

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's
NEW LAW COLLEGE, AHMEDNAGAR

Theory of Development and Indian Economy

(Subject Code – BA303)

**STUDY MATERIAL
FOR
B.A.LL.B. – II (Sem. – III) Pattern – 2017**

By
Prof. Atul Abasaheb Mhaske

B.E., M.B.A., M.A. (Economics), NET (Economics)

Assistant Professor,
New Law College,
Ahmednagar

**ACADEMIC YEAR
2020-21**

INDEX

MODULE NO.	PARTICULARS	PAGE NO.
I	Economic Development and Growth 1. Concept of Development, Economic Development and Economic Growth 2. Human Right Dimension in Economic Development and Economic Growth 3. Features and Indicators of Economic Development 4. Vicious Cycle of Poverty 5. Determination of Poverty Line	3-18
II	Strategies of Economic Growth 1. An overview of Theories of Development 2. Balanced and Unbalanced Growth 3. Big Push Theory 4. Relation between Population Growth and Per Capita Income 5. Concept of Sustainable Development – Sustainable Development Goals 6. Concept of Human Development – Determination of HDI and PQLI	19-46
III	Agrarian Economy in India 1. Features of Indian Agriculture 2. Subdivision and Fragmentation of Land 3. Pattern of Land Holding In India 4. Agricultural Credit - Institutional and Non- Institutional Credit 5. Issues of Agricultural Labours 6. Contractual Farming 7. Issues of Corporatisation of Farming	47-67
IV	Industrial Economy in India : 1. Features of Indian Industry 2. Concept of SME, MSME, PSU and MNC 3. Controversy over land acquisition for Industry 4. Issues of Industrial Labour and Labour Legislation 5. Capital – Sources of Domestic Capital and Foreign Capital	68-90
V	Other Areas of Indian Economy : 1. Inflation – Trends in Prices and Money Supply 2. Black Money and Corruption – Reasons and Measures 3. Food Security – Problem of Hunger and Malnutrition – PDS 4. Issue of Employment – Skill Development, Make in India Programme 5. Issue of Special Economic Zones 6. Trends in Revenue and Expenditure of Central and State Government	91-106
	BIBLIOGRAPHY OF REFERENCE MATERIAL	107

Module 1 Economic Development and Growth

1. Concept of Economic Growth

Economic growth is an increase in the the production of economic goods and services, compared from one period of time to another. It can be measured in nominal or real (adjusted for inflation) terms. Traditionally, aggregate economic growth is measured in terms of gross national product (GNP) or gross domestic product (GDP).

1. Economic growth is an increase in the production of goods and services in an economy.
2. Increases in capital goods, labor force, technology, and human capital can all contribute to economic growth.
3. Economic growth is commonly measured in terms of the increase in aggregated market value of additional goods and services produced, using estimates such as GDP.

For more clarification see video [Economic Growth Explained](#)

In words of **Prof. Meier**, *“we shall define economic growth as the process whereby per capita real income of a country increases over a long period of time.”*⁹¹

According to **Prof. Salvatore**, *“Economic growth has been defined as the process whereby a country’s real per capital gross national product (GNP) or income increases over a sustained period of time through continuing increase in per capita productivity.”*

Development: Meaning and Concept of Development

Development means “improvement in country’s economic and social conditions”. More specially, it refers to improvements in way of managing an area’s natural and human resources. In order to create wealth and improve people’s lives.

Dudley Seers while elaborating on the meaning of development suggests that while there can be value judgements on what is development and what is not, it should be a universally acceptable aim of development to make for conditions that lead to a realisation of the potentials of human personality.

Seers outlined several conditions that can make for achievement of this aim:

- i. The capacity to obtain physical necessities, particularly food;
- ii. A job (not necessarily paid employment) but including studying, working on a family farm or keeping house;
- iii. Equality, which should be considered an objective in its own right;
- iv. Participation in government;
- v. Belonging to a nation that is truly independent, both economically and politically; and
- vi. Adequate educational levels (especially literacy).

The people are held to be the principal actors in human scale development. Respecting the diversity of the people as well as the autonomy of the spaces in which they must act converts the present day object person to a subject person in the human scale development. Development of the variety that we have experienced has largely been a top-down approach where there is little possibility of popular participation and decision making.

Growth vs Development

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

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

Comparison chart

Economic Development versus Economic Growth comparison chart

	Economic Development	Economic Growth
Implications	Economic development implies an upward movement of the entire social system in terms of income, savings and investment along with progressive changes in socioeconomic structure of country (institutional and technological changes).	Economic growth refers to an increase over time in a country's real output of goods and services (GNP) or real output per capita income.
Factors	Development relates to growth of human capital indexes, a decrease in inequality figures, and structural changes that improve the general population's quality of life.	Growth relates to a gradual increase in one of the components of Gross Domestic Product: consumption, government spending, investment, net exports.
Measurement	Qualitative. HDI (Human Development Index), gender-related index (GDI), Human poverty index (HPI), infant mortality, literacy rate etc.	Quantitative. Increases in real GDP.
Effect	Brings qualitative and quantitative changes in the economy	Brings quantitative changes in the economy
Relevance	Economic development is more relevant to measure progress and quality of life in developing nations.	Economic growth is a more relevant metric for progress in developed countries. But it's widely used in all countries because growth is a necessary condition for development.
Scope	Concerned with structural changes in the	Growth is concerned with increase

Economic Development versus Economic Growth comparison chart

Economic Development	Economic Growth
economy	in the economy's output

2.1 Indicators of Economic Growth

Economic growth is a quantitative term and measures the rate of growth in economy via following indicators -

- **National income or GDP**- Higher the growth in national income, higher will be the economic growth since population will have a bigger chunk of income for distribution among themselves.
- **Per capita Income** - We incorporate population so as to take care of increasing population. If population increase at a higher rate than national income then of course economy will be no better off. Hence we look at per person income which is national income divided by population.
- **Per capita consumption** - We look at it to basically distinguish between what part of income is going for savings and what part for consumption. Very high saving rate especially in developed countries can bring about recessionary conditions. And in general too stressing too much on savings at the cost of producing essential goods can adversely impact welfare. Hence an increase in per capita consumption is seen as another measure to indicate economic growth.

2.2 Indicators of Economic Development

To know the level of economic development of a country there are a different indicators which are used. These indicators help in understanding the level of development, comparisons with other countries, or different time periods. These indicators help in better planning towards achieving economic development.

The indicators of economic development are:

Growth rate of National Income:

- In this indicator real income is calculated on constant prices
- If there is rise in national income, this indicates economic development.
- When there is high rate of national income, development rate is high and vice versa

Per Capita Income (PCI):

- The average income of the people living in the country is the per capita income.
- A rise in PCI is an important indicator of economic development
- The rise in PCI indicates economic welfare of the country

Per Capita Consumption (PCC):

- The increase in consumption of goods and services by the people is measured in PCC.
- Example clothing, food, education, health etc
- An increase in PCC shows better quality of life of people and higher economic development of the country.

Productivity per Hecter of Land

It means total crops production (kgs) divided by total Land under Crops (Hecter).

Physical Quality Life Index (PQLI) and Human Development Index (HDI):

- PQLI is the overall welfare of the people in life expectancy, infant mortality rate, standard of living.
- HDI measures life expectancy, education and standard of living.
- A rise in PQLI and HDI shows an improvement in quality of life of people and therefore economic development.

Industrial progress:

Industrial progress is an important indicator of the economic development of a country. It helps to increase per capita income and the national output of the country.

Capital formation:

It means investing in transport, irrigation, roads, electricity, technology etc. higher capital formation will lead to higher economic development.

- The indicators under economic development are more towards the qualitative improvement of people in the country.
- A higher rate of these indicators shows a higher level of economic development.

3.Human rights dimension in economic development

Global human rights and development (GHRAD) **Human rights and development** aims converge in many instances and are beneficial only to the government and not the people although there can be conflict between their different approaches. Today a human rights-based approach is viewed by many as essential to achieving development goals. Historically, the "minority clauses" guaranteeing civil and political rights and religious and cultural toleration to minorities were significant acts emerging from the peace process of World War I relating to a peoples rights to self-determination. Overseen by the League of Nations Council the process allowed petitions from individuals and was monitored under the jurisdiction of the Permanent Court of International Justice. The 'clauses' are an important early signpost in both the human rights and development histories.

The Declaration on the Right to Development was proclaimed by the UNGA under resolution 41/128 in 1986. with only the United States voting against the resolution and eight absentions. The United Nations recognizes no hierarchy of rights, and all human rights are equal and interdependent, the right to development then is not an umbrella right that encompasses or trumps other rights nor is it a right with the status of a mere political aspiration.

The Right to development is regarded as an inalienable human right which all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development.

The right includes

- 1) people-centred development, identifying "the human person" as the central subject, participant and beneficiary of development;
- 2) a human rights-based approach specifically requiring that development is to be carried out in a manner "in which all human rights and fundamental freedoms can be fully realized";
- 3) participation, calling for the "active, free and meaningful participation" of people in development;
- 4) equity, underlining the need for "the fair distribution of the benefits" of development;

- 5) non-discrimination, permitting "no distinction as to race, sex, language or religion"; and
- 6) self-determination, the declaration integrates self-determination, including full sovereignty over natural resources, as a constituent element of the right to development.

The right is a third generation right viewed as a group right such that it is owed to communities as opposed to an individual right applying to individuals "It is a people, not an individual, that is entitled to the right to self-determination and to national and global development" One obstacle to the right is in the difficult process of defining 'people' for the purposes of self-determination. Additionally, most developing states voice concerns about the negative impacts of aspects of international trade, unequal access to technology and crushing debt burden and hope to create binding obligations to facilitate development as a way of improving governance and the rule of law.

The right to development embodies three additional attributes which clarify its meaning and specify how it may reduce poverty

- 1) The first is a holistic approach which integrates human rights into the process
- 2) an enabling environment offers fairer terms in the economic relations for developing countries and
- 3) the concept of social justice and equity involves the participation of the people of countries involved and a fair distribution of developmental benefits with special attention given to marginalised and vulnerable members of the population.

5. Vicious Circle of Poverty

Different economists have different opinions about the vicious circle of poverty.

According to Prof. Nurkse, “The main reason of vicious circle of poverty is the lack of capital formation.”

Similarly, Kindleberger opined that vicious circle of poverty takes place due to the small size of the market.

However, the reasons of vicious circle of poverty can be classified into three groups:

- (a) Supply side of vicious circle.
- (b) Demand side of vicious circle.
- (c) Vicious Circle of Market Imperfections.

A. Supply Side of Vicious Circle:

Supply side of vicious circle indicates that in underdeveloped countries, productivity is so low that it is not enough for capital formation. According to Samuelson, “The backward nations cannot get their heads above water because their production is so low that they can spare nothing for capital formation by which their standard of living could be raised.”

In the words of Prof. Nurkse on the supply side there is small capacity to save resulting from low level of national income. The low real income is a reflection of low productivity, which in turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save and so the circle is complete.

Low Income → Low Saving → Low Investment → Low Production → Low Income

The supply side of vicious circle can be illustrated with the help of a

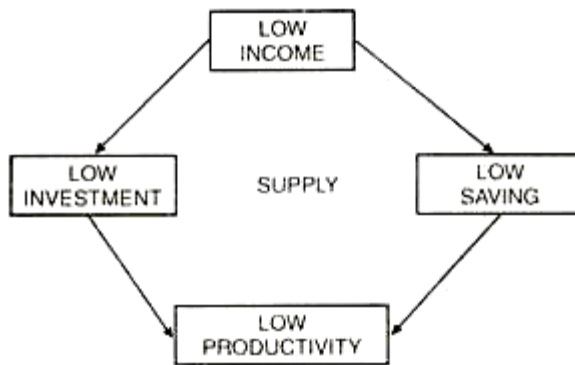


fig .1

Reflects the UDCs are poor. In these countries poverty refers to low real income .Real income remains low due to low level of capital and capital is low because of low level of saving. The reason of low saving is low level of income. Those, it becomes clear from the above analysis, that the main reason of low level of poverty and income is the low level of saving. Consequently, investment is not possible in production channels. A man can save only when his real income exceeds consumption. Generally, in UDC, society is divided into two groups viz.; rich and poor.

In such countries, majority of farmers are from poor groups. Their income is very low because they are engaged in subsistence farming. The methods of cultivation are old and unskilled. The productivity of labour is low due to unskilled labour, disguised unemployment and immobility of labour. Under such situation, a huge chunk of national product is consumed on consumption purposes. In this way, they lack in saving, investment and so the capital formation.

Although, the rich group of the society is in a position to save. But, they spend their saving on luxurious goods instead of saving. They gave preference to foreign products. Thus, their demand does not enlarge the size of the market. Basically, in an economy, investment does not depend only on saving, but also on ability to invest and willingness to invest. These countries lacks in investment facilities due to low level of demand.

The quantity of investment depends on able entrepreneurs. Able entrepreneurs have to take risk and put hard work to set up a new industry. The social atmosphere of the rich class is such that

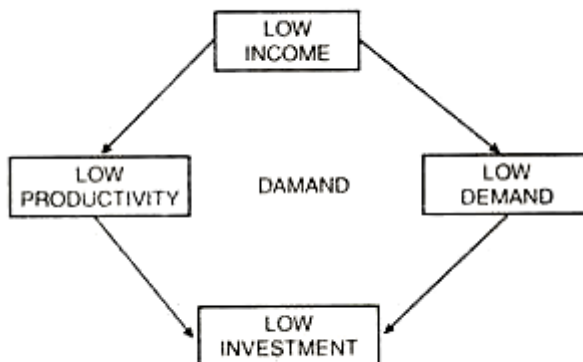
they do not dare to take risk. They prefer to put some labourers on work. Moreover, in UDCs, there exist medium income group who prefer to work in trade, services etc. instead of capital formation. The main reasons responsible for this are lack of capital for investment in industries, lack of industrial finance, lack of skilled labour, lack of transportation and social overhead etc.

B. Demand Side of Vicious Circle:

According to Prof. Nurkse, “On the demand side, the inducement of invest may he low because of the small purchasing power of the people, which is due to the small real income, which is again due to loco productivity. The level of productivity however, is the result of the small amount of capital used in production which in turn may be caused or at least partly caused by small inducement to invest.

Low Income → Low Demand Low Investment → Low Productivity → Low Income

Fig. 2 shows that low income leads to low demand which in turn results in low investment and so the low level of capital which again leads to low productivity and low income. The main reason of the poverty in these countries is the low level of demand. Consequently, the size of market remain low. The small size of the market becomes a hurdle in the path of inducement to invest.



Thus, the investors do not establish industries on large scale and productivity remains low and so the income. In order to prove this, Prof. Nurkse has cited many examples. For instance, an entrepreneur will not establish a modern shoe factory in a country where the people are poverty ridden and unable to purchase shoes. Similarly, iron and steel industry in Chile will produce so

much iron and steel in three hours that the entire demand of the country can be fulfilled. Thus, according to Nurkse, “In underdeveloped countries, on demand side, low purchasing power of the people results in low productivity.”

C. Vicious Circle of Market Imperfections:

Meier and Baldwin have described a third vicious circle based on capital deficiency due to market imperfections. In underdeveloped countries, resources are underdeveloped and people are economically backward. Existence of market imperfections prevents optimum allocation and utilization of natural resources and the result is underdevelopment and this, in turn, leads to economic backwardness.

The development of natural resources depends upon the character of human resources. But due to lack of skill and low level of knowledge, natural resources will remain unutilized, underutilized and misutilised. In the words of Meier and Baldwin, “Underdeveloped resources are, therefore, both a consequence and cause of the backward people... The more economically backward are the people, the less developed will be natural resources, lesser the development of natural resources more the people are economically backward.” The vicious circle caused by Market Imperfections is shown as under.

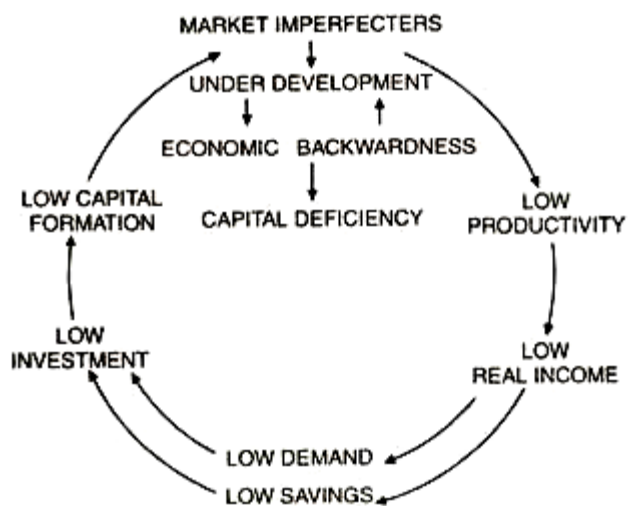


Fig. 3

The vicious circle of poverty is a result of the various vicious circles which were on the sides of supply of and demand for capital. As a result capital formation remains low productivity and low real incomes. Thus, the country is caught in vicious circles of poverty which are mutually aggravating and it is very difficult to break them.

5.1 Determination of Poverty line

Two Measures of the BPL Population The official poverty line is determined by the Planning Commission, on the basis of data provided by the National Sample Survey Organisation (NSSO). NSSO data is based on a survey of consumer expenditure which takes place every five years. The most recent Planning Commission poverty estimates are for the year 2004-05. In addition to Planning Commission efforts to determine the poverty line, the Ministry of Rural Development has conducted a BPL Census in 1992, 1997, 2002, and 2011 to identify poor households. The BPL Census is used to target families for assistance through various schemes of the central government. The 2011 BPL Census is being conducted along with a caste census, and is dubbed the Socio-Economic & Caste Census (SECC) 2011.

Planning Commission Methodology Rural and urban poverty lines were first defined in 1973-74 in terms of Per Capita Total Expenditure (PCTE). Consumption is measured in terms of a collection of goods and services known as reference Poverty Line Baskets (PLB). These PLB were determined separately for urban and rural areas and based on a per-day calorie intake of 2400 (rural) and 2100 (urban), each containing items such as food, clothing, fuel, rent, conveyance and entertainment, among others.

The **official poverty line** is the national average expenditure per person incurred to obtain the goods in the PLB. Since 1973-74, prices for goods in the PLB have been periodically adjusted over time and across states to deduce the official poverty line.

Uniform Reference Period (URP) vs Mixed Reference Period (MRP) Until 1993-94, consumption information collected by the NSSO was based on the Uniform Reference Period (URP), which measured consumption across a 30-day recall period. That is, survey respondents were asked about their consumption in the previous 30 days. From 1999-2000 onwards, the NSSO switched to a method known as the Mixed Reference Period (MRP). The MRP measures consumption of five low-frequency items (clothing, footwear, durables, education and institutional health expenditure) over the previous year, and all other items over the previous 30 days. That is to say, for the five items, survey respondents are asked about consumption in the previous one year. For the remaining items, they are asked about consumption in the previous 30 days.

Tendulkar Committee Report In 2009, the [Tendulkar Committee Report](#) suggested several changes to the way poverty is measured. First, it recommended a shift away from basing the PLB in caloric intake and towards target nutritional outcomes instead. Second, it recommended that a uniform PLB be used for both rural and urban areas. In addition, it recommended a change in the way prices are adjusted, and called for an explicit provision in the PLB to account for private expenditure in health and education. For these reasons, the Tendulkar estimate of poverty for the years 1993-94 and 2004-05 is higher than the official estimate, regardless of whether one looks at URP or MRP figures. For example, while the official 1993-94 All-India poverty figure is 36% (URP), applying the Tendulkar methodology yields a rate of 45.3%. Similarly, the official 2004-05 poverty rate is 21.8% (MRP) or 27.5% (URP), while applying the the Tendulkar methodology brings the number to 37.2%.

MODULE 2 Strategies of Economic Growth

1. Overview of Theory of Development

Development theory is a collection of [theories](#) about how desirable change in society is best achieved. Such theories draw on a variety of social science disciplines and approaches. In this article, multiple theories are discussed, as are recent developments with regard to these theories. Depending on which theory that is being looked at, there are different explanations to the process of development and their inequalities.

2. Balanced Growth Theory

The balanced growth theory can be explained with the views of:

(a) Rosenstein Rodan and

(b) Ragnar Nurkse and

(c) Lewis

(A) Views of Rosenstein Rodan:

In 1943 article, Rosenstein Rodan propounded this theory but without using the term balanced growth. He stated that the Social Marginal Product (SMP) of an investment is different from its Private Marginal Product (PMP). If different industries are planned accordingly to their SMP, the growth of the economy would be much more than it the industries had been planned according to their PMP. SMP is greater than PMP because of the complementarity of different industries which leads to the most profitable investment from the social point of view.

He illustrates it with a popular example to shoe factory. If a large shoe factory is started in the region where 20,000 unemployed workers are employed. Now in case, the workers spend their entire wages on shoes, it would create market for shoes. If series of industries are started, in that case the demand of different industries would increase via multiplier process. This would lead to planned industrialization. Ragnar Nurkse has also developed his thesis on these lines.

(B) Views of Ragnar Nurkse:

Prof. Nurkse has given a proper explanation of the theory of balanced growth. He holds that the major obstacle to the development of the underdeveloped countries is the vicious circle of poverty. This vicious circle of poverty shows that income in underdeveloped countries is low. Low income leads to low savings. Low savings will naturally result in low investment, which will result in less production. Low production will generate low income. Low income will create low demand for goods. In other words, it will result in smaller markets (limited extent of markets). Thus, there will be no inducement to invest.

According to Nurkse “The inducement to invest may be low because of the small buying power of the people, which is due to their small real income, which again is due to low productivity. The low level of productivity however is a result of the small amount of capital used in production which in turn may be caused, at last partly, by inducement to invest.” So, in order to break the vicious circle of poverty in the under-developed countries, it is essential to have a balance between demand and supply.

Ranger Nurkse is of the view that economic development is adversely affected by vicious circle of poverty. The economic development can take place only if vicious circle of poverty is broken. The vicious circle of poverty operates both on the demand and supply side.

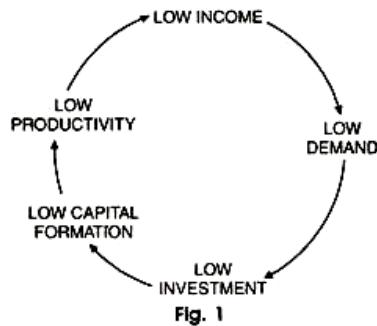
(a) Demand Side:

Vicious circle of poverty affects the demand side of capital formation. The underdeveloped countries are poor because their level of income is low. Due to low level of income, their demand for low income goods is low.

Vicious circle of poverty: On Demand Side:

In UDCs the size of the market is limited. As a result, private investors do not get opportunities for more investment. This reduces investment and capita. Hence productivity of capital would fall.

This reduced per capita income as explained as follows:



Low Income → Low Size of Market → Low Investment → Low Productivity → Low Income.

(b) Supply Side:

Vicious circle of poverty affects the supply side of capital formation. In the underdeveloped countries, poverty exists because the per capita income of the people is low. Due to low per capita income, the level of saving is low. Since investment depends on savings, so investment would be low due to which capital formation would be low. Low capital formation would lead to low productivity which would result in poverty. This is how vicious circle from supply side completes.

Low-Income → Low Savings → Low Investment → Low Capital → Formation → Low Productivity → Low Income

Vicious Circle of Poverty: Supply Side:

The underdeveloped countries, can resort to capital formation and accelerate the pace of economic development only by breaking the vicious circle of poverty. Once the vicious circle of poverty is broken, the economy would be on the rails to development. Now the question is how to break the vicious circle of poverty.

How to Break Vicious Circle of Poverty?

(i) Complementary Demand:

The vicious circle of poverty cannot be broken with industrial investment decisions. This means vicious circle of poverty cannot be broken only by making investment in one industry or one sector. Rather, there should be overall investment in all the sectors. This is the only way to enlarge the size of the market. In order to clear his views, Nurkse has given example of shoe industry as given by Rosenstein Rodan.

It testifies that investment in shoe industry will not lead to sufficient demand. What we need is to have overall investment, so that labourers of one industry can be the consumers or buyers of the products of others. In the words of Nurkse, “The solution seems to be balanced pattern of investment in a number of different industries so that people working with more productivity, with more capital and improved techniques become each other’s customers.”

When investment will be made in several industries simultaneously, it will increase the income of many people who are employed in various industries. They will purchase goods made by each other for consumption. They will become customers mutually. Thus, with the increase in supply demand will also go up. The extent of market will also increase. It will lead to capital formation and thus, the vicious circle of poverty will get broken. Same would be the case of wage-earners of different industries or sectors.

The complementarity of industries is in reality, the crux of the concept of balanced growth. This is termed as complementarities of demand. According to Nurkse, “Most industries entering for mass consumption are complementary in the sense that they provide a market for and thus supports each other, the basic complementarity stems, in the last analysis from the diversity of human wants. The case for balanced growth rests on the need for a balanced diet.” Thus, on the basis of the complementarities of demand, balanced growth will be helpful in attaining economic progress.

(ii) Government Intervention:

Nurkse is of the view that the government must intervene in productive activities through economic planning. He is of the view that when government participates in productive activities, it will help in breaking the vicious circle of poverty. Nurkse opines that if entrepreneurs are available in underdeveloped countries, then they can be induced to make investment. But in underdeveloped countries, private entrepreneurs cannot come forward with so much heavy

investment. This can easily be carried by the government only. Thus, vicious circle of poverty can be broken only by the intervention of the government.

(iii) External Economies:

Balanced growth also leads to external economies. External economies are those which accrue because of the setting up of new industries and expansion of the existing industries. The accruing of external economies lead to the law of increasing returns to scale. It leads to a fall in the cost of production and hence the price level. A fall in the price leads to the increase in demand which is useful for economic development.

(iv) Economic Growth:

Balanced growth helps in accelerating the pace of economic growth, G.M.Meier is of the view that “Balanced Growth is a means of getting out of rut”. Nurkse is of the view that increase in investment in different branches of production can enlarge the total market. This can break the bonds of the stationery equilibrium of underdevelopment.

How the Market can be enlarged:

The market size can be enlarged by monetary expansion, salesmanship and advertisement, removing trade restrictions and expanding social other heads i.e., infrastructures. It can be widened either by a reduction in prices or by an increase in money while keeping constant prices. As the circumstances are found, market is not large enough to allow production on such a scale to reduce cost in underdeveloped countries. The solution pointed out for this critical position by Prof. Nurkse, is “More or less synchronized application of capital to a wide range of different industries.

Here is an escape from the deadlock, that is it results in an overall enlargement of the market. People working with more and better tools in a number of complementary projects become each other’s consumer. More industries catering for mass consumption are complementary in the sense that they provide a market for and support each other. The case for balanced growth sets on the need for a balanced diet.”

Nurkse further submits his notion of balanced growth from Say’s law which states that “Supply creates its own Demand” and Mill cites that “Every increase of production, if distributed without

miscalculation among all kinds of produce in the proportion which private interest would dictate, creates or rather constitutes its own demand.” Thus, Nurkse’s, balanced growth is a sort of frontal attack—”a wave of capital investment in a number of different industries.” Therefore, the best way is to have simultaneous wave of new plants composed in such a way that full advantage is taken of complementarities on the supply side and of the complementarities of the markets on the demand side.” Investment in wide range of industries will give better division of labour, it leads to vertical and horizontal integration of industries, a common source of raw-materials and technical skill, an expansion of the size of the market and better use of social and economic overhead capital.

Therefore, investment in productive equipment and in human capital should be simultaneous while investment will be fruitless unless people are educated. But Prof. Nurkse pleads that private enterprise can achieve the desired effect under the stimulus of certain incentives. Price incentives may bring about balanced growth to some extent. It is further promoted by monetary and other effects.

(C) W.A. Lewis Views on the Theory of Balanced Growth:

W.A. Lewis has advocated the theory of balanced growth on the basis of the following two reasons:

Firstly, in the absence of balanced growth, prices in one sector may be higher than the prices in the other sector. On account of unfavourable terms of trade in the domestic market, they might suffer heavy losses. As a result no investment will be made there in and their growth will be halted. Because of balanced growth equality in comparative prices in all the sectors will be made and thereby all the sectors will continue to grow.

Secondly, when the economy grows, then several bottlenecks appear in different sectors. As a result of economic development, income of the people also increases. Due to increase in income, demand of those goods rises whose demand is income-elastic. If the production of these goods does not increase, there may appear several bottlenecks. However, in case of balanced growth, it is possible to increase production of those goods whose income elasticity of demand is more. Thereby, chances of bottlenecks in different sectors will be quite remote.

In case it is not possible to increase production simultaneously in agricultural and industrial sectors, then Prof. Lewis suggested that the strategy of balance between domestic and foreign trade should be adopted. If industrial sector is not developing, then the agricultural produce should be exported and industrial products should be imported. On the other hand if agricultural sector is not developing, then the industrial goods should be exported and agricultural products should be imported.

However, Lewis does not favour a strategy for growth which totally dependent on increase exports. In his opinion, such a policy may turn the terms of trade against the country which pursues it. According to Lewis, “All sectors of the economy should be developed simultaneously so that balance is maintained between industries and agriculture, production for domestic consumption and production for exports”.

2.2 Unbalanced Growth Theory: Explanation, Process and Priorities

According to Hirschman, “Development is a chain of disequilibria that must be kept alive rather than eliminate the disequilibrium of which profits and losses are symptoms in a competitive economy.

If economy is to keep moving ahead, the task of development policy is to maintain, tension, disproportions and disequilibria.”

Explanation of the Theory:

Albert O. Hirschman in his strategy of economic development goes a step further from Singer when he says that for accelerating the pace of economic development in the underdeveloped countries, it is advisable to create imbalances deliberately. He also recognized the inter-relatedness of different economic activities as done by Ragnar Nurkse. But he asserts that investment in selected industries or sectors would accelerate the pace of economic development.

He regarded, “Development is a chain disequilibria that must keep alive rather than eliminate the disequilibria, of which profits and losses are symptoms in a competitive economy”. There would be ‘seasaw advancement’ as we move from one disequilibrium to another new disequilibrium situation.

Thus Hirschman argued that, “To create deliberate imbalances in the economy, according to a pre-designed strategy, is the best way to accelerate economic development.” Hirschman is of the confirmed view that underdeveloped countries should not develop all the sectors simultaneously rather one or two strategic sectors or industries should be developed by making huge investment. In other words, capital goods industries should be preferred over consumer goods industries.

It is because capital goods industries accelerate the development of the economy, where development of consumer goods industries is the natural outcome. Hirschman has stated that, “If the economy is to be kept moving ahead, the task of development policy is to maintain tensions, disproportions and disequilibria.”

Process of Unbalanced Growth:

The strategy of unbalanced growth is most suitable in breaking the vicious circle of poverty in underdeveloped countries. The poor countries are in a state of equilibrium at a low level of income. Production, consumption, saving and investment are so adjusted to each other at an extremely low level that the state of equilibrium itself becomes an obstacle to growth. The only strategy of economic development in such a country is to break this low level equilibrium by deliberately planned unbalanced growth.

Prof. Hirschman is of the opinion that shortages created by unbalanced growth offer considerable incentives for inventions and innovations. Imbalances give incentive for intense economic activity and push economic progress.

According to Prof. Hirschman, the series of investment can be classified into two parts:

1. Convergent Series of Investment:

It implies the sequence of creation and appropriation of external economies. Therefore, investment made on the projects which appropriate more economies than they create is called convergent series of investment.

2. Divergent Series of Investment:

It refers to the projects which appropriate less economies than they create.

These two series of investment are greatly influenced by particular motives. For instance, convergent series of investments are influenced by profit motive which are undertaken by the private entrepreneurs. The later is influenced by the objective of social desirability and such investment are undertaken by the public agencies.

In the words of Prof. Hirschman, “When one disequilibrium calls forth a development move which in turn leads to a similar disequilibrium and so on and infinitum in the situation private profitability and social desirability are likely to coincide, not because of external economies, but because input and output of external economies are same for each successive venture.” Thus, growth must aim at the promotion of divergent series of investment in which more economies are created than appropriated.

Development policy, therefore, should be so designed that may enhance the investment in social overhead capital (SOC) is created external economies and discourage investment in directly productive activities (DPA).

Unbalancing the Economy:

Development, according to Hirschman, can take place only by unbalancing the economy. This is possible by investing either in social overhead capital (SOC) or indirectly productive activities (DPA). Social overhead capital creates external economies whereas directly productive activities appropriate them.

(i) Excess of investment in Social Overhead Capital:

Social over-head capital are concerned with those series without which primary, secondary and tertiary services cannot function. In SOC we include investment on education, public health, irrigation, water drainage, electricity etc. Investment in SOC favorably affect private investment in directly productive activities (DPA).

Investment in SOC is called autonomous investment which is made with the motive of private profit. Investment in SOC provide, for instance, cheap electricity, which would develop cottage and small scale industries. Similarly irrigation facilities lead to development of agriculture. As imbalance is created in SOC, it will lead to investment in DPA.

ii) Excess of Investment in Directly Productive Activities:

Directly productive activities include those investments which lead to direct increase in the supply of goods and services. Investment in DPA means investment in private sector which is done with a view to maximize profit. In those projects, investment is made first where high profits are expected. In this way, DPA are always induced by profits.

Priorities: Excess SOC or Excess DPA:

(a) Unbalancing the economy with SOC:

Imbalance can be created both by SOC and DPA. But the question before us is that in which direction the investment should be made first so as to achieve continuous and sustained economic growth. The answer is quite simple. The government should invest more in order to reap these economies, the private investors would make investment in order to enjoy profits. This

would raise the production of goods and services. Thus investment in SOC would bring automatically investment in DPA.

(b) Unbalancing the economy with DPA:

In case investment is made first in DPA, the private investors would be facing a lot of problems in the absence of SOC. If a particular industry is setup in a particular region, that industry will not expand if SOC facilities are not available. In order to have SOC facilities, the industry has to put political pressure. That is really a tough job. Thus, excess DPA path is full of strains or pressure- creating whereas excess SOC path is very smooth or pressure relieving.

3. Big Push Theory

Definition and Explanation:

The *Big Push Theory has been presented by Rosenstein Rodan*. The idea behind this theory is this that a big push or a big and comprehensive investment package can be helpful to bring economic development. In other words, a certain minimum amount of resources must be devoted for developmental programs, if the success of programs is required.

As some ground speed is required for the aircraft to airborne. In the same way, certain critical amount of resources be allocated for development activities. This theory is of the view that through 'Bit by Bit' allocation no economy can move on the path of economic development, rather a specific amount of investment is considered something necessary for economic development. Therefore, if so many mutually supporting industries which depend upon each other are started the economies of scale will be reaped. Such external economies which are attained through specific amount of investment will become helpful for economic development.

Rosenstein Rodan has presented three types of indivisibilities and economies of scale. They are as:

(1) Indivisibilities in Production Function: When so many industries are established the economies regarding factors of production, goods, and techniques of production are accrued. Rosenstein Rodan gives more importance to economies which arise due to the establishment of social overhead capital. The infra-structure consists of means of transportation, communication and energy resources. They all contribute to development indirectly. They last for a longer period of time. The SOC can not be imported. To construct it a big amount of capital is required. For some time, the excess capacity may grow in SOC, but they are very much must. Accordingly, UDCs will have to spend 30% to 40% of investment on SOC. The SOC is attached with the following indivisibilities:

(i) The SOC must be provided before Directly Productive Activities (DPA).

(ii) It is lumpy and it has a minimum durability.

(iii) It lasts for a longer period of time and it is irreversible.

These indivisibilities serve as big obstacle in the way of economic development of a UDC.

(2) Indivisibilities of Demand: The complementarity with respect to demand requires that UDCs should establish such industries which could support each other. To make investment in one project may be risky because in UDCs the demand for goods and services is limited due to lower incomes. In other words, the indivisibilities of demand require that at least a certain amount of investment be made in so many industries which could mutually support each other. As a result, the size of market will be extended in UDCs; or the problem of limited market will come to an end in UDCs.

(3) Indivisibility in Supply of Savings: The supply of savings also serves as an indivisibility. A specific amount of investment can be made in the presence of specific savings. But in case of UDCs because of lower incomes the savings remain low. Therefore, when incomes increase due to increase in investment the MPS must be greater than APS.

In the presence of these indivisibilities and non-existence of external economies only a Big Push can take the economy out of dole drums of poverty. It means a specific amount of investment is necessary to remove the obstacles in the way of economic development.

Criticism/Demerits:

Rosenstein theory is better in the sense that it identified that market imperfections are the big obstacles in the way of economic development. Therefore, a big amount of investment will solve the problem of limited markets, rather depending upon market mechanism, and such heavy amounts of investment will become helpful for economic growth. Despite this merit, followings are the demerits of this theory.

(i) Negligible Economies in Export, and Import Substitute Sectors: The 'Big Push' infrastructure may be justified on the ground of external economies. But, according to Viner, the

export sector and import-substitute sectors are so backward in UDCs that they hardly give rise to economies.

(ii) Negligible Economies from Cost Reducing Investment: The goods which are concerned with public welfare hardly yield external economies. Moreover, the investment which is aimed at reducing costs does not yield economies.

(iii) Neglecting Investment in Agri. Sector: In this theory emphasis has been laid upon making investment in infrastructure and industries. While it neglects the investment to be made in agri. and its allied sectors. As the agri. sector is the largest sector in UDCs and it will be a mistake to ignore it.

(iv) Inflationary Pressure: From where the funds will come in UDCs to spend them on SOC. If the funds are raised through foreign loans and by printing new notes they will create inflation in the economy.

(v) Administrative and Institutional Difficulties: This theory stresses upon state investment to remove deficiency of capital. But in case of UDCs the machinery is corrupt. There exist a lot of problems in state machinery. The private and public sectors compete with each other, rather supporting each other. Consequently, there will not be the balanced growth in the economy.

(vi) It is Not a Historical Fact: The Big Push theory is a recipe for the UDCs, but it has not been derived on the basis of historical experience. As Prof. Hagen says, "the Big Push theory lacks the historical evidences and facts".

4.Relation between Population Growth and Per Capita Income

It is easy to see why some people have become alarmists when it comes to population growth rates in developing nations. Looking at the world's low-income countries, they see a population of more than 2 billion growing at a rate that suggests a doubling every 31 years. How will we cope with so many more people? The following statement captures the essence of widely expressed concerns:

“At the end of each day, the world now has over two hundred thousand more mouths to feed than it had the day before; at the end of each week, one and one-half million more; at the close of each year, an additional eighty million. . . . Humankind, now doubling its numbers every thirty-five years, has fallen into an ambush of its own making; economists call it the “Malthusian trap,” after the man who most forcefully stated our biological predicament: population growth tends to outstrip the supply of food.”Phillip Appleman, ed., *Thomas Robert Malthus: An Essay on the Principle of Population—Text, Sources and Background, Criticism* (New York: Norton, 1976), xi.

But what are we to make of such a statement? Certainly, if the world's population continues to increase at the rate that it grew in the past 50 years, economic growth is less likely to be translated into an improvement in the average standard of living. But the rate of population growth is not a constant; it is affected by other economic forces. This section begins with a discussion of the relationship between population growth and income growth, then turns to an explanation of the sources of population growth in low-income countries, and closes with a discussion of the Malthusian warning suggested in the quote above.

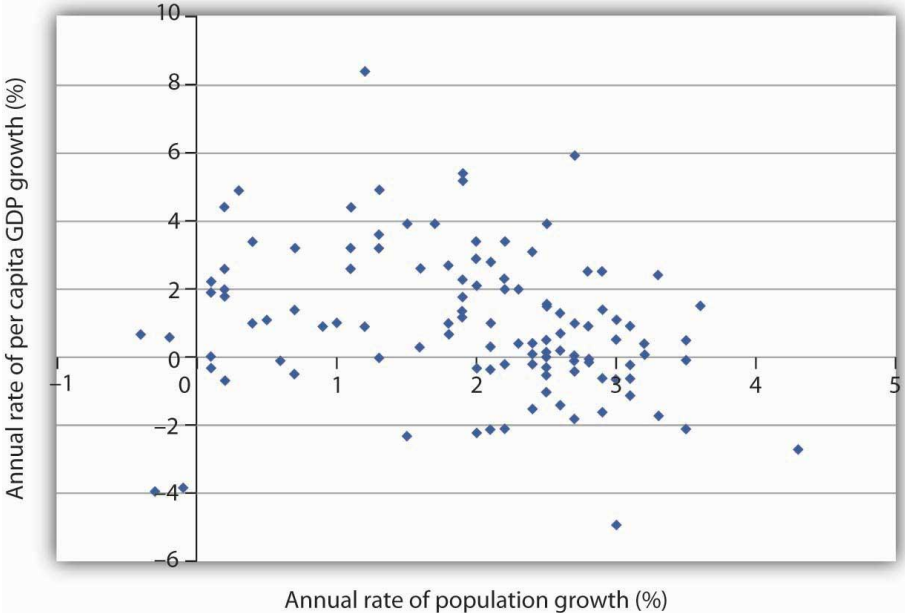
Population Growth and Income Growth

On a simplistic level, the relationship between growth in population and growth in per capita income is clear. After all, per capita income equals total income divided by population. The growth rate of per capita income roughly equals the difference between the growth rate of income and the growth rate of population. Kenya's annual growth rate in real GDP from 1975 to

2005, for example, was 3.3%. Its population growth rate during that period was 3.2%, leaving it a growth rate of per capita GDP of just 0.1%. A slower rate of population growth, together with the same rate of GDP increase, would have left Kenya with more impressive gains in per capita income. The implication is that if the developing countries want to increase their rate of growth of per capita GDP relative to the developed nations, they must limit their population growth.

Figure "Population and Income Growth, 1975–2005" plots growth rates in population versus growth rates in per capita GDP from 1975 to 2005 for more than 100 developing countries. We do not see a simple relationship. Many countries experienced both rapid population growth and negative changes in real per capita GDP. But still others had relatively rapid population growth, yet they had a rapid increase in per capita GDP. Clearly, there is more to achieving gains in per capita income than a simple slowing in population growth. But the challenge raised at the beginning of this section remains: Can the world continue to feed a population that is growing exponentially—that is, doubling over fixed intervals?

Figure Population and Income Growth, 1975–2005



A scatter chart of population growth rates versus GNP per capita growth rates for various developing countries for the period 1975–2005 suggests no systematic relationship between the rates of population and of income growth.

Source: United Nations Development Program, Human Development Report 2007/2008 (New York: Palgrave Macmillan, 2007).

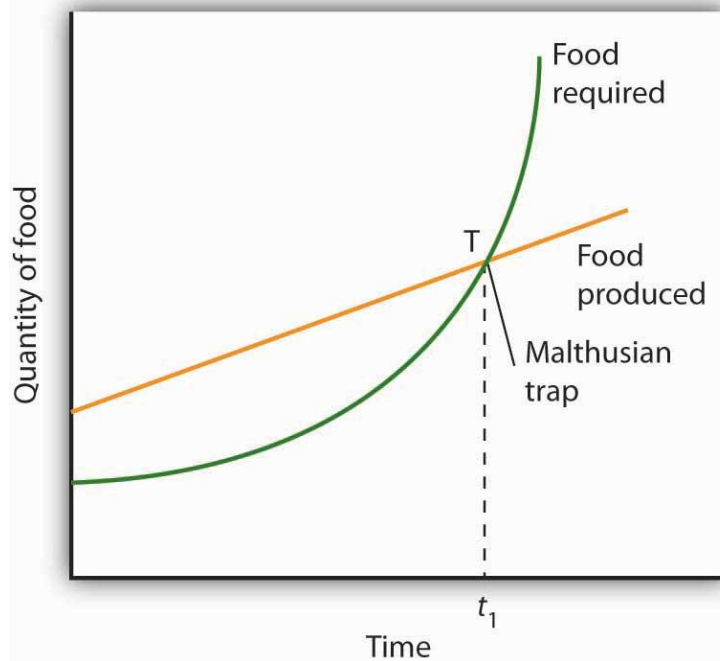
The Malthusian Trap and the Demographic Transition

In 1798, Thomas Robert Malthus published his *Essay on the Principle of Population*. It proved to be one of the most enduring works of the time. Malthus's fundamental argument was that population growth will inevitably collide with diminishing returns.

Diminishing returns imply that adding more labor to a fixed quantity of land increases output, but by ever smaller amounts. Eventually, Malthus concluded, increases in food production would be too small to sustain the increased number of human beings who consume that output. As the population continued to grow unchecked, the number of people would eventually outstrip the ability of the land to generate enough food. There would be an inevitable Malthusian trap, a point at which the world is no longer able to meet the food requirements of the population, and starvation becomes the primary check to population growth.

A Malthusian trap is illustrated in [Figure "The Malthusian Trap"](#). We can determine the total amount of food needed by multiplying the population in any period by the amount of food required to keep one person alive. Because population grows exponentially, food requirements rise at an increasing rate, as shown by the curve labeled "Food required." Food produced, according to Malthus, rises by a constant amount each period; its increase is shown by an upward-sloping straight line labeled "Food produced." Food required eventually exceeds food produced, and the Malthusian trap is reached at time t_1 . The faster the rate of population growth, the sooner t_1 is reached.

Figure *The Malthusian Trap*



If population grows at a fixed exponential rate, the amount of food required will increase exponentially. But Malthus held that the output of food could increase only by a constant amount each period. Given these two different growth processes, food requirements would eventually catch up with food production. The population hits the subsistence level of food production at the Malthusian trap, shown here at point T.

What happens at the Malthusian trap? Clearly, there is not enough food to support the population growth implied by the “Food required” curve. Instead, people starve, and population begins rising arithmetically, held in check by the “Food produced” curve. Starvation becomes the limiting force for population; the population lives at the margin of subsistence. For Malthus, the long-run fate of human beings was a standard of living barely sufficient to keep them alive. As he put it, “the view has a melancholy hue.”

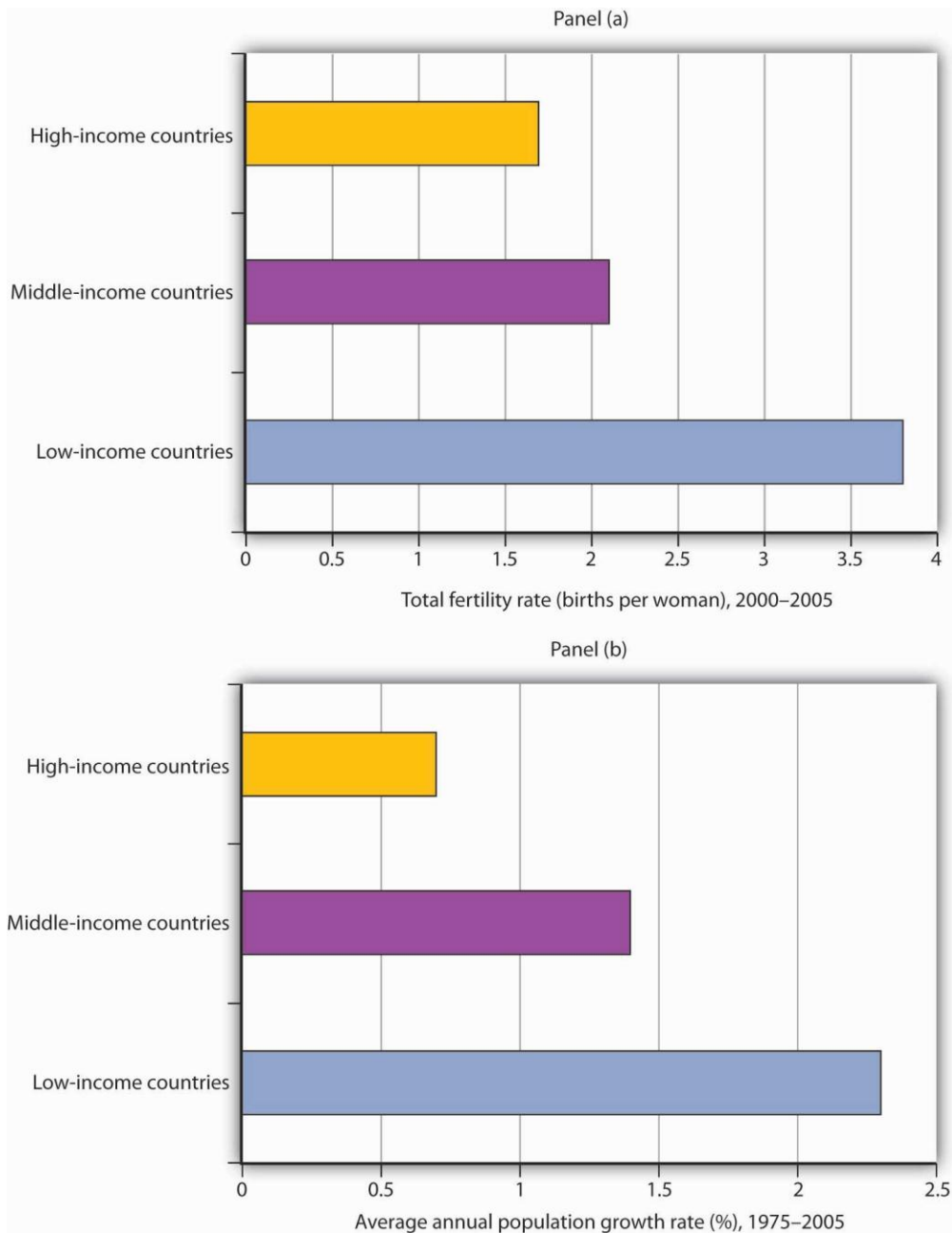
Happily, Malthus’s predictions do not match the experience of Western societies in the 19th and 20th centuries. One weakness of his argument is that he failed to take into account the gains in output that could be achieved through increased use of physical capital and new technologies in

agriculture. Increases in the amount of capital per worker in the form of machines, improved seed, irrigation, and fertilization have made possible huge increases in agricultural output at the same time as the supply of labor was rising. Agricultural productivity rose rapidly in the United States over the last two centuries, just the opposite of the fall in productivity expected by Malthus. Productivity has continued to expand.

Malthus was wrong as well about the relationship between population growth and income. He believed that any increase in income would boost population growth. But the law of demand tells us that the opposite may be true: higher incomes tend to reduce population growth. The primary cost of having children is the opportunity cost of the parents' time in raising them—higher incomes increase this opportunity cost. Higher incomes increase the cost of having children and tend to reduce the number of children people want and thus to slow population growth.

Panel (a) of Figure "Income Levels and Population Growth" shows the birth rates of low-, middle-, and high-income countries for the period 2000–2005. We see that the higher the income level, the lower the birth rate. Fewer births translate into slower population growth. In Panel (b), we see that high-income nations had much slower rates of population growth than did middle- and low-income nations over the last 30 years.

Figure Income Levels and Population Growth



Panel (a) shows that low-income nations had much higher total fertility rates (births per woman) during the 2000–2005 period than did high-income nations. In Panel (b), we see that low-income nations had a much higher rate of population growth during the 1975–2005 period.

Source: World Development Indicators database, World Bank, revised October 17, 2008.

An increase in a nation's income can be expected to slow its rate of population growth. Hong Kong, for example, has enjoyed dramatic gains in income since the 1960s. Its birth rate and rate of population growth have fallen by over half during that time.

But if economic development can slow population growth, it can also increase it. One of the first gains a developing nation can achieve is improvements in such basics as the provision of clean drinking water, improved sanitation, and public health measures such as vaccination against childhood diseases. Such gains can dramatically reduce disease and death rates. As desirable as such gains are, they also boost the rate of population growth. Nations are likely to enjoy sharp reductions in death rates before they achieve gains in per capita income. That can accelerate population growth early in the development process. Demographers have identified a process of demographic transition in which population growth rises with a fall in death rates and then falls with a reduction in birth rates.

The process of demographic transition has unfolded in a strikingly different manner in developed versus less developed nations over the past two centuries. In 1800, birth rates barely exceeded death rates in both developed and less developed countries. The result was a rate of population growth of only about 0.5% per year worldwide. By 1900, the death rate in developed nations had fallen by about 25%, with little change in the birth rate. Among developing nations, the birth rate was unchanged, while the death rate was down only slightly. The combined result was a modest increase in the rate of world population growth.

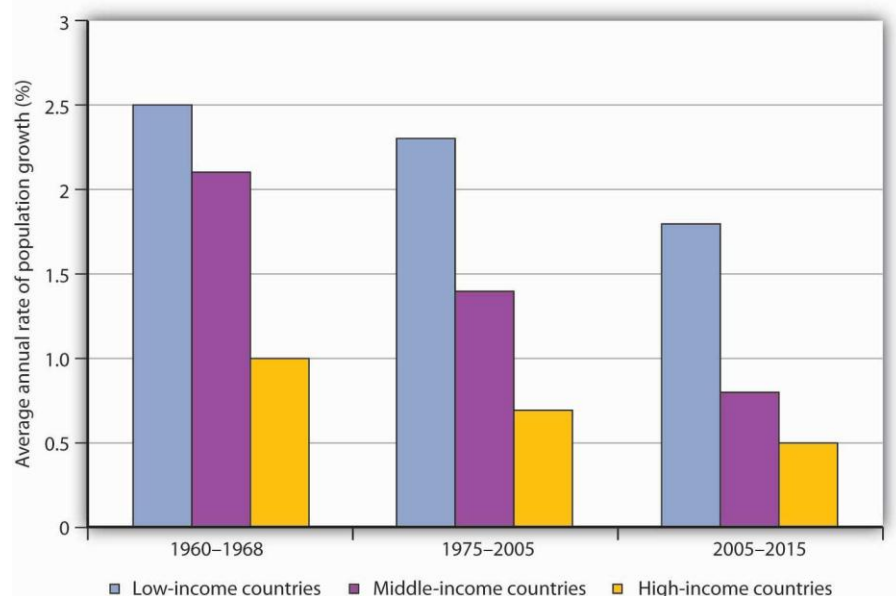
Changes were much more rapid in the 20th century. By 1965, the death rate among developed nations had plunged to about one-quarter of its 1800 level, while the birth rate had fallen by half. In developing nations, death rates took a similarly dramatic drop, while birth rates showed little change. The result was dramatic world population growth.

The world's high-income economies have completed the demographic transition. Less developed nations have begun to make progress, with birth rates falling by a slightly greater percentage than death rates. The results have been a sharp slowing in the rate of population growth among high-

income nations and a more modest slowing among low-income nations. Continued slowing in population growth at all income levels is suggested in Figure "The Demographic Transition at Work: Actual and Projected Population Growth".

Between 1965 and 1980, the world population grew at an annual rate of 2%, suggesting a doubling time of 36 years. For the world as a whole, it is predicted that population growth will slow to a 1.1% rate during the 2005–2015 period, a rate that would imply a doubling time of 65 years.

Figure The Demographic Transition at Work: Actual and Projected Population Growth



Population growth has slowed considerably in the past several decades.

Source: United Nations Development Program, Human Development Report 2007/2008 (New York: Palgrave Macmillan, 2007) for periods 1975–2000 and 2005–2015, United Nations Development Program, Human Development Report 1990 (New York, Oxford: Oxford University Press, 1990) for the 1960–1988 period, in which categories refer to low, middle, and high human development rankings.

4.

SUSTAINABLE DEVELOPMENT

Sustainability is development that satisfies the needs of the present without compromising the capacity of future generations, guaranteeing the balance between economic growth, care for the environment and social well-being.

Sustainable development is a concept that appeared for the first time in 1987 with the publication of the **Brundtland Report**, warning of the negative environmental consequences of economic growth and globalization, which tried to find possible solutions to the problems caused by industrialization and population growth.

HOW TO ACHIEVE SUSTAINABLE DEVELOPMENT?

Many of the challenges facing humankind, such as **climate change**, water scarcity, inequality and hunger, can only be resolved at a global level and by **promoting sustainable development**: a commitment to **social progress, environmental balance and economic growth**.

As a part of a new **sustainable development roadmap**, the United Nations approved the **2030 Agenda**, which contains the **Sustainable Development Goals**, a call to action to protect the planet and guarantee the global well-being of people. These common goals require the active involvement of individuals, businesses, administrations and countries around the world.

The 17 sustainable development goals (SDGs) to transform our world:

GOAL 1: No Poverty

GOAL 2: Zero Hunger

GOAL 3: Good Health and Well-being

GOAL 4: Quality Education

GOAL 5: Gender Equality

GOAL 6: Clean Water and Sanitation

GOAL 7: Affordable and Clean Energy

GOAL 8: Decent Work and Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

GOAL 10: Reduced Inequality

GOAL 11: Sustainable Cities and Communities

GOAL 12: Responsible Consumption and Production

GOAL 13: Climate Action

GOAL 14: Life Below Water

GOAL 15: Life on Land

GOAL 16: Peace and Justice Strong Institutions

GOAL 17: Partnerships to achieve the Goal

5. Human Development

Human development is defined as the process of enlarging people's freedoms and opportunities and improving their well-being. Human development is about the real freedom ordinary people have to decide who to be, what to do, and how to live.

The human development concept was developed by economist Mahbub ul Haq. At the World Bank in the 1970s, and later as minister of finance in his own country, Pakistan, Dr. Haq argued that existing measures of human progress failed to account for the true purpose of development—to improve people's lives. In particular, he believed that the commonly used measure of Gross Domestic Product failed to adequately measure well-being. Working with Nobel Laureate Amartya Sen and other gifted economists, in 1990 Dr. Haq published the first Human Development Report, which was commissioned by the [United Nations Development Programme](#).

Human development index

The Human Development Index (HDI) is a measure of economic development and economic welfare. The Human Development Index examines three important criteria of economic development (life expectancy, education and income levels) and uses this to create an overall score between 0 and 1.

- 1 indicates a high level of economic development,
- 0 a very low level.

The HDI combines:

1. Life Expectancy Index. Average life expectancy compared to a global expected life expectancy.
2. Education Index
 1. mean years of schooling
 2. expected years of schooling
3. Income Index (GNI at PPP)

What the HDI shows

- The HDI gives an overall index of economic development. It has some limitations and excludes several factors that might have been included, but it does give a rough ability to make comparisons on issues of economic welfare – much more than just using GDP statistics show.

Limitations of Human Development Index

- Wide divergence within countries. For example, countries like China and Kenya have widely different HDI scores depending on the region in question. (e.g. north China poorer than south-east)
- HDI reflects long-term changes (e.g. life expectancy) and may not respond to recent short-term changes.
- Higher national wealth does not indicate welfare. GNI may not necessarily increase economic welfare; it depends on how it is spent. For example, if a country spends more on military spending – this is reflected in higher GNI, but welfare could actually be lower.
- Also, higher GNI per capita may hide widespread inequality within a country. Some countries with higher real GNI per capita have high levels of inequality (e.g. Russia, Saudi Arabia)
- However, HDI can highlight countries with similar GNI per capita but different levels of economic development.
- Economic welfare depends on several other factors, such as – threat of war, levels of pollution, access to clean drinking water e.t.c.

5.2 Physical Quality of Life Index (PQLI)

The Physical Quality of Life Index (PQLI) was developed for Overseas Development Council in the mid-1970s by Morris David Morris. It was created due to dissatisfaction with the use of GNP as an indicator of development. The Physical Quality of Life Index measures the quality of life or well-being of a country based on three variables- basic literacy rate, infant mortality, and life expectancy at age one. All equally weighted on a 0 to 100 scale.

PQLI might be regarded as an improvement but it also shares the general problems of measuring quality of life in a quantitative way. It has also been criticized because there is considerable overlap between infant mortality and life expectancy. The UN Human Development Index is a more widely used means of measuring well-being.

Steps to Calculate Physical Quality of Life:

- 1) Find percentage of the population that is literate (literacy rate).
- 2) Find the infant mortality rate. (out of 1000 births) INDEXED Infant Mortality Rate = $(166 - \text{infant mortality}) \times 0.625$
- 3) Find the Life Expectancy. INDEXED Life Expectancy = $(\text{Life expectancy} - 42) \times 2.7$

4) Physical Quality of Life =

$$(\text{Literacy Rate} + \text{INDEXED Infant Mortality Rate} + \text{INDEXED Life Expectancy})$$

3

- ABOUT PHYSICAL QUALITY OF LIFE INDEX= PQLI : Increase in national income and per capita income are not the real indicators of economic development, as it has a number of limitations. Increasing incomes of the country are concentrated in the hands of a few people, which is not development. The development of a country should be such

that the living standards of the poor rise, and the basic requirements of the citizens are fulfilled. Keeping this in mind, Morris Davis Morris presented the physical quality of life index, in short known as the PQLI. In this index, betterment of physical quality of life of human beings is considered economic development. The level of physical quality of life determines the level of economic development. If any country's physical quality of life is higher than that of the other country, then that country is considered as more developed.

There are three standards to measure the physical quality, which are depicted here:

1)- Extent of Education, 2)- Life Expectancy & 3)- Infant Mortality Rate

Module 3 Agrarian Economy of India

1 Features of Indian Agriculture

(i) Source of livelihood:

Agriculture is the main occupation. It provides employment to nearly 61% persons of total population.

It contributes 25% to national income.

(ii) Dependence on monsoon:

Agriculture in India mainly depends on monsoon. If monsoon is good, the production will be more and if monsoon is less than average then the crops fail. Sometimes floods play havoc with our crops. As irrigation facilities are quite inadequate, the agriculture depends on monsoon.

(iii) Labour intensive cultivation:

Due to increase in population the pressure on land holding increased. Land holdings get fragmented and subdivided and become uneconomical. Machinery and equipment can not be used on such farms.

(iv) Under employment:

Due to inadequate irrigation facilities and uncertain rainfall, the production of agriculture is less, farmers find work a few months in the year. Their capacity of work cannot be properly utilised. In agriculture there is under employment as well as disguised unemployment.

(v) Small size of holdings:

Due to large scale sub-division and fragmentation of holdings, land holding size is quite small. Average size of land holding was 2.3 hectares in India while in Australia it was 1993 hectares and in USA it was 158 hectares.

(vi) Traditional methods of production:

In India methods of production of agriculture along with equipment are traditional. It is due to poverty and illiteracy of people. Traditional technology is the main cause of low production.

(vii) Low Agricultural production:

Agricultural production is low in India. India produces 27 Qtls. wheat per hectare. France produces 71.2 Qtls per hectare and Britain 80 Qtls per hectare. Average annual productivity of an agricultural labourer is 162 dollars in India, 973 dollars in Norway and 2408 dollars in USA.

(viii) Dominance of food crops:

75% of the cultivated area is under food crops like Wheat, Rice and Bajra, while 25% of cultivated area is under commercial crops. This pattern is cause of backward agriculture.

Agriculture Landholdings

The term 'agricultural holding' indicates average size of agricultural land held by the farmers in India.

There are four different concepts of holding:

- (a) Economic holding,
- (b) Basic holding,
- (c) Optimum holding, and
- (d) Family holding.

Economic holding indicates that particular size of holding which will provide necessary support to the peasant family. In this connection Keating observed that economic holding is one **“which allows a man the chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses.”**

Considering the quality of soil and climatic condition and irrigation facilities, the size of economic holding varies between different regions. Although Keating suggested 40-50 acres as the size of economic holding for South Bombay, but M.L. Darling suggested that 10-12 acres would be the size of economic holding in Punjab.

Causes of Sub-Division and Fragmentation of Agricultural Holding:

With the growth of the size of families, the agricultural holdings in India are gradually being sub-divided among the heirs on the death of the owner of the land. In this way generation after generation the land is being subdivided and fragmented as well.

Under such a situation a member of the family gets one tiny plot at one place and another tiny plot at another place leading to a peculiar problem of growing sub-division and fragmentation of holding.

The following are some of the important causes of growing sub-division and fragmentation of agricultural holding in India:

(i) Increasing Pressure of Population:

With the rapid growth of population, in the country, the pressure of population on land is increasing. In view of near absence of the growth of alternative occupations, people started to put much pressure on agriculture leading to continuous sub-division of land.

(ii) Laws of Inheritance:

In India, the laws of inheritance made provision for equal share of the ancestral property among the children. Due to the application of this law there is a continuous split in the size of farms with every new generation.

(iii) Fall of Joint Family System:

Under the system of joint family there was no need to sub-divide the size of agricultural holding. But under the impact of growing industrialisation and urbanisation, the joint family system is breaking up rapidly leading to a sub-division of agricultural holding in the country.

(iv) Decline of Village Handicrafts and Industries:

Due to destruction of village handicrafts and industries, artisans were forced to discard their ancestral occupations and started to depend on agriculture. This has added the dimension of the problem.

(v) Rural Indebtedness:

High degree of rural indebtedness is another cause which is supplementing to this problem of sub-division of holding. Unscrupulous village moneylenders are charging exorbitant rate of interest and adopting unfair practices and in the process gradually grab the land of the poor cultivators. In this way a part of a land is passing away into the hands of moneylenders leading to increasing sub-divisions of land holding.

(vi) Psychological Attachment of Land:

Indians are very much psychologically attached to land and they are not mentally prepared to accept payment in lieu of land. The type of mentality has raised the problem of sub-division and fragmentation of agricultural holding.

(vii) Crop Sharing:

In India many big land owners lease out their land to tenants instead of cultivating their own. In order to avoid trouble this big land owners deliberately divided the land among the number of tenants and in this way avoid land reform laws. Thus, in this way a large operational holding is deliberately reduced to a number of small uneconomic operational holding.

Problems of Sub-Division and Fragmentation of Agricultural Holding:

Continuous sub-division and fragmentation of agricultural holding has been resulting in series of problems.

These are as follows:

(i) Adoption of Modernisation Process Difficult:

The growing sub-division and fragmentation of agricultural holding make the adoption of modernized method in agricultural operation quite difficult. Application of new technology, use of fertiliser and making provision for irrigation facilities will be difficult in uneconomic holding.

(ii) Wastage of Land:

Due to sub-division of holding a good amount of land (about 3 to 5 per cent) is being wasted for drawing boundaries and hedges between huge numbers of tiny plots. In Punjab about 6 per cent of the land is wasted due to this reason. Moreover, due to sub-division the plots become so small that it is quite uneconomic to cultivate such land.

(iii) Difficulties in Management:

Fragmentation of agricultural holding creates difficulties to the farmers to manage the agricultural operation smoothly. A considerable wastage of time and resources is resulting from transporting agricultural inputs to different fragmented lands.

(iv) Litigation:

Small and fragmented farms indulged into frequent boundary disputes. All these quarrels over boundaries result in increasing volume of litigation in the rural areas.

(v) Low Productivity:

Due to continuous sub-division of holding, the size of land becomes so small that the farmer cannot adopt new techniques of cultivation and instead of they depend on traditional methods.

(vi) Disguised Unemployment:

Smaller size of holdings cannot provide full time job to all the members of farmer's family. Thus, in the absence of alternative occupations, disguised unemployment started to occur in the rural areas.

Remedial Measures to Tackle the Problem of Sub-Division and Fragmentation of Agricultural Holding:

(i) Economic Holding:

To tackle the problem of sub-division and fragmentation, economic holding are to be created.

Creation of economic holding requires the following policy:

(a) Fixation of ceiling on land holding and distribute the surplus land to those farmers having uneconomic holding;

(b) Inducing those farmers having tiny holding to give up their lands and shift them to other occupations;

(c) To provide alternative occupations by developing agro-based industries in rural areas.

(ii) Consolidation of Holding:

Consolidation of agricultural holding is a solution to remedy the problem of scattered or fragmented holding. Here consolidation of land indicates bringing the scattered small plots of land into a compact block and then divide the compact block among the farmers in a compact manner. In India consolidation was initiated on a voluntary basis and later on it was made compulsory.

Majority of the states have already made sufficient provision for the implementation of scheme for consolidation of holdings. But the progress of consolidation is not up to the mark and again is not uniform among all states. In this connection the Sixth Plan mentioned, It is estimated that by

now nearly 45 million hectares of land, i.e., about one fourth of the consolidate field has been consolidated all over the country.

However, the implementation has been extremely patchy and sporadic. Only in Punjab, Haryana, and Western Uttar Pradesh, the work is complete. Even a beginning has not been made in southern states and Rajasthan. In the Eastern States, some work began only in Orissa and Bihar

(iii) Co-Operative Farming:

Co-operative farming can be considered as a permanent solution towards the problems of subdivision and fragmentation of agricultural holdings in India. Through co-operative fanning, the small and scattered farms can be consolidated in India.

3.Types of Landholdings in India

An operational land holding is a techno-economic land unit used wholly or partly for agricultural production and operated (directed/managed) by one person alone or with the assistance of others, without regard to title, size or location. A operation land holding may be consisted of either one or more than one parcels of land, provided they form the part of same unit. Operational Land Holdings include only those units which are used either in farm production or farm production + livestock and poultry products (primary) and/or pisciculture or for only livestock and poultry products (primary) and/or pisciculture.

There are five kinds of Land Holdings in India, depending on various sizes as follows:

- Marginal holdings: Size 1 hectare or less
- Small holdings: Size 1 to 2 hectares
- Semi-medium holdings : Size 2 to 4 hectares
- Medium holdings: Size 4 to 10 hectares
- Large holdings: Size above 10 hectare

Maximum number of operational land holdings in India is marginal holdings. According to Census 2011, 67 per cent of holdings were classified as marginal (less than one hectare) and 18 per cent were classified as small (one-two hectare). Large holdings were estimated to be only 0.7%.

Highlights from the latest agricultural Census

The below observations have been sourced from Agricultural Census 2010-11.

- There are 138.35 million (13.8 Crore) operational land holdings in India. In comparison to 2005-06, there was an increase of 7% in number of these holdings. Out of these 12.78% land holdings belong to women.

- The average size of operational holding in India is 1.15 ha. 85.01% operational land holdings in India are marginal holdings (below 2.00 ha). There are 14.29% semi-medium and 3.7% large holdings.
- Highest number of operational land holdings in India are in Uttar Pradesh, followed by Bihar, Maharashtra and Andhra Pradesh. Lowest land holdings in India are in Chandigarh. However, in terms of operated area, the largest contribution comes from Rajasthan followed by Maharashtra. Chandigarh constituted the lowest number of operational holdings as well as the operated area in the country in 2010-11.

Agricultural credit in India

Agricultural credit is considered as one of the most basic inputs for conducting all agricultural development programmes. In India, there is an immense need for proper agricultural credit as Indian farmers are very poor. From the very beginning, the prime source of agricultural credit in India was moneylenders.

After independence, the Government adopted the institutional credit approach through various agencies like co-operatives, commercial banks, regional rural banks etc. to provide adequate credit to farmers, at a cheaper rate of interest. Moreover, with growing modernisation of agriculture during the post-green revolution period, the requirement of agricultural credit has increased further in recent years.

Types of agricultural credit

Considering the period and purpose of the credit requirement of the farmers of the country, agricultural credit in India can be classified into three major types

- **Short term credit:** The Indian farmers require credit to meet their short term needs viz., purchasing seeds, fertilizers, paying wages to hired workers etc. for a period of less than 15 months. Such loans are generally repaid after harvest.
- **Medium-term credit:** This type of credit includes credit requirement of farmers for a medium period ranging between 15 months and 5 years and it is required for purchasing cattle, pumping sets, other agricultural implements etc. Medium-term credits are normally larger in size than short term credit.
- **Long term credit:** Farmers also require finance for a long period of more than 5 years just for the purpose of buying additional land or for making any permanent improvement on land like the sinking of wells, reclamation of land, horticulture etc. Thus, the long term credit requires sufficient time for the repayment of such loan.

Sources of agriculture credit

Apart from the moneylenders, cooperative credit sources and the government, nowadays, the long term and short term credit needs of institutions are also being met by National Bank for Agricultural and Rural Development (NABARD).

Sources of agricultural credit can be broadly classified into institutional and non-institutional sources. Non-Institutional sources include moneylenders, traders and commission agents,

relatives and landlords, but institutional sources include co-operatives, commercial banks including the SBI Group, RBI and NABARD.

Commercial banks

In the initial period, the commercial banks of our country have played a marginal role in advancing rural credit. With the help of “village adoption scheme” and service area approach the commercial banks started to meet the credit and other requirements of the farmers. They also sponsored various regional rural banks for extending credit to small and marginal farmers and rural artisans just to save them from the clutches of village moneylenders.

Commercial banks are finding difficulty in advancing loans to the farmers particularly in respect of lending techniques, security, recovery etc. and are expected to overcome these gradually. But the commercial banks are not very much interested to advance loan to small and marginal farmers.

Government:

Another important source of agricultural credit is the Government of our country. These loans are known as taccavi loans and are lend by the Government during emergency or distress like famine, flood etc. The rate of interest charged against such loan is as low as 6 per cent. During 1990-91, the state Governments had advanced nearly Rs 350 crore as a short-term loan to agriculture. But the taccavi loan failed to become very much popular due to official red-tapism and corruption.

Credit facility to farmers:

Kissan credit card: The Kissan Credit Card (KCC) scheme was launched in 1998 with the aim of providing short-term formal credit to farmers. Owner cultivators, as well as tenant farmers, can avail loans to meet their agricultural needs under this scheme at attractive rates of interest. The government has also simplified the application process to increase interest among farmers. Repayment is also simplified and dependent on the harvesting season, reducing the farmers’ debt burden.

Investment loan: Loan facility to the farmers is available for investment purposes in the areas viz. Irrigation, Agricultural Mechanization, Land Development, Plantation, Horticulture and Post-Harvest Management.

Interest subvention scheme: The interest subvention scheme for farmers aims at providing short term credit to farmers at the subsidised interest rate. The policy came into force with effect from Kharif 2006-07. The scheme is being implemented for the year 2018-19 and 2019-20.

The interest subvention will be given to Public Sector Banks (PSBs), Private Sector Banks, Cooperative Banks and Regional Rural Banks (RRBs) on use of own funds and to NABARD for refinancing to RRBs and Cooperative Banks.

The Interest Subvention Scheme is being implemented by NABARD and RBI.

Problems regarding Agricultural credit in India

- **Insufficiency:** In spite of the expansion of rural credit structure, the volume of rural credit in the country is still insufficient as compared to its growing requirement arising out of the increase in prices of agricultural inputs.
- **Inadequate amount of sanction:** The amount of loan sanctioned to the farmers by the agencies is also very much inadequate for meeting their different aspects of agricultural operations. Considering the amount of loan sanctioned as inadequate and insignificant, the farmers often divert such loan for unproductive purposes and thereby dilute the very purpose of such loan.
- **Lesser attention of poor farmers:** Rural credit agencies and its schemes have failed to meet the needs of the small and marginal farmers. Thus, lesser attention has been given on the credit needs of the needy farmers whereas the comparatively well-to-do farmers are getting more attention from the credit agencies for their better creditworthiness.
- **Inadequate institutional coverage:** In India, the institutional credit arrangement continues to be inadequate as compared to its growing needs. The development of co-operative credit institutions like Primary agricultural credit societies, land development banks, commercial banks and regional rural banks, have failed to cover the entire rural farmers of the country.
- **Red tapism:** Institutional agricultural-credit is subjected to red-tapism. Credit institutions are still adopting cumbersome rules and formalities for advancing loan to farmers which ultimately force the farmers to depend more on costly non-institutional sources of credit.

Solutions

- To monitor the taccavi loan offered by the Government in a serious manner.

- Co-operative credit societies should be organised to make it efficient and purposeful for delivering the best in terms of rural credit. Moreover, these societies may be transformed into a multi-purpose society with sufficient funding capacity.
- Middlemen existing between credit agencies and borrowers should be eliminated.
- Reserve Bank of India should arrange sufficient fund so that long term loans can be advanced to the farmers.
- Power and activities of the Mahajans and moneylenders should be checked so as to declare an end to the exploitation of farmers.
- The banks should adopt procedural simplification for credit delivery through rationalisation of its working pattern.
- In order to check the fraud practices adopted by the farmer, for getting loans from different agencies by showing same tangible security, a credit card should be issued against each farmer which will show the details about the loans taken by them from different agencies.
- Credit should also monitor the actual utilisation of loans by developing an effective supervisory mechanism.

4.Problems of Agricultural Labour in India

As we are aware that near about 53% population of India is engaged in agricultural activities. But agriculture in India is still at mercy of monsoon. Here, the condition of the farmers and agricultural labourers depend on the intensity of monsoon. If monsoon is good then crop is good and vice-versa. Agriculture labour is counted in the category of unorganized sector, so their income is not fixed. Hence they are living an insecure and underprivileged life and earning just Rs. 150/day along with full uncertainty.

The agricultural labourers are one of the most exploited and oppressed classes in rural hierarchy.

Problems of Agriculture Labour:

1. **Marginalisation of Agricultural Workers.** The workforce in agriculture (cultivators plus agricultural labourers) was 97.2 million in 1951 and this rose to 185.2 million in 1991. As against this, the number of agricultural labourers rose from 27.3 million in 1951 to 74.6 million in 1991. This implies that (i) the number of agricultural labourers increased by almost three times over the period from 1951 to 1991; Agricultural labourers increased from 28 per cent in 1951 to 40 per cent in 1991. These facts indicate the fast pace of casualisation of workforce in agriculture in India. Moreover, the share of agriculture and allied activities in GDP at factor cost has consistently declined over the years - from 55.3 per cent in 1950-51 to 37.9 per cent in 1980-81 (at 1999-2000 prices) and further to 14.0 per cent in 2011-12 (at 2004-05 prices).
2. **Wages and Income.** Agricultural wages and family incomes of agricultural workers are very low in India. With the advent of the Green Revolution, money wage rates started increasing. However, as prices also increased considerably, the real wage rates did not increase accordingly. Currently labours are getting around Rs. 150/day under the MGNREGA in rural areas.
3. **Employment and Working Conditions.** The agricultural labourers have to face the problems of unemployment and underemployment. For a substantial part of the year, they have to remain unemployed because there is no work on the farms and alternative sources of employment do not exist.

4. **Indebtedness.** In the absence of banking system in the rural areas and trial process of sanction by the commercial banks, farmers prefers to take loans from un institutional sources like Sahukars (moneylenders), landlords at the very high rate (in some cases at 40% to 50%) . This exorbitant rate traps in the vicious circle of debt.
5. **Low Wages for women in Agricultural Labour.** Female agricultural workers are generally forced to work harder and paid less than their male counterparts.
6. **High Incidence of Child Labour.**Incidence of child labour is high in India and the estimated number varies from 17.5 million to 44 million. It is estimated that one-third of the child workers in Asia are in India.
7. **Increase in Migrant Labour.** Green Revolution significantly increased remunerative wage employment opportunities in pockets of assured irrigation areas while employment opportunities nearly stagnated in the vast rain fed semi-arid areas.

Measures Taken by the Government

1. **Minimum Wages Act.** The Minimum Wages Act was passed as long back as in 1948 and since then the necessity of applying it to agriculture has been constantly felt. Means the Act is not applicable to agricultural sector?
2. **Abolition of Bonded Labour.** Since Independence, attempts have been made to abolish the evil of bonded labour because it is exploitative, inhuman and violative of all norms of social justice. In the chapter on Fundamental Rights in the Constitution of India, it has been stated that trading in humans and forcing them to do *begar* is prohibited and can invite punishment under the law.
3. **Provision of housing sites.** Laws have been passed in several States for providing house sites in villages to agricultural workers.
4. **Special schemes for providing employment.** Rural Employment (CSRE), National Rural Employment Jawahar Gram Samridhi Yojana (JGSY), and National Food for Work Programme (NFFWP), Mahatma Gandhi Rural Employment Guarantee Act MGNREGA
5. **Special agencies for development.**Special agencies - Small Farmers Development Agency (SFDA) and Marginal Farmers and Agricultural Labourers Development Agency (MFAL) - were created in 1970-71 to solve the problems of Agriculture labour of the country.

Contractual Farming

Contract farming involves agricultural production being carried out on the basis of an agreement between the buyer and **farm** producers. Sometimes it involves the buyer specifying the quality required and the price, with the **farmer** agreeing to deliver at a future date.

What is contract farming

Contract farming can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products. Typically, the farmer agrees to provide agreed quantities of a specific agricultural product. These should meet the quality standards of the purchaser and be supplied at the time determined by the purchaser. In turn, the buyer commits to purchase the product and, in some cases, to support production through, for example, the supply of farm inputs, land preparation and the provision of technical advice.

Contract farming business models

- **Informal model** - This model is the most transient and speculative of all contract farming models, with a risk of default by both the promoter and the farmer” (van Gent, n.d., p.5). However, this depends on the situation: interdependence of contract parties or long-term trustful relationships may reduce the risk of opportunistic behaviour. Special features of this CF model are:
 - Small firms conclude simple, informal seasonal production contracts with smallholders.
 - The success often depends on the availability and quality of external extension services.
 - Embedded services, if at all provided, are limited to the delivery of basic inputs, occasionally on credit; advice is usually limited to grading and quality control.
 - Typical products: requiring minimal processing/ packaging, vertical coordination; e.g. fresh fruit/ vegetables for local markets, sometimes also staple crops.
- **Intermediary model** - In this model, the buyer subcontracts an intermediary (collector, aggregator or farmer organisation) who formally or informally contracts farmers

(combination of the centralised/ informal models). Special characteristics of this CF model are:

- The intermediary provides embedded services (usually passing through services provided by buyers against service charges) and purchases the crop.
 - This model can work, if well-designed and if incentive-structures are adequate and control mechanisms are in place.
 - This model can bear disadvantages for vertical coordination and for providing incentives to farmers (buyers may lose control of production processes, quality assurance and regularity of supplies; farmers may not benefit from technology transfer; there is also a risk of price distortion and reduced incomes for farmers).
- **Multipartite model** - This model can develop from the centralised or nucleus estate models, e.g. following the privatisation of parastatals. It involves various organisations such as governmental statutory bodies alongside private companies and sometimes financial institutions. Special features:
 - This model may feature as joint ventures of parastatals/ community companies with domestic/ foreign investors for processing.
 - The vertical coordination depends on the discretion of the firm. Due attention has to be paid to possible political interferences.
 - This model may also feature as farm-firm arrangement complemented by agreements with 3rd party service providers (e.g. extension, training, credits, inputs, logistics).
 - Separate organisations (e.g. cooperatives) may organise farmers and provide embedded services (e.g. credits, extension, marketing, sometimes also processing).
 - This model may involve equity share schemes for producers.
 -
 - **Centralized model** - In this model, the buyers' involvement may vary from minimal input provision (e.g. specific varieties) to control of most production aspects (e.g. from land preparation to harvesting). This is the most common CF model, which can be characterised as follows:

- The buyer sources products from and provides services to large numbers of small, medium or large farmers.
- The relation/ coordination between farmers and contractor is strictly vertically organised.
- The quantities (quota), qualities and delivery conditions are determined at the beginning of the season.
- The production and harvesting processes and qualities are tightly controlled, sometimes directly implemented by the buyer's staff.
- Typical products: large volumes of uniform quality usually for processing; e.g. sugar cane, tobacco, tea, coffee, cotton, tree crops, vegetables, dairy, poultry.
- **Nucleus estate model** - In this model, the buyer sources both from own estates/ plantations and from contracted farmers. The estate system involves significant investments by the buyer into land, machines, staff and management. This CF model can be characterised as follows:
 - The nucleus estate usually guarantees supplies to assure cost-efficient utilisation of installed processing capacities and to satisfy firm sales obligations respectively.
 - In some cases, the nucleus estate is used for research, breeding or piloting and demonstration purposes and/ or as collection point.
 - The farmers are at times called 'satellite farmers' illustrating their link to the nucleus farm. This model was in the past often used for state owned farms that re-allocated land to former workers. It is nowadays also used by the private sector as one type of CF. This model is often referred to as "outgrower model".
 - Typical products: perennials

Advantages

Contract farming is looking towards the benefits both for the farm-producers as well as to the agro-processing firms. **Producer/farmer**

- Makes small scale farming competitive - small farmers can access technology, credit, marketing channels and information while lowering transaction costs
- Assured market for their produce at their doorsteps, reducing marketing and transaction costs

- It reduces the risk of production, price and marketing costs.
- Contract farming can open up new markets which would otherwise be unavailable to small farmers.
- It also ensures higher production of better quality, financial support in cash and /or kind and technical guidance to the farmers.
- In case of agri-processing level, it ensures consistent supply of agricultural produce with quality, at right time and lesser cost.

Agri-based firms

- Optimally utilize their installed capacity, infrastructure and manpower, and respond to food safety and quality concerns of the consumers.
- Make direct private investment in agricultural activities.
- The price fixation is done by the negotiation between the producers and firms.
- The farmers enter into contract production with an assured price under term and conditions.

Challenges

- Contract farming arrangements are often criticized for being biased in favor of firms or large farmers, while exploiting the poor bargaining power of small farmers.
- Problems faced by growers like undue quality cut on produce by firms, delayed deliveries at the factory, delayed payments, low price and pest attack on the contract crop which raised the cost of production.
- Contracting agreements are often verbal or informal in nature, and even written contracts often do not provide the legal protection in India that may be observed in other countries . Lack of enforceability of contractual provisions can result in breach of contracts by either party.
- Single Buyer – Multiple Sellers (Monopsony) .
- Adverse gender effects - Women have less access to contract farming than men.

Module 4 Industrial Economy of India

1.Features of Indian Industry

1. Co-Existence of Public and Private Sector:

Indian business environment is characterized by the co-existence of both public and private sector in respect of its participation in various economic activities in the country. Accordingly, the various economic policies of the country can promote the development of both the sectors in different spheres of activities.

2. Low Income Level:

Another features of Indian business environment is that it has to face low income level of the people in general as an important economic parameter for determining its economic activities.

3. Poor Rate of Capital Formation:

Capital deficiency is one of the important features of the Indian business environment. Both the amount of capital available per head and the present rate of capital formation in India is very low. Moreover, this low level of capital formation in India is also due to weakness of the inducement to invest and also due to low propensity and capacity to save. Thus under this present feature, the business environment of the country never faces adequate incentive towards faster development of the country.

4. Low Level of Technology:

Prevalence of low level of technology is another important feature of Indian business environment. The business environment of the country is thus suffering from technological backwardness. Obsolete techniques of production are largely being applied in both agriculture and industrial sector of the country.

Sophisticated modern technology is being applied in production units at a very limited scale as it is very much expensive. Moreover, the huge unskilled and untrained labour force is also an important impediment towards technological modernization of the country.

5. Under-Utilization of Capacity:

Under-utilization of productive capacity of Indian industries is another important feature of Indian business environment. As a result of this under utilization, the industries in India are suffering from higher unit costs and low profitability syndrome.

6. Lack of Diversification:

The business environment of the country is also subjected to the problem of lack of diversification in its industry, trade and other related activities.

7. Financial Market:

Indian business environment is also supported by under developed financial market. Financial market is suffering from lack of buoyancy and there is also the problem of lack of adequate and free uninterrupted flow of institutional credit towards industrial and other business units.

8. Industrial Dispute and Slow Pace of Labour Reforms:

Another important feature of business environment is the growing industrial dispute leading to strikes and lock-outs in growing number of units as a result of irrational trade union activities. Moreover, the slow pace of labour reforms introduced by the Government has affected the business environment of the country.

9. Government Interference:

Business environment in the country is also affected by unwanted government interference in various spheres of business and industrial activities. There is lack of single window clearance and lack of administration efficiency in respect of industrial licensing. Thus the business enterprises have to face the problem of red-tapism, harassment, corruption, undue delay etc. which ultimately interrupts the promotion of smooth business environment in the country.

10. Extent of Market:

Another feature of business environment of India is the poor extent of market in the after math of globalization and international competition faced by the country. The business enterprises of the country is also suffering from lack of diversification of its export market.

However, considering the natural advantage available in the country, the country would be able to diversify its export market particularly in respect of its agro-processed industries, services sector, information technology sectors etc.

11. Transportation Bottle Neck:

Another important feature of business environment of the country is that it is subjected to frequent transport bottle-neck. Although the country has developed a wide network of transportation system throughout the country but its frequent interruption as a result of natural calamities like flood, landslides etc. and insurgency has been resulting a serious blow to the business environment of the country.

12. Trady Flow of Foreign Investment:

Promotion of business environment also depends on the smooth flow of foreign investment in various sectors. But the country is suffering from trady flow of foreign investment, which goes against the promotion of business environment in the country.

13. Disturbed Law and Order Conditions:

Another important feature of business environment in India is its disturbed law and order conditions in some particular regions leading unbalanced growth where smooth flow of business is interrupted. Thus the business environment in a vast country like India is subjected to its diversified features.

2 What is the definition of MSME?

The Government of India has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in terms of which the definition of micro, small and medium enterprises is as under:

- Enterprises engaged in the manufacture or production, processing or preservation of goods as specified below:
 - A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh;
 - A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore;
 - A medium enterprise is an enterprise where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore. In case of the above enterprises, investment in plant and machinery is the original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006.
- Enterprises engaged in providing or rendering of services and whose investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006 are specified below.
 - A micro enterprise is an enterprise where the investment in equipment does not exceed Rs. 10 lakh;
 - A small enterprise is an enterprise where the investment in equipment is more than Rs.10 lakh but does not exceed Rs. 2 crore;
 - A medium enterprise is an enterprise where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

PSU

PSU stands for Public Sector Undertakings. They are also often come across by the term Public Sector Enterprises. PSUs are state-owned enterprises in India. Moreover, the union government of India or any of the many state and territorial governments own the PSUs.

There are two different classifications of public sector undertakings:

- The Central Public Sector Enterprises (CPSEs) which the Central Government controls.
- The State Level Public Enterprises (SLPEs) which the State Governments control.

Features of PSUs in Economics

The main characteristics of PSUs in economics are as follows:

- State Ownership:** Public sector undertakings are in full ownership and control of the Government or some other public authority. For instance, the Central Government owns the Reserve Bank of India. Similarly, the Government of Delhi State owns the Delhi Transport Corporation.
- Government Control:** The [governments of India](#) not only own but also control the functions of the PSUs in India.
- Service Motive:** The primary aim and objective of a public sector undertaking (PSU) are to offer quality service to the public. In order to serve the people, it may even incur losses. For instance, the Food Corporation of India provides food grains to the public at subsidised prices.
- State Financing:** The Government provides the capital and funds through appropriations from its budget. The government may also provide loans from time to time with the aim to improve the overall functioning of the PSU.
- Public Accountability:** Public sector undertakings (or PSUs) are accountable to the public at large. Their performance and results are very critical to the public. The Comptroller and Auditor General of India conduct the annual audit of these undertakings. Moreover, their annual reports are subject to discussion in the Parliament or the State legislature.

- f. **Bureaucratic Management:** The management of these PSUs is bureaucratic in nature. Furthermore, this means that certain Government rules and regulations govern their operations.

List of Indian PSUs in Economics

There are 8 Maharatnas, 16 Navratnas and 74 Miniratnas as on 13th September of the year 2017. Some of the Maharatnas are as follows.

- i. National Thermal Power Corporation (NTPC)
- ii. Coal India Limited (CIL)
- iii. Gas Authority of India Limited (GAIL)
- iv. Oil and Natural Gas Corporation (ONGC)
- v. Bharat Heavy Electricals Limited (BHEL)

Further, some of the Navratnas are as follows.

- i. Hindustan Aeronautics Limited (HAL)
- ii. National Aluminium Company (NALCO)
- iii. Oil India Limited (OIL)
- iv. Power Finance Corporation (PFC)

Finally, some of the Miniratnas are as follows:

- i. Airport Authority of India (AAI)
- ii. Bridge and Roof
- iii. Cochin Shipyard (CSL)

Objectives of PSUs in Economics

Furthermore, some of the objectives that PSUs aim are accomplishing are as follows.

- Promoting rapid economic development with emphasis on creating and expanding infrastructure.
- PSUs also aim at generating financial resources for the development of the economy.
- Moreover, creating employment opportunities is one of the primary goals of PSUs.

- Promoting balanced regional growth.
- Encouraging and developing small scale and ancillary industries in India.
- Accelerate export promotion.
- Also, accelerate import substitution.
- Promoting redistribution of wealth and income.

Roles of PSUs in Economics and Economic Development

- I. **Capital and Public Sector Formation:** The role of public sector in collecting saving and investing them during the planning era is very important. Moreover, during the first and second five-year plan it was 54% of the total investment. Furthermore, we see a decline to 24.6 % in the year 2010-11.
- II. **Balanced Regional Development:** Public sector undertakings locate their plants in backward parts of the country. These areas lack basic industrial and civic facilities like electricity, water supply, township and manpower. Public enterprises then develop these facilities, thereby bringing about a complete transformation. Transformation in the socio-economic life of the people in these regions. Moreover, steel plants of Bhilai, fertilizer factory at Sindri, are few examples of the development of backward regions by the public sector.
- III. **Employment Generation:** Public sector creates millions of jobs to fight the obvious problem of unemployment in India. However, the number of people without employment in March 2011 was 150 lakh. Furthermore, the public sector contributes a lot towards the improvement of working and living conditions of workers.
- IV. **Promotion of Research and Development:** Since most of the public enterprises are engaged in high technology and heavy industries, they undertake research and development programmes. Public sector lays the strong and wide base for self-reliance in the field of technical know-how. Also, there is a strong emphasis on the maintenance and operation of sophisticated industrial plants, machinery and equipment in the country. Moreover, the expenditure on research and development reduces the cost of production.
- V. **Export Promotion and Foreign Exchange Earnings:** Some public enterprises have done much to promote India's export. The State Trading Corporation (STC), the Minerals and Metals Trading Corporation (MMTC), Hindustan Steel Ltd., the Bharat Electronics Ltd., the Hindustan Machine Tools, etc., have done very well in export promotion

Problems faced by PSUs in India

Some of the critical problems of Indian PSUs in Economics are as follows.

- Poor policy making and poor execution
- Over-staffing
- Very high operation costs
- Lack of a realistic and proper pricing policy
- Lack of vision and motivation for self-improvement
- Wastage of resources or under-utilization of resources

To conclude, the role of PSUs in macroeconomics are as follows.

Being the largest commercial enterprises in the country, PSUs provide a huge leverage to the government (their controlling shareholder) to intervene in the economy. Their intervention is either directly or indirectly to achieve the desired socio-economic objectives. PSUs play a key role in steering the national economy in the right direction.

Multinational Corporations (MNCs): Meaning, Features and Advantages

A multinational company is one which is incorporated in one country (called the home country); but whose operations extend beyond the home country and which carries on business in other countries (called the host countries) in addition to the home country.

It must be emphasized that the headquarters of a multinational company are located in the home country.

Features of Multinational Corporations (MNCs):

Following are the salient features of MNCs:

(i) Huge Assets and Turnover:

Because of operations on a global basis, MNCs have huge physical and financial assets. This also results in huge turnover (sales) of MNCs. In fact, in terms of assets and turnover, many MNCs are bigger than national economies of several countries.

(ii) International Operations Through a Network of Branches:

MNCs have production and marketing operations in several countries; operating through a network of branches, subsidiaries and affiliates in host countries.

(iii) Unity of Control:

MNCs are characterized by unity of control. MNCs control business activities of their branches in foreign countries through head office located in the home country. Managements of branches operate within the policy framework of the parent corporation.

(iv) Mighty Economic Power:

MNCs are powerful economic entities. They keep on adding to their economic power through constant mergers and acquisitions of companies, in host countries.

(v) Advanced and Sophisticated Technology:

Generally, a MNC has at its command advanced and sophisticated technology. It employs capital intensive technology in manufacturing and marketing.

(vi) Professional Management:

A MNC employs professionally trained managers to handle huge funds, advanced technology and international business operations.

(vii) Aggressive Advertising and Marketing:

MNCs spend huge sums of money on advertising and marketing to secure international business. This is, perhaps, the biggest strategy of success of MNCs. Because of this strategy, they are able to sell whatever products/services, they produce/generate.

(viii) Better Quality of Products:

A MNC has to compete on the world level. It, therefore, has to pay special attention to the quality of its products.

Advantages and Limitations of MNCs:

(i) Employment Generation:

MNCs create large scale employment opportunities in host countries. This is a big advantage of MNCs for countries; where there is a lot of unemployment.

(ii) Automatic Inflow of Foreign Capital:

MNCs bring in much needed capital for the rapid development of developing countries. In fact, with the entry of MNCs, inflow of foreign capital is automatic. As a result of the entry of MNCs, India e.g. has attracted foreign investment with several million dollars.

(iii) Proper Use of Idle Resources:

Because of their advanced technical knowledge, MNCs are in a position to properly utilise idle physical and human resources of the host country. This results in an increase in the National Income of the host country.

(iv) Improvement in Balance of Payment Position:

MNCs help the host countries to increase their exports. As such, they help the host country to improve upon its Balance of Payment position.

(vi) Technical Development:

MNCs carry the advantages of technical development to host countries. In fact, MNCs are a vehicle for transference of technical development from one country to another. Because of MNCs, poor host countries also begin to develop technically.

(vii) Managerial Development:

MNCs employ latest management techniques. People employed by MNCs do a lot of research in management. In a way, they help to professionalize management along latest lines of management theory and practice. This leads to managerial development in host countries.

(viii) End of Local Monopolies:

The entry of MNCs leads to competition in the host countries. Local monopolies of host countries either start improving their products or reduce their prices. Thus MNCs put an end to exploitative practices of local monopolists. As a matter of fact, MNCs compel domestic companies to improve their efficiency and quality.

In India, many Indian companies acquired ISO-9000 quality certificates, due to fear of competition posed by MNCs.

(ix) Improvement in Standard of Living:

By providing super quality products and services, MNCs help to improve the standard of living of people of host countries.

(x) Promotion of international brotherhood and culture:

MNCs integrate economies of various nations with the world economy. Through their international dealings, MNCs promote international brotherhood and culture; and pave way for world peace and prosperity.

Limitations of MNCs from the Viewpoint of Host Country:

(i) Danger for Domestic Industries:

MNCs, because of their vast economic power, pose a danger to domestic industries; which are still in the process of development. Domestic industries cannot face challenges posed by MNCs. Many domestic industries have to wind up, as a result of threat from MNCs. Thus MNCs give a setback to the economic growth of host countries.

(ii) Repatriation of Profits:

(Repatriation of profits means sending profits to their country).

MNCs earn huge profits. Repatriation of profits by MNCs adversely affects the foreign exchange reserves of the host country; which means that a large amount of foreign exchange goes out of the host country.

(iii) No Benefit to Poor People:

MNCs produce only those things, which are used by the rich. Therefore, poor people of host countries do not get, generally, any benefit, out of MNCs.

(iv) Danger to Independence:

Initially MNCs help the Government of the host country, in a number of ways; and then gradually start interfering in the political affairs of the host country. There is, then, an implicit danger to the independence of the host country, in the long-run.

(v) Disregard of the National Interests of the Host Country:

MNCs invest in most profitable sectors; and disregard the national goals and priorities of the host country. They do not care for the development of backward regions; and never care to solve chronic problems of the host country like unemployment and poverty.

(vi) Misuse of Mighty Status:

MNCs are powerful economic entities. They can afford to bear losses for a long while, in the hope of earning huge profits-once they have ended local competition and achieved monopoly. This may be the dirties strategy of MNCs to wipe off local competitors from the host country.

(vii) Careless Exploitation of Natural Resources:

MNCs tend to use the natural resources of the host country carelessly. They cause rapid depletion of some of the non-renewable natural resources of the host country. In this way, MNCs cause a permanent damage to the economic development of the host country.

(viii) Selfish Promotion of Alien Culture:

MNCs tend to promote alien culture in host country to sell their products. They make people forget about their own cultural heritage. In India, e.g. MNCs have created a taste for synthetic food, soft drinks etc. This promotion of foreign culture by MNCs is injurious to the health of people also.

(ix) Exploitation of People, in a Systematic Manner:

MNCs join hands with big business houses of host country and emerge as powerful monopolies. This leads to concentration of economic power only in a few hands. Gradually these monopolies make it their birth right to exploit poor people and enrich themselves at the cost of the poor working class.

3.Controversy over Land Acquisition for Industry

The government's acquisition of land for projects has been facing protests across the country, the violence in Uttar Pradesh being only the latest. What is Land Acquisition? Land acquisition is the process by which the government forcibly acquires private property for public purpose without the consent of the land-owner. It is thus different from a land purchase, in which the sale is made by a willing seller.

How is this process governed? Land Acquisition is governed by the Land Acquisition Act, 1894. The government has to follow a process of declaring the land to be acquired, notify the interested persons, and acquire the land after paying due compensation. Various state legislatures have also passed Acts that detail various aspects of the acquisition process.

Land is a state subject. Why is Parliament passing a law? Though land is a state subject, "acquisition and requisitioning of property" is in the concurrent list. Both Parliament and state legislatures can make laws on this subject.

Is there a new Act being proposed? The government had introduced a Bill to amend this Act in 2007. That Bill lapsed in 2009 at the time of the general elections. The government has stated its intent to re-introduce a similar Bill, but has not yet done so.

What are the major changes being proposed? There are significant changes proposed in the 2007 Bill with regard to (a) the purpose for which land may be acquired; (b) the amount of compensation to be paid; (c) the process of acquisition; (d) use of the land acquired; and (e) dispute settlement mechanisms. We explain these briefly below.

Purpose: Currently, land may be acquired for a range of uses such as village sites, town or rural planning, residential purposes for poor or displaced persons, planned development (education, housing, health, slum clearance), and for state corporations. Land may also be acquired for use by private companies for the above purposes or if the work "is likely to prove useful to the public". The 2007 Bill had a narrower list: (a) for strategic naval, military or air force purposes; (b) for public infrastructure projects; and (c) for any purpose useful to the general public if 70% of the land has been purchased from willing sellers through the free market.

Compensation: The current Act requires market value to be paid for the land and any other property on it (buildings, trees, irrigation work etc) as well as expenses for compelling the person change place of residence or business. It explicitly prohibits taking into account the intended use

of land while computing market value. The 2007 Bill requires payment of the highest of three items: the minimum value specified for stamp duty, the average of the top 50 per cent by price of land sale in the vicinity, and the average of the top 50 pc of the land purchased for the project from willing sellers. For computing recent land sale, the intended land use is to be used. Thus, agricultural land being acquired for an industrial project will be paid the price of industrial land.

Process of acquisition: Several changes are proposed, including the requirement of a social impact assessment. Any project that displaces more than 400 families (200 in hilly, tribal and desert areas) will require an SIA before the acquisition is approved.

Use of land acquired: The 2007 Bill requires the land acquired to be used for that purpose within five years. If this condition is not met, the land reverts to the government (it is not returned to the original land owners). If any acquired land is transferred to another entity, 80 pc of the capital gains has to be shared with the original land-owners and their legal heirs.

Dispute Settlement: Currently, all disputes are resolved by civil courts, which results in delays. The 2007 Bill sets up Land Acquisition Compensation Dispute Resolution Authority at the state and national levels. These authorities will have the power of civil courts, and will adjudicate disputes related to compensation claims.

Does the proposed Bill address the major issues? The Bill narrows the uses for which land may be acquired. It also changes the compensation due and links that to the market price for which land is to be used. There could be significant changes in acquisition for use by private industry. Firstly, they would have to purchase at least 70 pc of the required land from willing sellers (presumably, at fair market price). Second, the compensation amount for the remaining (upto 30 pc of land) could be significantly higher than the current method. This would be at a premium to the average paid to the willing sellers, and it would be based on intended industrial or commercial use which usually commands a higher price than agricultural land. However, the effect on acquisition for projects such as highways and railways will not be significant, as there is no benchmark for price determination for such use.

4. Issues of Industrial Labour

Problem # 1. Surplus Labour Force:

Labour market in India is suffering from surplus labour force. A huge number of labourers are rendered surplus due to lack of adequate demand arising out of both primary, secondary and tertiary sector. Due to high rate of growth of population, a huge number of labour forces is continuously being added with the existing labour force leading to a huge surplus in the labour market.

Problem # 2. Unskilled Labour:

Another major problem of labour market in India is that there is a growing number of unskilled labourers in the country. In the absence of adequate vocational institutes, skill formation among the labour force in the country is very slow. This huge number of unskilled labourers find it difficult to become self employed and thus create a huge army of unemployed in the country.

Problem # 3. Lack of Absorption of Skilled Labour:

In India the absorption rate of skilled labour force is also very poor. A huge number of technically educated youths after completing their technical education like engineering, vocational courses etc. are finding it difficult to get themselves absorbed in the secondary sector, leading to a huge problem of educated unemployment in India.

Problem # 4. Imperfections:

Labour market in India is also suffering from some imperfections such as lack of adequate information regarding jobs, lack of suitable agency for the proper utilisation of labour force, child labour practices, lack of proper manpower planning etc. Such imperfections have been resulting in various hurdles in the path of absorption of labour force smoothly.

Problem # 5. Work Culture:

Work culture among the Indian labour force is not at all good. Whatever work force is absorbed in various productive sectors it is not adhered to healthy work culture. This has been resulting in lesser economic surplus in the production system which restricts indirectly its absorption capacity in future.

Problem # 6. Militant Unionism:

Labour market in India is also facing the problem of militant unionism. In some productive sectors and that too in some particular states, trade unions are not adhering to healthy practices. This has led to militancy in the union structure and its activities, which is detrimental for the greater interest of the nation.

Problem # 7. Unemployment:

Labour market is also facing a serious problem of unemployment. A huge number of work forces of our country remain partially or wholly unemployed throughout the year or some part of the season. This has led to the problems like disguised unemployment, seasonal unemployment, general unemployment and educated unemployment.

In the absence of adequate growth of employment avenues, unemployment problem in the country is gradually becoming much more alarming day by day.

Moreover, due to the policy of downsizing followed both in public and private sector and also in government administration and services sector, the problem of unemployment is becoming much more acute. This has also been putting much pressure on the labour market of the country.

Problem # 8. Lack of Labour Reforms:

Labour market in India is also suffering from lack of adequate labour reforms provision. Economic reforms introduced in the country during the 1990s have changed economic scenario of the country. But the country is lagging behind in adopting necessary labour reforms which are rational and important under the present context.

We have seen that the labour market in India has been suffering from the aforesaid serious problems. Thus the Government should chalk out proper policy for bringing necessary reforms in the labour market for the greater interest of the country as well as for the interest of labour force (both working and non-working) in general.

5.Capital Formation:

-

Meaning and Definition:

Capital is one of the important factors which governs the quantity and the composition of output in a country. If there are increasing resources of capital in a country, it results in technological discoveries, raises productivity of labor, increases the rate of economic development and provides higher standard of living for the masses.

In case, there is deficiency of capital assets such as machinery equipment tools, dams, roads, railways, bridges, etc., etc., the country then remains trapped in the vicious circle of poverty. *Capital accumulation/formation*, thus, in brief is at the very core of economic development.

It may here be remembered that though capital occupies a central position, to the process of development yet, we cannot ignore the other factors like education, effective government, social Justice, attitude of the people to work, etc., etc. These factors play a significant role in the economic progress of a country.

Economic development is thus a multidimensional phenomenon which is the result of a combination of social, cultural, political, and economic factors. To quote **Ranger Nurkse:**

"Economic development has much to do with human endowments, social attitudes, political conditions, and historical accidents. Capital is necessary but not a sufficient condition of economic progress".

Capital Formation:

Capital formation is the process of building up the capital stock of a country through investing in productive plants and equipments. Capital formation, in other words, involves the increasing of capital assets by efficient utilization of the available and human resources of the country.

Sources of Capital Formation and Importance:

The stock of capital goods can be built up and increased through two main sources:

(1) Domestic Resources and (2) External Resources.

(1) Domestic Resources:

Domestic resources play an important part in promoting development activities in the country.

These sources in brief are:

(i) Voluntary Savings. There are two main sources of voluntary savings (a) households (b) business sector. As regards the volume of personal savings of the households. It depends upon various factors such as the income per capita, distribution of wealth, availability of banking facilities, value system of the society, etc.

In the under-developed countries, the saving potential of the people is low as a greater number of them suffer from absolute poverty. So far as the rich section of the, society is concerned, they mostly spend their wealth on the purchase of real estates. luxury goods, or take it abroad to safe keeping. There is, therefore very little saving forthcoming from the high income group.

The business sector is an important source of voluntary savings in the less developed countries. They usually hesitate in assuming the risks associated with investment. The fear of nationalization and political instability further demands their incentive to save and invest in the country. The statistics of many underdeveloped countries indicate that both these sources hardly manage to save 15% of their GDP. This is not even sufficient to maintain the present standard of living of the masses.

(ii) Involuntary Savings. In the developing countries, the income per capita of the people is low. Their propensity to consume mainly due to demonstration effect is very high. As the flow of savings is inadequate to meet the capital needs of the country, the government, therefore adopts measures which restrict consumption and increase the volume of savings.

The traditional methods used for increasing the volumes of savings are (a) taxation (b) compulsory schemes for lending to the government. The two fiscal measures stated above are very sensitive and delicate: They should be devised and handled very carefully.

For instance, if the people of low and middle income groups are heavily taxed through various forms of taxation, their power, (whatever little) to save will be burdened with taxes. The tax structure is to be devised in such a manner that it should provide incentive to work, save and invest for various levels of income groups.

(iii) Government Borrowing. The volume of domestic savings can also be increased through government borrowing. The government issues long and short term bonds of various denominations and mobilizes saving from the general public as well as from the financial institutions.

In the developing countries, there are many obstacles which stand in the way of government's borrowing. For instance, the money and capital market is unorganized. The rural sector is not provided with adequate financial institution. People being illiterate prefer to invest their savings in gold, jewellery, etc. The government of developing countries should, therefore, evolve

a workable programme of mobilizing the savings of the people both in the urban and rural sectors.

(iv) Use of Idle Resources. In the developing countries of the world there are many resources which remain unutilized and underutilized. If they are properly tapped and diverted to productive purposes, the rate of capital formation can increase rapidly.

For instance, in most of the low income countries, there is a disguised unemployment in the rural sector. If the surplus farmers are employed at nominal wages in or near their villages for the construction of roads, tube-wells, canals, school buildings, etc., or their services are acquired on self-help basis for capital creating projects, they can be a valuable source of capital formation in the country.

(v) Deficit Financing. Deficit financing is regarded an important source of capital formation. In the developed countries this method is used for increasing effective demand and ensuring continued high levels of economic activity. In the less developed countries, it is used to meet the development and non development expenditure of the government.

(2) External Resources:

External resources has following types:

(i) Foreign Economic Assistance. There is a controversy over the impact of inflow of capital for the development of a country. It is argued that capital is one of the variable in the growth process. If the government of a country is ineffective and people are not receptive to social changes, the inflow of capital resources and technical assistance would go waste.

In case, the developing nations needing foreign capital and technical assistance have the will to absorb capital and technical knowledge and the social and political barriers are overcome, capital then becomes the touchstone of economic development. The main benefits of the foreign economic assistance, however, in brief are as under:

(a) Foreign loans bridge saving gap. In Pakistan, like most of the developing countries, the domestic saving average 14% of GDP. The low rate of saving is not sufficient to achieve the desired rate of growth in the country. Foreign loans supplement domestic savings and help in bridging the resource gap between the desired investment and the domestic savings.

(b) Close the trade gap. In Pakistan, the export earnings are persistently falling short of import requirements. The foreign, exchange gap caused by excess of import/export is being filled up with inflow of capital.

(c) Provides greater employment opportunities. The financing of various projects with the help of foreign assistance provides greater employment opportunities in a country.

(d) Increase in productivity of various economic sectors. The inflow of capital and technical know-how increases the productive capital of various sectors of the economy.

(e) Increase in real wages. The foreign resources help in increasing marginal productivity of labor in the recipient country. The real wages of the workers are thus increased with the help of foreign assistance.

(f) Provision of higher products. The foreign capital helps in the establishment of industries in the country. The inflow of technical knowledge improves the quantity and quality of manufactured goods and makes them available at lower prices to the domestic consumers.

(g) Increase in tax revenue. The profits earned on foreign investment are taxes by the government, The revenue of the state is thus increased.

(h) External economies. The inflow of foreign capital and advanced technology stimulates domestic enterprises. The firm avails of the benefits of external economies like that of training of labor, introduction of new technology, new machinery, etc., etc.

(ii) Donor Country and the Economic Assistance: Here a question can be asked .as to why the developed nations are kind in giving aid to the developing countries? According to the rich nations, the foreign aid is given for a combination of humanitarian and self-interest reasons:

(a) Humanitarian ground. If a country is faced with famine, drought, epidemic, diseases, earthquake etc., it is obligatory for the developed nations to help that country financially purely on humanitarian grounds. The rich countries are extending economic assistance in the form of grants to the poor nations of the world.

(b) Self-interest reasons. Foreign economic assistance is also provided on the following self interest reasons by the donor countries.

(a) The foreign aid may be given to protect the developing country from the influence of-other camp countries.

(b) The donor country may have surplus products. In order to check the fall in the prices of products in the domestic market and to maintain level of production, the surplus goods are exported to the needy countries on loan.

(c) Economic assistance is also provided by the. donor countries to remove the economic disparities among the nations of the world.

(d) Some advanced nations particularly the socialist countries provide financial and technical help for the propagation of political ideology in the capitalist developing countries.

(e) Foreign aid is also given for increasing the camp followers of the donor countries.

Module 5 Other Areas of Indian Economy

1. Money Supply and Inflation

Supplying the money in the market is the sole responsibility of the central bank of the country (Reserve Bank of India in case of India). RBI prints the currency and supplies money in the economy. Coins are minted by the Ministry of Finance but circulated by the RBI in the whole country. Supply of money decides the rate of inflation in the economy. If supply of money increases in the economy then inflation starts rising and vice versa.

The currency issued by the central bank is in fact a liability of the central bank and the government. In general therefore this liability must be backed by an equal value of assets consisting mainly of gold and foreign exchange reserves, especially in terms of high power foreign currencies.

In India money supply is done on the basis of **Minimum Reserve System since 1956**. The RBI required holding a reserve of Gold and foreign securities and it is empowered to issue currency to any extent. Since 1957, the Minimum Reserve System changed to **Gold reserve of Rs. 115 cr. and rupee securities of 85 cr.** Hence RBI needs to keep 200 cr. as security to print any amount of currency in the economy.

Monetary Aggregates according to RBI

- **M0 (Reserve Money):** Currency in circulation + Bankers' deposits with the RBI + 'Other' deposits with the RBI = Net RBI credit to the Government + RBI credit to the commercial sector + RBI's claims on banks + RBI's net foreign assets + Government's currency liabilities to the public – RBI's net non-monetary liabilities.
- **M1 (Narrow Money):** Currency with the public + Deposit money of the public (Demand deposits with the banking system + 'Other' deposits with the RBI).
- **M2:** M1 + Savings deposits with Post office savings banks.
- **M3 (Broad Money):** M1+ Time deposits with the banking system = Net bank credit to the Government + Bank credit to the commercial sector + Net foreign exchange assets of the

banking sector + Government's currency liabilities to the public – Net non-monetary liabilities of the banking sector (Other than Time Deposits).

- **M4 (Broad Money):** M3 + All deposits with post office savings banks (excluding National Savings Certificates).

Money Supply M3 in India increased to 112200.55 INR Billion in October from 110835.65 INR Billion in September of 2015. Money Supply M3 in India averaged 18279.23 INR Billion from 1972 until 2015, reaching an all time high of 112200.55 INR Billion in October of 2015 and a record low of 123.52 INR Billion in January of 1972. Money Supply M3 in India is reported by the Reserve Bank of India.

How to Measure Inflation in India

1. GDP Deflator: The GDP deflator is another indicator of inflation, which is often considered to be broader than the CPI and the WPI. The GDP deflator in most countries is obtained by using a variety of primary price indices. These are used to deflate individual components of the GDP valued at current prices (either from the production or the demand side estimates) to obtain volume estimates.

2. The GDP deflator is then defined implicitly as the ratio of the estimate at current prices to the one at constant prices. When this process is followed, the GDP deflator is legitimately recognized as a high quality measure of inflation. Nonetheless, given the delay in publication of national accounts it is seldom used as a headline indicator of inflation in a real-time setting.

3. Consumer Price Index: The overall CPI is meant to represent the cost of a representative basket of goods and services consumed by an average household. However, in India, the existing CPIs refer to specific segments of the population.

Types of CPI

1. Consumer Price Index for Agricultural Labourers (CPI-AW)

2. Consumer Price Index for Industrial Workers (CPI-IW)

3. Consumer Price Index for Urban Non-Manual Employees (CPI-UNME)

Consumer Price Index for Urban Non Manual Employees was earlier computed by Central Statistical Organisation. However this index has been discontinued since April 2008. The CPI (IW) and CPI (AL& RL) compiled is occupation specific and centre specific and are compiled by Labour Bureau.

This means that these index numbers measure changes in the retail price of the basket of goods and services consumed by the specific occupational groups in the specific centre. CPI (Urban) and CPI (Rural) are new indices in the group of Consumer price index and has a wider coverage of population.

This index compiled by Central Statistical Organisation tries to encompass the entire population and is likely to replace all the other indices presently compiled. In addition to this, Consumer Food Price Indices (CFPI) for all India for rural, urban and combined separately are also released w.e.f May, 2014.

Conclusion: Supply of money and inflation are positively co-related to each other. If supply of money increases in an economy and production/ supply of goods/ services do not follow it, then inflation increases inevitably.

2.Black Money and Corruption

Causes of Black Money in India

Black money is always an evil for any economy. There are various reasons for the generation of Black money.

1. Prohibition causes black money

Certain activities are usually forbidden by law such as gambling, production of illicit liquor, smuggling, trafficking illegal drugs, lending at exorbitant interest charges, money lending without proper license etc. When some individuals wish to undertake these activities, these will apparently go unreported and incomes so earned would be totally black.

2. Public Expenditure

The NIPFP Report mentions that the Government itself lives in the Glass House, as the rapid growth of its spending over the last two decades has been a major contributory factor in generating black money.

Due to the rapid rise of public spending for multiple Governmental programmes and activities, the unscrupulous elements in public service and public life could find ample opportunities for amassing black income and wealth by dubious methods

3. Political Funding encourages black money

Political funding in India also causes a significant amount of black income. Our election laws and behavior of political parties are primarily responsible for this. Today contesting of elections has become a very costly affair.

The candidate has to spend much in excess of the officially sanctioned amount. This has to be arranged somehow in black money. The politicians largely resort to industrialists and trading community for the help — the funds are raised in terms of black money.

Deficiencies of the Tax System pays way for black money

There are various lacunae in the tax system that encourages generation of black income. First, high personal Income Tax Rates cause people to try and evade taxes, and thus lead to generation

of black income. The dilemma for the Government is that even efforts at lowering tax rates do not lead to larger payments of income tax by the higher income groups.

Although there are a number of tax laws pertaining to income tax, sales tax, stamp duties, excise duties etc. enforcement is weak due to widespread corruption in these departments.

6. Quotas, Controls and Licences generates black money

The “License, Quota, Permit Raj” that has dominated the Indian system of controls has often led to the initiation of various ways of escaping these and thus, the generation of black income.

7. Generation of Black Income in the Public Sector

There are huge investments marked for the public sector in every five-year plan. The usage of these has to be monitored by the bureaucrats in Government and public sector undertakings. A symbiotic relationship often develops between the contractors, bureaucrats and politicians. Costs are often artificially escalated and underhand deals generate black money.

8. Inadequacy of Powers creates black money

The inadequacy of the powers given to the tax enforcing authorities is another important cause for black money.

9. Weak Deterrence encourages black money

Despite of adequate legal provisions to curb the growth of black economy in India, it has persisted because of weak deterrence against tax evasion in practice. No serious action has been taken against detected cases of tax evaders. Till recently, too trivial penalties were imposed, too few prosecutions have been launched and even fewer have been convicted.

10. Ineffective Enforcement of Tax Laws gives way for black money

Ineffective enforcement of tax laws is also a cause for black money. Lack of proper training and inefficiency of the department people led to the creation of black money.

11. Lack of Publicity leads to black money

Another reason for wide spread black money is said to be the secret provision of direct tax laws. At present, the department is statutorily prohibited from disclosing any information relating to a person’s assessment. Thus, even if a person is caught and penalized for keeping black money, he can keep it as secret from every one.

12. Deteriorated Public Morality causes black money

Moral values and social attitudes of people in India have declined during recent years. In today's society, black marketers, smugglers, corrupt politicians, public officials and tax evaders are not condemned, but rather admired and envied for possessing black money power.

13. Demonstration Effect causes black money

The conspicuous consumption and luxurious life style of black moneyed people have created a sort of demonstration effect on many others to inspire for such consumption patterns.

Anti-Corruption measures by the Government

- o NDA Government's Zero tolerance on corruption
- o SIT
- o Demonetization
- o DBT- Plugging the loopholes, Bogus Ration Cards cancelled, Savings to Govt. Subsidy
- o PAHAL DBT
- o Rerouting of black money via Mauritius, Cyprus and Singapore channel blocked
- o Real time transaction data with Switzerland and other European countries done
- o Benaami Transaction law started
- o Political funding clean-up started
- o Action taken against around 3 lakh shell companies
- Fugitive Economic Offenders Bill introduced to empower law enforcement agencies to confiscate the assets of economic absconders. This would also help the banks and other financial institutions to achieve higher recovery from fugitive economic offenders

3. Food Security

Food security entails ensuring adequate food supply to people, especially those who are deprived of basic nutrition. Food security has been a major concern in India. According to UN-India, there are nearly 195 million undernourished people in India, which is a quarter of the world's hunger burden. Also roughly 43% children in India are chronically undernourished. India ranks 74 out of 113 major countries in terms of food security index. Though the available nutritional standard is 100% of the requirement, India lags far behind in terms of quality protein intake at 20% which needs to be tackled by making available protein rich food products such as eggs, meat, fish, chicken, etc. at affordable prices.

In order to provide the Right to food to every citizen of the country, the Parliament of India, enacted a legislation in 2013 known as the National Food Security Act, 2013. Also called as the Right to Food Act, this Act seeks to provide subsidized food grains to approximately two thirds of India's 1.33 billion population.

Hunger in India

India, with a population of over 1.3 billion, has seen tremendous growth in the past two decades. Gross Domestic Product has increased 4.5 times and per capita consumption has increased 3 times. Similarly, food grain production has increased almost 2 times. However, despite phenomenal industrial and economic growth and while India produces sufficient food to feed its population, it is unable to provide access to food to a large number of people, especially women and children.

State of Hunger in India

According to FAO estimates in 'The State of Food Security and Nutrition in the World, 2019' report, 194.4 million people are undernourished in India. By this measure 14.5% of the population is undernourished in India. Also, 51.4% of women in reproductive age between 15 to 49 years are anaemic. Further according to the report 37.9% of the children aged under five in India are stunted (too short for their age), while 20.8% suffer from wasting, meaning their weight

is too low for their height. Malnourished children have a higher risk of death from common childhood illnesses such as diarrhea, pneumonia, and malaria. The Global Hunger Index 2018 ranks India at 103 out of 119 countries on the basis of three leading indicators -- prevalence of wasting and stunting in children under 5 years, under 5 child mortality rate, and the proportion of undernourished in the population.

Food Loss & Food Waste

On the other hand, it is estimated that nearly one third of the food produced in the world for human consumption every year gets lost or wasted. 40 percent of the fruits and vegetables, and 30 percent of cereals that are produced are lost due to inefficient supply chain management and do not reach the consumer markets. While significant levels of food losses occur upstream, at harvest and during post-harvest handling, a lot of food is lost or wasted during the distribution and consumption stages. Some food is also wasted on the shelves and in the warehouses of food businesses either due to excess production, introduction of new products, labeling errors, or due to shorter remaining shelf life. Such food could be saved by timely withdrawing it from the distribution network, aggregating it and then redirecting it to the people in need.

Key facts about hunger in India

India is home to the largest undernourished population in the world

194.4 million people i.e. 14.5% of our population is undernourished

20.8% of children under 5 are underweight

37.9% of children under 5 years of age are stunted

51.4% women in the reproductive age (15-49 years) are anaemic

Malnutrition in India

Despite India's 50% increase in GDP since 2013, more than one third of the world's malnourished children live in India. Among these, half of the children under three years old are underweight and a third of wealthiest children are over-nutriented.

One of the major causes for **malnutrition in India** is economic inequality. Due to the low social status of some population groups, their diet often lacks in both quality and quantity. Women who suffer malnutrition are less likely to have healthy babies. Deficiencies in nutrition inflict long-term damage to both individuals and society. Compared with their better-fed peers, nutrition-deficient individuals are more likely to have infectious diseases such as pneumonia and tuberculosis, which lead to a higher mortality rate. In addition, nutrition-deficient individuals are less productive at work. Low productivity not only gives them low pay that traps them in a vicious circle of under-nutrition, but also brings inefficiency to the society, especially in India where labour is a major input factor for economic production. On the other hand, over-nutrition also has severe consequences. In India national obesity rates in 2010 were 14% for women and 18% for men with some urban areas having rates as high as 40%. Obesity causes several non-communicable diseases such as cardiovascular diseases, diabetes, cancers and chronic respiratory diseases.

National Rural Health Mission

The National Rural Health Mission of India mission was created for the years 2005–2012, and its goal is to "improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women, and children."

The subset of goals under this mission are:

- Reduce infant mortality rate (IMR) and maternal mortality ratio (MMR), Neonatal mortality rate (NMR).
- Provide universal access to public health services

- Prevent and control both communicable and non-communicable diseases, including locally endemic diseases
- Provide access to integrated comprehensive primary healthcare
- Create population stabilisation, as well as gender and demographic balance
- Revitalize local health traditions and mainstream AYUSH
- Finally, to promote healthy life styles

The mission has set up strategies and action plan to meet all of its goals.

4. Skill Development

National Skill Development Mission

The National Skill Development Mission was approved by the Union Cabinet on 01.07.2015, and officially launched by the Hon'ble Prime Minister on 15.07.2015 on the occasion of World Youth Skills Day. The Mission has been developed to create convergence across sectors and States in terms of skill training activities. Further, to achieve the vision of 'Skilled India', the National Skill Development Mission would not only consolidate and coordinate skilling efforts, but also expedite decision making across sectors to achieve skilling at scale with speed and standards. It will be implemented through a streamlined institutional mechanism driven by Ministry of Skill Development and Entrepreneurship (MSDE). Key institutional mechanisms for achieving the objectives of the Mission have been divided into three tiers, which will consist of a Governing Council for policy guidance at apex level, a Steering Committee and a Mission Directorate (along with an Executive Committee) as the executive arm of the Mission. Mission Directorate will be supported by three other institutions: National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), and Directorate General of Training (DGT) – all of which will have horizontal linkages with Mission Directorate to facilitate smooth functioning of the national institutional mechanism. Seven sub-missions have been proposed initially to act as building blocks for achieving overall objectives of the Mission. They are:

- (i) Institutional Training, (ii) Infrastructure, (iii) Convergence, (iv) Trainers, (v)



Overseas Employment, (vi) Sustainable Livelihoods, (vii) Leveraging Public Infrastructure.

Make in india

Make in India, a type of Swadeshi movement covering 25 sectors of the Indian economy, was launched by the Government of India on 25 September 2014 to encourage companies to manufacture their products in India and enthruse with dedicated investments into manufacturing.

"Make in India" is a initiative which was launched on 25 September 2014 with three major objectives: (a) to increase the manufacturing sector's growth rate to 12-14% per annum in order to increase the sector's share in the economy; (b) to create 100 million additional manufacturing jobs in the economy by 2022; and (c) to ensure that the manufacturing sector's contribution to GDP is increased to 25% by 2022 (later revised to 2025). The policy approach was to create a conducive environment for investments, develop modern and efficient infrastructure, and open up new sectors for foreign capital. The initiative targeted 25 economic sectors for job creation and skill enhancement, and aimed "to transform India into a global design and manufacturing hub".

5.Special economic zone

A **special economic zone (SEZ)** is an area in which the business and trade laws are different from the rest of the country. SEZs are located within a country's national borders, and their aims include increased trade balance, employment, increased investment, job creation and effective administration. To encourage businesses to set up in the zone, financial policies are introduced. These policies typically encompass investing, taxation, trading, quotas, customs and labour regulations. Additionally, companies may be offered tax holidays, where upon establishing themselves in a zone, they are granted a period of lower taxation.

The creation of special economic zones by the host country may be motivated by the desire to attract foreign direct investment(FDI). The benefits a company gains by being in a special economic zone may mean that it can produce and trade goods at a lower price, aimed at being globally competitive. In some countries, the zones have been criticized for being little more than labor camps, with workers denied fundamental labor rights.

The Special Economic Zone Act (June, 2005) & the Rules (Feb.2006) came into force with the set of objectives, which included among others to offer SEZs a clear, coherent and viable business and economic rationale anchored in local conditions. Further, SEZs must offer investors something significantly better than what is available in the rest of the economy. Although, SEZs in India have witnessed generation of employment, investments and exports over a period of time, however, it is considered that the SEZs model in India could not reap the expected rate of benefits pertaining to all these aspects. The underlined reasons which are found while conducting secondary analysis and primary survey are rise in cost of operation, global slowdown, fall in market demand, Instability in the policy environment, lack of skilled manpower and the primarily is the lack of incentives to operate in the SEZs such as imposition of MAT and DDT. Therefore, it is considered that SEZs model in India could never take off in the country. Pertaining to the different stated aspects of survey, several positive and negative facts are observed and analysed. The survey reveals that SEZs' developers/ units are satisfied with regard to approvals, processes, creation and acquisition of SEZs processes of the government. They also feel that concerned authorities are well coordinated to handle operational activities and their notification process is also satisfactory. However, with respect to getting permission from the custom authorities or DC (for procuring / exporting / temporary /removal/sub-contracting of

materials/ services etc.) and to get sanctions of claims, their experience is not satisfactory. The survey also observed the shortfall between the projections and actuals of exports/employment/investment in the SEZs and found global slowdown, recession in the shipping industry, too many restrictions & frequent changes in policies as the major reasons for this shortfall. More often than not, expectations with regard to SEZs are often inflated; objectives are overstated and strategic planning remains inadequate—resulting in stagnant development, unsustainable growth or low returns on investment. In addition, SEZ development programs should be integrated into the broader economic policy framework and the national investment environment, and be fine-tuned to be consistent with the capacity of the government. SEZ programs should be closely coordinated or linked with wider economic strategies as they evolve, supporting domestic investment in SEZs and promoting linkages, training and upgrading along the value chain. At every stage, both the broader development program and the SEZs need clear, consistent and credible political commitments at the highest levels of government. SEZ progression up the developmental scale needs to be well-timed so as to take advantage of GVC participation, and opportunities such as new FTAs or technological developments affecting outsourcing and transport costs. Balanced economic development should be taken into account for the strategic, logistical positioning over time as the economy matures. Advanced SEZs should be factored into the planning of economic or logistics corridors 42 PHD Research Bureau connecting actual and potential SEZs with markets and regional neighbours—giving impetus to cross-border SEZs and contributing to enhanced regional and subregional cooperation. If these preconditions are approximately met, then SEZs could achieve better footing and with good policies, can become a focus of economic activity.

5.Trends and Issues in Revenue Expenditure of Government

Revenue expenditures are those expenditures of the government which are used for *running the show* and don't create any productive assets and don't reduce liabilities. These include operational and administrative expenses, welfare schemes, subsidies, pensions, salaries, interest payments, grants, money on defence (except defense equipments) and so on. Revenue expenditure enables the government to determine its ability to deliver services to the public (such as capability to finance subsidy and welfare programmes.)

As per currently available data, India pays one of the highest interest rates in the world on its debt. India also has very high revenue expenditure incurred in the form of subsidy on various items such as food, fertilizer and petroleum, cooking gas, etc.

Contents

- Trends in Revenue Expenditures
- 7th Pay commission puts huge pressure on government demanding revenue expenditures
- Debt is mostly internal but interest payments is a problem
- The curious case of subsidies
- Food Subsidy
- Steps taken to Curb Revenue Expenditure
- Steps taken to reduce its Internal and External debt
- Steps taken to reduce expenditure on employees

Trends in Revenue Expenditures

7th Pay commission puts huge pressure on government demanding revenue expenditures

Wages and salaries account for a huge fraction of government expenditure. With incorporation of 7th pay commission, the government's expenditure is likely to increase by Rs. 1.28 lakh crore in the current fiscal, thus, posing issues for public finances.

Debt is mostly internal but interest payments is a problem

Public debt is either domestic (internal debt) or external debt. India's internal debt comprises of money raised in the open market through special securities issued to RBI, compensation, treasury bills and other government bonds. The external debt includes money raised by issuing securities to international financial institutions such as IMF, World Bank, IDA, IFAD, ADB, Asian Development Bank and so on.

The current circumstances are as follows: First, most of the debt of India is domestic debt or internal debt, which gives us much needed resilience during ups and downs of global economy. Thus, this is not a concern. However, major concern in revenue expenditures is the interest payment. In this reference, India can be compared to a person, who uses credit card for his day to day affairs. India's interest payment on borrowings is one of the highest in the world. As per latest report released by RBI, although by the end of March 2017, India's external debt witnessed a decline of 2.7 per cent over its level at end-March 2016, yet, India's total external debt was placed at US\$ 471.9 billion which is very high. While there has been a decrease by 1.4 per cent in long-term debt, the short-term debt increased by 1.4 per cent. We already know that the country has lower Debt-to-GDP ratio; but at the same time India borrows at a much higher interest rates compared to other countries. Under such circumstances, it is imperative that India should its reliance on high interest external debt soon.

The curious case of subsidies

As per the budget 2017-18, the total subsidy on food, petroleum and fertilisers has been increased by 3 per cent to that of financial year 2016-17.

Bibliography of Reference Material

1. Agarwal A. N., *Indian Economy: Problems of Development and Planning*, New Age International Publishers, New Delhi, 2015.
2. Dutt R. and K. P. M. Sundharam, *Indian Economy*, S. Chand and Company Limited, New Delhi, 2016.
3. Jhingan, M. L., *The Economics of Development and Planning*, Vrinda Publication Private Limited, New Delhi, 2010.
4. Prakash, B. A., *The Indian Economy Since 1991 Economic Reforms and Performance*, Pearson Publication, Delhi, 2008.
5. Economic Survey of india 2019-20.
6. www.economicdiscussion.com
7. www.who.org
8. www.economicshelp.com