level.

In the intial states of economic development, income elasticity of demand for food would be high in countries like India. But the supplies may not respond to the growing demand in view of organisational constraints and institutional rigidities. As a result, the prices of agricultural commodities would increase and push up the cost of production index of the non-agricultural goods too. In effect, the terms of trade turn in favour of the agricultural sector until the agricultural supplies increase to the necessary level.

15.8.2 Terms of Trade in India

As a part of development policy, the agricultural price policy in India had been used against the interests of the farmers to keep wage goods and raw materials cheap for the growing industrial sector and to maximize and transfer to the industrial sector surpluses for investment.

In other words, the terms of trade do not seem to favour the agricultural sector. In this connection, taxation and price policies have to be considered together. Taxation of a part of agricultural output may be regarded as the payment of a zero price for that part. If the part that is paid for is also priced low, then the average realized price per unit of agricultural produce is lowered in two ways. This means that even when the terms of trade indicated by price statistics are steady, they may turn against agriculture in real sense if the taxes on agriculture are increased. A third way to depress the terms of trade against agriculture is to let the prices of urban goods purchased by the farmers rise and at the same time keep the prices of agricultural commodities low.

A negative agricultural policy is thought to be common in the early phases of development, generally through high delivery quotas, procurement, low prices or by high prices of industrial goods used by labourers.

15.9 Suggestions for Sound Price Policy

A sound price policy for a developing country like India should include the following:

1. Arrangements should be made for the regular supply of essential farm outputs in time and at reasonable prices, and in adequate quantities.

2. A portion of marketable surplus of foodgrains with the farmers may be compulsorily requisitioned at a price equivalent to the average cost to the marginal producer to distribute to the weaker sections.

3. The cost of procurement, storage and distribution should be keep at the lowest.

4. Marketable surplus with the farmers over and above the levy quota should be allowed to be sold in the free open market.

5. The Government should maintain and operate buffer stocks of foodgrains so that the open market prices can be kept within a reasonable range.

15.10 Summing Up

Pricing policy affects the sector, particularly the agricultural produce. This unit explains the functions of agricultural cost, and prices fixes the prices of most of the agricultural commodities. However, in India the marketable and the marketed surplus will be less due to high poverty. Terms of trade between agriculture and industry are not in favour of agriculture sector.

- Dr. M. Atchi Reddy

15.11 Suggested Books

1.	Datt & Sundaram	:	Indian Economy
2.	Misra & Puri	:	Indian economy
3.	P.C. Bansal	:	Agricultural Problems of India

15.12 Model Examination Questions

I. Answer the folloiwng questions in about 30 lines each:

1. Explain the role of Agricultural prices in developing countries like India.
2. Distinguish between marketed surplus and marketable surplus. Explin the role of marketed surplus in economic development

II. **Answer the following questions in about 15 lines each:**

1. What are the facts affecting marketable surplus ?
2. What do you mean by 'Procurement Prices' ?
3. Explain the terms of trade between agricultural and industry.
4. Distinguish between marketable and marketed surplus.
5. Explain the working of commission on Agricultural Costs and prices.

Unit-16: Agricultural Finance

Contents

16.0 Aims and Objectives

The unit explains the nature of agricultural finance and the functioning of the government sponsored agencies in India.

After reading the unit, you will be able to

* justify the need for organised credit for agricultural divelopment in India;
* list the objectives of agricultural credit;
* examine the working of government sponsored agencies pertanining to agricultural finance; and
* identify the short, medium and long-run credits in agricultural finance.

16.1 Introduction

Agriculture produces raw materials for food and clothing besides many manufactured household goods. But farming is one of the most risky industries and the cultivator does not have any assurance about the size of the harvest. he has to face drought, famines, cyclones and floods. He has to fight pests and other crop diseases and diseases to the animals. In many cases, a number of poor cultivators are utterly helpless and many farmer families are reduced to financial bankruptcy.

Agriculture is a peculiar industry. It cannot avail itself of the benefits of a joint stock company. The farmer has to depend for the most part on his own resources. He cannot make use of the public savings as the industrialists do. He cannot estimate his costs of production and the returns as accurately as the industrialist for the purpose of getting a loan. Also a number of cultivators are tenants who cannot make use of the available public credit facilities.

Compared to industry the agricultural sector is veryslow in its adjustment of supplies in response to changes in demand for its products. The gestation period is so large and rigid that the farmer is unable to reduce or stop his production even when there is a chronic fall in agricultural prices. While a manufacturer can renew his circulating capital many times a year, an agriculturist owing to the seasonality of farming takes generally an entire year to renew his capital. Thus the peculiarities of agriculture keep its financial needs entirely on a different footing.

16.1.1 Need for Agricultural Finance in India

India is a Predominantly agricultural country with about 70% of its labour force being engaged in agricultural activities. About 72 million households cultivate a net sown area of about 162 million hectares. One-half of them own less than a hectare. Most of these small and marginal farmers along with a majority of the agricultural labourers live below the poverty line and are perpetually in debt. It is this factor that makes the organised credit an essential ingredient of the development.

16.1.2 Evils of the Private Credit

Credit requirements in agriculture cannot be left to the mercy of the private individual money lender for different reasons such as the following:

1. Profit being the sole consideration of the private money lenders, it is dificult to channelise such credit into socially desirable uses.
2. Judgement of credit worthiness involves a very high degree of discounting the future.
3. The rates of interest of the private money-lenders are unbearably high.
4. There is every risk that the private money-lenders covet the properties of the weaker sections through intimidation and litigation.

16.1.3 Institutional Credit

Adequate credit facilities are essential for progressive agriculture. As the agriculturist needs credit at low rates of interest and on favourable conditions an effective control over its use becomes a social obligation. That is why the institutional credit system was developed with liberal State assistance in many countries of the world during the present century.

Agricultural credit should not be interpreted in the narrow sense of mere granting of loans. It combines in itself both technical guidance and planning of the farm business. The farmer needs guidance to make the most effective use of the loan so that he would maximise his earnings from the land. Therefore, the credit services and the agricultural extension services should be entrusted to the expert public agencies which would function in close collaboration with each other.

Keeping in view the insufficiency of individual savings and the evils of the system of private money lending, the Government of India had proposed to establish Agricultural Banks in the different provinces during the closing decades of the 19th century.

16.1.4 Objectives of Agricultural Credit

The main objectives of agricultural credit policy are

1. To ensure timely availability of credit to all eligible persons for every viable scheme,
2. To meet the short, medium and long term needs through different agencies;
3. To make the resources of financing agencies equitably available at reasonable rates of interst and terms of repayment, and
4. To bring about improvement of productivity and total production in farming.

In addition, the credit agencies can undertake direct supervision of the use of credit, extension services, and monitoring of the progress achieved.

Check Your Progress - 1

1. List the evils of private credit.

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2. What are the objectives of agricultural credit ?

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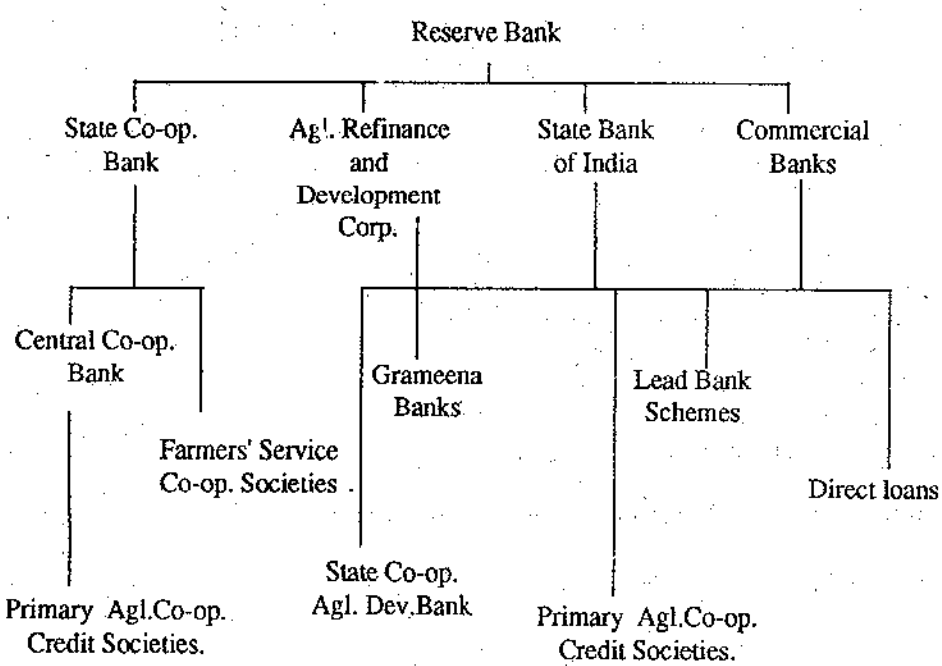
16.2 Government Sponsored Agencies -Their Working

During the post-independence period, the Government had assumed increased role in the development of agriculture. Not only did it build the gigantic multi-purpose projects and carry on the land reforms, but it had also started a number of financial institutions and expanded the scope of the existing agencies to extend the required credit ot the multivarious activities of the agricultural sector.



16.2.1 Co-operative Banks

The structure of co-operative banking in India is federal in character. It consists of primary societies at village level, co-operative banks at the apex.

Co-opreative movement in India was started with the object of organising and developing a special agency for providing agricultural credit. For this purpose, two distinct types of co-operative banks have come to be set up in India. One provides short term and medium term credit and the other long term credit.

The first category consists of the primary societies, co-operative central banks and the State level apex banks. the central co-operative banks form an important link in the chain as they help in balancing the deficits and surpluses in the resources of their constituents. Besides, they tap local savings for financing local needs of production and provide the channel at the district level for the funds to flow from the apex Bank, money market and the Reserve Bank of India. At the base are the primary co-operative societies which cater to the needs of the members generally drawn from one or two revenue villages.

The long term credit structure consists of the Central Land Mortgage (development) Banks and Primary Banks. by 1960 Central Land Mortgage Banks were started in almost all the States. In some states like Madhya Pradesh the State Co-operative Bank functioned as the Central land Mortgage Bank too. There is considerable variation of organisational structure in this State even at the lower levels. In Andhra Pradesh and other Southern States the units of operation at the taluka level are the primary land mortgage (development) banks. They are affiliated to the apex Bank and they advance loans to individual agriculturists out of the funds provided by the Central Land Mortgage Bank.

The Reserve Bank of India provides long term finance to the land mortgage (development) banks through direct loans and also by purchasing the special development debentures of the land mortgage banks.

16.2.2 Commercial Banks

The commercial banks had entered the agricultural sector largely after the 14 major banks were nationalised in 1969. In order to cater to the needs of the unbanked rural areas, a system of 'Lead Bank Scheme' was introduced in the early 1970s. Almost all the 352 districts in the country were allocated to one or other of the nationlised banks for a comprehensive survey of their credit needs. The banks were required to identify the areas were the credit was essential for development and agriculture was given predominance over others.

Although the Lead Bank Scheme was to assume a big role in meeting the credit needs of the districts concerned, it was not expected to have a monopoly of business in the district. The Bank would act as a consortium leader and after identifying underbanked areas, it would invoke the co-operation of other credit agencies including other commercial banks operating in that district.

The Lead Bank Scheme has made a fair progress. they had compiled voluminous reports of the credit needs at district level. and advanced loans to numerous rural farmers, artisans and small enterprenurs.

The problems facing the Lead Bank Scheme can be put under two categories. In the first place, there is a basic inconsistency in the scheme of alloting a district to a bank so that it can lead and co-ordinate the branch expansion with other banks in that district. It is clear that there is rush and competition in the rich and fertile districts, whole backward districts are the least preferred by them

Secondly, there are too many administrative problems. People complained about the prohibitive cost of the loans, favouritism and previlising corrupt practices. On the other hand, the banks are worried about the poor recovery rates in many areas.

16.2.3 Agricultural Refinance Development Corporation (A.R.D.C)

The Agricultural Refinance Development Corporation became a statutory body with the passage of Agricultural Refinance Development Corporation Act in May 1963 with a share capital of Rs.5 crores. Its aim was to provide assured finance for productive purposes and specially to development (mortgage) banks. The A.R.D.C. does not involve itself in direct financing to the agriculturists, but it does through the established institutions of credit in the co-operative sector.

The special schemes of the A.R.D.C were intended to be implemented within compact areas with close supervision, economy in administration, co-ordination among technical and non-technical agencies with necessary state assistance. The schemes include tractorisation, soil conservation, poultries, plantation, dairies, fisheries and so on.

16.2.4 State Bank of India

The State Bank of India has been responsive to the needs of the co-operative institutions connected with creidt for purposes of marketing and processing of agricultural products. It has extended not only finance to many co-operative societies of marketing and processing but also remittance facilities and short-term loans to be the Co-operative Central financing Institutions besides assisting a number of Co-operative Sugar Factories, Land Mortgage Banks, Industrial Co-operatives and Wholesale Consumer Stores.

16.2.5 Taccavi Loans

Government provides financial assistance through taccavi loans to farmers under (i) the Improvement Loans Act of 1883 and (ii) the Agriculturists Loans Act of 1884. The former provides for the long-term loans while the latter caters to the short-term and medium term needs of the farmers.

The defects of taccavi Loans are the following :

1. methods of distribution and collection are very rigid;
2. delays in the granting of loans make them useless, and
3. cost of the loans is very high.

The taccavi loans scheme, one of the oldest in the country, has receded in the wake of the establishment of modern institutions.

16.2.6 Agricultural Credit and Regional Rural Banks (Grameena Banks)

In spite of the fact that 14 major banks were nationalised in 1969 and more than, 50% of their branches are located in the rural areas, the poor farmers could not be benefited due to a variety of reasons that made them ineligible for assistance from the commercial banks.

To overcome this problem of weaker sections, the Regional Rural Banks came into being in 1975. They are intended to bridge the gap caused by the abolition of the rural indebtedness and the failure of the commercial banks to provide loans to the weaker sections.

The financial structure of Regional Rural Banks is simple. About 50% of the capital is from the State Government concerned, while the rest is provided by the sponsoring nationalied banks. The rate of interest charged by these banks is low and not more than that charged by the Co-operative Societies.

These banks are expected to release the poor from the hold of the usurious money-lenders and they can extend even consumption loans. Their chief target groups are small and marginal farmers, agricultural labourers, rural artisans and small enterpreneurs. They are supposed to relax the rules of collateral security in deserving cases and especially in the case of depressed class and educated unemployed.

The drawbacks of rural banks arethe following :

In spite of their having the most landable objectives at the time of their establishment, rural banks have run into some difficulties.

The newly established rural banks are unable to withstand the competition from the well established Commercial Banks which choose more efficient and viable units as their customers and leave out the least efficient clients for the rural banks.

When the rural banks were set up, it was understood that the co-operative societies in those areas would be ceded to the rural banks. But this condition was not fulfilled by the State government. As a result, many unavidable problems crop up between these two credit agencies.

16.3 Short, Medium and Long Term Credit

16.3.1 Short term credit

Short term credit is intended for financing the current agricultural operations and is generally given for a period not exceeding 18 months. Farmers need funds for hiring labour, buying seeds, manures, fertilizers and pesticides and for holding stocks of finished product until it is sold out. Sometimes short-term credit is used to meet the vagaries of nature like famines and floods or crop failures due to pests.

16.3.2 Medium term credit

Medium term credit is for effecting minor improvements to land, purchase of implements, bullocks and is given for a period of 3 to 5 years.

16.3.3 Long term credit

Long term credit is meant for effecting permanent improvements to land and digging of wells and the period is from 5 to 20 years. It is intended for acquiring the agents which help step up the productive process over a long period.

Long term expenditure can be sub-divided into i) Purchasing land; ii) reclamation of land, iii) bunding and levelling of land, ivb) digging and repair of wells, and canals v) laying of orchards and plantations, and vi) construction of farm houses and cattle sheds.

16.4 Summing up

As you are aware, India is predominatly an agricultural country. the majority of the agricultural households own less than one hectare and some of them are agricultural labour. As the majority of rural households live below the proverty line agricultural credit for their cultivation is a must. Government sponsered agencies such as cooperative banks, commercial banks, ARDC, SBI, Grameena banks provide loans for agriculture.

But the finance povided by these agencies is still inadquate many of the rural households are still depended on indgenous bankers and others.

Dr. M. Atchi Reddy

16.5 Suggested Books

1. Datt & Sundaram : Indian Economy
2. P.C.Bansal : Agricultural Problems of India
3. Misra & Puri : Indian Economy

16.6 Model Examination Questions

I. Answer the following questions in about 30 lines each:

1. What is agricultural finance ? What is its role in Indian agricultural development ?
2. Explain the role of government sponsored agencies in providing agricultural credit.

II. Answer the following questions in about 15 lines each:

1. Explain the need for providing finance to agriculturists in India.
2. Distinguish between private credit and institutional credit.
3. Are regional rural banks successful in providing credit to rural people?

Block - V

This block on **"Industrial Sector"** deals with the pattern of industrial development in India, the industrial policy resolutions since independence. The public sector and private sector. It also explains four different industrial financial institutions provide loans for the establishment of industries.

The block covers the following four units :

Unit - 17	:	Industrial Development in India
Unit - 18	:	Public Sector
Unit - 19	:	Concentration of Economic Power in India
Unit - 20	:	Industrial Finance

Unit - 17 : Industrial Development in India

Contents

17.0 Aims and Objectives

The unit examines the role of different industrial policy statements that were implemented for the industrialisation of the country as also the process of industrialisation in India.

After reading the unit, you will be able to

* emphasize th necessity of industrial policy;
* explain the Industrial Policy Resolution, 1948;
* analyse th industrial policy resoltuion, 1956;
* identify other important policy statements since 1956;
* examine the growth and pattern of industrialisation since independence;
* recall the obstacles to industrial growth since mid-sixties;
* list the reasons for industrial stagnation; and
* identify the measures which boost up industrial production.

17.1 Introduction

In this unit we try to analyse the role played by the industrial sector in fostering economic development. Industrialisation plays a crucial role in providing the much needed social and economic infrastructure in a developing economy. Developing countries have certain basic deficiencies such as lack of capital, lack of technology, excessive dependence on foreign trade, immobility of labour, out moded techniques of production, excessive importance to agriculture and so on. Unless a radical transformation is brought about in respect of the technological and institutional set-up of a developing economy, it is not possible to achieve speedy economic development. It is in this context that one has to give importance to industrialisation.

Relationship Between Agriculture and Industry

In an economy there is interdependence of the agricultural and industrial sectors. If the industrial sector is developed, it would provide the important inputs like inorganic fertilisers, agricultural implements, etc, so as to modernise agriculture. Similarly, agriculture supplies wage goods and important raw materials to some of the agro-based industries. If the agricultural sector is developed, it would also generate the necessary purchasing power so as to provide effective demand for the industrial goods. Another relationship between agriculture and industry is that with the expansion of industry, employment opportunities of a non-agricultural nature would be improved. The surplus labour in agriculture which is characterised as 'disguised unemployed' could be shifted to the industrial sector.

17.2 Need for Industrial Policy

Having recognised the importance of industrialisation for rapid economic development our task now is to know what the industrial policy should be in a mixed economy. The most important feature of a mixed economy is that it functions on the lines of a socialist as well as a capitalist economy. The public sector functions as a repository of socialism while the private sector stands for capitalism.

While it is important that some basic and key industries should be with the public sector, it is equally important that the activties of the private sector be regulated so as to achieve the broad national objectives of development planning. This is possible by the adoption of suitable administrative, monetary and fiscal measures by the government.

The policy with regard to industrial licensing, taxation and banking operations should be such, as to provide necessary incentives to stimulate private investments. The industrial policy followed in a country should keep in view (a) the degree of economic development already achieved in the country, (b) the natural and human resources position, (c) the socio-economic factors relating to the internal and external conditons, etc.

In so far as India is concerned, it would be interesting to ask certain questions like the following:

(i) What has been the industrial policy of the Government of India to achieve speedy economic development.

(ii) Can we say that the Indian Industrial Policy is most appropriate to ensure harmony between the public and private sectors?

(iii) What are the important limitations of our industrial policy in the context of a mixed economy?

(iv) What has been the progress achieved by the industrial sector so far and what problems has the sector been facing in recent years?

Answers to these vital questions would clearly make us understand the working of the industrial sector in India. In this context, it may be noted that the first offical document reflecting the government's intentions of the industrial sector in the post-independence period was the Industrial Policy Resolution of 1948. It was a time when the Government had to announce the industrial policy immediately after the country attained her indepndence. It was obvious that the circumstances prevailing during that time would have influenced the Government's thinking on this policy measure. Some of the important considerations before the Government at the time of adopting the 1948 Resolution were briefly the following :

1. The country was subjected to the Second World War inflation.
2. It was exception whether the government would resort to total nationalisation on the eve of India's independence.

3. The problems that arose in the wake of the country's Partition and the prevailing unstable political atmosphere to be tackled.

The Government thought that the fear in the minds of the private entrepreneurs should be removed by creating the necessary confidence for stimulating investments in the industrial sector. The 1948 Resolution was announced against this background. Now, let us discuss the salient features of 1948 Resolution.

17.3 The Industrial Policy Resolution, 1948

17.3.1 Categories

The industries were divided into four broad categories :

a) The manufacture of arms and ammunition, the production and control of atomic, energy and the ownership and management of railway transport were brought exclusively under the control of Central Government.

b) The second category relates to coal, iron and steel, aircraft manufacture, ship building, manufacture of telephone, telegraph and wireless apparatuses excluding radio receiving sets and mineral oils. The private units already producing these commodities were allowed to continue in the private sector. But new undertakings in these industries would be taken up only by the State.

c) The third category relates to such of those basic industries which the government would feel it necessary to plan and regulate. Under this category certain important industries like Salt, automobiles, heavy machinery, machine tools, heavy chemicals, fertilizers, electro-chemical industries, non-ferrous metals, rubber manufactures, power and industrial alcohol, tractors, prime movers, cotton and woolen textiles, cement, sugar, paper and newsprint, air and sea transport, minerals, and industries relating to defence were included. It was also mentioned that the Central Government would take over any industry considered important for national defence.

d) All other industries not covered by these three categories were left open to private enterprise (individual as well as Joint ownership).

17.3.2 Policy Measures

In the 1948 Resolution cottage and small scale industries were left to individual, village or co-operative enterprises. The policy resolution attached great importance to the role played by cottage and small scale industries. It was considered that the development of these industries would help decentralised industrialisation in the country.

Another important policy measure of the Resolution was with respect to the reward for labour and labour-management relations. The Resolution stressed that fair wages to labour was a pre-requisite for harmonious relations between management and labour. The Resolution also stated that labour was to be associated with the management of the concern for improving the industrial climate.

The 1948 Resolution recognised the need for securing the participation of foreign capital and enterprises to supplement the indigenous capital and technology. However, the participation of foreign capitals should not result in foreign domination and harm the national interests. While recognising the need for having foreign capital, the policy resolution insisted upon the progressive Indianisation of foreign concerns in the course of time.

Thus it could be seen that the main achievement of 1948 Industrial Policy was in laying a firm foundation for a mixed economy in which both private and public enterprises would function such a way as to achieve accelerated industrial development in the country.

17.3.3 Industries (Development and Regulation) Act , 1951

After the 1948 Resolution, an important development in respect of State policy towards industries was the passing of the Industries (Development and Regulation) Act, 1951. This act conferred wide ranging powers on the government in relation to industries. Now, we may examine the important provisions of this Act:-

a) No new industrial unit can be established or extension to existing units made without getting a licence from the Central Government. Under this Act the Government is empowered to lay down conditions regarding location, minimum size of the plant, etc.

b) The Government can start an investigation into matters relating to fall in production, deterioration in the quality of product, unnecessary use of resources of national importance, etc.

c) The Government is empowered to take over any private enterprise which does not carry out its instructions for improvement in management and policies.

d) Under this the government can prescribe prices, quantity of production and channels fo distribution.

e) The Act empowers the Government to set up development councils for the individual or group of industries. Accordingly, the Central Advisory Council was established in May 1952.

The main objective of the Act was to provide for government control over the location, expansion and starting of new private industrial units.

The Act was also aimed at using resources for achieving balanced regional development, protecting small and cottage industries and preventing concentration of ownership in the hand of a few rich entrepreneurs.

Check Your Progress - 1

1. Which factors do influence industrial policy ?

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2. Explain the Indian Economic situation at the time of adopting 1948 industrial policy.

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3. Into how many categories have the industries divided in the 1948 Industrial Policy Resolution?

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17.4 Industrial Policy Resolution, 1956

17.4.1 Development After 1948 Policy

Several economic and political developments had occured which made it necessary to announce a fresh industrial policy. On April 30, 1956 the Government of India adopted the industrial policy resolution which replaced the earlier 1948 Resolution. The improtant developments after the first industrial policy resolution, 1948 could be discussed now.

1) The Constitution of India was enacted wherein fundamental rights were guaranteed. The Constitution enuniciated the 'Directive Principles of State Policy'.

2) The First Five Year Plan had been completed the experience of which warranted a change in the Industrial Policy.

3) The Parliament had accepted the ushering in of the Socialistic Pattern of Society as the main goal of our planning.

4) Added to these, the second Five Year Plan was to be placed before the country.

17.4.2 Schedules

All these developments necessitated a fresh evaluation of Industrial Policy. According to the 1956 Resolution, industries were reclassified in the following manner:

a) Schedule A : Seventeen industries have been included in this category, the future development of which is to be the exclusive responsibility of the State. These industries are considered to be of basic and strategic importance in the interest of the country. Important among them are iron and steel, atomic energy, heavy machinery, coal, minerals oils, railway transport and distribution of electricity. New industries will be set up only by the State.

b) Schedule B : Twelve industries have been included in this category. They will have to be progressively State owned. The State would generally set up new units and the private enterprise is expected to supplement the efforts of the State. Some of the important industries in this category are aluminium, machine tools, ferroalloys, fertilisers, synthetic rubber and sea transport.

c) Schedule C : The remaining industries fall into this category. Their development has been left to the initiative and enterprise of the Private Sector.

17.4.3 Objectives of the Policy

The main objective of the 1956 Policy was the achieving of accelerated industrialisation in the country. Expansion of Public Sector and the co-operatives, reducing the disparities in income and wealth, and prevention of monopoly and oligopoly concentration of industrial wealth were also aimed at.

Although there was a division of industries into same categories in the 1956 resolution their grouping into water tight compartments. In other words; if necessary privately owned units could be permitted to produce an item falling within Schedule 'A'. Similarly, heavy industries in the public Sector could as well obtain some of their requirements from the Private Sector units.

According to the 1956 Policy Resolution, the State would continue to follow a policy of supporting the cottage and small scale industries for their development. The Government support could be in many forms. For instance, certain tax concessions or subsidies could be granted to encourage the growth and expansion of cottage and small scale industries. In regard to the role of foreign capital, the Resolution clearly gave an assurance to the foreign investors regarding the safety of their investment. The Resolution envisaged that with the expansion of infrastructural facilities like power, transport, etc, it would be possible to reduce regional imbalances in the country.

17.4.4 Merits of the Policy

Thus, we could clearly see that the 1956 Resolution is an improvement over the 1948 Resolution in some respects. They are the following :

a) Public sector has been given greater importance.
b) The classification of industries under the Public and private Sectors has been made more flexible.
c) The 1956 Policy provided the private entrepreneurs with the much needed confidence that their property would be safe and that it was not the intention of the government to take over the privately owned units on grounds of doctrine.
d) The new policy envisaged cordial relations between Public and Private Sectors.
e) The new policy also envisaged fair and non-discriminatory treatment of the two sectors. The broad content of the 1956 Resolution still remains intact even today although the Government announced certain policy measures from time to time with a view to achieveing the objectives of development planning.

17.4.5 Critical Analysis of the Policy

It has often been criticised that the 1956 Resolution is biased against the development of private sector in the economy Instead of being complementary, the functioning of both the sectors has been contradictory to each other's. This criticism, however does not appear to be tenable. The expansion of Public Sector has provided numberous opportunities for the Private Sector to grow. The Public Sector is intended to help rather than hinder the growth of the private sector. Therefore, it can be said that the industrial policy resolution clearly marked the dawn of mixed economy in India. The initial fears in regard to the future development of private enterprise have turned out to be unfounded. During the successive plan periods, the investments in private sector have been increasing although the percentage increase in the Public Sector is somewhat higher. The Public Sector investments are more capital intensive and meant to produce basic and key commodities while the Private Sector still dominates in the production of consumer goods in the country.

Check Your Progress - II

4. How many schedules are there in the 1956 Industrial Policy Resolution?

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5. List the major objectives of the 1956 Policy?

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6. Explain the merits of the 1956 Policy.

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17.5 Important Policy Statements since 1956

We may now discuss some of the industrial policy statements of the Government since 1956.

17.5.1 Licensing Policy, 1970

In respect of the licensing policy, certain changes have been brought about in 1970 and 1973. In February, 1970 the Government accepted the recommendations of the Industrial Licensing Policy Enquiry Committee. The important objective of the new licensing policy was to prevent concentration of industries by some monopolists. The industrial sector has been divided into three sectors. They are the core sector, the heavy investment sector and the middle sector.

The core sector consists of basic, critical and strategic industries. They include agricultural inputs like fertilizers, tractors, etc, iron and steel, non-ferrous metals, petroleum, cooking coal, heavy industrial machinery, ship building, dredgers and newsprint. Such of the industries in the core list which find place in Schedule 'A' of the Industrial Policy Resolution 1956 would be reserved for the Public Sector.

All investment units of over Rs.5 crores would come under the 'heavy investment sector'. Excepting the industries reserved for the Public Sector under the 1956 Resolution, the Private Sector would be permitted to start all other units in this category.

Next comes the middle sector. Units having investment ranging from Rs.1 crore to Rs. 5 crores come under this category. The applications of the entrepreneurs other than belonging to large industrial houses would be given preference for granting licences under this category.

The new licensing policy also suggested 'the joint sector concept' which means dual participation by Private and Public Sectors.

17.5.2 Industrial Policy, 1973

We may now discuss the industrial policy announced in February 1973. Here also, the main objective was to prevent the concentration of economic power. Emphasis was on the development of small and medium industries and the co-operatives. Some of the important changes introduced by this new policy statement are the following:

a) The definition of 'larger industrial house' for the purposes of industrial licensing has been modified. A large industrial house was defined on the basis of its assets. Prior to 1973, it was considered that those industrial houses having assets worth over Rs.35 crores were to be treated as larger industrial houses. But this policy statement has lowered the limit to Rs. 20 crores.

   Also, the new policy statement stipulated that while granting licenses to the large houses, all conditions under the MRTP Act, 1969 must be fulfilled.

(b) The list of core industries has been expanded. Those industries having national importance in future and also having more linkage effects were brought into the 'Core Industries List'.

(c) Foreign concerns have been allowed to participate in the core industries but such participation should be confiend to exports. Their investments would be subjected to the guidelines issued from time to time by the Government. Participation of foreign concerns should be examined with special reference to technological aspects, export possiblity and its overall effect on the balance of payments.

(d) The licensing policy of the Government should keep in view techno-economic and social considerations. Preference should be given to the units participating in the development of backward areas.

(e) The policy statement of 1973 laid emphasis on the development of small and medium industries. Even mass consumption goods could be produced by these industries or with joint participation of the Public Sector. The policy statement also emphasised the role of the co-operative sector in the manufacture and distribution of mass consumption goods.

17.5.3 Industrial Policy Statements of 1978 and 1980

Another policy statement announced by the Government was in January 1978 (Janata Govt.) This policy statement give importance to the development of cottage and small scale industries. The list of items reserved for the small-scale sector has been expanded so as to include 500 items.

Again, after the mid-term elections another policy statement was announced in July 1980, keeping in view the approach to the Sixth Plan. This policy statement of 1980 increased the monetary parameters in respect of small sector industries. In respect of small scale units the limit of investment has been raised from Rs.10 to Rs.20 lakhs and for auxiliary industries from Rs.15 to Rs.25 lakhs. Emphasis was laid on regularisation of excess capacity in selected industries especially those of the new policy statement aimed at optimum utilisation of the existing installed capacity on the one hand and the preservation of the environment and ecological balance on the other in the country.

17.5.4 Concluding Remarks

Thus, it is seen that the 1956 Resolution is still being continued. Whatever policy statements were made since 1956 they mostly related to the licensing aspects of the industrial concerns. The main objective of the Government is to see that the fruits of industrial development should not get concentrated in the hands of a few private industrialists. For accelerated economic development, the benefits of industrial growth should reach all sections of the people and result in a balanced regional development. Keeping this in view, the industrial policy of 1956 and subsequent policy statements tried to regulate the activities of the Private Sector while satisfying the Constitutional requirements of a mixed economy.

Check Your Progress - 3

7. Explain the main points of the 1970 licensing policy?

8. What is the focus of 1973 Industrial Policy?

17.6 Growth and Pattern of Industrialization since Independence

A review of industrial development in the past 30 years is made in order to understand the problems faced by Indian industry.

In the First Five Year Plan importance was given to agricultural developemnt. It only aimed at building basic services like power and irrigation so that industrialisation might be quickened in the future years. The overall industrial production during the first plan was very satisfactory. The production of capital goods increased by 17 percent while the intermediate goods registered an increase of 34 percent. Several new products were manufactured for the first time of which mention might be made of petroleum refining, ship building, raiway wagons, etc. In the public Sector, important undertakings like Sindri Fertilizer factory, Chittaranjan Locomotives and Indian Telephone Industry were set up.

In the Second Five Year Plan a big effort was made for industrialisation. It gave importance to heavy engineering,heavy chemicals and machine tools industry as in the Public Sector, three steel plants at Rourkela, Bhilai and Durgapur were set up. Importance was given to the producing of essential goods like cement, fertilizers, etc. During the Second Plan there was, however, shortage of wage goods.

During the Third Five Year Plan, priority was given to further expansion of capital goods industries. In this respect, the Public sector played an important role. But the achievements of the Third Five Year Plan are disappointing for which the following reasons are generally given.

(i) Wars with China and Pakistan;
(ii) Foreign exchange crisis, and
(iii) Unfavourable monsoon, etc.

However, the pace of industrial development slowed down, since the mid Sixties.

During the Fourth Five Year Plan, industrial progress was unsatisfactory. The reasons were under-utilisation of capacity, acute shortage of power and transport facilities, etc. Even in the Fifth Plan, the industrial growth did not pick up. In the Sixth Plan the industrial growth was 3.9 percent in 1982-83 and about 4.5 percent in 1983-84. Therefore, for the entire Sixth Plan period the industrial growth is expected to be around 4.5 percent per annum.

It would be interesting to find out the reasons for slow industrial development in India, especially since 1965 onwards.

At the outset, it may be stated that the Industrial growth in India upto 1965 had been impressive. There was also marked diversification of the industrial structure. It is noticed that during the period 1951 to 1965 industrial production increased at an average rate of 7.7 percent per annum. This rate dropped very sharply to 3.6 percent per annum during the subsequent decade from 1965 to 1975. This shows that the pace of industrial development has been somewhat uneven over time In 1976, the industrial growth had suddenly shown improvement by registering on all time record of 10 percent during that year. However, in the subsequent years the industrial progress has not been satisfactory. The percentage change over the previous years was 7.6%, 4% and 5.6% for the years 1978-79, 1979-80 and 1980-81 respectively. All this reveals that the growth of industrial production has been uneven and not satisfactory since the mid-Sixties.

17.7 Obstacles to Industrial Growth since Mid-Sixties

The reasons for the fluctuations in the rate of growth of industrial production are many and complex. No single factor can be identified. However, a careful analysis shows that the slow progress since mid-Sixties was mainly due to the follwoing reasons :

1. Poor performance of agriculture
2. Changes in income distribution,
3. Fall in public investment,

4. Slowing down of import substitution, and
5. An increasingly inefficient management.

We can now discuss these factors briefly. The growth of industry is intimately related to the growth of agriculture. Agriculture not only supplied wage goods (i.e., food grains) and raw materials to the industrial sector but also generates effective demand for the output of the industrial sector. The agro-based industries have, to some extent, been affected due to fluctuations in agricultural production. Some authors have attributed the industrial stagnation since mid-Sixties to the changes in income distribution.Since the implementation of the First Five Year Plan, the fruits of economic development have gone more infavour of the Upper income classes. This has resulted in a lack of effective demand for certain industrial goods. Another reason is that there has been slowing down in public ivestment, especially with respect to providing infrastructure like electicity, transport, etc. In matters relating to our foreign trade, the domestic policies followed by the Government pushed up the cost structure of Indian industry and rendered our exports uncompetitive in the international market. Another reason for industrial stagnation is the increasing operational inefficiency, mostly seen in many Public Sector industries.

17.8 Industrial Stagnation - Reasons

In recent times, the industrial production has been declining (especially since mid 60s) which is popularly termed deceleration of industry or industrial stagnation. Some of the possible factors affecting our industrial progress may be the following:

Industrial growth in India since Independence has been no doubt impressive. But its trend since 1951 has not been uniform. During the period (1951-65) industrial production increased at an average rate of 7.7 percent per annum. This rate dropped rather sharply to 3.6 percent per annum. This rate dropped rather sharply to 3.6 percent per annum during the decade (1965-75). in the year 1976 the growth rate suddenly went up to nearly 10 percent. And from 1977 onwards the growth rate has been fluctuating between 1.4% and 4.5 percent per annum. It is this slow growth rate of industrial production that is generally described as industrial deceleration. Different authors who have analysed the data on industrial progress inIndia have given different arguments which are often conflicting with each other (the works of Bhagwati and Desai, 1970; Bhagawati and Srinivasan, 1975; Deepak Nayar, 1978; S.L.Shetty 1978; Ashok V.Desai 1981). However certain common reasons for the flow industrial progress can be move out.

The first reason is stated to be the wars with China and Pakistan during the years 1962, 1965 and 1971 which diverted potential public investment to defence. The second reason is attributed to the successive droughts of 1965-66, 1966-67 and later 1971-72 , 1972-73 which restricted the supply of raw materials and the demand for industrial goods from the agricultural sector. The third relates to the infra-strctural bottlenecks owing to the shortages of pwoer, transport and intermediate goods. The fourth relates to oil crisis since 1973 which led to considerable industrial dislocation and consequently severe balance of payments difficulties. And the fifth relates to the bureaucratic system of licensing, restrictions and controls adopted by the Government which resulted in greater inefficiency as well as misutilsation of resources.

In the Indian economy the inter-relationship between agriculture and industry cannot be ignored. The slow agricultural growth adversely affects the industrial production also.it can also be noticed that whenever there is increase in the price of wage goods, the effective demand for the industrial products would fall. This would discourage further investment in the industrial sector. Further, it is often noticed that there is under-utilisation of the capital assets already created in the industrial sector. This is more so with respect to Public Sector industries. Consequently, the industrial units had to incur losses. The value of capital out-put ratio has also increased due to accumulation of large quantity as of idle capital assets. Added to all these, the unfavourable international situation cannot be overlooked. The Indian industries which have been exporting their products for quite some time are not able to withstand the foreign competition in recent years.

17.9 Measures for Boosting up Industrial Production

For the growth of industries, it is very essential to give importance not only to the supply but also to the demand aspects of production. Af far as the supply aspect is concerned infrastructural facilities coupled with a high rate of capital formation are essential. As for the demand aspect, the purchasing power within the country and the situation in the international market should be carefully assessed. In order to achieve rapid industrialisation it is, therefore, essential that (i) a proper balance between agricultural and industrial growth is maintained, (ii) a suitable income, prices and wages policy is adopted, (iii) a realistic import and export policy is implemented, and (iv) public distribution of essential commodities is further streamlined. It is not possible to acheive sustained industrial growth if we look at industrial sector in isolation. It is very essential to carefully analyse the inter-sectorial dependence and only then is it possible to take suitable measures for the developemnt of industries in the country.

17.10 Summary and Conclusion

In order to improve the industrial growth what steps are to be taken? It will be necessary to ensure that key infrastructural or intermediate goods like steel, cement, coal, railway transport, communications and fertilizers are expanded. The draft Seventh Plan laid emphasis on improved utilisation of the existing idle capacities and to improve managerial efficiency. Such a step is expected to reduce the existing value of capital-output ratio of various industries. However, in a mixed economy, the final result depends upon how the Private Sector responds to various policy measures of the Government. As the industrial sector is inter-related to many other important sectors in the economy, it is essential that a proper balance is achieved between them by careful planning.

— Dr. T. Divakara Rao

17.11 Suggested Books

1.	Datt and Sundaram	:	Indian Economy
2.	Misra and Puri	:	Indian Economy

17.12 Model Examination Questions

I Answer the following questions in about 30 lines each :

1. Examine the important industrial policy statements in 1956?
2. Explain the necessity of Industrial Policy Resolution, 1956. What are its main features?

II Answer the following questions in about 15 lines each :

1. Trace the slow industrial progress in recent years?
2. What are the main features of the Industrial Policy Resolution 1948?

Unit - 18 : Public Sector

Contents

18.0 Aims and Objectives

The unit explains the need to expand the Public Sector in a developing country like India, and to review its progress and suggest measures for its further development.

After reading the unit, you will be able to

* recognize the role of the Public Sector,
* list the objectives of the Public Sector,
* describe the progress of the Public Sector units in India,
* indentify the causes for their poor performance of the Public Sector, and
* explain the remedial measures.

18.1 Introduction

The Public Sector plays an important role in developing countries. In so far as India is concerned the expansion of the Public Sector is of a recent origin. Prior to independence the Government used to control very few industries like the railways, the Posts and Telegraphs and the ports. In general, the Government was not interfering in the economic life of the people. Production of goods and their distribution in the country was mostly left to the private individuals. It is only after the attainment of Independence, that the first policy document on industrialisation was released in the form of the 'Industrial Policy Resolution 1948. This document reflected the intentions of the Government for the a mixed economy. The second Industrial Policy Resolution of 1956 laid much emphasis on the growth and expansion of the Public Sector. The 1956 Resolution clearly stated that the State that the State will 'Progressively assume predominance and direct responsibility for setting up new industrial undertakings'. Following this, the Public Sector has been expanded with the main objective of achieving a socialistic pattern of society.

18.2 Role of Public Sector in a Mixed Economy

In a developing economy with Public and Private Sectors, it is essential that to basic and key industries should be developed and controlled by the Government. It should be so because of the following considerations.

a) Private entrepreneurs would not come forward to undertaking huge investments for the establishment of basic and heavy industries. So, it is for the Government to play the role of an entreprenuer to develop such industries.

(b) Private enterpreneurs generally function on the basis of 'profit criterion'. But such a criterion usually runs against the fulfilment of social objectives.

(c) The nation's resource should be rationally utilised to benefit the society as a whole. It would be possible to do so if the Government enters as the main producer of certain important commodities.

(d) Sometimes, the Government has to start new industries for bringing about a balanced regional development.

The need to attach importance to the role of the Public Sector in India or a developing economy like ours can now be analysed. It must be noted that the production of goods by the Private Sector is guided by the profit motive. So, if the production of all goods and services is left only to the Private Sector, it might result in the growth of monopolies and concentration of economic power in the hands of a few industrialists. To have such a situation in the country is socialy most undesirable.Hence the need to expand the Public Sector.

Moreover, for rapid industrialisation in the country, basic and strategic industries should quickly be developed. These industries require heavy investments and long duration for their completion. The Private sector may not come forward to undertake such large investments. It is because of the two reasons that the Private Sector may not the capable of investing large amounts, and has it may not be prepared to wait for la long time to get the return on such investments. Obviously, therefore, it is for the Public Sector to make large investments for the development of basic and strategic industries such as generation of electricity, expansion of transport and communications, building up of heavy machimery, etc. These industries provide the much needed infrastructure for economic development. It may be noticed that expansion of these industries by the Public Sector also helps the Private Sector to start new industries or expand the existing ones.

The role of the public Sector is justified on another count also; since the Public Sector is managed by the Government, mobilisation of resources for investment purpose becomes much easier than in the case of the Private Sector. The Government can resort to deficit financing or external borrowing, if necessary, in order to mobilise the resources for rapid economic development in the country. Such measures are not open to the Private Sector.

Apart from these reasons, the need to expand the Public Sector is aimed at creating more employment opportunities to the growing labour force in the country and to help balanced regional development also. The Private Sector being guided by profit motive is not likely to start new industrial units in the backward areas. So, it is left to the Public Sector to start industries in the backward regions.

18.3 Objectives of the Public Sector

The objectives of the Public Sector are, therefore, the following:

a. To reduce concentration of economic power in the hands of a few individuals;
b. To generate surpluses of economic development;
c. To generate employment potential for the growing labour force;
d. To ensure balanced regional development in the country;
e. To bring about rational utilisation of country's scarce resources;
f. To play a complementary role to the Private Sector in a mixed economy like ours.

18.4 Progress of Public Sector Units in India

The public Sector in India can be broadly divided into departmental and non departmental undertakings. The former relates to public utilities like ralilways, ports, posts and telegraphs, electricity, etc. And the later relates to the commercial undertakings at the beginning of the First Plan were only 5 with a small investment of nearly Rs.29 crores. This number increased to 97 in 1971 with a total investment of Rs.4,682 crores Again, the number further increased to 168 in 1981 with a total capital investment of Rs.18,231 crores. (Economic Survey 1981-82). The Bureau of Public Enterprises recently released a report stating that the Central government Public Enterprises are 193 in the year 1982-83. The State Government undertakings also have increased remarkably. For instance, the State Governments owned 657 enterprises with a total investment of Rs. 1,546 corores is the year 1981-82 (Report of the Eighth Finance Commission).

A five year profile of public enterprises is given below:

Table : Five Year Profile of Public Enterprises:

		UNIT	1976-77	1977-78	1978-79	1979-80	1980.
1.	No. of Running Public Enterprises	(Number)	149	155	159	169	168
2.	Capital employed	Rs. crores	10887	12130	13969	16182	18231
3.	Turnover	Rs. crores	14911	18020	19061	23290	28645
4.	Gross profit before interest and tax	Rs. crores	1028	915	1071	1229	1422
5.	Net profit after tax	Rs.crores	-21	160	185	225	39
6.	Net profit after tax	Rs.crores	184	91	40	74	182
7.	Internal Resources	Rs.crores	719	708	906	1030	1214
8.	Gross profit of capital employment	Percent	9.4	7.5	7.7	7.6	7.8
9.	Employment	Lakhs	15.75	16.38	17.03	17.75	18.38

Source : *Economic Survey*, 1981-82

The Public Sector in India is no doubt instrumental in providing the much needed infrastructure to foster rapid economic development. A strong industrial base has been created in the country since the Second Five Year Plan. Most of the Public Sector enterprises have contributed significantly to the promotion of India's exports. For example, the State Trading Corporation (STC) and the Mineral and Metals Trading Corporation (MMTC) are the two important public sector undertaking in the country which have been dealing with export promotion. Public Sector undertakings have also started producing goods which were formerly improted, thus facilitating import substitution to some extent. For example, Hindustan Antibiotics Limited, and Indian Drugs and Pharmaceuitals Limited (IDPL) are some of the units which have helped 'import substitution'. In other words, the foreign exchange earlier used for importing some commodities from abroad could be now saved. Similarly, the Oil and Natural Gas Commission (ONGC) and the Indian Oil Corporation Ltd, are the important public enterprises that have helped to reduce our oil imports to some extent.

In the matter of savings also the Public Sector has registered an increase during the five year plans. While it was only 20.9 percent of the total savings in the country in the year 1977-78, the figure to 31.6 percent in the year 1982-83. Public sector savings include the Centre and State revenue surpluses (budgetary surpluses) and also the surpluses generated by the Public Enterprises. These surpluses from a significant part of the total financial resources available for the Public Sector five year plans. In respect of employment generation also, the contribution of the Public Secotr is no less important. For example, the total no. of employees in 1972-73 was only 9.32 lakhs while the figure increased to 18.38 lakhs in year 1980-81.

Public enterprises have been partly successful in bringing out balanced regional development in different parts of the country. A good example is the setting up of the steel plants at Bhilai (Madhya Pradesh) Rourkela (Orissa) and Durgapur (West bengal), and Neyveli Project (Madars). Many State Government enterprises have also been located in the backward district of the States so as to achieve the objective of balanced regional development. In spite of all these progress the Public Sector has been criticised in some respects.

A debate has been going on in our country since a decade or so whether the performance of the public enterpises could be judged by their earning of profits. As it is, most of the public enterprises in India are running on losses. As public enterprises are guided by a variety of considerations in determining prices, it would not be appoprpriate to consider 'Profit' as the sole criterion to measure their efficiency. This is the view held by some thinkers who are against the use of profit criterion for the public enterprises. Prices of public utilities like the railways, electricity, water supply, etc, cannot be increased although their cost of production must have risen. Another argument closely associated with the 'profit criterion' is related to the methods followed incomputing profits of a public enterprise. One way of looking at the profitability of public enterprise is by measuring the dividends as a percentage to the paid up-capital. Another way is to consider the ratio of profits after tax to the total paid up capital and resources. Still another way is to consider the toal cash returns (interest plus dividends) as a percentage of the percentage of the total capital employed (equity plus loans). All these methods of measuring profits either directly or indirectly related to the pricing policy adopted by the public enterprises. It is, therefore, necessary to look into the mechanism of pricing followed by the public enterprises in India.

Check Your Progress -I

1. List the major objectives of the Public Sector in India.

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2. Classify the Public Sector Enterprises in India.

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18.4 Causes for Their Poor Performance.

Public enterprises in India have not developed any clear and uniform policy of pricing for all of them. Every one of them is allowed to follow the price poliy which is best suited to its conditions. Consequently, some enterprises are following a policy of pricing which could provide them with adequate profits. Such a policy is pursued on economic grounds. On the other hand, there are some other public enterprises which fix the price on the 'no profit - no loss' principle. this is a deliberate policy followed by the Government with a view to supplying the commodities produced by the public enterprises at their marginal cost. On socio-political considerations a few enterprises are directed by the Government to follow a policy of price reduction In other words, although there is a possibility of charging a higher price for their products, the price is purposely lowered to enable the common man to purchase these goods. In respect of goods which are in direct competition with imports, the import prices are considered. The price policy followed by a Public Sector unit is not akin to that followed by a Private Sector unit. So losses are incurred by the Public Sector units. Some of the other important reasons for such losses are given below.

Firstly, the poor performance could be attributed to the abnormal delays in the completion of various Public Sector undertakings. If there is delay in the completion of project it is but natural that its total cost goes up much more than what it has been originally estimated on account of price rise. This is popularly known as 'escalation of costs'. On account of this, the rate of return on the capital invested obviously comes down.

Secondly, it has often been criticised that there is poor capacity utilisation by the Public Sector units. Most of the Public Sector units operate in the capacity utilisation range of 50 to 75 percent only. Some units are utilising even below 50 percent of their rated capacity. The poor capacity utilisation is no account of a number of reasons like improper planning in respect of resources and inventories; managerial inefficiency and lack of co-ordination among various branches of production, etc. Low capacity utilisation coupled with large overhead expenditure on construction of factory buildings, etc, resulted in pushing up the value of the capital output ratio in these units. This ratio is generally regarded as an index of the quality of management. As the Private Sector units avoid these lapses, the capital output ratio is comparatively smaller. For instance, in the year 1981-82 while the capital output ratio of the Central Government undertakings was as high as 7:4:1 its value was only 3:8:1 for the Private Sector enterprises.

Thirdly, the Public Sector is criticised for inefficient management. The chairman and managing directors of public enterprises are drafted from the Government personnel who do not necessarily possess the skills to run industrial enterprises. Added to this, there is excessive centralisation and ministerial interference in the affairs of Public Sector units which would reduce the autonomy of these units.

18.5 Remedial Measures

In a mixed economy like India, the performance of Public Sector units has to be linked with the concept of profitability at least in respect of the commercial undertakings. These units would not be in a position to generate surpluses of profit criterion is not adopted in their pricing policy. Except a few enterprises like the State Trading Corporation (STC), Oil & Natural Gas Commission (ONGC), Oil India Limited (OIL), etc, most of the Public Sector units have been running on losses for quite some years. Such a situation is not a healthy sign. According to the Constituion as well as the Industrial Policy Resolution, 1956 the Public Sector performance should be able to set guidelines for the Private Sector. But experience has shown that the Public Sector functioning could not come up to fulfil this task. The private and Public Sectors, are not functioning as complementary to each other. Now the question is how shall we improve the performance of the Public Sector? Recently, the government has instructed the Public Sector units to focus thier attention on some specific areas like profitability technology upgradation, customer orientation, participative management motivation etc.

It is possible for a public enterprise to earn profits by follwing a competititve price policy. But for that not only costs of production are to be reduced by reducing the wastes but the quality of the product should be improved. Profit criterion may have to be followed by almost all Public Sector units excepting a few enterprises dealing with public utilities.

There should be sufficient delegation of powers, so that public enterprises are allowed to work with greater autonomy. Whatever be the purpose of starting an enterprise, the attainment of progressively higher level of productivity should be the operational goal of all units. And to achieve a higher level productivity managerial efficiency should be improved. The selection of top executives should be from men of proven commercial & administrative ability. Proper training should be imparted to the various types of workers. Industrial disputes should be amicably and quickly settled and perfect discipline among the employees should be ensured. Also, inorder to involve public in the functioning of the Public Sector units, it has been suggested that employees of the enterprises, lending bankers and financial institutuions may be allowed to have more percentage of shares than what they are now having in the Public Sector units.

The very concept of mixed economy would be questioned if the performance of the Public Sector is not up to the expection of the content and spirit of our Constitution. Therefore, there is an urgent need to reorganise the working of the Public Sector units so as to make them economically viable.

18.7 Summing Up

The Public Sector Plays a crucial role in a developing country like India where infrastructural facilities are to be developed. Basic and key industries should be developed and controlled by the Government through the Public Sector. the heavy investment need for the establishment of key and basic industries may not be posible for the private sector. The Public Sector can reduce concentration of economic power and generate employment. The progress of the public sector can be ensured by its substantial expansion in all forms. However, due to many reasons explained earlier, the performance of the public sector is not upto the mark. Remedial measures are to be taken to improve its performance.

--Dr.T.Divakara Rao

18.8 Suggested Books

1.	Datt and Sundaram	:	Indian Economy
2.	S.L.Kuchhal	:	Industrial Economy of India

18.9 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. What are the factors determining the expansion of the Public Sector in India?
2. Account for the poor performance of Public Sector Units in India. Suggest remedial measures.
3. Critically examine the role played by the Public Sector in India.

II. Answer the following questions in about 15 lines each:

1. Explain the causes for the poor performance of Public Sector units in India.
2. What remedial measures can you suggest to make Public Sector Units more viable?

Unit - 19 : Concentration of Economic Power in India

Contents

19.0 Aims and Objectives

The unit analyses the causes and consequences of concentration of economic power and the explains the working of Private Sector in India.

After reading the unit, you will be able to

* describe the findings of Mahalanobis's Committee and Monoplies Inquiry Commission;
* Identify the causes and consequences of concentration of economic power in India;
* understand the working of the Private Sector;
* list the remedial measures to prevent the concentration of economic power; and
* explain the objectives and other details of MRTP Act, 1969.

19.1 Introduction

Modern industry requires huge capital, considerable enterprise and resourcefulness. It is possible for the big concerns alone to have these pre-requisities so that production is organised most efficiently. But in a free enterprise system the ownership of huge capital and other resources often leads to concentration of economic power in the hands of a few businessmen. The objectionable consequence of concentration of economic power is in the form of monopolies which indulge in restictive practices which are very harmful from the social and economic points of view.

India has a mixed economy which implies that the means of production are owned by the Public as well as Private Sectors. The Constitution of India has clearly specified in the Directive Principles of State Policy that "the ownership and control of the means of production be distributed in such a way as to subserve the common good and that the operation of economic system should not result in the concentration of wealth and means of production to the common detriment" After Independence, the five year plans have come into being since 1951. The Industrial Policy Resolution, 1956 has emphasised the role of Public Sector in developing key and strategic industries in the country. The idea was that greater ownership and control by the State would help to promote the Socialistic pattern of society as enshrined in our Constitution. The Industrial Policy Resolution, 1956, empowered the Government to regulate the activities of private enterpreneurs in such a way as to achieve the broad objectives of planning. It was, therefore expected that the planning process would set in forces to reduce the economic inequalities and prevent concentration of economic power in the hands of a few individuals.

19.2 Mahalanobis Committee, 1960

Towards the end of the Second Five Year Plan (i.e., in 1960) The Government of India desired to know whether the effects o planning during the first two plans could reduce the concentration of economic power in the country. A committee was appointed under the chairmanship of Dr. P.C. Mohalanobis (which is popularly known as 'Distribution of Income and levels of Living Committee'). The committee was asked to examine the following aspects :

1. To find out to what extent the operation of the economic system had resulted in concentration of wealth and means of production ;
2. To review the trends in the levels of living during the first and second plan periods and ;
3. To study the changing trends in the distribution of income and wealth in the country.

The Mahalanobis committee Report indicated that concentration of economic power had increased significantly between 1951 and 1958, especially in respect of industrial wealth owned by the Private Sector. The data revealed that even after 10 years of planning in the country, there was considerable degree of inequalities in the distribution of economic assets which had resulted in concentration of economic power in the hands of a few individuals. The committee also identified some important factors that had contributed to the concentration of economic power in India, first is with regard to the infrastructure provided by the Government. The big industrialists could make full use of the infrastructural facilities provided by the Government during the first two five year plans. The Public Sector units. Consequently, corporate profits increased significantly and industrial wealth got concentrated in the hands of a few industrial houses like Tatas, Birlas, etc. The second is the prevalence of mild inflation during the period from 1951 to 1958. Rising prices stimulate private investments. The third is the Government's policy of offering some tax incentives to the private entrepreneurs to encourage them to start new industries or expand the existing units. The fourth relates to the facilities of institutional finance provided to the Private Sector. As big industies have large securities it is easy for them to get large amounts from the financial institutions. Moreover, ownership of banks in the country had been under the Private Sector's control till nationalisation and, therefore, the private individuals had the privilege of getting large amounts from banks for their investments.

19.3 Monopolies Inquiry Commission, 1964

Another commission appointed by the Government in 1864 known as 'Monopolies Inquiry Commission' pointed out some more reasons for the concentration of economic power.

1. Technological advancement after the Second World War helped the large joint stock companies to grow rapidly and thus led to concentration of economic power.

2. The managing agency system which was continued even after independence for a number of years was also responsible for the rapid growth of private companies. The supply of managerial skill in various forms resulted in concentration of economic power. Under the managing agency system, the funds of one company were invested in acquiring assets or stocks or shares of another independent company, thus accentuating for there the concentration of economic power. (The Managing agency system had been however, abolished since 1970).

3. Some of the big industrial houses were the main beneficiaries of the Second World War. They had enough money to invest in new enterprises or expand their existing units, when once Government of India launched a programme for rapid industrialisation in the 2nd Five Year Plan.

4. Added to these factors, the type of licensing, regulation of imports and exchange control systems introduced by the Government with a few to exercising supervision over the activities of the Private Sector very much worked to the advantage of the big houses. The big businessmen were in a better position to

raise the required capital for setting up modern industries. They were able to get licences from the Government very easily unlike the small enterpreneurs, who were not able to fulfil the requirements under the Licensing Act. It could also be seen that big business houses had an advantage in securing foreign collaboration and thereby, were benefited by the use of advanced technology.

19.4 Cause and Consequences of Concentration of Economic Power in India

The Monopolies Inquiry Commission stated that there were two kinds of concentration of economic power in the industrial sector. The first relates to product-wise concentration and the second to country-wise concentration.

In a survey conducted by the Commission it came to light that concentration was of a high degree in respect of nearly 100 products. Some of them were infant milk, food, tea, sugar, various types of textile fabrics, household goods like hurricane lanterns, domestic refrigerators, thermosflasks, matches, cigarattes, footwear, various kinds of medicines, trasport goods, etc. In respect of these products it was found that more than 75 percent of their production was controlled by a few top producers. By product-wise concentration we mean that a large percentage of total production of a commodity is controlled by the top 2 or 3 producers. The commission found that there was much concentration in respect of the petroleum industry, semi-manufactured steel products and some of the mineral products like zinc. copper, lead, etc.,

In respect of the second category of concentration, namely country-wise concentration, the commission made a detailed study of 2,259 companies. It has been noticed that most of these companies belonged to one or the other of the 83 big business groups operating in the country. In other words, each big business group like Tata, Birlas, etc. had the ownership of a large number of companies spread throughout the country. The following table explain the growth of the assets of monopoly houses during 1951-1976 :

Table-1 : Assets of Top Ten Monopoly Groups 1951-76 (Rs. Crores)

Name of the Group	1951	1971	1976
Tata	116	711	981
Birla	104	687	975
Mafatlal	13	172	257
Singhania	29	113	241
Thaper	15	137	202
ICI		119	199
Bangur	17	150	195
Scindia	25	90	177
Shriram	12	137	172
Bhiwandiwala			166

(Source : Economic & Political Weekly, Special number, 1979)

Concentration of economic power in industry can be measured by some parameters like profitability ration, gross profit earnings, possession of total assets, etc., During the period, 1963-64 to 1966-67, the total assets of the 20 big industrial houses in our country increased from Rs. 1326 crores to Rs. 2386 crores, thus registering an annual growth of 21.6%. During the next six years, i.e., from 1966-67 to 1972-73, the total assets increased from Rs. 2386 crores to Rs. 3516 crores, registering an annual growth rate of 6.6%. The decline in the annual growth rate was generally attributed to the steps taken by the Government to discourage the growth of big business houses as also to the bottlenecks in terms of shortage of power, coal and industrial raw materials during that period. Among the 20 big industrial houses Tatas, Birlas and Mafatlal alone accounted for nearly 46-5% of the total assets in the year 1975-76.

Apart from the Mahalanobis Committee and the Monopolies Inquiry Commission, we may mention that there are a few systematic studies on monopoly houses carried out by individual scholars. For instance, R.K. Hazari identified 20 large houses which controlled a significant part of the private corporate sector over the years 1951-58. Another works is that of B.Dutta who studied the monopoly capital ownership by different groups for the year 1968. Now it is very important for us to realise that these different estimates are not easily comparable due to differences in conceptual and methodological aspects.

After the passing of M.R.T.P. Act, 1969 an undertaking which alone or together with other inter-connected holding owns a minimum of Rs. 20 crores in assets is treated as a monpoly group. But we must appreciate the difficulty involved in valuing the assets over a period of time dure to lack of sufficient data. From all these studies, we can know at best the growth of assets owned by the monopoly houses in India, but we do not know to what extent these houses have invested their assets in other countries. So, generally, we can say that the large industrial houses had grown very fast which resulted in concentration of economic power and glaring inequalities in the distribution of income.

All this, however, does not mean that the growth of private industry is itself anti-social. Expansion of big business houses could, however, be justified on rather purely economic grounds. In a country like India where there is capital scarcity, Private Sector may have to be encouraged, to develop industries at least in the early stages of development. So, some scholars held the view that the growth of big business in India was an inevitable part of the development process itself. Concentration of economic power has been justified on grounds of obtaining "economics of scale'. But these views are not really tenable. Although capital accumulation is a prerequisite for rapid economic growth, it need not be by concentration of economic power in the hands of a few individuals. The Public Sector and co-operatives could be allowed to expand instead of the large industrial houses. Some of the adverse effects of concentration of economic power in the Private Sector can now be discussed.

The nation's resources are likely to be misutilised or underutilised or unutilised. The private industrialists use the financial and, physical resources at their disposal to fulfil their own objectives. Priority of production is not determined to serve national interests. The practices followed by them prequent other entrepreneurs from enter in their feilds of production and compete with them. consumers also would be very much adversely affected by the price policies pursued but the big industrialists. The fruits of economic development in the country are appropriated by these big industrialists. Sometimes, it may even be possible for these big industrialists to pressurise the Government for taking policy decisions in their favour. All this results in a highly skewed distribution of income among different sections of the society. Much of the industrial wealth would be controlled by a very small percentage, say the top of 10 or 15% of our population. Industrial development should take into account only the supply aspects of production but also the demand aspects relating to the marketablity of the goods produced by various industries in the country. As grater concentration of economic power makes large sections of population gradually becoming poorer and poorer incourse of time, industrial development may be hampered due to lack of adequate demand for some industrial products.

19.5 The Working of the Private Sector

Due to all these drawbacks can we say that the private Sector has to be completely eliminated? In a mixed economy the Private Sector has to be encouraged, since it plays an important role in the proces of development. But what is really needed is to prevent excessive concentration of economic power which is socially undesirable. A balance should be maintained between the economic and social objectives of development planning. It is in this context that a judicial commission was set up under the Monopolies and Reastrictive Trade Practices Act 1969 (M.R.T.P.Act). The Commission under M.R.T.P.Act would advise the Government on matters relating to concentration of economic power in India industry.

The Private Sector in India just like in any other mixed economy comprises the small and big industrial houses as well as the foreign firms which invested their capital in our country. According to the Government's policy, the Private Sector is expected to play only a secondary role. It should be complementary to the Public Sector. It is very clear from the Industril Policy Resolution 1956, that important industries should be progressively owned by the State. However, the growth of Private Sector has been very much against the principles laid down in the Policy Resolution 1956. As discussed earlier, the big industrial houses have been able to expand their production as well as assets during the plan period. The small industry could not be developed to the extent it ought to in spite of the various incentives given by the Government. Most of the consumer goods are produced by the Private Sector while the public Sector produces important capital goods. Due to concentration of economic power in the Private Sector, the consumer goods market came to be controlled by monopolists and oligopolists. This has led to glaring inequalities in the distribution of income and also regional disparties in the location of various industries. Private investment being guided by profit motive is heterogenous in nature. In other words, depending upon the circumstances private firms formulate their objectives. Some of them may act as monopolists while some others may act as oligopolists. In India private films having oligopoly character have registered much faster growth than the monopoly type firms. Most of the big industrial houses are able to adopt labour saving techinques in production. Consequently, their activities are not helpful to the generation of additional employment.

In this connection it is not out of place to mention that the growth of big business in India is the result of defective industrial licensing policy. So in order toget the licensing policy suitably modified. The Govt. of India appointed in July, 1967 Industrial Licensing Policy Inquiry Committee (ILPIC) under the Chairmanship of S. Dutt. The committee inquired into the working of the licensing system for a decade's period, i.e., 1956-66. The Committee found that there were many deficiencies in the licensing system : Firstly, out of 73 large industrial houses chosen for investigation, it had been found that 30 houses had an appreciably higher share in the corporate sector. Secondly, it had been noticed that 50% or more of the licenses in respect of 51 products were given to large industrial houses. Thus, the small industrial houses were deprived of producing them. Thirdly the Committee found that a large number of licences issued to the big industrial houses were not actually implemented. In many cases, the production of commodities exceeded their targeted capacities. So, the applications of the new entrants were rejected for producing the commodities. And Fourthly,, it had been found that institutional credit had gone more in favour of big houses rather than the small houses.

The Committee, therefore, recommended that the industries be divided into four categories : (a) key or core sector, (b) small-scale sector, (c) industries producing less essential consumer goods, and (d) all the remaining industries.

In order to decentralise the big business and supervise the activities of the Private Sector and also in the light of the recommendations of Dutt Committee. The Government of India brought out many changes in the licensing policy since 1970. The cretion of core sector and joint sector in our industrial structure are aimed at facilitating more decentralisation of industries. Whatever be the Government's policy to regulate the activities of the Private Sector, it has to take into account certain aspects which are inherent of a mixed economy. For example, the Government should be liberal in encouraging and promoting investments of the Private Sector. But such a policy of liberalisation sometimes may provide a chance to the big industrialists to grow very fast aggravating the concentration of economic power. On the other hand, if the Government's policy is rigid and inflexible, it would not create a healthy investment climate for the Private Sector to grow. So, whatever policy that is taken by the government it should be able to serve the twin objectives, namely, (1) to increase industrial production in the country by promoting investments of the Private Sector (2) Social justice by not allowing the Private Sector to grow in Large dimensions as to result in more concentration of economic power. The Private Sector in Industrial houses are controlling a vast number of commodities in the country. The Public Sector could not emerge as a potential competitor to the big private industrial units. In such a situation measures should be taken to curb the growth of big industrial houses, diversify industry and to attain significant industrial growth in the country.

19.6 Remedial Measures to Prevent Concentration of Economic Power

Let us discuss some of the measures open to the Government.

1. The small scale sector should be encouraged to develop very fast. Steps should be taken by the Government to supply important inputs t them at reasonable prices. The items earmarked for small sector should not be allowed to be produced by the large industrial houses.

2. Another measure is to see that the public sector is expanded. Joint sector participation could be encouraged. The cooperaiive sector also needs to be expanded.

3. Some other measures may include changes in the existing licensing systems and company administration. changes in the tax system and proper implementation of urban property ceiling Act, etc.

19.7 Monopolies and Restrictive Trade Practices Act (1969)

In the context of concentration of economic power, it is necessary to understand the Monopolies and Restrictive Trade Practices Act (MRTP Act) implemented by the Government of India since Dec. 1969. The main objectives of MRTP Act are the following :

(i) To ensure that the functioning of the economic system should not result in concentrtion of economic power detrimental to the common interest;
(ii) To control monopolistic and restrictive trade practices which are injurious to public welfare.

Under the provisions of the Act, the Monopolies and Restrictive Trade Practices Commission was set up Aug. 2,1970 under the Chairmanship of justice Alogiri Swamy. The commission had advisery as well as judicial power.

The working of MRTP Act has been frequently subjected to criticism. One of the defects of this Act is that both the aspects of concentration of economic power as well as monopoly have been mixed up. Very often the Monopolies Commission has been asked to investigate proposals for expansion, mergers, etc. But it would be better if the Commission is asked to give its views before licenses are granted to various concerns. In spite of the MRTP Act, the large industrial houses have been growing unabated. This is on account of the inefficiency in government administration and lack of political will to implement the Act strictly.

In order to regulate and control the activities of big business, The Govt. of India introduced the Foreign Exchange Regulation Act, 1973. Under these regulations foreign exchange would be more liberally given to those units which are helpful to the boosting up of exports. Small industries would be given the necessary foreign exchange to meet their requirements. MRTP Act and Foreign Exchange regulation Act, 1973 empower the Government to take steps to prevent concentration of economic power in the hands of a few big industrialists.

19.8 Summing Up

We have tried to understand the term, "concentration of economic power". Many committees appointed by the Government such as Mahalanobis Committee, MIC and individual scholars like R.K. Hajari and B. Dutta studied this aspect and indicated the increase of concentration of economic over since 1951. Industrial Licensing Policy Inquiry Committee inquired into the working of the licensing system and found many deficiencies in the system. This unit has also touched upon the MRTP Act and tried to indicate some remedial measures to prevent concentration of economic power.

--Dr.T.Divakara Rao

19.9 Suggested Books

1. S.C. Kuchhal : Industrial Economy of India
2. Datt and Sundaram : Indian Economy

19.10 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. What is meant by 'concentration of economic power in India'? What are the recommendations of Mahalanobis committee?
2. Explain the causes and consequences of concentration of economic power in India.

II. Answer the following questions in about 15 lines each :

1. Elucidate the reasons to industrial stagnation in India.
2. What are the main finding of Monopolies Inquiry commission, 1964?
3. What is MRTP Act what are its objectives?
4. What are the findings of Monopolies committee?
5. Explain the working of private sector in India.

Unit - 20 : Industrial Finance

Contents

20.0 Aims and Objectives

The unit explains the roof financial institutions for industrial development in a developing country like India.

After reading the unit, you will be able to

* emphasize the need to have financial institutions;
* explain the financial requirements of industries;
* describe the functioning of different financial institutions in India; and
* examine the problems of industrial finance and suggest remedial measures.

20.1 Introduction - The Need to Have Financial Institutions

After the Second World War, financial institutions have assumed some of the direct responsibilites which were previously looked after by individual entrepreneurs and financiers. Finance corporations' have come into being to provide State and or private funds to public, private or mixed concerns to meet their medium and long term financial requirements. In advanced countries like the United Kingdom, the U.S.A., etc., large business units generally do not face any difficulty in raising the required capital for various purposes. But in developing countries like India, the financial requirements of the industries could not be met by the individual entrepreneurs themselves. The financial institutions have to play a very important role to provide finance for the development of industry.

Firstly, the developing countries suffer from low rates of capital formation. Financial corporations are expected to bridge the gap between savings and investment of a concern. Secondly, in these countries, there is no systematic mechinism to mobilise the financial resources for the development of industrial concerns. So, the financial corporations have to raise the resources on one hand and provide them to the industries on the other. Thirdly, developing countries suffer from ill-organised capital market. The financial corporations are intended to invigorate the capital market by underwriting the various corporate securities so as to create a steady demand for them. Fourthly, financial corporations assume special importance in the planned economic development of a country. Scarce financial resources are carefuly utilised to develop basic and key industries in the Public Sector. Fifthly, financial corporations generally perform a variety of functions for the development of industry. They carry functions like underwriting and issuing of corporate securities, mortgage lending, subscribing to debentures and equity capital, etc. Lastly, the financial corporations not only provide financial assistance to the industries but also furnish technical advice to the newly promoted concerns. This is really an important function, performed by the development corporations.

20.2 Financial Requirements of Industries

Having learnt the role played by financial institutions in the development of industries, let us now turn to the type of financial assistance that is generally required by various Indian industries. Industry requires finance for meeting 'block or capital expenditure'. It means for creating fixed capital such as that for the purpose of construction of the factory building, for buying machinery, for purchase of land, etc. Industry also requires finance for its 'working capital' which means for the purchase of raw materials, for payment of wages to workers, etc. Apart from the financial institutions, the commercial banks also provide assistance to the industries to meet their short term requirements by (i) granting advances, loans, overdraft and cash credit and (ii) by discounting bills, hundis and other commercial paper. An industrial concern is supposed to establish what is called 'a line of credit' with a bank or banks so that the supply of funds would be prompt. The extent to which advances may be granted by a bank to an industrial concern depends upon (a) the lending capacity of a bank and (b) the conditions stipulated from time to time by the banking laws. There are various methods open to the industrial concerns to raise adequate finance for meeting their requirements. The main sources from which the Indian industry draws finance are (a) shares and debentures, (b) public deposits, (c) short term loans from commercial banks, (d) indigenous bankers, (e) financial institutions and (f) retained, profits in India. Managing agents also provide industrial finance, but the system had been abolished since April 1970 on account of certin serious defects in the working of the system itself.

20.2.1 Financial Requirements of Small Scale Industries

Of all the main sources, it should be noted that shares and debentures, public deposits and assistance from financial institutions are the most important. In so far as small industries in India are concerned, they are spread over rural and urban areas. These units require finance to buy raw materials, to pay for labour, to dispose of the finished goods, etc. Indigenous bankers provide financial assistance to the small industrialists but they normally charge exhorbitant rates of interest. Till the nationalisation of commercial banks (i.e., July 1969) the small industries were facing a lot of difficulty to get adequate finance. In recent years, the small industries are rendered financial assistance from some fo the sources such as Industrial Co-operatives, the State Bank of India (S.B.I), the nationalised commercial banks, State financial corporations and co-operative banks and the National Small Industries Corporation (N.S.I.C).

Industrial co-operatives have been very successful in respect of certain industrial concern like the handloom industry, making of potteries, coir and rope making, etc. These cooperatives depend upon the State Co-operative Banks for getting the required finance. As stated earlier, prior to the nationalisation of commercial banks, the small enterprises were not provided with adequate financial assistance from the banking sector. But after 1969, the State Bank of India and its subsidiaries, the nationalised banks and other scheduled banks have been granting financial assistance to the small scale industies on a priority basis. As far as financial institutions are concerned, we can see that the State Financial Corporations and cooperative banks have been helping the small industries since July, 1960 under the 'Credit Guarantee Scheme' It is a scheme which provides protection to the lending institutions from possible losses in respect of their advances to small industries. The National small Industries Corporation ((NSIC), set up in February 1955, has been helping the small industries in a number of ways including the provision of financial assistance to them. The Corporation secures government orders for their output; provides financial and technical assistance to enable the small industries fulfil their obligations; works for bringing the much needed co-ordination between large scale and small scale industies; and above all, underwrites and guarantees loans granted by various banks to the small scale industries.

20.2.2 Financial Requirements of Large Scale Industries

Now, how about the large scale industries in India? How are they financed? Just like small scale units, large industrial concerns also require finance for block capital and for working capital. Block capital is raised through issue of shares and debentures to the general public or borrowing from financial institutions while working capital is raised through public deposits and bank loans. A major portion of their financial requirements for block capital is by means of equity or preference shares. Debentures are nothing but bonds issued by an industial concern and it carries a fixed rate of interest payble after a certain number of years. By offering high rates of interest, the large industial concerns raise funds from the public by way of 'public deposits'. Bank loans are offered not only to small scale units but also to large industrial concerns so as to meet the short term requirements. Very recently, commercial banks also have been providing medium term loans to the industrial concerns and purchasing their shares. In spite of selling shares and debentures, or raising funds by public deposite, etc., the large industrial concerns in India could not get adequate finance for the development purposes. The main drawback is that the capital market in India has not been well developed. Most of the people in India are not aware of the transactions of shares and debentures. Public deposits though reasonably a good source of industrial finance, are subjected to uncertainly. At a time when the industrial units want money, they may or may not be able to raise sufficient amounts by public deposits. Lending by banks is mostly to meet the short tem requirements but not the long term requirements. So, after independence the Government started a number of institutions. Some of the salient features of these institutions may be discussed now.

20.3 Financial Institutions in India

20.3.1 The Industrial Finance Corporation of India (IFCI)

The I.F.C.I. was set up in 1948 with an authorised capital of Rs. 10 crores to perform mainly three functions, namely (a) to grant loans and advances to industrial concerns and subscribe to the debentures floated by them, (b) to guarantee loans raised by the industrial concerns, and (c) to underwrite the shares and debentures issued by the industries. This institution has been authorised to sanction long and medium term finance upto a period of 25 years to not only public limited companies but also to private limited concerns. The limit of assistance to any single industrial unit should not normally exceed Rs. 1 crore. Most of the assistance provided by I.F.C. has helped some of the important industries in our country such as textiles, paper, basic chemicals and fertilisers, cement, metals and metal products, motor vechicles and manfacturing food, etc. In recent years the corporation has been taking special care for the development of backward areas. The I.F.C. has been helping the industries for undertaking rationalisation and modernisation programmes. It also provides training to the personnel of industrial concerns in modern management.

At the State level, State finance corporationss have been set up to provide financial assistance to the private limited companies, partnerships, and sole traders. These corporations have been set up with an authorised capital ranging from Rs. 50 lakhs to Rs. 5 crores with a view to helping small and medium scale industries. The State Governments have set up State Industrial Development Corporations also for the purpose of promoting the industrial development in their States. The Industrial Development Corporations more or less perform the same functions as those of the Financial Corporations. In recent years, the State Industrial Development Corporations have promoted a good number of joint sector enterprises.

20.3.2 The Industrial Credit and Investment Corporation of India (IC.I.C.I)

This Corporation was set up in 1955 with an authorised capital of Rs 25 crores for the purpose of developing large and medium scale industries in the private sector. The Corporation has certain functions like these of promoting new industries, assisting the existing industries for their expansion and modernisation; and also providing technical and managerial assistance so as to increase production of the units. The Corporation just like the I.F.C underwrites the shares and debentures issued by the industrial concerns. The financial assistance provided by the I.C.I.C.I. had gone mainly to paper, chemicals, electrial equipment, textiles, sugar, cement, etc. The Corporation grants loans to the industries in terms of foreign currency also. It has been playing an important role in financing the industrial units in the Private Sector.

20.3.3 The Industrial Development Bank of India (I.D.B.I)

This bank was set up in 1964. It is a subsidiary to the Reserve Bank of India. It has an authorised capital of Rs. 50 crores and its is considered an apex institution to coordinate the activities of various term lending institutions The I.D.B.I. helps to indentify the gaps in our industrial structure. It provides refinance facilities to institutions which grant long and medium term loans to various industries. The bank helps the industries by providing financial assistance directly also.

20.3.4 The Industrial Reconstruction Corporation of India (IRCI)

Some of industrial units faced problems such as lack of demand, managerial inefficiency, labour troubles, shortages of raw materials, etc. To remove these dificulties, the Govt. of India set up the Industrial Reconstruction Corporation of India (IRCI) in 1971 with an authorised capital of Rs 25 crores. The main aim of IRCI is to help the sick units for speedy reconstruction and rehabilitation. Some of the industries like texitiles, engineering and mining have benefited from the functions of the I.R.C.I.

20.3.5 Unit Trust of India (U T I)

In order to mobilise the small savings for the purpose of investment in industries the Unit Trust of India was set up in February 1964 with an initial capital of Rs. 5 crores. The units sold by the Trust have the denomination of Rs. 10 only and, therefore, it is very easy for the general public to buy them. The unit holders are entitled to receive dividends on their unit value. The main objective of the Unit Trust of India is twofold, namely (1) to mobilise the small savings which are scattered throughout the country, and (2) to make the benefits of industrial development reach the small savers.

20.4 Problems and Remedial Measures

In spite of setting up several financial institutions, the requirements of the Indian industries could not be fully met. It has been pointed out that most of the financial institutions are serving by ganting only financial assistance to the various industries. But in a developing country these institutions have to play a more positive role for accelerating the growth rate of industrial output. The institutions have to identify the new projects, select them in the light of plan priorities and also assist in their efficient management. The financial institutions should be able to provide guidance to the industries so as to reduce their cost structure and improve their productive efficiency. While providing assistance to the Industries, care should be taken to see that the country's resources are not wasted. In other words, domestic capital as well as foreign exchange which are the scaree resources should be properly utilised. The financial institutions in India till very recently had neglected the development of backward areas. It is very essential that the industrial potential of the backward areas should identified and suitable schemes are drawn up for providing assistance by the term lending institutions. But the wileingness of the financial institutions to offer an attractive terms may not be finance enough to induce entrepreneurs to come forward and start industries in the backward areas. So while granting licences it is necessry that preference should be given to the industries of backward regions.

In this context, it should be emphasised that mere extension of institutional finance to the industries is not sufficient. There must be maximum contribution from the industrial units to promote the required finance by themselves. The capacity of an industry to absorb finance is a very important factor and it is determined by profitability, prospects of future growth and entrepreneurial expectations. In recent years dependence of industries on assistance from financial institutions has tremendously increased. It is as because of not having a developed and efficient capital market in our country. So in order to improve the industrial climate the pre-requisite is to have a developed capital market which helps to mobilise the individual savings for the industrial growth and also enable the financial institutions to perform their functions effectively.

20.5 Summary and Conclusion

This unit focuses on the necessity of financial institutions for providing industrial loans. Many financial institutions such as IFCI, ICICI, IDBI and IRCI were established to provide finance to large scale industries. Their performance is commandable.

The role of financial institutions in a developing country like India is no doubt very important but the progress of industrial growth very much depends upon not only financial assistance but also upon the other policy measures taken by the Government.

-- Dr.T. Divakara Rao

20.6 Suggested Books

1.	Datt & Sundaram	:	Indian Economy
2.	S.C. Kuchhal	:	Industrial Economy of India

20.7 Model Examination Questions

I. Answer the following questions in about 30 lines each :

1. What do you mean by 'industrial finance'? Explain the main sources of finance available to the small scale and large scale industries.
2. "The role of financial institutions should be supplemented by other policy sources to achieve accelerated industrial development?

II. Answer the following questions in about 15 lines each :

1. Explain the problems of industrial finance suggest remedial measures.
2. What is the role played by the institutions of finance in the promoting or industrial development?
3. What are the financial requirements of large scale industries?

Block - VI

This block on "**Foreign Sector**" deals with foreign trade, foreign aid and foreign capital.

The block cover the following three units ·

Unit - 21	:	Foreign Trade and Economic Development
Unit - 22	:	Foreign Trade in India
Unit - 23	:	Foreign Aid and Foreign Capital

Unit-21: Foreign Trade & Economic Development

Contents

21.0 Aims and Objectives

The unit explains the role of foreign trade both country-wise and content-wise.

After reading the unit, you will be able to:

* explain the approaches to global trade;
* discus the approaches to global trade;
* identify the concepts of terms of trade and balance of payments; and
* describe the tendencies in the pattern of international trade.

21.1 Introduction

The examination of the role of foreign trade in economic development begins with the question as to what economic development is, Economic development was equated till recently with economic growth or a rise in the per capita national income. But it is no longer the case now. A number of Middle easter countries are growing at a fast pace, thanks to oil- exports, but this sort of one dimensional growth can hardly be called development.

Development then refers to a qualitative shift in the basic parameters of society, both socio-economic Development is a broader and richer abstraction than mere growth may leave the majority of the people in on object poverty. Growth can take place without development for a long period but growth is only an element, though an essential one, of development.

21.2 Importance of Foreign Trade

From the economic history of the now advanced countries, one can clearly make the tremendous importance of foreign trade. In fact, the great geographical discoveries of the 15th-17th centuries like the opening of the Americas, the sea route to India, etc. were certainly spurred in part by the necessity of finding the missing links in foreign trade in the form of gold, spices, cloth, etc. In fact, there was a school of economic thought called the Mercantalists who held that wealth would be created in a country primarily by foreign trade. The results of the greatgeographical discoveries led to the colonization of large parts of Asia, Africa and Latin America. the traders soon became colonisers and exploited these areas in terms of natural resources, markets, etc, in order to generate the industrial revolution in the metropolitan countries, especially Britain and France.

The view of the importance of trade does not necessarily meant that a country, especialy a large one cannot develop without trade of a substanital nature. We have the example of the Soviet Union which due to a host internal and external factors repoduced for about two decades in China as also in Albania in Europe. This was possible because both the Soviet Union and China were very large countries with a variety of natural resources required for the process of industrialisation. Also, the economic and social costs for this type of development were extremely high. Albania is a unique example of a small country shutting itself off from the world. But as yet Albania has not managed to join the club of developed countries. A number of countries in Eastern Europe tried the model of collective self-reliance but there is evidence that this model is also breaking down. The importance of foreign trade as one of the motive forces of economic development is now recognised all over the world.

Another group of countries which were primarily large like the United States followed a policy of limited action with the world market. This was possible since America possessed a huge internal market of continental dimensions and also varied resources. This also applies to some other countries like Brazil, etc. The growing importance of foreign trade is now being recognised. The deplection of natural resources and the growing technological inter-dependence is leading to the realization of a major role for a foreign trade.

There is a set of countries which primarily relied on foreign trade for development. this includes Japan and a number of small countries of Western Europe. Being small and lacking a natural resource base (in many cases) they have to depend on trade to provide them the missing links. Also the economices of scale and the criteria of optimality are such that their internal market cannot in many cases satisfy the necessary production capacity. They have integrated themselves fully with world market and vary their investment and production decisions in conformity with world market fluctations. this has enable to build a dynamic structure which is cost-competitive on a global scale.

21.3 Approaches to Global Trade

Among the developing countries also one can discern various approaches to global trade. the first set of countries include mostly countries like Vietnam, Laos, Tanzania, Guinea, Mozambique, Ethiopia etc. and till recently China. These countries propound the philosophy of "standing on one's ownlegs" and argue the prospect of self-propelling endogenous development. By and large, the growth rates of these countries are rather low and breaking away from the internal division of labour deos not seem to have helped them much. These countries have tended to view international economic relations including foreign trade as basically exploitative leading to a transfer of resources to the advanced countries . But foreign evidence that this view is undergoing strains. China now recognises that foreign trade has an important role to play in its modernisation programme. Other socialist countries are build up economic relations with the Soviet Union and other East European socialit countries . But there are problems of histro , geograph , tradition, politics and economics . Such a one sided development of trade flows will make them, vulnerable and also facilities the setting up of inefficient units based on outmoded techologies.

Another set of countries in Latin America and South-East Asia asd also some countries of East and west Africa have evolved upon a course of full-scale integration with the world markets and specialise in the international divison of labour. These countries look upon foreign trade as a primary determinant for catapulting their economies into the advanced league. With the help of a liberal import of technology, goods and other ingredients like managerial expertise, they hope to 'catch up' with the advanced countries and also occupy the lower rungs of industrialisation as the West moves towards the formation of a post-industrial society. Their specilisation in the international division of labour is based on their endowments and comparative advantages like a skilled and relatively cheap labour force, geographical location and other factors. By and large, these countries have performed extremely well in terms of economic growth and some of them have already joined the 'club' of industrialised countries now leagued as "newly industrialised countries'. To a certain extent this is true of other South-East Asian countries also. In so for as Latin American countires are concerned they have not been as successful and have fallen into debt traps. But one common thing to most of these 'export led-economies' is the fact that they by and large have not built up institutions capable of deflating the political tensions which arise as a consequence of economic growth and of solving system problems.

Another group of countries with a different approach to global trade are countries like India. While primarily depending on self-reliance and the huge internal market, foreign trade does occupy a signficant place in thier economic structure. In the first phase of its indepennt development this country looked for an import substitution strategy and now is on the verge of evolving an alternative policy framework.

21.4 Terms of Trade Issue

One important question in the whole debate around foreign trade is the terms of trade issue. Historically, prices of goods exported by developing countries were till recently rising at a slower pace than prices of the goods of developed countries. This led to a deterioration in the terms of trade for the developing countries and consequently, to outflow of resources from the developing countries. But since the Oil crisis of 1973, there is evidence that the tide is changing. Prices, especially those of natural resources, are growing more and more and reflect scarcity. Developing countries are coming together more and more to collectively influence the markets. The North-Sourth dialogue is also looking into these problems which, if not solved immediately, could in the long run assume alarming proportions.

The colonial model of international trade condemned the developing countries to the role of agricultural and natural resource exporters. This was based partly on the Ricardian concept of comparative costs wherein it was argued that a country must specialise in the production of these commodities in which it had a natural advantage. This theory was static and did not foresee a dynamic system working towards a change and many developing countries have started working towards export of manufactures.

21.5 Patterns of International Trade

As one takes an overview of international trade pattern as it exists today, one can celarly see a few marked tendencies. Firstly, international trade is now more and more characterised by trade in the means of production. That is to say that means of production are occupying a larger place in the total trade turnover. This means that the already developed countries are monopolising a larger part of the trade. Secondly, trade is becoming more science intensive, i.e., the frontier areas of science and technology etc., are coming to define trade flows in a more difinite manner. The role of natural resources in world trade is slowly going down, though not in value, at least by unit use due to a spurt in synthetics. Also, devleoping countries are now in a later position to influence global trends due to the fact that they are working unitedly in collective organisations like the United Nations, International Monetary Fund (IMF), International Bank for Reconstruction and Devleopment (IBRD) and other organisations. A redefinition of the place of international trade in globnal exchange will go a long way in creating a new, fair and equitable global order. Increasing interdependence through growing international trade could be one way of building up a sound economic foundation. Many advanced countries have used international trade to transform themselves. There is no reason why developing countries should not be able to do so.

Check Your Progress - I

1. What is terms of trade?

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2. Expand the abbrevations, IBRD and IMF.

21.6 Balance of Payments

One cannot think of a developing country that does not face the balance of payments problems. These problems are a result of development itself. In a state of underdevelopment at a level of income lower than that necessary to generate self-sustaining growth or to raise living standards, an economy is likely to have a low level of balance of payments equilibrium. The rigidity of factor proportions between domestic and foreign resources, combined with the unfavourable out look for exports, meant that development efforts in India had a built-in tendency to generate balance of payment pressures. These pressures could have been eliminated only by scaling down the development efforts . In the Indian context, they would have meant the abandoing of the targets embodied in the five year plans.

These pressures have resulted in a continuing (deficit) in India's trade balance since 1955, and in recurrent crises with respect to the means of covering such deficits. The deficits have increased during the last years of the Third Five-Year Plan. Trade deficits during recent years have been partly covered by earnings on invisibles including remittances from abroad.

Check Your Progress-II

3. Explain the balance of payments ?

21.7 Summary and Conclusion

Foreign trade is one of the important motive forces of economic development both for planned and unplanned, capitalist and socialist countries. In the process of foreign trade, some countries gain more and others less. But many countries of the Third World face problems of balance of payments in thier process of development because they have to import heavy machinery by paying heavily and export large quantities of their raw materials at cheaper rates.

-- **Dr G.N.Seetharam**

21.8 Suggested Books

1. Misra & Puri : Indian Economy
2. J.S.Uppal : India's Economic Problems

21.9 Model Examination Questions

I. Answer the following question in about 30 lines

1. Explain the role of foreign trade in economic development.

II. Answer the following questions in about 15 lines each:

1. What is the approach to foreign trade in India ?
2. What is meant by terms of trade regarding foreign trade ? Explain its pattern in India.
3. What do you mean by 'balance of payments' and global trade?

Unit - 22 : Foreign Trade in India

Contents

22.0 Aims and Objectives

The unit discusses India's foreign trade, recent trends in exports and imports, balance of payments position as also India's trade policies in recent times.

After reading the unit, you will be able to:

* make out the recent trends in the composition and direction of trade;
* explalin the position of India's balance of payments; and
* critically analyse import and export policies followed in india

22.1 Introduction - India's Foreign Trade

India's exports and imports have both increased tremendously during the past 35 Years. In 1950-51 the exports were of the value of Rs. 600 crores and imports amounts Rs. 650 crores. In 1984-85 exports have increased to Rs. 11,513 crores and imports to Rs. 16,834 crores. It is clear that imports had risen faster than exports. Accordingly, the gap between them had also widened. In 1950-51 there was a deficit of Rs. 50 crores whereas in 1984-85 it was Rs.5321 crores. Since 1970-71 the increased at the rate of 17 per cent.

The importance of foreign trade to a country's economy is ndicated by the share of imports and exports in its national income. In 1984-85 imports accounted for 8 percent of the GNP and exports for 5.4 percent In 1970-71 their shares were 4.1 per cent (imports) and 3.8 per cent (exports) respectivly. It is clear that the importance of foreign trade sector is growing in India.

22.2 Recent Trends in the Composition & Direction of Trade

22.2.1. Composition and Direction of Exports

In addition to rapid increase in the volume of exports and imports, there have been significant changes in their composition. At the time of independence, India was industrially a backward country. Its exports consisted mostly of primary goods produced in the agricultural and mining sectors. Jute, cotton textiles, tea, iron-ore and manganese ore were the main export commodities. As India has achieved considerable industrial progress, the composition of its exports has changed. The importance of jute exports has declined. At first they accounted for one fifth of total exports. At present, their share in hardly 2 per cent. Similarly, the share of cotton textiles has declined. Engineering goods and handicrafts are now the most important items of export. Exports of handicrafts earn the highest amount of foreign exchange accounting for about 16 per cent of the total. The second place is occupied by the exports of engineering goods.

It may be observed that though there is a big increase in India's exports, there is actually a decline in India's share in world exports. In 1948-49, India's share in world exports was 2.2 per cent, while it was only 0.5 per cent in 1984-85. This only shows that India's exports have not increased as fast as the exports of other countries.

There is also a change in the direction of India's exports. England was the biggest buyer of India's exported goods in 1950-51. About one-fourth of India's exports went to England. In 1984-85,England's share declined to 10 per cent. At present, the USA, the USSR and Japan are India's biggest customers. Each one of them buys about 13 per cent of the country's exported goods. The emergence of the USSR as one of India's big trade partners during the past ten Years is significant. India's exports to Russia were negligilble about 30 Years ago.

22.2.2 Composition & Direction of Imports

Important changes have taken place in the composition and direction of India's imports. As noted above. imports have risen much more than exports. Since 1979-80 this increase has been much more rapid than during the earlier period. This is mainly due to the increasing imports of petroleum products and consumer durables like TV sets and components for automobiles. An underdeveloped country generally imports capital goods and finished manufactured goods. During the period of industrialisation, its imports of machinery and other capital goods would increase rapidly because the new industries require machinery and equipment which have to be only imported. Once a country is industrially developed, it would be in a position to export finished goods including capital goods.

It is necessary to account for India's changing imports. At first Indian imports were mainly composed of finished consumer goods and foodgrains. Till the end of 1970's foodgrains were a major import. There had also been imports of capital goods for new industries since the second Five Year Plan. Because of Green Revolution and the rise in the domestic production of foodgrains, food imports have declined.. At present, India imports foodgrains in limited quantities. It is a matter of interest to know that though India's imports of foodgrains have come down, its imports of inputs for increasing food production have risen considerably. It is common knowledge that owing to the Green Revolution, the use of chemical fertilisers and pesticides has increased in agriculture. Both these commodities are produced out of petroleum. Thus with the increasing use of fertilisers, etc., the imports of petroleum products have increased tremendously. In addition to that the prices of petroleum products have been raised by the OPEC countries by four fold during the past ten Years. About half of India's imports now consist of petroleum products, In 1950-51, petroleum imports were only 8 per cent of the total, whereas their share in 1984-85 was 40 per cent. The second place is occupied by the imports of capital goods essential for industrialisation. Their share is 25 per cent. The recent widening of trade gap is also due to the rise in the quantity and price of petroluem imports. Since they are essential for the development of agricultural,. industrial and transport sectors. it is not possible to reduce them all of a suddden.

There is also a change in the direction of India's imports. Thirty Years ago the USA and England were major importers of India's goods. As in the case of exports, there is a big increase in the importance of the USSR in the matter of imports,. The USA and the USSR each supply about 10 per cent of India's import requirements. Next in importance come Japan and England.

22.2.3. Position of India's Trade Balance

As a result of the above mentioned changes in India's exports and imports, there is a growing deficit in its balance of trade during the past five Years, Table presents India's exports, imports and the trade deficit over a period of time.

Table - 1 : India's Foreign Trade (Rs. Crores)

Year	Imports (-)	Exports (+)	Balance of Trade
1950-51	650.2	606.6	(-) 49.6
1960-61	1,139.7	660.6	(-) 479.5
1965-66	1,408.5	805.6	(-) 602.9
1976-77	5,074.0	5,142.0	(+) 68.0
1980-81	12,549.0	6,711.0	(-) 5,838.0
1981-82	13,608.0	7,806.0	(-) 5,802.0
1982-83	14,356.0	8,908.0	(-) 5,448.0
1983-84	15,763.0	9,872.0	(-) 5,891.0
1984-85	16,834.0	11,513.0	(-) 5,321.0

Source : i) Monthly Statistics of Foreign Trade (various-issues) for Years upto 1965-66.
ii) Centre for Monitoring Indian Economy', August 1985 for subsequent Years.

It may be observed that except for the Year 1976-77 when there was a small trade surplus, throughout this period the balance of trade had been in deficit. In the beginning, the deficit was limited. But since the Second Five Year Plan, owing to the rise in the imports of capital goods and foodgrains, the imports had risen faster than exports and thus a deficit had also increased. This continued during the Third Plan period as well . In 1972 there was a sudden increase in the price of petroleum products, which increased the value of imports sharply. Since 1980-81 the imports have risen faster than exports. This is mainly attributable to India's inability to reduce its import of petroleum and petroleum products like fertlisers, pesticides and polyster fibre, In addition, the imports of electronic goods and computers have also been increased as per the government policy. The Government has liberalilsed the import policy further for the purpose of increasing the production of industrial goods. The imports of raw materials, machinery and tenchnical know-how for increasing domestic production have also been liberalised. All these have resulted in a steep rise in imports.

Secondly, exports have not kept pace with imports, Though the Government has provided a number of incentives to exporters, India's exports have increased only marginally. This is so because (i) there has been competition from other countries; (ii) the quality and cost of Indian exports are not competitive which is the reason why the demand for them is not picking up; (iii) the developed countries are trying deliberately to restrict imports from developing countries like India. Thus, in spite of our best efforts, exports are lagging behind imports.

Since 1980-81 the trade deficit has been about Rs. 5000 crores and there are no sign of it being reduced. Unless there are drastic measures to reduce inessential imports and raise exports, there is no possibility of improving the situation. The Goverment's trade policies will be discussed towards the end of this lesson.

Check Your Progress -1

1. Identify the pattern of change in the export sector.

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2. Do you find any change in the composition of exports?

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3. Explain, in brief, the pattern of change in imports.

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4. What is the present position of India's balance of trade?

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22.3 Balance of Payments in India

22.3.1 Meaning of Balance of Payments

The balance of payments is a record of all economic transactions between a country and the rest of the world. It is divided into current and capital accounts. Within the current account there is at first the balance of trade; secondly the balance of invisible trade like services, and thirdly unrequited payments like gifts. A deficit in curre: t account is adjusted in the capital account by sale of gold or by borrowing from surplus countries and i: ternational agencies.

22.3.2 India's Balance of Payments Position

A developing country generally suffers from excess of imports over exports. This applies to both goods and services, i.e., visible and invisible items. Such a country increasingly imports capital goods and also uses the shipping and insurance services of foreign countries. This trend may change after it becomes a developed country. Such a deficit is normally adjusted by taking loans from rich countries and international organisations like the IMF. Sale of gold is undertaken only under exceptional conditions.

Table I crearly shows the trend in India's visible balance of trade. Throughout the plan period there has been trade deficit. Since 1980-81 this deficit has increased sharply and remained above the level of Rs.5000 crores. The reasons for this trend have been discussed in the earlier part of this lesson.

The balance of invisibles includes exports and imports of shipping, banking, and inusrance services, tourism, payment of interest and dividends. Till 1973-74 India had presistent deficit in its invisible balance of payments. As India's shipping, insurance and banking services had not been adequately developed, India has had to depend on foreign countries. Moreover, since India had been borrowing heavily from other countries and the IMF, the interest payments also had to be paid to foreigners. As against these payments, India's receipts on account of these transactions were limited. Therefore, there had been deficit from 1950-51 to 1973-74. A new trend had started since then. Gradually, this deficit had turned into a surplus. At first, this surplus was about Rs.200 in 1974-75. It increased to Rs.824 crores in 1976-77 and then to Rs.1422 crores in the very next year. Since 1980-81, there has greatly helped India to neutralise more than half of its trade surplus of Rs.5000 crores. As a result, the overall deficit in the current account is about Rs.2000 crores.

The surplus in invisibles is due to the remittances by non-resident Indians working in the Arab countries and America. As noted earlier, the petroleum producing Arab countries suddenly increased the petroleum prices. This has made them enormously rich and they have taken up development projects on a large scale, Manual workers, engineers, doctors and teachers have gone to these countries from India in search of employment and business. Several Indian companies have won contracts in these countries. They have been sending their earnings to their dependents in India. As a result, India is earning a lot of foreign exchange by exporting labour. Moreover the government is providing a number of incentives to the non-residents to send their remittances through official channels. Allotment of scooters, cars, houses and many other scarce goods is made on a priority basis to the non-residents against payment in foreign currency. The government is also providing incentives to non-resident Indians to invest in new industries. Further, stiff measures to reduce smuggling has also contributed the rise in these receipts.

As noted above, though the remittances by non-resident Indians have considerably reduced the deficit in the balance of payments, the net annual deficit is still above Rs.2000 crores. This is mainly credit account of India's growing external debt and the growing burden of interest and repayment. In 1970-71 India's external debt was Rs.6,577 crores, and by 1984-85 it increased to Rs.28,891 crores. This had increased the annual burden of interest and repayment. In 1970-71 India had to pay Rs.450/- crores towards interest and repayment. whereas in 1984-85, it was Rs.[illegible],115 crores. It shows that half of the net deficit in balance of payments is due to debt servicing. As India is depending more on foreign loans pay for deficit and also for development. This burden is likely to increase further. When the government is not able to reduce the imports or increase exports, the only way out is to borrow from other countries to meet the deficit. This further increases the deficit and a vicious circle is thus formed.

22.3.3 Measures to Reduce the Deficit in Balance of Payments

When a country suffers from deficit in its balance of payments continuously over a long period of time, it becomes necessary for it to take long term remedial measures. In the short-run, adjustment is done through foreign loans. But this policy has its own limitations. There is always a limit to the amount of loans which a country can get from other countries. As the external debt increased, the country in question will lose its economic independence and the creditor countries would start exploiting it. Its economic policies tend to be influenced by foreign countries. Even if these loans are raised from the IMF, there is the danger of the IMF imposing its own economic policies on the borrowing country. All sorts of conditions are attached to the loans sanctioned. There is also the problem of increasing burden of debt servicing. Interest and repayment burden would increase as external debt increases. Most of the Latin American countries like Argentina and Mexico are caught in a debt trap. Their foreign exchange earnings are not sufficient even to pay interest on their external loans. They are forced to borrow again which increases their debt further.

The only effective remedies for reducing the deficit, therefore, are import reduction and export promotion. If these remedies fail, devaluation may be resorted to. But devaluation also is an uncertain remedy. Exports and imports may not respond, to changes in the exchange rate. Moreover, if other countries also devalue their currencies, no country can hope to gain from it. Similarly, exchange controls also are a temporary measure and, if continued, they would distrub the free flow of trade. Therefore, the govt. should concentrate on reducing inessential imports and raising exports through suitable measures.

Check Your Progress - 2

5. What is balance of payments?

6. What measures can be taken to reduce the deficit in balance of payments position?

22.4 Trade Strategies and Policies

22.4.1 Import Policy - Import Substitution

A country can cut down its imports by import substitution as well as by directly restricting them. Import substitution means producing the imported goods within the country. Substitutes for imported goods must be identified and steps should be taken to encourage their production within the country. This policy has two advantages. First, it reduces imports, and thus the deficit is reduced. Second, it promotes the development of these industries in the country and thus self-reliance is achieved. It also leads to the industrial development of the country.

In India tne policy of import substitution was adopted during the Second Plan period. Prof.Mahalanobis found that it was not possible for India to import capital goods because of shortage of foreign exchange. Moreover, for self-sustained growth, capital goods are essential. Therefore, he suggested import-substitution for basic and capital goods. During the Second Plan period India started developing capital goods industries like iron and steel, chemicals, machinery and power. The imports of these goods were cut down and their domestic production was given priority. Similarly, agricultural development was given priority in order to reduce import of foodgrains. Thus the import-substitution policy led to the growth of heavy industry and self-sufficiency in food grains.

But it must be recognised that this policy has not resulted in really reducing imports. As noted earlier, though India has become self-sufficient in foodgrains, and though imports of foodgrains have become insignificant, imports of fertilisers and their inputs have gone up. In fact, the import bill has increased largely because of these petroleum products. Similarly, import substitution in capital goods sector has not reduced India's dependence on foreign countries. Machinery requried for the maintenance of these industries is still being imported. The imports of capital goods still account for 25 per cent of total imports.

Significantly, the policy of import-substitution has not produced the expected results. It has contributed to inefficiency and high costs of industrial goods. In fact, all the import-substitution industries were granted protection. There was no foreign competition for them. Absence of competition has made them inefficient. Monopoly position has resulted in higher prices. These goods are not able to compete with those of other countries in the world market because of their low quality and high costs. The domestic consumers have also suffered as they have no choice but to buy these inferior and highly priced products because of the policy of protection.

Another way of reducing imports is to directly or indirectly restrict them. The government may directly ban the imports of inessential goods to save foreign exchange. In the case of others, the govt. may impose heavy import duties, thereby discouraging their import. In India, import restrictions have been introduced since the beginning of the Second Plan. The govt. banned the imports of all inessential consumer goods. Imports were restricted to only foodgrains and machinery needed for new industries.

The policy of restricted imports was relaxed in 1966 when the rupee was devalued. Devaluation was exected to increase the demand for exports. To increase their production these industries were allowed to improt raw materials and machinery. All goods that were required to increase the production of export goods were allowed to be imported freely. Thus the policy of import restriction was replaced by import liberalisation.

In 1977-78, there was further liberalisation of imports. It was thought that import substitution and import restriction policies had not been very effective in reducing the payments deficit. Only though export-promotion, deficit could be reduced. To encourage export-based industries, the govt. allowed them to import whatever goods they wanted. Free Trade Zones were set up where imports were completely free.

Another reason for liberalisation of imports was the new policy of the govt. to promote modern technology of electronics and computers. The cotton textile and other industries, need to be modernised, and the production and use f electronics like TV sets has to be encouraged. These things are possible only through imports, because India does not have the capacity to produce them.

The IMF also has been responsible for adopting of this policy. In order to promote free trade and abolish all trade restrictions, import duties and controls were reduced. This was one of the conditions attached to the IMF loan given to India.

Thus, it can be seen that the policy of import substitution and import restriction has been greatly relaxed in recent times. In 1985 the govt. has openly announced further relaxation of import restrctions. The number of goods which can be imported freely has been raised to 149. Now there is no commodity, except beef, whose imports are banned. Licencing and other restrictions on imports have been almost removed completely. There has been complete change in the import policy of the govt.

22.4.2 Export Policy - Export Promotion

Export promotion is considered to be more effective in reducing trade deficit than import reduction. For a long time India had been exporting mostly traditional items like jute, tea and textiles. The demand for these goods is generally inelastic. At first, it was thought that unless there is industrialisation, it would not be possible for India to increase its exports. India should switch over from the export of traditional goods to that of modern industrial goods. But during the early phase of industrialisation exports may remain stagnant. Later on, with economic development, exports also will rise.

As noted earlier, there is a change in the compositionof India's exports. Engineering goods and handicrafts are the major export items now. In spite of this, exports have increased slowly. Even the devaluation of 1966 could not raise exports much. It is now realsied that there are several reasons for slow growth of exports. First, the demand for Indian traditional exports like jute and textiles is inelastic. Therefore, there is little scope for increasing them. Second, even in the case of new export goods, it is not easy to increase their exprots. For most of these goods, there is a lot of demand within the country. Therefore, there is no incentive to export them to foreign markets. Even if they are exported, it is not easy to sell them abroad because of their poor quality and high prices.

They are not able to stand the competition from foreign goods. There were also till recently too many restrictions and heavy export duties levied upon exports by the govt.

However, in recent times, the govt. has changed its trade policy in favour of export-promotion. It has been noticed that import-restriction policy has not been effective and that only through export-promotion, trade deficit can be reduced. The IMF also has come to believe that export promotion is a better policy than import restriction. It leads to greater trade among nations. Therefore, India has adopted a policy of export promotion.

The govt. has announced a series of measures to promote exports. Various incentives are given to export industries. They are given income tax rebate and also rebate in excise duty. Exporters are given credit facilities on liberal terms. Sometimes, direct cash assistance is given to them.

The State Trading Corporation (STC) has been trying since 1956 to promote exports of new commodities in addition to the STC, the govt. has established commodity boards for tea, coffee, rubber and tobacco. The Boards will help in increasing the production and exports of these commodities.

The most important measure for export promotion is that of import liberalisation. Export based industries are given a free hand to import their raw materials and machinery. If there are any industries entirely devoted to exports they are given free import licences and other incentives. The govt. has also created Free Trade Zones, where the industries are given freedom to import anything provided that their entire production was meant for export. The new export policy for 1985-86 announced recently has further liberalised imports for the purpose of export-promotion. All restrictions are removed to make them export more. Further, the govt. has announced a number of incentives like tax rebate, liberal licencing and fincance for export industries.

In spite of all these, India's export performance has not improved. The reasons for this are not far to seek. Export promotion policy is being pursued without any regard for the nature of commodities and their Potential for export. In the name of export promotion, even essential consumer goods like vegetables and meat are exported. This results in the shortage of these commodities. Moreover, these goods are exported with heavy subsidies by the govt. This results in the creation of shortage and higher prices for the domestic consumer and the wasting of govt. subsidies. It has also been observed that on the pretext of export promotion, many industries have increased their imports unnecessarily, and this has resulted in a higher import bill. In other words, export promotion policy has led to import promotion. There is another unhelpful development. For the sake of export promotion industries are allowed to import the latest technology which is highly capital-intensive. This modern technology results in higher unemployment of labour and negligence of indigenous technology. It may be thus seen that the export promotion policy of the govt. is not likely tosucceed.

22.4.3 Assessment

The failure of both import reduction and export promotion policies, has resulted in India's deficit in balance of trade continnuing to be very high. For the past five years, it has been above Rs.5000 crores per annum. Even with the high level of remittances by non-resident Indians, the gap in the balance of payments is persisting at an average level of Rs.2000 crores. It is through loans from industrialised countries and international financial organisations like the IMF and the IDA that India has been adjusting her balance of payments.

22.5 Summig Up

This unit has introduced the concepts of balance of payments and explained the position of balance of trade and balance of payments in India. Important changes in India's exports and imports are clearly explained in this unit. Balance of payments position is not favourable to India. The deficit has been increasing. It increased from Rs.6,500 crores toRs.29,000 crores during 1970-71 to 1984-85. Some measures have been indicated to reduce the deficit.

In the last part of the unit, two trade strategies, namely, import substitution and export promotion policies are discussed.

Prof. Tippa Reddy

22.6 Suggested Books

1.	Misra & Puri	:	Indian Economy (Chapters 41 & 42)
2.	Michael P. Todaro	:	Economic Development in the Third World (chapters 12 - 14)
3.	J.S.Uppal	:	India's Economic Problems (Chapters 19 & 20)
4.	Bo Soderstein	:	International Economics (Chapter 21)

22.7 Model Examination Questions

I. Answer the following in about 30 lines each :

1. Discuss the objectives and effects of import-substitution policy in India
2. Comment on the effects of import liberalisation policy of the government.
3. Discuss the limitations of the export promotion policy in India.

II. Answer the Following in about 15 lines each :

1. What are the major trends in India's improts during the last ten years?
2. What are the causes for persistent deficit in India's balance of trade?
3. Discuss the importance of remittances by non-resident Indians to India's balance of payments.
4. Explain the improt substitution policy.
5. Explain export promotion.

Unit-23 : Foreign Aid and Foreign Capital

Contents

23.0 Aims and Objectives

The unit discusses the role of foreign aid, foreign capital and also the mechanisms of the World Bank, the International Monetary Fund and Multinational Corporations.

After reading the unit, you will be able to :

* explain the role of foreign aid for industrialisation:
* describe the mechanisms of World Bank and I.M.F.
* identify India's attitude towards aid
* recognize the concept of typing of aids
* explain the entity of foreign capital
* recall the need for foreign capital
* interpret the influence of foreign capital; and
* List the characteristics of multinational corporations.

23.1 Introduction

The popular feeling is that aid is no more than charity bestowed on the poorer nations of the world by the relatively affluent. This is so because the rich have a disproportionate share of the world's wealth. The communist countries feel that aid is another instrument of world monopoly capitalism designed to exploit the countries of the Third World. In a way the World Bank, International monetary Fund and United States Agency for internation Development are regarded as the creation of the world monopoly capitalism designed to propagate the capitalist ideology in the Third World. The international Financial instittuions are accused of using aid as a bargaining place for obtaining favourable treatment to foreign private investment in the Third World countries. This is to obtain easy entry for the exports of goods and services from the West and for the promotion of economic policies beneficial to the donors of Aid.

Prof. Peter Baner's view is that aid is neither a necessary nor a sufficient condition for development. It is not necessary because several developing countries such as Malaysia, Hong Kong, Thailand, Singapore and Mexico made rapid progress between the last quarter of the nineteenth century and the middle of the twentieth century without much aid. Aid is not a sufficient condition for development because many countries which have received substantial aid have made little progress. In the absence of essential ingredients for development such as human skill. Institutions and attitudes conducive to progress, aid is likely to be wasted. Moreover, aid may encourage misallocation of resources, weaken domestic investment effort, and allow recipient governments to indulge in ostentatious projects.

23.2 International Bank for Reconstruction and Development (I.B.R.D.)

Early in World War II financial experts of the Allied nations recognised that the post-war world would be in great need of international cooperative arrangements to deal with monetary and financial problems. Following several preliminary meetings, in July 1944 the 44 Allied nations convened the United Nations monetary and financial conference at Bretton Woods, in United States of America. At this conference, the articles of agreement, or charters, were drawn up for two complementary international financial institutions, the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD, popularly known as the world Bank). Although the roles assigned to the two institutions differ, their joint objective was to provide the monetary and financial machinery that would enable nations to work together for world prosperity, thus aiding policital stability and fostering peace among nations. 'The Bank's Articles of Agreement were submitted for ratification to the 44 Governments during 1945 and put into force on December 27, 1945, when they were signed in Washington by 28 of the nations. Eventually all the Bretton Woods participating Governments, except the Soviet Union, became members of both institutions. The Bank began its operation in 1946. The World Bank was created as a new type of international investment institution to make or guarantee loans for productive reconstruction and development projects, both from its own capital, which would be provided by its member governments, and through the mobilisation of private capital. The Bank's share capital was so structured that any risk involved in its operations would be shared by all member governments, roughly in accordance with their economic strength. The Bank, although an inter-governmental organisation, relies mainly on the world's capital markets for the bulk of its financial resources of the Bank. However, the problem was tackled with the introduction of the United States Marshall Plan in 1948. From then onwards the Bank turned its efforts mainly to development lending. Lending for productive projects which will lead to economic growth in its less developed member countries is the Bank's principal job to-day. Apart from 3.1 billion in loans to Europe, Australia and new Zealand, the bank has lent over the past 25 years 2.1 billion to 8 Africal countries. 4.8 billion t0 16 Asian countries and 4.4 billion to 22 countries in the Western hemisphere. Loans have been made for electric power, roads, railways, ports, natural gas pipeliness, telecommunications, agriculture. Industry, water supply, education, family planning and, in a few cases for more general programmes of development, including industrial imports.

Two financial affiliates of the Bank have been established, the International Finance Corporation (IFC), which became operational in 1956, and the International Development Association (IDA) which became operational in 1960. These two institutions and the Bank itself from the World Bank group (I.B.R.D). Membership of the Bank is a requirement for membership in the International Financial Corporation, which works specifically with the private sector in developing countries, and in International Development Association, which operates in the same sectors and with the same policies as the Bank, but whose loans (known as "credits") are provided only to the poorer developing countries on easier terms than conventional World Bank loans. The Bank has also sponsored the international centre for the settlement of investment disputes.

The Board of Governors of the World Bank (I.B.R.D) has the power to admit new members and to determine the conditions of their admission. However, in order to be eligible for bank membership, a country must join the International Monetary Fund (I.M.F) which involves agreement to observe accepted rules of international financial conduct. The political regime or economic system of a country does not bar membership in the Bank and there is thus nq bar, for example, to socialist countries' membership in the bank or the International Monetary Fund (IMF). Any country is free to apply for membership if it wishes to do so.

23.3 International Monetary Fund (I.M.F.)

The International Monetary Fund (IMF) consists of its original members and others (Article II). There is no substantial difference in the qualifications for membership of the above two groups, but the procedures at the time of their entry differ. The former are those countries which participated in the Bretton Woods Conference, completed ratification by the end of 1946 (under the original Agreement, the deadline was the end of 1945, but at the Savannah inaugural meeting a decision was taken to extend the date by one year), and deposited their advice of agreement with the American Administration. The original members were 39 in all, that is, the 44 allied countries which were present at the above Conference excluding Australia, Haiti and Liberia, New Zealand and the Soviet Union (Australia, Haiti and Liberia, however, later joined the Fund). The other members were those countries which later became members in accordance with the terms prescribed by the International Monetary Fund (IMF). The actual procedure was for such countries to request participation and present their requests to the Board of Governors (to be touched upon later) and, for the Executive Directors then to decide upon the conditions (such as quotas and methods of payments) which were then to be approved by the Board of Governors, and lastly, the petitioning countries signed the Agreement and deposited their advice of agreement with the American Administration. The total of other members was 39 as at the end of May 1962. According to Article XX, Section 2 of the Agreement, 'By their signing of this Agreement, all Governments accept it both on their own behalf and in respect of all their colonies, overseas territories, all territories, under their protection, suzerainty, or authority and all territories in respect of which they exercise a mandate, and so the Agreement covers not only their homelands but also all the areas under their control.

If a member wishes to withdraw from the Fund, it is always possible for it to do so by advising the International Monetary Fund (IMF) authorities to that effect, and the withdrawal becomes effective as from the date the notice has been received (Article XV, Section 1). On 14 March 1953, Poland, one of the original members, exercised its right of withdrawal, giving as a reason that the International Monetary Fund (IMF) was a mere puppet of the United States Government. Besides a voluntary withdrawal, a member may be asked to withdraw from the International Monetary Fund (IMF). Thus, should a member fail to fulfil one or other of its obligations under the Agreement, the Fund may declare the member ineligible to make use of the resoures of the Fund. If, after the expiration of a reasonable period, the member persists in its failure to fulfil one or other of its obligations, it may be required to relinquish its membership of the Fund by a decision of the Board of Governors. On 31 December 1954, Czechoslovakia, an original member, was, in accordance with this rule, expelled from the Fund.

Thus, at the end of May 1962, the total membership of the International Monetary Fund (IMF) stood at 76 of which 37 were original members, which means that, with the exception of the Communist countries and Switzerland, all the leading countries of the world had joined the Fund.

It may be remembered that participation in the International Bank for Reconstruction and Development, which was also established by the Bretton Woods Agreements, is permitted only if the country concerned is a member of the International Monetary Fund (IMF), but participation in the International Monetary Fund is possible without joining the International Bank for Reconstruction and Development (World Bank). Therefore, though Cuba and Dominica withdrew from the International Bank for Reconstruction and Development (I.B.R.D). In November 1960 and in December 1960, respectively they were able to retain their International Monetary Fund (IMF) membership.

Member countries are required to subscribe a certain sum to the International Monetary Fund (IMF) as a joining exchange fund for the purpose of achieving the fund's objectives. The initial subscriptions were scheduled to total 11,000 million of which 8,800 million was to be subscribed by the original members and the balance by the other members. These subscriptions were made on the basis of quotas fixed for the members, and their quotas are set forth in Schedule A attached to the Agreement for the original member and fixed by the International Monetary Fund (IMF) when any other country joined the Fund. These quotas, as will be explained later, greatly influence the positions and rights of members in that they serve as the basis for the use of the resources of the Fund and as a standard for the voting rights in the Fund. Quotas were to be calculated on the basis of monetary reserves, volume of foreign trade, and notional income of each member, and in addtion, political considerations were to some extent taken into account.

23.4 India's Attitude Towards Aid

There are two view points regarding aid in India. One view point is that aid has encouraged the growth of the Public Sector and inefficient bureaucratic policies in India. It has also the implication that but for aid, Indian policy makers would have followed more efficient policies. This involves a greater degree of reliance on private enterprise and the market mechanism. Another view point is that concentration of economic power and as strengthening of Indian big business control over the Indian economy has been contributed to a great extent by foreign aid. According to this view point, the World Bank is one of the principal aid donors to India. So the significant achievement of the World Bank has been to integrate India into the World capitalist system so that international investors get a huge market for capital and technology to maximise their profits.

India's policy makers have for long maintained that aid is only temporary relief. In Indian plans, "self-reliant growth" has been one of principal objectives. The interpretation of 'self-reliance' has been subject to change and revision over time. The Third and Fourth Five Year Plans interpreted it to mean termination of aid, whereas the later Five Year Plans interpreted it to mean reduction in the dependence on aid. Thus Sixth Five Year Plan interprets 'self-reliance' as a means of gaining a more equal relationship with the world economy. This reduces the country's vulnerability to international pressures and disturbances. This is to be achieved not only through a reduction in the dependence on aid but also by according equal weight to export promotion and efficient import substitution.

23.5 Tying of Aids

One important factor which reduces the amount of real resources transferred from agiven amount of nominal aid is the practice of aid tying. Aid may be tied by source, by projects or both. Source tying compels the aid recipients to purchase goods and services from a specified source, usually the donor country, even though it may be a relatively expensive source. Project tying prevents the aid recipients from spending the aid funds on alternative projects. This enables the donors to engage in monopolistic pricing practices. In addition, aid donors may be able to charge excessive prices for spare parts, inputs and raw materials. These follow the machinery and equipment supplied under tied aid. Besides aid-tying may lead to resource misallocation and the import of machinery and equipment unsuitable to the resource endowments of the aid recipients. Therefore, donors attach importance to the aid they give as an instrument of trade promotion. It also appears that their willingness to make aid available in sizeable amounts is somehow connected with other ends they wish to promote. The United Nation's Charter speaks about employing the international machinery for the promotion of economic advancement of all peoples. The concept of aid between countries is inter-nationalist and humanitarian. At the same time aid is also dictated by economic and strategic interests.

The major policy document regarding international aid in the United States of America is the point 4 programme of Truman. Aid is a component of the growth process and continues till a country reaches the take-off stage in the process of modernization. Sometimes aid is given as a sort of way to secure acces to vital and strategic raw materials. Also, one observes that aid is largely concentrated on countries located near the borders of the Soviet Union and China. Aid is also given to promote technical progress and institution building which, it is hoped, will lead to political stability. Several scholars like Hans Moregenthau have, on the other hand argued that aid will lead to instability of generating dynamic forces. Also, one observes that the former metropolitan countries usually aid their former colonies. Sometimes aid is given in order to spread the language of a certain country. For example, a French political leader said that "..................for us Frenchmen it is somehow a need to defend the French language. This is a fundamental reason to maintain bilateral aid". Other countries like the Soviet Union, China, etc. give aid out of political and economic motives. They are mostly in the form of soft loans and are tied. Chinese charge no interest on their aid. Aid in their case is concentrated in some countries and is linked to trade. Aid is a weapon in the ideological war. There is a strong lobby opposed to foreign aid on ideological grounds in the western countries. Aid is allegedly against the free market principle and is motivated by an appetite for monuments. Further, aid usually generates public sector growth which is ideologically not to the liking of conservative economists. So these are the various arguments for and against aid.

23.6 Role of Aid in Industrialisation

All the underdeveloped countries regard industrialisation as the sovereign remedy for most of their economic ills. Many of these nations look upon a policy of rapid and large scale industrialisation as a relatively quick solution to their problems of poverty and low levels of consumption. Some over-populated and underdeveloped countries consider industrialisation as an answer to their problems of population pressure on land and of surplus labour. The belief is that with the rapid development of heavy industries, they can siphon off their surplus labour from the over-crowded soil to the new urban factories, thus promoting more employment, higher wages for more people, and an increasing demand for goods and services. In the words of the Planning Commission of India:

"Rapid industrialisation is the core of development. But if industrialisation is to be rapid enough, the country must aim at developing industries which make the machines needed for the large number of industries in the field of consumer goods and intermediate products. This is possible only if substantial expansion is undertaken in iron and steel, non-ferrous metals, coal, cement, heavy chemicals and other industries of basic importance".

Foreign assistance to Indian industrialisation began with the signing of the Indo-American technical cooperation agreement in 1952. The basic intention was to make knowledge, techniques, men and material of the United States of America (U.S.A) available for the economic and social development of India. Through the first two five year plans and upto the middle of the Third Five Year Plan, more than a hundred major projects were taken up. The Indo-Soviet agreement in 1955 gave an impetus to Indo-Soviet cooperation in the area. This cooperation was in the area of iron and steel, lignite excavation, mining excavation, scientific research, oil exploration, power facilities, small industries, and training institutions, etc.

23.7 Foreign Capital - Its Entity

Foreign capital comes largely in the form of equity capital which seeks profit out of investments made. Foreign, capital can come to India in various forms. Firstly, it can come to India as direct investment through foreign branches of the principal concerns and controlled Indian companies. In other words, companies had been formed in industrially developed countries with the specific purpose of operating in India. Sometimes, companies of industrially advanced countries start their subsidiary offices or branches and affiliates in India. Secondly, India favours the joint participation of foreign and domestic capital and is encouraging the import of foreign capital. Thirdly, it has become the accepted policy of the advanced countries to provide loans and grants to under-developed countries for their faster economic development. Whatever may be the form, foreign capital is essentially risk capital which is invested with the sole purpose of making profits.

23.8 Need For Foreign Capital

Third World countries have to depend on foreign capital for various reasons. The extent to which these countries have to rely upon foreign capital varies from country to country depending upon the natural resources, technical progress, and policies of the government of country concerned. The under-developed countries go in for foreign capital for various reasons like the following :

1. When the country's capital is inadequate or insufficient for economic development of the country, it resorts to foreign capital.

2. When a vast majority of the people are poor, it is difficult to mobilise savings to undertake developmental activities. Since the domestic capital market of a country is under-developed, there arises a need to go in for foreign capital.

3. In under-developed countries, for want of entrepreneur's, sufficient experiences, technical know-how, managerial skill, the domestic capital may not flow into certain lines of production productive activity. It is believed that foreign capital can pave the way.

23.9 Foreign Capital - Its Influence

Foreign capital is a decisive force in all economic and international relations. It is capable of subordinating to itself even States enjoying complete political independence. The political domination of one country by another attracts far more attention than the domination which the capital, enterprise, technical collaboration and skill of one country exercises over the trade and manufactures of another. These foreign private investments are playing an important role in India.

Foreign firms of imperialist countries invest lots of capital in their ex-colonial countries. These foreign controlled firms are internationally large. They are world renowned giants. They enjoy agreat degree of influence because their capacity to arrange financial assistance is very high. In other words, foreign firms are privileged, by and large, in gaining access to cheap finance. They benefit from the bias shown by almost all leading institutins towards big, established borrowers. They have access to special loan funds set up or supported by their home governments to encourage exports.

Foreign investors are getting a number of specific incentives like tax concessions, tax holiday, tax free loans, and royalties from the Government of India. India has assured the foreign investors with regard to nationalisation and repatriation of capital and dividends. As early as 1948, Jawaharlal Nehru, the then Prime Minister of India, had guaranteed that there would be no nationalisation of foreign capital. India considers that foreign investment play an important role in the schemes of economic development. Hence, India has been granting the foreign investors all the facilities that Indigenous capital at present enjoys.

There are many view points in India regarding the role of foreign capital. The first view point is that the dependence of our industries on imports of raw materials and components is a major cause for the drain of our capital. It is only through repatriation of profits, export of accumulated capital, royalities and payment through technical know-how. But is the drain is more essentialey through import of raw materials, intermediate goods, and spare parts, needed for industries established with foreign capital, the drain becomes heavy, costly, and continuous. This continuous drain increases foreign exchange crisis, reduces capital accumulation for further investment and thereby makes the country eternally dependent. It is difficult to explain the various methods adopted by foreign investors to create outlets for different forms of exploitation. Foreign capital gives an opportunity to the foreign investors a) as an outlet for their outdated machinery, b) as a market for their raw materials, for their semi-finshed products, spares etc., at exorbitant rates. These are not included in the account of remittances of profits, royalities, etc., at high rates of return.

The other view point is that India's reliance on foreign private investments and technical collaboration is playing an increasingly significant role in the industrialisation of the country. There is no harm in getting foreign capital, since the nation is prospering in the form of industrialisation.

Check Your Progress - 1

1. What are the forms for foreign capital that enter India?

2. Why do the developing countries need foreign capital?

23.10 Characteristics of Multinational Corporations

Multinational Corporations are giant firms with their neadquarters located in one country, and with a variety of business operations in several other countries. They are sometimes referred to as Transnational Corporations, which means that their operations extend beyond the boundaries of the country in which they were originally started. Some multinational corporations may be internationally controlled, but not internationally owned like Unilever, Dutchshell, Agfa-Gavaert. Others may be both international owned and controlled 1) Most of the multinational enterprises which have proliferated and developed in the last two decades operate on the basis of internationally owned assets. Ownership of assets being the means to operational control which is of the essence of the flexibility and efficiency of a multional corporation, control of a single institution is logically its basic characteristic. Since control is remote control, whether it should be tight or loose depends upon economic strategy or tactics, but there can be no question or other reality of absolute and ultimate corporate control. 2) The second characteristic of a multinational corporation in its comparatively recent manifestation is that it is concerned with international transfers of distinct, but complementary, factor inputs-not merely equity capital, but also, knowledge, entrepreneurship and some goods and services of a varied kind. 3) The third chracteristic is that resources are transferred, but not traded in, according to the traditional norms and practices of international trade. A multinational corporation is, therefore, an enterprise which owns and or controls producing facilities in more than one country, such as factories, mines, oil refineries, distibution channels, offices, etc.

23.11 Multi-national Corporations in India

Multinational corporations from different countries of the world like United States of America, United Kingdom, Japan, France, Netherlands and others entered into foreign collaboration agreements of different forms in India. These collaboration manufacture even small articles like paints and varnishes, soaps, cosmetics, tooth pastes, tooth brushes, toilet articles, stationery, transport, shoes, tea and coffee. Everything we use from morning till nights is nothing but a foreign commodity sold in the name of Swadeshi Industry.

Here we can mention a few names of foreign dominated in India. Plantation industry is dominated by two British firms, viz., Liptons and Brooke Bond. Agricultural machinery is dominated by Massey Furguson and insecticides & Pesticides by ICI, CIBA, Shaw Wallance, Union Carbide and Bayers. Production of motor cycles is concentrated in Enfield and Escorts. Tobacco is controlled by Imperial Tobacio and Vajir Sultan Tobacco Company.

23.12 Summary and conclusion

Foreign aid has been a factor of some importance in economic development though not a significant one.

The industrially advanced nations advance capital to the under-developed countries in a numbr of ways. This is done in order to gain control over important areas of organised production. The sole objective of multinational corporations is to maximise profit. Thus they drain all resources in the form of profits, royalty payments, commissions and technical consultancy fees.

Dr.G.N.Seetharam

23.13 Suggested Books

T. Nagi Reddy	:	India Mortgaged
U.S. Uppal	:	India's Economic Problems
Datt and Sundaram	:	Indian Economy
Wadhwa, C.D.	:	Some Problems of India's Economic Policy

23.14 Model Examination Questions

I Answer the following questions in about 30 lines each :

1. What is the role of foreign aid in economic development?
2. Does aid help development? Discuss.
3. What is the effect of foreign aid on economic development of India?
4. Critically examine the role of foreign capital in economic development?
5. Explain the role of I.B.R.D. and I.M.F in the economic development of a country.

II. Answer the following questions in about 15 lines each :

1. Describe the role of World Bank in economic development
2. What is the role and functions of I.M.F.?
3. What is India's attitude towards foreign aid?
4. What are the characteristics of multinational corporations?
5. What is the influence of foreign capital?

Block - VII

This block on **"Poverty and Unemployment"** explains different concepts pertaining to them and methods for the measurement of poverty and unemployment. It discusses the problems of poverty and unemployment with speical reference to India.

The Units included in the block are :

Unit - 24 : Poverty in India

Unit - 25 : Unemployment in India

Unit - 24 : Poverty in India

Contents

24.0 Aims and Objectives

The unit explains the extent of poverty in India, the reasons for the increase in the number of people below poverty line and remedial measures to be followed for the alleviation of poverty.

After reading the unit, you will be able to :

* Recognize the standards of living of Indian people;
* define poverty;
* identify the causes of poverty; and
* suggest policies to eliminate poverty.

24.1 Introduction

After three decades of planning, it is necessary to determine how far the fruits of development have reached the common people. Analyses of income distribution and of standards of living of the population would show whether there is equitable distribution of the national income or if the rich are getting richer, and if poverty has increased or not. While development imposes a strain and sacrifice on the population, in terms of social justice it should not increase the burden on the poorest sections of the population. The extent of poverty and the number of poor have to be estimated, to formulate policies that will help to reduce inequalities and to eliminate poverty.

24.2 Standard of Living in India

The theory of percolation has been rendered ineffective because the growth did not percolate, except marginally and the levels of inequality increased faster than the growth. The standard of living of the high income groups kept increasing as new consumer goods came into the market. The conspicous consumption of these by the rich has made the disparities of living more glaring, since the developmental efforts have had little or no impact on the poverty levels in the country. Different studies undertaken by different authors have pinpointed the extent of disparities in income. The Reserve Bank of India's estimate was that the top 5% of the population commanded 25% of the national income while the bottom 20% has only a share of 7%. This coincides roughly with the estimates of Iyengar and Mukerji, made for the year 1956-57. The National Sample Survey, calculated the consumption expenditure to be Rs.78/- for the bottom 5%

at 1960-61 prices while that of the top 5% was Rs.1350. Inequalities exist in agriculture and land holdings, in the private industrial sector and among different States of the country. In 1960 the Mahalanobis Committee came to the same conclusion in its analysis of the distribution of income and levels of living. The position has worsened in recent years, when the consumption expenditure of the bottom ten percent fell by about 15% to 20% while that of the rich increased. This shows the widening gulf between the standards of living of the rich and the poor, and the failure to achieve even the basics of a welfare state like housing, education, health and medical services, plus food, clothing and clean drinking water for the majority of the population. The provision of civic amenities, electricity, transport and others essentials have been neglected, with the result that the material living standards of the poor have not changed evenafter three decades of planning.

24.3 Definition of Poverty

The reduction of poverty requires the identification of the poor, who have to benefit from government policies. Different definitions have been given regarding poverty, and the magniture and extent of poverty depends upon the choice of the proper definition.

24.3.1 Poverty as Low Levels of Per Capita Income

Per Capita National Income is usually used to measure the standards of living of the people. For instance, the India per capita income was Rs.306.70 in the year 1960-61, and those with an income below this average income were regarded to be the poor.

The PCY has certain limitations as a measure of the average standard of living and as a bench mark to mark off the level of poverty. Since it is a simple average it says nothing about distribution of wealth and income. If the distribution is very skewed, as it is in India, the average has no value. It can neither show the dimension of pvoerty levels nor the differences in stardards of living of the people. The national income gives no indication about the types of goods being produced, or their distribution, since it is only an aggregate figure.

24.3.2 Per Capita Consumption Expenditure

Since the national income figure includes the value of goods that are exported, of goods used for capital formation and for investment and Government expenditure, it does not represent the actual levels of living of the people. Thus, these items have to be deducted from national income to get the value of expenditure on actual consumer goods. This figure divided by population gives the per capita consumption expenditure Dandekar and Rath, have estimated the per capita consumption expenditure for the year 1960-61 as follows :-

Item	Rs. (Crores)
NNP at market prices	14,328
plus imports (minus exports)	411
equals Net Domestic Expenditure	14739
minus Net Domestic Capital Formation	1665
minus Govt. Expenditure	1086
equals Private Consumption Expenditure	11988

On dividing this figure, by the population, the per capita consumption expenditure turned out to be Rs.276.30 per annum. Taking the consumption expenditure per day it was estimated to be about 0.75p per person in 1960-61. Persons with levels below this level of consumption were considered to be poor.

However, this estimate also suffers from the same disadvantages as PCY, since it is also an aggregate figure. It cannot distinguish between consumption of the rich and the poor, since it includes the luxury consumption of the rich and that of the poor and the destitute as well. This is in no way a correct reflection of the average standard of living in the country. Hence it gives no indication about the composition of the type of goods consumed by the different strata of the population in both the urban and the rural areas.

24.3.3 Poverty Line

In the early 60's an expert committee was set up by the Govt. of India. It estimated that the nationally desirable minimum level of consumption expenditure was Rs.20/- per capita per month at 1960-61 prices. This included the expenditure on health and education which was supposed to be borne by the State. This figure came to be and continues to be the basis of the "Poverty Line". On this basis, the Planning Commission estimated that about 50% of the population lived in abject poverty, without being able to achieve even this level of consumption.

24.3.4 Dandekar and Rath's Study

In 1971, two economists, Dandekar and Rath, undertook the study of poverty and inequalities in India. They found that the "poverty line" defined by the Planning Commission was rather arbitarily defined and gave no reference to the composition of the consumption expenditure of Rs.20 gave no reference to the composition of the consumption basket under study or the prices of the essential goods. The authors, therefore, realsied the importance of explicity stating th level of living of the poorest sections, in terms of their expenditure on "sheer physical existence, such as food". On examining the distribution of expenditure on different essentials of the poorest persons, they found that almost 75 to 80% of total expenditure was onfood. They then examined the nutritional adequacy of the food consumed by these people. They interpreted the levels of poverty in terms of the calorie intake of the masses, and the expenditure onfood to acheive this level of input. A daily intake of about 2,250 calories per capita per day was considered to be adequate under Indian conditions. In terms of money, they found that it worked out to be Rs.170/- and about 50% of the urban population was estimated to be below this level. The total number of poor in the rural regions then was 166.4 million, and about 49 million in the urban regions. The extent of poverty, was hence recognised to be enormous and unprecedented.

Minhas, Ojha and other have also undertaken studies of poverty. Minhas estimated that 35% of the population lay below the poverty line, while Ojha's estimate calculated it to be 70% of the rural population. In the Draft Sixth Five Year Plan. (1978-83), the number of people below the poverty line was estimated to be about 46% of the total population. The differences in estimates is due not only to statistical errors and omissions, but also to the different ways of defining poverty. But whatever the estimates, they reflect the magnitude of the problem and the large nuber of poverty striken people in the country. It also shows that the effects of development, though continuous, have not percolated to the levels of the poor. In fact, in actual numbers, the number has increased over the plan periods.

Check Your Progress - I

1. What is 'poverty-line'?

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2. How do you measure the standard of living of people ?

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3 What is per capita consumption expenditure ?

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24.4 Causes of Poverty

The analysis of poverty is highly complicated as it is the net result of a number of factors. Broadly, these can be divided into :-

(a) Historical factors : We have noted in the previous lessons, the deleterious effects of the British policy, especially in the textile industry. The import of British goods was responsible for dislodging large nubers of people from the textile and the handicraft industries. With the absence of alternative avenues of employment, these people became destitute.

(b) High rate of population growth : The reduction of the death rate due to improvements in medicine and health facilities, further added to the problem. Control of family size and the need to reduce the birth rate have been largely restricted to the high income groups, who are more literate and have a higher level of awareness about the advantages of a small family. Among the poor, illiteracy and social and religious factors have contributed to high birth rates. This has further accelerated the growth and misery of the poor masses.

(c) Developmental Pattern : Over and above the other reasons, the developmental path followed by the country, has worsened the situation. In a mixed economy the decisions regarding production and consumption rest with a small but influential section of the population.

Since the five year plans ignored the choice of goods, decisions regarding the types and varieties of consumer goods to be produced rest with the affluent who prefer to invest in the "profitble" industries, that cater to their own needs. These resources are diverted to the production of luxuries, causing greater inequalities of income and consumption. Both financial and physical inputs are hence misused in providing inessentials to those within the glass curtain while the actual needs of the majority are neglected, as fewer resources flow into these sectors. The indiscriminate use of mechanised techniques on the plea of reaping economies of scale also resulted in lowering employment opportunities, leading to greater unemployment and hence increased poverty.

24.5 Policies to Eliminate Poverty

The identification of the growing magnitude of poverty led to the recognition of policies needed to control and eliminate it. The plans, therefore, started concentrating onthis aspect of the economy, and tried to suggest ways to remedy matters. In the Fifth Plan the slogan of "garibi hatao" was raised and growth related

Let OA be the number of labourers required to put in OC hours of work each working full time a day. OC/OA gives th hours of work put in by each labourer. Marginal productivity of labour becomes nil with OC labour hours. Labour is no applied beyond the point C.

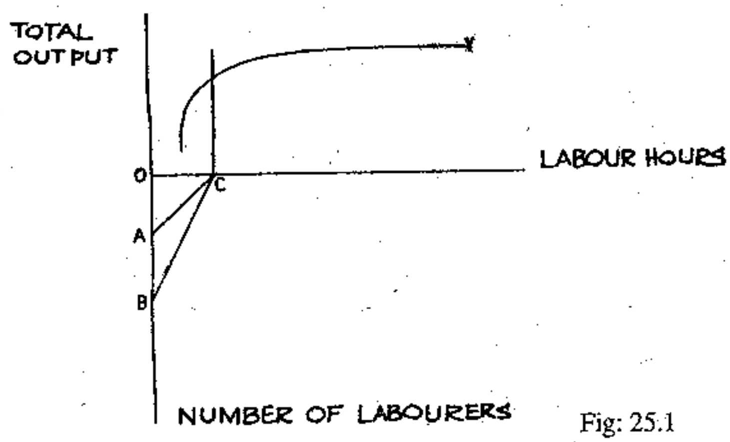

Fig: 25.1

Since the work can be done by OA labourers without changing the total hours of work, the surplus workers are AB. The marginal productivity of labour is nil at C. The marginal productivity of laoburers is nil over the range AB. This represents the volume of disguised unemployment.

Underemployment may be defined as the number of hours of work(labour time)on offer by work force at an existing wage rate compared with the actual number of hours taken up. In other words, the gap between an existing wage rate compared with the actual number of hours taken up. In other words, the gap between the number of hours of work on offer at the existing wage rate and the actual number of hours taken up is treated as underemployment. Underemployment exists if workers are prepared to offer their services even at wage rates below bare subsistence level whereas disguised unemployment prevails in a situation when withdrawal of a certain quantity of labour does not diminish a total output of the sector.

Both disguised unemployment and underemployment can be shown in the same diagram. Diagramatically, the situation is depicted in the following diagram.Given a subsistence wage level of OWs, the level of laobur employment should be OA units. However, if supply of labour is OD, and if all are being employed, then there are AB units of underemployment and BD units of disguised unemployment.

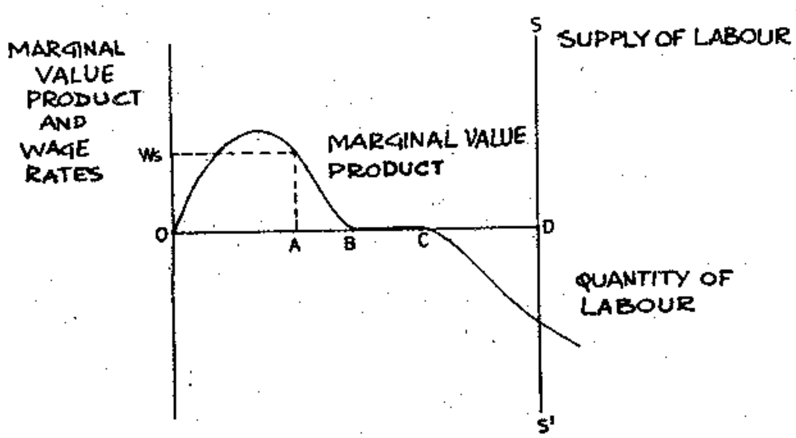

Fig. 25.2

OWs is the subsistence wage
AB units of underemployment
BD units of disguised unemployment

25.4.2 Seasonal Unemployment

In agriculture, the seasonal rise and fall in farm activity is a common phenomenon. Seasonally in agriculture can be traced to the time interval between sowing of seeds and harvesting of crops. The rigid necessity of carrying out operations at the right time and the simultaneity of the harvest period for all cultivators in a particualr region are seasonal aspects. In agriculture, climatological factors play an important role. In the offseason, nothing need to be done on the farm. Hence, it leads to enforced unemployment. On the other hand, during the busy season the farm workers may put in more hours than the 'norm' in order to finish the work within a span of time determined by the climatological and other natural factors. This unemployment during the slack season is called 'seasonal unemployment.' Due to this, a part of the work force in agriculture becomes redundant during the slack season.

25.4.3 Technological Unemployment

This type of unemployment occurs due to changes intechniques of production, i.e., the introduction of labour saving machinery and processes in industry or the rise of new products that make existing ones obselete. A worker may be displaced from his particualr job by the introduction of a labour saivng device. When such a displacement occurs, workers who have become highly specialsied in specific skills that are not needed any more in other types of employment, older workers, and those with poor educational backgrounds find it very difficult to get new jobs. This kind of unemployment is called technological unemployment.

25.4.4 Cyclical Unemployment

Cycles of business porsperity (booms) and depression are a permanent characteristic of modern industrialisation. Periods of great industrial activity alternate with periods of general business depression. Recurrent periods of prosperity and depressionare through a succession of peiods of rapid expansion followed by actual or relative contraction. Deficiency of effective demand is considered to be the basic cause of cyclical fluctuation. Unemployment caused by trade cycles at regualr intervals is known as cyclical unemployment. It is the investment goods which are mostly affected by trade cycles. As production and sales drop during recession, businessmen find that their plants are operating at far below capacity. So they are less inclined to add further capacity through investment in new plants and equipment.

25.4.5 Frictional Unemployment

Frictional unemployment is the amount of unemployment that exists at all time because of imperfections in the working of the labour markets. When a worker leaves one job, he will immediately report to a new job provided there is perfect knowledge and mobility in the laobur market. In reality, it takes time to find a job, even if a job exists. Frictional unemployment is defined as the temporary unemployment resulting from a dearth of lack of information, a lack of conformity between jobs available, and the costs of moving from one occupation or industry to another occupation or indsutry.

25.4.6 Chronic Unemployment

Chronic unemployment is a situation in which people are unemployed throughout or a considerable part of the year due to lack of employment opportunities.

Check Your Progress - II

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3. What is disguised Unemployment?

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4. What is technological unemployment?

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5. What is meant by Cyclical unemployment?

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6. What is chronic unemployment?

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25.5 Differences of Unemployment between Developed and Developing Countries

The difference in the nature of unemployment between the developing and the developed countries stems primarily from differences in the mode of organisation in these economies. Generally, the unit of production in a developed economy is a firm operating with the help of wage paid labour, whereas in a developing economy the basic unit is a household, drawing its laobur mainly from the members of the family. Hence, unemployment in developing countries is hidden or disguised while that in developed economies is visible or chronic or open.

There are a few differences in the types of Keynesian version of unemployment between the developed and developing countries.

Firstly, the type of unemployment in developed countries is a cyclical phenomenon and hence temporary. As soon as the effective demand expands due to revival of investment, the dismissed workers would be called back to their normal jobs.

Secondly, the marginal productivity of workers thrown into inferior jobs is low but not zero in developed countries, whereas the concept applied to developing countries relates to zero marginal productivity.

Thirdly, disguised unemployment does not refer to any movement of workers from one job to another.

Fourthly, the workers who are thrown out of their original jobs can be easily identified in developed countries, whereas those subjected to disguised unemployment in developing countries cannot be identified.

Fifthly, in developed countries, the problem arises due to lack of effective demand while in developing countries it arises primarily due to deficiency in effective supply.

25.6 Measurement of Unemployment

Normally four criteria are used to arrive at a measure of unemployment. They are

a) Time criterion
b) Income criterion
c) Productivity criterion
d) Willingness of criterion

25.6.1 Time Criterion

Unemployment is defined as the actual time spend by the labour force in relation to some time-norm specified for a given period. In arriving at estimates using the time criterion the question of how the norm can be defined comes up. Should it be 8 hours per day or more or less? Can 8 hours be taken as uniform for all the occupational categories? What should be the norm for a number of working days in a year? Again, should this norm be the same for all categories of workers? These questions become important in empirically working out unemployment on this basis.

Taking time into consideration, we can say that so many people are unemployed for so much of the time taking the total number of working norms into consideration. This is so because it is not meaningful to say that so many people are employed or unemployed, as there may be some of them who are partially employed or partially unemployed or chronically unemployed.

The National Sample Survey provides three different types of data relating to employment, unemployment and not available for work.

(i) **Usual status concept** : Firstly, information relating to usual defined as the one pursued for a relatively longer period during the last one year collected. On the basis of this information the follwoing unemployemnt rate can be estimated:

$$\text{Person-year unemployment rate } (M_1) = \frac{Uy}{Ly} \times 100$$

Where Uy stands for unemployed persons on the basis of usual activity status

Ly stands for Labour force on the basis of usual activity status

(ii) **Weekly status concept** : Information relating to the current activity or the activity during the week preceding the date of interview is ascertained. A person who reports having worked at least for one hour on any day during the reference period of one week while pursuing a gainful occupation is deemed to be employed. Any person who did not work even for one hour during the reference period of one week but was seeking or available for work is deemed to be unemployed.

$$\text{Person - week unemployment rate } (M_2) = \frac{Uw}{Lw} \times 100$$

Uw stands for unemployed persons on the basis of current activity

Lw stands for Labour force on the basis ofcurrent activity

(iii) **Daily status concept** : Information pertaining to each day of the reference is collected. Each activity status of a person for each day of the preceding 7 days is recorded. Any person who worked at least for one hour but less than four hours is considered to have worked for half a day. If he worked for four hours or more during a day,he is considered to be employed for the whole day.

$$\text{Person - day unemployment rate } (M_3) = \frac{Ud}{Lw - Nd} \times 100$$

Ud stands for unemployed days of the persons in the labour force

Lw stands for labour force on the basis of current activity

Nd stands for days not available for work during the reference week.

The first two rates (M1 and M2) are stock rates representing the persons unemployed whereas the third one is a flow rate representing the unemployed time.

25.6.2 Income Criterion

If a person earns income per annum less than some desirable minimum, he is considered to be unemployed. Low income is an index of unemployment and underemployment. One can get a measure of unemployment and underemployment in the country by looking at the per cent of population below the poverty line. Dandekar and Rath argued for adoption of the poverty norm. They argued that an adequate level of employment must be defined in terms of providing minimum livelihood to the population. They assert than the acceptance of the national norm of minimum desirable level of per capita consumer expenditure atutomatically gives the national norm of an adequate level of employment in terms of earnings. It is often contended that the time devoted to work is a less important variable than the income earned. Persons are inadequately employed always not because they devote less time to work but because the earnings from work are insufficient.

25.6.3 Productivity Criterion

When a person's contribution is less than some normal standard, he is considered to be unemployed. This criterion in used to identify the problem of disguised unemployment.

25.6.4 Willingness Criterion

If a person is willing to do more work than he is actually doing at present, he is considered to be unemployed. Only those persons who are willing to work more or are looking for work may be regarded as unemployed. This is logically independent of wether a person is employed or unemployed according to any other criterion. This willingness criterion is combined with the time criterion by defining the unemployed as those persons who are working less than a specified norm, and who are also looking for or are available for work.Only those persons who fail to get work even though they are willing to work should be regarded as unemployed.

Check Your Progress - III

7. How can unemployment be calculated through time criterion?

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8. How do you calculate unemployment through income criterion ?

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25.7 Magnitude of Unemployment in India

Most of the unemployment in India is structural in its nature. It is a result of an alarming rate of growth of population and an adequate rate of growth. The population in our country is growing at a rate of 2.5% per annum and the number of people coming to the laobur market in search of jobs is also increasing at a rapid rate. We shall classify unemployment in our country into two kinds, viz., 1) Urban unemployment, 2) Rural unemployment. 1) Urban unemployment consists of two types, viz., a) Industrial unemployment, and b) educated unemployment. 2) Rural unemployment can be classified as i) open unemployment, and ii) disguised unemployment.

25.7.1 Industrial Unemployment

The exact size of the industrial unemployment in India is not known because the necessary data in this respect is not available. During the plan period the industrial sector has expanded and the employment in it steadily increased. Unfortunately, the industrial unemployment has also gone up due to the following reasons : i) there has been a very large increase in the growth of population compared to the rate of growth of the economy, ii) a large scale migration of the people from the rural areas to the urban areas has taken place and the moderate growth of the industrial sector could not absorb all those who have migrated, iii) the retrogression in the industrial sector after mid sixties has occured.

25.7.2 Educated Unemployment

The number of educated poeple is growing rapidly and a large number of them are unemployed. The Planning Commission's estimate suggests that in the beginning of 1980, approximately 34 to 72 lakhs educated persons were unemployed. In the past three decades the educated unemployment has risen about 14 times. According to the Sixth Five Year Plan estimates, at the beginning of 1980 approximately 2.4% of the educated unemployed were engineers. Among the educated unemployed the matriculates were abut 70.9% in 1980. There are many causes of educated unemployment. They are a) defective education system, b) lack of technical qualifications for various works among the educated people, and c) the maladjustment between demand and supply of educated workers.

In rural areas, unemployment is both open and disguised. The wide spread seasonal unemployment is another problem. The high pressure of population on land is resulting in disguised unemployment. A national estimate of rural unemployment is very difficult because of differences in the concepts used in surveys. In the First Plan it was estimated that 30 percent of the total working rural population was unemployed. In the Second Plan it was stated that the magnitude of rural unemployment was about 15 to 18 million. rural unemployment is reproted to have increased in recent years due to the increase of population.

Now let us examine the various estimates of unemployment in India. For about two decades beginning from 1951, estimates of unemployment were provided by the Planning Commission. there are some limitations marking these estimates which were expressed by the committee of experts on unemployment. Keeping this in view the Planning Commission stopped giving its estimates for a decade. However, to understand the magnitude of unemployment these estimates are very useful. It was stated that on the eve of the First Plan 3.3 million persons were unemployed and thus the unemployment rate was 2.4%. 9.6 million people were unemployed in 1966 and during 1966-69 it was around 14 million. Consequently, the number of unemployed increased to 22 million. The Sixth Five Year Plan accorded a high priority to the elimination of unemployment and, with this end in view the Planning Commission provided estimates of unemployment in 1980. but due to the conceptual variations these estimates are not comparable to the earlier estimates. The Planning Commission provided the estimates in March 1980. By age group, 75% of the usual status employment to the labour force was concentrated in the age group 15.29. The unemployment rate was higher in urban areas (8.77%) as against that in rural areas 3.26%. Among women the usual status unemployment rate was 7.01% as against 3.07% among men. Weekly status estimates revealed that the unemployment is high (66%) among the young educated people though they consittuted only 11.5% of the total young force. The analysis of data on daily status unemployment rate reveals that the unemployment rate was the highest among the agricultural labour households. These households, covering aobut 21.2% of the all-India population, accounted for 46.7% of the daily status employment in 1977-78.

25.8 Policies for Removing Unemployment

Though the removal of unemployment is an objective of Indian Planning, no long term employment policy has been attempted. In each plan some short term measures were attempted resulting in a little success. As all efforts were made to increase the growth rate the unemployment problem was worsened in the sort certain direct measures were undertaken to tackle this problem. During the First Plan, the development of cottage industries, road, building projects, etc was undertaken expecting that they would generate additional employment. In the Second Five Year Plan the emphasis was laid on heavy industries. Thus, there was not much scope for creating additional employment opportunities.

The employment policy during the Third Plan was the same. This policy was obviously inadequate and the number of unemployed people rose to 22 million in 1969.

The Fourth Five Year Plan accepted the necessity of pursuing comprehensive programmes of rural development, labour intensive technology in industries and promotion of laobur intensive products for domestic and foreign markets.

Under the Fifth Five Year Plan a high priority was given to the removal of unemployment . This plan stressed the importance of labour intensive techniques in promoting employment. In this plan some special schemes of rural development with high employment potentials was given importance, viz., Small Farmers Development Agency (SFDA), the Marginal Farmers and Agricultural Labour Development Agencies (MFAL) and Drought Prone Areas Programme (DPAP).

The employment policy under the Sixth Five Year Plan aims at the two major goals of reducing underemployment or the majority of labour force and cutting down on the long-term unemployment. Thus greater emphasis has been given to self employment ventures inagricultruc, cottage and small industries and allied activities as well as non-farm operations. The major plan programmes having considerable employment potential are: 1) The Integrated Rural Development Programme (IRDP) which would benefit 15 million families during 1980-85, 2) The Operation Flood with 55 Dairy Projects and other dairy development schemes, 3) National Rural Employment Programme (NREP) would generally cover those persons who might not benefit from any other programme. This is expected to create approximately 300 to 400 million man days of employment actually, 4) Employment to the urban poor in the various works for tree plantation, slum improvement, environmental sanitation, construction of houses etc 5) The National Scheme of Training of RuralYouth for Self Employment (TRYSEM) Under this scheme 2 lakh rural youth will be trained annually for self-employment.

25.9 Pre-Conditions for Effective Employment Generation

It appears that the providing of irrigation facilities followed by the extension of High Yielding Varieties (HYV) technology will not provide abundant scope for the absorption of labour in agriculture. However, if it is accompanied by a high degree of mechanization, which is likely to happen in the absence of effective public intervention, much of the potential for labour absorption will be lost. Even the mere generation of employment without any reference to wage rate and agragian reforms may not make much of a dent on poverty. It is generally recognized that agricultural development by itself may not lead to widespread prosperity. If the agricultural development leads to a skewed income distribution, it does obviously impose constraints on its own development.

In order to ensure better distribution, several economists have argued for the creation of effective organisational forms under which imputs such as fertilizers, new seeds, electricity and water can be made available to as large a group of cultivators as possible. If we are not able to devise such organisational forms, technological innovations are bound to create tension in the agrarian society through the accentuating of inequalities even if there were no inherent biases in the new technology in favour of wage producers. The Organisational forms referred to may be interreted as implying (i) drastic land reforms (ii) the weakening of the hold of landed gentry in factor, product and credit markets, and (iii) the organising of the poor (iv) creation of necessary supporting services. It may be noted that the realisation of the first will have a desirable impact on the second and the thirds. This will also create a conductive environment for triggering off self-induced technological progress.

If organisational forms are devised and the major potentialities indicated above are realsied, it will be possible to strengthen the small farmers and ensure wide-spread prosperity. In this process, effective employment will be generated in the agricultural sector which, inturn, will also generate a market for less sophisticated commodities that can be locally produced. This kind of demand coupled with the access to credit market will induce indigenous technological change in the smallindustrial production units. In that case small industries would not only be able to generate effctive employment but would also be able to induce employment generation through linkages in other sectors, and thus propel the much needed forces to generate wide spread prosperity in rural India.

25.10 Summing Up

There are many concepts relating to unemployment problem such as voluntary, involuntary, disguised, seasonal, technological, cyclical, frictinal, chronic, industrial and educated unemployment. Unemployment can be measured in four ways, viz., time criterion, income criterion, prodictivity criterion, and willingness criterion. In time criterion, three methods are used to estimate unemployment namely, usual status method, weekly status method and daily status method.

Unemployment as is well known is severe in India. The government has initiated a number of measures to increase employment. More than Rs. 500 crores has been allocated for this purpose in 1989-90. Many employment generation programmes are being implemented.

-Mr.G.Ramakrishna

25.11 Suggested Books

1.	Datt & Sundaram	:	Indian Economy
2.	J.S.Uppal (ed)	:	India's Economic Problems
3.	Misra & Puri	:	Indian Economy

25.12 Model Examination Questions

I Answer the following questions in about 30 lines each.

1. What are the various categories of unemployment?
2. Explain the various criteria for the measurement of unemployment.
3. What policies do you suggest to remove unemployment?
4. Explain disguised unemployment through a diagram

II Answer the following questions in about 15 lines each.

1. What are the differences in unemployment between developed and developing countries?
2. What are the pre-conditions for effective employment generaions?
3. Why do you feel that unemployment is a serious problem?
4. Explain the meaning of unemployment?

Dr. B.R. Ambedkar Open University
UNDERGRADUATE PROGRAMME
SYLLABUS FOR SECOND YEAR B.A
ECONOMICS

Course-II : Economics of Development

Block - I	**:**	**Understanding Development and Underdevelopment**
Unit - 1	:	Characteristics of Underdeveloped Economies
Unit - 2	:	Factors For and Against Economic Development
Unit - 3	:	Theories of Capital Formation
Unit - 4	:	Choice of Techniques and Choice of goods
Unit - 5	:	Objectives of Economic Development
Block II	**:**	**National Income and Social Accounting**
Unit - 6	:	National Income and Its Measurement
Unit - 7	:	National Income Estimates in India
Unit - 8	:	National Income Accounts - An Outline of Social Accounting Methods
Block - III	**:**	**Planning for Development**
Unit - 9	:	Economic Planning in India
Unit - 10	:	Five Year Plans in India
Unit - 11	:	Achievements of Indian Five Year Plans
Block - IV	**:**	**Agricultural Sector**
Unit - 12	:	Profile of Indian Agriculture
Unit - 13	:	Agricultural Productivity
Unit - 14	:	Green Revolution
Unit - 15	:	Agricultural Prices
Unit - 16	:	Agricultural Finance
Block - V	**:**	**Industrial Sector**
Unit - 17	:	Industrial Development in India
Unit - 18	:	Public Sector
Unit - 19	:	Concentration of Economic Power in India
Unit - 20	:	Industrial Finance
Block - VI	**:**	**Foreign Sector**
Unit - 21	:	Foreign Trade and Economic Development
Unit - 22	:	Foreign Trade in India
Unit - 23	:	Foreign Aid and Foreign Capital
Block - VII	**:**	**Poverty and Unemployment**
Unit - 24	:	Poverty in India
Unit - 25	:	Unemployment in India

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SECOND YEAR (3 YEAR DEGREE COURSE) EXAMINATION

MODEL QUESTION PAPER
ECONOMICS
COURSE - II : ECONOMICS OF DEVELOPMENT

Time : 3 hours Max. Marks : 100

SECTION - A

Note :

* **Answer any four of the following eight questions in about 30 lines each.**
* **Each question carries 15 marks.** 4 x 15 = 60.

1. Describe the main characteristics of underdeveloped countries.
2. Critically examine Hirschman's argument that unbalanced growth is superior to balanced growth.
3. What are the major objectives of India's Five Year Plans? How far have these been achieved?
4. What is Green revolution? Critically examine the impact of the revolution on Indian agriculture.
5. Examine the significance of the Industrial Policy Resolution of 1956.
6. Discuss the role of foreign trade in Indian economic development.
7. What is poverty line? Explain its nature and magnitude.
8. Critically examine the reasons for industrial stagnation in India in recent years.

SECTION-B

Note :

* **Answer any five of the following ten questions in about 15 lines each.**
* **Each question carries 8 marks.** 5 x 8 = 40

9. Explain the following concepts : (a) Populatin explosion, (b) Dualistic economies.
10. Differentiate economic development from economic growth.
11. Explain vicious circle of poverty.
12. What are the main features of Seventh Five Year Plan?
13. Discuss the following concepts : (a) Rolling Plan (b) Plan Holiday (c) Perspective Plan.
14. Explain the concept of disguised unemployment.
15. Explain the following terms : (a) Terms of trade (b) Balance of Payments (c) Devaluation.
16. Discuss the merits and demerits of capital intensive technique.
17. Explain the measurement methods of unemployment.
18. Explain the following concepts : (a) Self-sufficiency (b) GNP (c) Land reforms.

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UNDERGRADUTE COURSES; II YEAR

SUBJECT : ECONOMICS

COURSE-II : ECONOMICS OF DEVELOPMENT
ASSIGNMENT NO. 1

N.B.

1. Do not copy the answer directly from any of the books.
2. As far as possible try to answer the questions independently in your own words.
3. If it is necessary to quote from any source give the correct reference.
4. Use your own foolscap pages for writing the assignment.
5. Leave sufficient margin for the comments of the evaluator.
6. Completion of this assignment normally should not take more than two hours' time.

I. Answer the following questions in about 30 lines each :

1. Explain the main characteristics of underdeveloped countries.
2. Explain the theory of balanced growth. What is the alternative theory suggested by Hirschman?
3. Distinguish between labour intensive and capital intensive methods.

II. Answer the following questions in about 15 lines each :

1. Explain the following terms :
   a) Back ward and Forward Linkages
   b) Social Overhead Capital and Directly Productive Activities.
2. What is meant by economic development? How is it different from economic growth?
3. Explain, in brief, the objectives of economic development.

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UNDERGRADUTE COURSES ; II YEAR

SUBJECT : ECONOMICS

COURSE-II : ECONOMICS OF DEVELOPMENT

ASSIGNMENT NO.2

N.B.

1. Do not copy the answer directly from any of the books.
2. As far as possible try to answer the questions independently in your own words.
3. If it is necessary to quote from any source give the correct reference.
4. Use your own foolscap pages for writing the assignment.
5. Leave sufficient margin for the comments of the evaluator.
6. Completion of this assignment normally should not take more than two hours' time.

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1. Answer the following questions in about 30 lines each :

1. What is planning ? Explain the objectives of Indian Plans.
2. Trace the agricultural development in India over the five year plans.
3. Critically examine the various factors affecting agricultural productivity in India.

II. Answer the following questions in about 15 lines each :

1. Explain the need for planning in India economic development.
2. What is green revolution ? Give the reasons for limited impact of green revolution.
3. Distinguish between marketable and marketed surplus.

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UNDERGRADUTE COURSES ; II YEAR

SUBJECT : **ECONOMICS**

COURSE II : ECONOMICS OF DEVELOPMENT

ASSIGNMENT NO. 3

N.B.

1. Do not copy the answer directly from any of the books.
2. As far as possible try to answer the questions independently in your own words.
3. If it is necessary to quote from any source give the correct reference.
4. Use your own foolscap pages for writing the assignment.
5. Leave sufficient margin for the comments of the evaluator.
6. Completion of this assignment normally should not take more than two hours' time.

I Answer the following questions in about 30 lines each:

1. Discuss the growth and pattern of industrialization since independence. What are the reasons for its slow progress?
2. What do you mean by concentration of economic power? Explain its causes and consequences in India.
3. What is unemployment? Explain its categories.

II. Answer the following questions in about 15 lines each:

1. Explain the causes for the poor performance of public sector units in India.
2. Explain the causes of poverty in India.
3. Explain the following concepts:
   a) Balance of payments
   b) Terms of Trade regarding foreign trade
   c) Import substitution