SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

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SCHOOL OF MANAGEMENT STUDIES

UNIT – I – Indian Economy – SBAA1203

UNIT 1 INTRODUCTION

Introduction to economic system- Concept and Measures of Development and Underdevelopment - Natural resources - Human Development - population: size, growth rates - rural & urban migration, Human development Index- Composition of national income.

Introduction To Economic System

An **economic system** is a means by which societies or governments organize and distribute available resources, services, and goods across a geographic region or country. Economic systems regulate the factors of production, including land, capital, labor, and physical resources. An economic system encompasses many institutions, agencies, entities, decision-making processes, and patterns of consumption that comprise the economic structure of a given community.

Types Of Economic System

There are many types of economies around the world. Each has its own distinguishing characteristics, although they all share some basic features.

- Traditional economic system
- Capitalist economic system
- Socialist economic system
- Mixed economic system

Traditional economic system

The traditional economic system is based on goods, services, and work, all of which follow certain established trends. It relies a lot on people, and there is very little division of labor or specialization

Some parts of the world still function with a traditional economic system.

It is commonly found in rural settings in second and third world nations, where economic activities are predominantly farming or other traditional income-generating activities. There are usually very few resources to share in communities with traditional economic systems. Either few resources occur naturally in the region or access to them

is restricted in some way. Thus, the traditional system, unlike the other three, lacks the potential to generate a surplus.

Capitalist Economic System. It is an **economic system** in which the means of production and distribution are privately or corporately owned. Operations are funded by profits and not controlled by a state government.

Features of a capitalist economic system

- Economic freedom. ...
- Consumer **sovereignty**. ...
- Limited **government**. ...
- Finance sector. ...
- **Profit** motive is seen as important for enabling an efficient distribution of resources and encouraging innovation and responsive markets.
- Market forces. ...
- Flexible labour markets – easy to hire and fire workers.
- Free trade.

Advantages of Capitalist economic system

- Efficient Allocation of Resources.
- Efficient Production.
- Dynamic Efficiency.
- Financial Incentives.
- Creative destruction.
- Economic freedom helps political freedom.
- Mechanism for overcoming discrimination and bringing people together.

Disadvantages of Capitalist economic System

- Monopoly power. Private ownership of capital enables firms to gain monopoly power in product and labour markets
- Monopsony power
- Social benefit ignored
- Inherited wealth and wealth inequality
- Inequality creates social division
- Diminishing marginal utility of wealth
- Boom and bust cycles.

Socialist Economic System

A **socialist economy** is a system of production where goods and services are produced directly for use, in contrast to a capitalist economic system, where goods and services are produced to

generate profit (and therefore indirectly for use). "Production under socialism would be directly and solely for use.

Advantages of Socialist Economy

- Reduction of relative poverty
- Free health care
- Diminishing marginal utility of income
- A more equal society is more cohesive
- **Socialist** values encourage selflessness rather than selfishness.
- **Benefits** of public ownership
- Environment
- Reduced hidden taxes

Disadvantages of Socialist Economy

(i)Loss of Consumer Sovereignty:

(ii) Less Democratic:

(iii) No Automatic Functioning:

(iv) Evils of Bureaucracy

(v) Rigid Economy:

(vi) Burden on Government:

(vii) Expenditure on Planning:

Mixed Economic System

A **mixed** economic system is a system that combines aspects of both capitalism and socialism. A **mixed** economic system protects private property and allows a level of economic freedom in the use of capital, but also allows for governments to interfere in economic activities in order to achieve social aims.

Advantages of the Mixed Economy

- A mixed economy distributes goods and services to where they need to be
- Supply and demand get measured through pricing instead of regulation
- A mixed economy improves production **efficiency**

- Mixed economies promote **control** equality.

Disadvantages of Mixed Economy

- There is more emphasis on profit at the expense of the welfare of the citizens.
- There is usually high level of corruption and mismanagement.
- Wealth is not equitably distributed as there is a gap between the rich and the poor.
- Efficiency hardly occurs in this type of **economy** because of involvement of the state

CHARACTERISTICS OF DEVELOPED AND UNDER DEVELOPING ECONOMY

(A). Characteristics of developed economy

The total major countries of the world are 182 out of which only 34 are developed and remaining 148 are under developed. Developing Country (DC) is a nation which, compare to developed nations, lacks industrialization, infrastructure, developed agriculture developed natural resources, and suffers from a low per capita income as a result.

Developed Country: A group of industrialized nations including Australia, Austria, Canada, France, Germany, Italy, Japan, UK and USA. In some contexts such countries are collectively called the North.

According to Kofi Annan, former Secretary General of the UN:"A developed country is one that allows all its citizens to enjoy a free and healthy life in a safe environment."

(B). Characteristics of under developing (developing) economy

Developing countries and developed countries are differentiating on the bases of self-esteem, freedom of choice and influence of externals. A country where the average income of the people is much lower than that of developed countries, the economy depends upon a few export crops and where farming is conducted by primary methods is called developing country. Rapid population growth is causing the shortage of food in many developing countries.

Developing Country: Developing countries are also called under-developed nations (UDN) or the South. Most of them are in Africa, Asia and Latin America.

According to **United Nations Experts:** “A developing country is that in which per capita income is low when compared to the per capita incomes of USA, Canada, Australia and Western Europe.”

According to **Prof. R. Nurkse**: “Under developed countries are those which when compared

with the advanced countries, are under-equipped with capital in relation to their population and natural resources.”

According to **Michal P. Tadaro**: “The under developed country, is that which has low levels of living (absolute poverty, poor health, poor education and other social services), low self- esteem (low respect, honour, dignity) and limited freedom (freedom from external influence and dominance, freedom of choice etc.).”

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SOME OF THE MOST IMPORTANT STRUCTURAL FEATURES OF DEVELOPING COUNTRIES

(i) Lower per-capita income
(ii) Low levels of human capital
(iii) High levels of poverty and under-nutrition
(iv) Higher population growth rates
(v) Predominance of agriculture and low levels of industrialization
(vi) Low level of urbanization but rapid rural-to-urban migration
(vii) Dominance of informal sector
(viii) Underdeveloped labor, financial, and other markets.

ECONOMIC CHARACTERISTICS

Following are the economic characteristics of UDC’s:

(i) General Poverty and Low Living Standard

Poverty cannot be described, it can only be felt. The most of the less developed countries (LDC) are facing the major problem of general as well as absolute poverty and low standard of living. Most of the people in developing nations are ill-fed, ill-housed, ill-clothed and illliterate. In LDCs almost 1/3 population is much poor.

(ii) Burden of Internal and External Debts

Under developed countries (UDC) are loans and grants receiving nations. Most of the developing countries of the world are depending on foreign economic loans. An amount of foreign loans is increasing as the years pass. Their foreign trade and political structure is also dependent on the guidance of foreigners.

(iii) Low Per Capita Income

Due to low national income and huge population growth rate, per capita income in developing countries is very low.

(iv) Over Dependence on Agriculture

Most of population is living in more than 50,000 villages. Backward agriculture is the major occupation of the population. Agriculture sector is backward due to old and traditional methods of cultivation, in-efficient farmers, lack of credit facilities; un-organized agriculture market etc.

(v) Backward Industrial Sector

Backward industrial sector is an additional feature of under developed countries.

(vi) Unemployment

An outstanding problem of developing countries is their high rate of un-employment, under-employment and disguised-unemployment.

(vii) Low level of Productivity

The productivity level is very low in under developed countries as compared to developed countries. Low level of productivity is due to economic backwardness of people, lack of skill, illiteracy and ill-training.

(viii) Deficit Balance of Payment

Third world countries have to import some finished and capital goods to make economic development, on the other hand they have no products to export but raw material.

(ix) Dualistic Economy

Dualistic economy refers to the existence of advanced & modern sectors with traditional & backward sectors. Co-existence of modern and traditional methods of production in urban and rural areas, Co-existence of wealthy, highly educated class with a large number of illiterate poor classes and Co-existence of very high living standard with very low living standard.

(x) Deficiency of Capital

Shortage of capital is another serious problem of poor nations. Lack of capital leads to low per capita income, less saving and short investment.

(xi) In-appropriate Use of Natural Resources

Mostly there is shortage of natural resources in developing nations and this is also a cause of their economic backwardness. Natural resources are available in various poor countries but they remain un-utilized, under-utilized or mis-utilized due to capital shortage, less efficiency of labour, lack of skill and knowledge, backward state of technology, improper government actions and limited home market.

(xii) Market Imperfection

Market is imperfect in accordance with market conditions, rules and regulations in the most of developing nations. There exist monopolies, mis-leading information, immobility of factors; hoarding and smuggling etc. that cause the market to remain imperfect.

(xiii) Limited Foreign Trade

Due to backwardness, developing countries have to export raw material because the quality of their products is not according to international standard ISO etc. Lower developing nations have to import finished and capital goods.

(xiv) Vicious Circle of Poverty

According to vicious circle of poverty, less developed nations are trapped by their own poverty. Vicious circle of poverty is also applied in case of Pakistani economy. Due to poverty, national income is low which causes low saving and low investment. So, rate of capital formation is very low.

(xv) Inflation

High rate of inflation causes economic backwardness in poor nations. Due to high level of price, purchasing power, value of money and saving of the consumers tend to decrease.

INDICATOR/DETERMINANTS OF ECONOMIC DEVELOPMENT

A. Economic Factors:

1. Population and Manpower Resources:

Population is considered as an important determinant of economic growth. In this respect population is working both as a stimulant and hurdles to economic growth. Firstly, population provides labour and entrepreneurship as an important factor service.

2. Natural Resources and Its Utilization:

Availability of natural resources and its proper utilization are considered as an important determinant of economic development. If the countries are rich in natural resources and adopted modern technology for its utilization, then they can attain higher level of development at a quicker pace. Mere possession of natural resources cannot work as a determinant of economic development.

3. Capital Formation and Capital Accumulation:

Capital formation and capital accumulation are playing an important role in the process of economic development of the country. Here capital means the stock of physical reproducible

factors required for production. The increase in the volume of capital formation leads to capital accumulation.

4. Capital-Output Ratio:

Capital-output ratio is also considered as an important determinant of economic development in n country. By capital-output ratio we mean number of units of capital required to produce per unit of output. It also refers to productivity of capital of different sectors at a definite point of time. But the capital output ratio in a country is also determined by stage of economic development reached and the judicial mix of investment pattern.

5. Favourable Investment Pattern:

Favourable investment pattern is an important determinant of economic development in a country. This requires proper selection of industries as per investment priorities and choice of production techniques so as to realize a low capital—output ratio and also for achieving maximum productivity.

6. Occupational Structure:

Another determinant of economic development is the occupational structure of the working population of the country. Too much dependence on agricultural sector is not an encouraging situation for economic development.

7. Extent of the Market:

Extent of the market is also considered as an important determinant of economic development. Expansion of the scale of production and its diversification depend very much on the size of the market prevailing in the country.

8. Technological Advancement:

Technological advancement is considered as an important determinant of economic environment. By technological advancement we mean improved technical know-how and its broad-based applications.

9. Infrastructural Facilities:

Development of infrastructural facilities is also an important component of economic environment in a country like India.

10. Suitable Industrial Relations:

Suitable industrial relations are also an important determinant economic development in a country like India. Healthy trade union activities and cordial relations between employer and employee promote such economic environment for development.

B. Non-Economic Factors:

1. Urge for Development:

It is the mental urge for development of the people in general that is playing an important determinant for initiating and accelerating the process of economic development. In order to

attain economic progress, people must be ready to bear both the sufferings and convenience. Experimental outlook, necessary for economic environment must grow with the spread of education.

2. Spread of Education:

Economic progress is very much associated with the spread of education. Prof. Krause has observed that, "Education brings revolutions in ideas for economic progress."

3. Changes in Social and Institutional Factors:

Conservative and rigid social and institutional set up like joint family system, caste system, traditional values of life, irrational behaviour etc. put severe obstacle on the path of economic development and also retards its pace.

4. Proper Maintenance of Law and Order:

Maintenance of law and order in a proper manner also helps the country to attain economic development at a quicker pace. Stability, peace, protection from external aggression and legal protection generally raises morality, initiative and entrepreneurship. Formulation of proper monetary and fiscal policy by an efficient government can provide necessary climate for increased investment and also can stimulate capital formation in the country.

5. Administrative Efficiency:

Economic development of a country also demands existence of a strong, honest, efficient and competent administrative machinery for the successful implementation of government policies and programmes for development. The existence of a weak, corrupt and inefficient administrative machinery, leads the country into chaos and disorder.

6. Cultural Set Up:

Sound cultural set up also build up a better non-economic environment which are conducive towards economic development. Cultural activities improve the mental set up of the people in general and develop simultaneously a sense of bond-ness among various sections of people living in the society.

7. Politico-Legal Environment:

The politico-legal environment of the country is also an important determinant of economic development. Political stability and legal support for developmental activities creates a better environment for development. Reforms in the form of industrial policy reforms, labour reforms etc. should be enacted through proper legislation.

DIFFERENCES BETWEEN ECONOMIC DEVELOPMENT AND GROWTH

The basis of Comparison	Economic Development	Economic Growth
Concept	Economic development is a much broader concept than economic growth. Economic development = Economic Growth + Standard of Living	Economic Growth is a narrower concept than economic development.
Scope	Economic Development is considered as a Multidimensional phenomenon because it focuses on the income of the people and on the improvement of the living standards of the people of the country.	Economic Growth is considered as a single dimensional in nature as it only focuses on the income of the people of the country.
Term	Long-term process	Short term process
Measurement	Both Qualitative & Quantitative Terms: HDI (Human Development Index), gender-related index, Human poverty index, infant mortality, literacy rate etc.	Quantitative Terms: Increases in real GDP.
Related To	Economic Development is related to Underdeveloped and developing countries of the world.	Economic Growth is related to developed countries of the world.
Effect	Qualitative and Quantitative Impact on the economy. Improvement in life expectancy rate, infant, literacy rate, poverty rates, and mortality rate.	Brings a quantitative impact on the economy. Increase in the indicators like per capita income and GDP, etc.
Process Tenor	Continuous process	In a certain period

NATURAL RESOURCES

NATURAL RESOURCES IN INDIA

India is endowed with different types of natural Resources such as fertile soil, forests, minerals and water. These resources are unevenly distributed. The various types of different Natural Resources of India is discussed below:

(i) Soil Resource:

India has a large proportion of well watered fertile lands. In the alluvial soil of the Northern Great Plains of the Sutlej-Ganga plains and Brahmaputra Valley wheat, rice, maize, sugarcane, jute, cotton, rapeseed, mustard, sesumum, linseed, etc. are grown in abundance.In the black soil of Maharashtra, Andhra Pradesh, Tamil Nadu, Gujarat cotton and sugarcane are grown. The improper use of soil destroys its composition, texture and structure unscientific irrigation causes capillary action making soil alkaline and unsuitable for cultivation. The proper management of soil is important for soil conservation in India.

(ii) Mineral Resource:

India is quite rich in some minerals like iron, coal, mineral oil, manganese, bauxite, chromites, copper, tungsten, gypsum, limestone, mica and so on. A number of organizations like Geological Survey of India, Indian Bureau of Mines, etc. are engaged in the exploration and development of mineral resource in India.

(iii) Livestock Resource:

Hills, mountains and less fertile lands are put under pasture. Scientific methods are followed in rearing cattle. India maintains rich domestic animal diversity. India has good population of goat, sheep, poultry, cattle, buffalo, etc. Indian livestock plays a vital role in improving the socio-economic status of the rural masses.

(iv) Horticulture:

Diverse agro-climatic conditions in India facilitate cultivation of a large number of horticulture crops such as vegetables, fruits, flower, medicinal and aromatic plant, mushroom, etc. and plantation corps like tea, coffee and rubber.They provide opportunities for growing spices.

(v) Fisheries:

Fish production has been showing increasing trend. India is one of the leading fish producer.

(vi) Forest Resource:

India possesses a variety of natural vegetation since the country has a varied relief and climate. These forests are confined to the plateaus and hilly mountainous areas. India has a great variety of fauna. There are many national parks and hundreds of wild life sanctuaries.

Forests are called 'green gold'. They are renewable resources. They provide quality environment. They eat up CO2, the poisons of urbanization, industrialization, explosion of population, etc. They regulate climate as they act as natural 'sponge'. Arresting soil erosion, increasing soil fertility growing forest based industries, providing medicinal herbs, animal habitats, cattle fodder, domestic fuel and foreign exchange they contribute substantially to Indian economy.

Unfortunately India's forest cover is diminishing at an alarming rate. So, various measures for afforestation have been introduced. The forest (conservation) Act 1980 was made in India. No forest can be diverted for non-forest purpose.

The Forest Research Institute was established at Dehradun for research in forestry development. Cutting trees selectively, planting new trees, protecting trees, observing world Forestry Day every March 21 by planting trees, etc. are the schemes of afforestation.

LAND AND WATER RESOURCES

(A). Land Resources

Land Resources in India enclose approximately 1.3 million sq miles and is a cape, protruding into the Indian Ocean, in between the Bay of Bengal on the east and Arabian Sea on the west. Indian land resources are segmented into varied relief features, 43% of land area is plain region; Indian mountain region constitutes 30% of the area, where as plateaus account for 27 % of the total surface area on the nation.

In spite of sufficient accessibility of landed topography, population pressure in the country is excessive and that makes space for both food production and the real estate market. However, land resources in India are both essential and at shortage in present days.

Land resources in India are considered as non-renewable energy reserve. Further, they are associated with a host of several other elements such as agrarian base of rural as well as urban economy, accessibility of water, and other factors. Speedy urban expansion and the rising land usages have changed because of the increasing population growth and economic development in some selected landscapes is being observed in India. The monitoring of land use changes is essential to understand land use over different sequential or spatial time scales for successful land management.

Today, with increasing urbanisation as well as industrialisation, an increased pressure has been witnessed on land, water and other environment resources, mainly in big metropolitan cities.

In order to utilise available land resources in India effectively, the country is re- organising efforts in the areas of land resource management. Thus, there has been a growth in land resource companies as well as in other service providers across the country. India occupies a land area of around 3,287,263 sq km.

There are different types of land in India, of which 54.7 % of it is civilised land. The several types of land resources in India include agricultural land, farmland, barren land, real estate land, commercial land and residential land. Majority of the population of India are engaged in agricultural and allied activities and thus agricultural land accounts for near about 56.78 % of the total land area of the country. In India, the total cultivable area is 1,269,219 sq km. Moreover, land is also used in India for grazing and as permanent pastures.

Land resources in India also include vast barren lands. They are mostly found in states like Rajasthan, parts of Leh and Jammu as snowfall prevents any major cultivation here. Real Estate lands are growing at an incredible rate in India. With the people becoming mobile due to transferable jobs the growth of houses and apartments has increased hugely all over India. Havelis in Rajasthan Commercial land is becoming more expensive with passing years. There is a strong competition in acquiring the best of farmlands, as they can be nestled in the lap of picturesque valleys replete with streams, private piece of beach in Goa, Pondicherry or private Havelis in Rajasthan.

The trend of love for nature and due to less available space in city apartments, farm land is fast becoming the best option for land resources in India. Thus, land resources in India are crucial factors dealt by the Indian government and managed effectively according to the requirements. In order to make appropriate utilisation of obtainable land resources, the nation is making efforts to manage land resources effectively. Thus, there has been an increase in the number of land resource companies and service providers.

(B). Water Resources

India – Physiography

India, with a geographical area of about 329 Million Hectares (M.ha), is a land of many mountains and rivers, some of them figuring amongst the mightiest rivers of the world. Physiographically, India may be divided into seven well defined regions. These are: the Northern Mountains comprising the mighty Himalayan ranges; the Great Plains traversed by the Indus, Ganga and Brahmaputra river systems; the Central Highlands, consisting of a wide belt of hills running east-west between the Great Plains and the deccan plateau; the Peninsular Plateaus; the East Coast, a belt of land of about 100-130 km wide, bordering the Bay of Bengal; the West Coast, a narrow belt of land of about 10-25 km wide, bordering the Arabian Sea; and the islands,

comprising the coral islands of Lakshadweep in Arabian Sea and Andaman and Nicobar group of islands in the Bay of Bengal.

Climate

The great mountain mass of Himalayas in the North and the ocean in the South are the two major influences operating on the climate of India. The Himalaya poses an impenetrable barrier to the influence of cold winds from central Asia and gives the sub-continent the elements of tropical type of climate. The oceans are the source of moisture-laden winds, giving India the elements of the oceanic type of climate.

India has a very great diversity and variety of climate and an even greater variety of weather conditions. The climate ranges from extremes of heat to extremes of cold; from extreme aridity and negligible rainfall to excessive humidity and torrential rainfall. The climatic condition influences to a great extent the water resources utilization in the country

Rainfall

Rainfall in India is dependent on the South-West and North-East monsoons, on shallow cyclonic depressions and disturbances and on violent local storms which form regions where cool humid winds from the sea meet hot dry winds from the land and occasionally reach cyclonic dimension. Most of the rainfall in India takes place under the influence of South West monsoon between June to September except in Tamil Nadu where it is under the influence of North-East monsoon during October and November. The average rainfall, i.e. total precipitation divided by the total land area, is about 1215 mm. However, there is considerable spatial variation in rainfall which ranges from less than 100 mm in the western Rajasthan to more than 2500 mm in North-Eastern areas.

Rivers of India

India is blessed with many rivers. Land slope determines the river to which the rain falling on an area will eventually flow. A river basin, also called catchment area of the river, is the area from which the rain will flow into that particular river. The shape and size of the river basin is determined by the topography. Following are the major river basins groups in India.

Indus system

This comprises the river Indus and its tributaries like the Jhelum, Chenab, Ravi, Beas and Sutlej. These originate in the North and generally flow in a West or South-West direction to eventually flow into Arabian Sea through Pakistan.

Ganga-Brahmaputra-Meghana system

The main river Ganga and its tributaries like the Yamuna, Sone, Gandak, Kosi and many others; similarly main rivers Brahmaputra, Meghna and their tributaries. All these eventually flow into Bay of Bengal, through Bangladesh. Some of the tributaries of these rivers are larger than other independent rivers. e.g. Yamuna, a tributary of Ganga, has a larger catchment area than the Tapi, a small peninsula river.

Rivers of Rajasthan and Gujrat

Mahi, Sabarmati, Luni etc. These are rivers of arid regions, they carry relatively little flow, some of them flow to Arabian Sea through Gujarat while some are land-locked and their flow is lost through percolation and evaporation in the vast arid regions.

East Flowing Peninsular Rivers

The important members of this group are Damodar, Mahanadi, Brhamanai, Baitrani, Subarnarekha, Krishna-Godavari and Kaveri. The all flow in to Bay of Bengal at various places along the Eastern coast of India.

West Flowing Peninsular Rivers

Narmada and Tapi. These originate in Central India and flow in a Western direction to meet Arabian Sea south of Gujarat.

Western Coast Rivers

A large number of rivers in the Western Coast - i.e. coastal Maharashtra and Karnataka, and entire Kerala. These rivers are small in length but carry a significant amount of water due to very high rainfall in western ghats. They drain only 3 % of the India's land area but carry 11 % of India's water resources.

BROAD DEMOGRAPHIC FACTORS

Demographic Factors Definition: Socioeconomiccharacteristics of a population expressed statistically, such as age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, average size of a family, average age at marriage. A census is a collection of the demographic factors associated with every member of a population.

POPULATION-SIZE, GROWTH RATE & SEX COMPOSITION

Population size

a) The population of India is estimated at 1,291,167,420 as of January 11th2016.

b) India's population is equivalent to 17.5% of the total world population.

c) India ranks number 2 in the list of countries by population.

d) The population density in India is 386 people per Km2.

e) 32% of the population is urban (410,404,773 people in 2014).

f) The median age in India is 26.6 years.

Details of population growth rate in India

Census Years	Population	Change in Population Between Censuses	Percent Change Between Censuses	Annual Growth Rate (percent)
1901	238,396,327	—	—	—
1911	252,093,390	13,697,063	5.8	0.6
1921	251,321,213	-772,177	-0.03	0
1931	278,977,238	27,656,025	11.0	1.0
1941	318,660,580	39,683,342	14.2	1.3
1951	361,088,090	42,427,510	13.3	1.3
1961	439,234,771	78,146,681	21.6	2.0
1971	548,159,652	108,924,881	24.8	2.2
1981	683,329,097	135,169,445	24.7	2.2
1991	846,421,039	163,091,942	23.9	2.2
2001	1,028,737,436	182,316,397	21.5	2.0
2011	1,210,193,422	181,455,986	17.6	1.6

Source: Registrar General of India, Census 2011, Provisional Population Totals.

Life expectancy

Period	Life expectancy in Years
1950–1955	36.6
1955–1960	39.7
1960–1965	42.7
1965–1970	46.0
1970–1975	49.4
1975–1980	52.5
1980–1985	54.9
1985–1990	56.7
1990–1995	59.1
1995–2000	61.5
2000–2005	63.5
2005–2010	65.6
2010–2015	67.6

Source: *UN World Population Prospects*

Reasons for Population Growth (Explosion)

i. Decline in the Death Rate:

The fall in death rates that is decline in mortality rate is one fundamental causes of overpopulation. Owing to the advancements in medicine, man has found cures to the previously fatal diseases. The new inventions in medicine have brought in treatments for most of the dreadful diseases. This has resulted in an increase in the life expectancy of individuals. Mortality rate has declined leading to an increase in population.

Owing to modern medications and improved treatments to various illnesses, the overall death rate has gone down. The brighter side of it is that we have been able to fight many diseases and prevent deaths. On the other hand, the medical boon has brought with it, the curse of overpopulation.

ii. Rise in the Birth Rate:

Thanks to the new discoveries in nutritional science, we have been able to bring in increase in the fertility rates of human beings. Medicines of today can boost the reproductive rate in human beings. There are medicines and treatments, which can help in conception. Thus, science has led to an increase in birth rate. This is certainly a reason to be proud and happy but advances in medicine have also become a cause of overpopulation.

iii. Migration:

Immigration is a problem in some parts of the world. If the inhabitants of various countries migrate to a particular part of the world and settle over there, the area is bound to suffer from the ill effects of overpopulation. If the rates of emigration from a certain nation do not match the rates of immigration to that country, overpopulation makes its way. The country becomes overly populated. Crowding of immigrants in certain parts of the world, results in an imbalance in the density of population.

iv. Lack of Education:

Illiteracy is another important cause of overpopulation. Those lacking education fail to understand the need to prevent excessive growth of population. They are unable to understand the harmful effects that overpopulation has.

Main Effects of Population Explosion in India

1. Problem of Investment Requirement:

Indian population is growing at a rate of 1.8 percent per annum. In order to achieve a given rate of increase in per capita income, larger investment is needed. This adversely affects the growth rate of the economy. In India, annual growth rate of population is 1.8 percent and capital output ratio is 4:1. It means that in order to stabilize the existing economic growth rate (4 X 1.8) = 7.2 percent of national income must be invested.

2. Problem of Capital Formation:

Composition of population in India hampers the increase in capital formation. High birth rate and low expectancy of life means large number of dependents in the total population. In India 35 percent of population is composed of persons less than 14 years of age. Most of these people depend on others for subsistence. They are unproductive consumers. The burden of dependents reduces the capacity of the people to save. So the rate of capital formation falls.

3. Effect on per Capita Income:

Large size of population in India and its rapid rate of growth results into low per capita availability of capital. From 1950-51 to 1980-81. India’s national income grew at an average

annual rate of 3.6 percent per annum. But per capita income had risen around one percent. It is due the fact that population growth has increased by 2.5 percent.

4. Effect on Food Problem:

Rapid rate of growth of population has been the root cause of food problem.

Shortage of food grains hampers economic development in two ways:

(a) People do not get sufficient quantity of food due low availability of food which affects their health and productivity. Low productivity causes low per capita income and thus poverty.

(b) Shortage of food-grains obliges the under-developed countries to import food grains from abroad. So a large part of foreign exchange is spent on it. So development work suffers. So rise in population causes food problem.

5. Problem of Unemployment:

Large size of population results in large army of labour force. But due to shortage of capital resources it becomes difficult to provide gainful employment to the entire working population. Disguised unemployment in rural areas and open unemployment in urban areas are the normal features of an under developed country like India.

6. Low Standard of Living:

Rapid growth of population accounts for low standard of living in India. Even the bare necessities of life are not available adequately. According to Dr. Chander Shekhar population in India increases by about 1.60 crore. It requires 121 lakh tonnes of food grains, 1.9 lakh metres of cloth and 2.6 lakh houses and 52 lakh additional jobs.

7. Poverty:

Rising population increases poverty in India. People have to spend a large portion of their resources for bringing up of their wards. It results into less saving and low rate of capital formation. Hence improvement in production technique becomes impossible. It means low productivity of labour.

8. Burden of Unproductive Consumers:

In India, a large number of children are dependent. Old persons above the age of 60 and many more in the age group of 15-59 do not find employment. In 2001, working population was 39.2 percent while 60.8 percent are unproductive workers. This high degree of dependency is due to high rate of dependent children. This dependency adversely affects effective saving.

9. Population and Social Problems:

Population explosion gives rise to a number of social problems. It leads to migration of people from rural areas to the urban areas causing the growth of slum areas. People live in most unhygienic and insanitary conditions.

Unemployment and poverty lead to frustration and anger among the educated youth. This leads to robbery, beggary, prostitution and murder etc. The terrorist activities that we find today in various parts of the country are the reflection of frustration among educated unemployed youth. Overcrowding, traffic congestions, frequent accidents and pollution in big cities are the direct result of over-population.

10. More Pressure on Land:

Rising rate of population growth exerts pressure on land. On the one hand, per capita availability of land goes on diminishing and on the other, the problem of sub-division and fragmentation of holdings goes on increasing. It adversely affects the economic development of the country.

11. Impact on Maternity Welfare:

In India, population explosion is the result of high birth rate. High birth rate reduces health and welfare of women. Frequent pregnancy without having a gap is hazardous to the health of the mother and the child. This leads to high death rate among women in the reproductive age due to early marriage. Hence to improve the welfare and status of women in our society, we have to reduce the birth rate.

12. Pressure on Environment:

Population explosion leads to environmental degradation. Higher birth rate brings more pollution, more toxic wastes and damage to biosphere. Briefly speaking, population explosion hinders the economic development. It should be controlled effectively.

REMEDIAL MEASURES FOR POPULATION GROWTH

A. Social Measure:

Population explosion is a social problem and it is deeply rooted in the society. So efforts must be done to remove the social evils in the country.

1. Minimum age of Marriage:

As fertility depends on the age of marriage. So the minimum age of marriage should be raised. In India minimum age for marriage is 21 years for men and 18 years for women has be fixed by law. This law should be firmly implemented and people should also be made aware of this through publicity.

2. Raising the Status of Women:

There is still discrimination to the women. They are confined to four walls of house. They are still confined to rearing and bearing of children. So women should be given opportunities to develop socially and economically. Free education should be given to them.

3. Spread of Education:

The spread of education changes the outlook of people. The educated men prefer to delay marriage and adopt small family norms. Educated women are health conscious and avoid frequent pregnancies and thus help in lowering birth rate.

4. Adoption:

Some parents do not have any child, despite costly medical treatment. It is advisable that they should adopt orphan children. It will be beneficial to orphan children and children couples.

5. Change in Social Outlook:

Social outlook of the people should undergo a change. Marriage should no longer be considered a social binding. Issueless women should not be looked down upon.

6. Social Security:

More and more people should be covered under-social security schemes. So that they do not depend upon others in the event of old age, sickness, unemployment etc. with these facilities they will have no desire for more children.

B. Economic Measures:

The following are the economic measures:

1. More employment opportunities:

The first and foremost measure is to raise, the employment avenues in rural as well as urban areas. Generally in rural areas there is disguised unemployment. So efforts should be made to migrate unemployed persons from rural side to urban side. This step can check the population growth.

2. Development of Agriculture and Industry:

If agriculture and industry are properly developed, large number of people will get employment. When their income is increased they would improve their standard of living and adopt small family norms.

3. Standard of Living:

Improved standard of living acts as a deterrent to large family norm. In order to maintain their higher standard of living people prefer to have a small family. According to A.K. Das Gupta those who earn less than Rs. 100 per month have on the average a reproduction rate of 3.4 children and those who earn more than Rs. 300 per month have a reproduction rate of 2.8 children.

4. Urbanization:

It is on record that people in urban areas have low birth rate than those living in rural areas. Urbanization should therefore be encouraged.

C. Other Measures:

The following are the other measures:

1. Late Marriage:

As far as possible, marriage should be solemnized at the age of 30 years. This will reduce the period of reproduction among the females bringing down the birth rate. The govt. has fixed the minimum marriage age at 21 yrs. for males and 18 yrs. for females.

2. Self Control:

According to some experts, self control is one of the powerful methods to control the population. It is an ideal and healthy approach and people should be provided to follow. It helps in reducing birth rate.

3. Family Planning:

This method implies family by choice and not by chance. By applying preventive measures, people can regulate birth rate. This method is being used extensively; success of this method depends on the availability of cheap contraceptive devices for birth control. According to Chander Shekher, “Hurry for the first child, Delay the second child and avoid the third.”

4. Recreational Facilities:

Birth rate will likely to fall if there are different recreational facilities like cinema; theatre, sports and dance etc. are available to the people.

5. Publicity:

The communication media like T.V., radio and newspaper are the good means to propagate the benefits of the planned family to the uneducated and illiterate persons especially in the rural and backward areas of country.

6. Incentives:

The govt. can give various types of incentives to the people to adopt birth control measures. Monetary incentives and other facilities like leave and promotion can be extended to the working class which adopts small family norms.

7. Employment to Woman:

Another method to check the population is to provide employment to women. Women should be given incentive to give services in different fields. Women are taking active part in competitive examinations. As a result their number in teaching, medical and banking etc. is increasing rapidly. In brief by taking, all there measures we can control the growth of population.

Sex Composition

Sex ratio is used to describe the number of females per 1000 of males. Sex ratio is a valuable source for finding the population of women in India and what is the ratio of women to that of men in India.

In the Population Census of 2011 it was revealed that the population ratio in India 2011 is 940 females per 1000 of males. The Sex Ratio 2011 shows an upward trend from the census 2001 data. Census 2001 revealed that there were 933 females to that of 1000 males. Since decades India has seen a decrease in the sex ratio 2011, but since the last two of the decades there has been in slight increase in the sex ratio. Since the last five decades the sex ratio has been moving around 930 of females to that of 1000 of males.

The major cause of the decrease of the female birth ratio in India is considered to be the violent treatments meted out to the girl child at the time of the birth. The Sex Ratio in India was almost normal during the phase of the years of independence, but thereafter it started showing gradual signs of decrease. Though the Sex Ratio in India has gone through commendable signs of improvement in the past 10 years, there are still some states where the sex ratio is still low and is a cause of concern for the NGO organizations. One of the states which is showing a decreasing trend in the population of women 2011 and is a cause of concern is Haryana. The state of Haryana has the lowest rate of sex ratio in India and the figure shows a number of 877 of females to that of 1000 of males.

There are also states such as Puducherry and Kerala where the number of women is more than the number of men. Kerala houses a number of 1084 females to that of 1000 males. While Puducherry and Kerala are the only two states where the number of female is more than the number of men, there are also states in India like that of Karnataka, Andhra Pradesh and Maharashtra where the sex ratio 2011 is showing considerable signs of improvement. Some facts related to the Sex Ratio in India follows, the main cause of the decline of the sex ration in India is due to the biased attitude which is meted out to the women. The main cause of this gender bias is inadequate education. Pondicherry and Kerala houses the maximum number of female while the regions of Daman and Diu and Haryana have the lowest density of female population.

HUMAN DEVELOPMENT INDEX (HDI)

The human development index, or HDI, measures the quality of life in different countries on a scale from zero to one. The United Nations Development Program created the HDI to determine how countries help their citizens develop as human beings. While previous measurements, such as gross national product, or GNP, measured a country's economic power, the HDI accounted for factors such as health and education along with economic development and personal income when evaluating a country's progress.

Life Expectancy Index

A key element in calculating the HDI is life expectancy at birth. The life expectancy factor helps to determine how long the average citizen lives, how healthy she can remain during her life and how much she can contribute in her working life. The HDI measures life expectancy from 20 to 85 years. Countries with longer life expectancies receive higher HDI scores than those in which people die at a younger age. For instance, in the fictitious country of Generica, the life expectancy at birth is 70 years. The life expectancy index would be (70-20)/ (85-20), or 0.77.

Education Index

The education index is another important component in the HDI calculation. The education index is found by dividing the number of years of schooling for adults age 25 and older by the expected years of schooling for children of school age. For instance, adult citizens of Generica typically go to school for 12 years, but school-age children are expected to go for at least 15 years. The education index for Generica is 12/15, or 0.8.

Gross National Income Per Capita

The gross national income per capita, or GNI, measures the annual income of the average citizen based on purchasing power parity, or PPP. The GNI index uses a minimum income of $100 and a maximum of $75,000. The index uses a logarithmic scale to show the decrease in purchasing power as income increases. The GNI per capita for citizens of Generica is $50,000. The income index for the HDI would be [Log(50,000) - Log(100)]/ [Log(75,000) - Log(100)], or 0.94.

Calculating the HDI

The HDI is found by taking the geometric mean of the life expectancy, education and income indexes. The geometric mean for three numbers is calculated by taking the product of the numbers and finding the cube root. In the equation below, taking a number to the 1/3 power is the same as finding the cube root. For Generica, the formula would look like this:

(0.77 x 0.8 x 0.94) ^ 0.3333333

= (0.58) ^ 0.3333333

= 0.83

Inequality-Adjusted Human Development Index (IHDI)

The typical HDI calculation does not account for the inequalities in different countries. The inequality-adjusted human development index, or IHDI, takes these inequalities into account and shows the loss to human development due to inequality. The IHDI measures inequality using the same elements measured in the HDI. For instance, countries with a handful of rich citizens and millions in poverty will show a high level of inequality in the income index.

RURAL AND URBAN MIGRATION.

Migration is defined as a move from one migration defining area to another, usually crossing administrative boundaries made during a given migration interval and involving a change of residence (UN 1993). Apart from its spatial dimension, migration also implies the disruption of work, schooling, social life, and other patterns. A migrant is someone who breaks off activities and associations in one place and reorganizes their daily life in another place. The change in residence can take place either permanent or semi-permanent or temporary basis (Premi, 1990).

Migrations are caused by a variety of factors including economic, social and political factors. They are briefly described as under.

i. **Marriage:** Marriage is a very important social factor of migration. Every girl has to migrate to her in-law's place of residence after marriage. Thus, the entire female population of India has to migrate over short or long distance. Among the people who shifted their resistance more than half (56.1%) moved due to marriage in 1991.

ii. **Employment:** People migrate in large number from rural to urban areas in search of employment. The agricultural base of rural areas does not provide employment to all the people living there. Even the small-scale and cottage industries of the villages fail to provide employment to the entire rural folk. Contrary to this, urban areas provide vast scope for employment in industries, trade, transport and services. About 8.8 per cent of migrants migrated for employment in 1991.

iii. **Education:** Rural areas, by and large, lack educational facilities, especially those of higher education and rural people have to migrate to the urban centres for this purpose. Many of them settle down in the cities for earning a livelihood after completing their education.

iv. **Lack of Security:** Political disturbances and interethnic conflicts drive people away from their homes. Large number of people has migrated out of Jammu and Kashmir and Assam during the last few years due to disturbed conditions there. People also migrate on a short-term basis in search of better opportunities for recreation, health care facilities, and legal advices or for availing service which the nearby towns provide.

'Pull' and 'Push' Factors: Urban centres provide vast scope for employment in industries, transport, trade and other services. They also offer modem facilities of life. Thus, they act as 'magnets' for the migrant population and attract people from outside. In other words, cities pull people from other areas. This is known as "pull factor".

People also migrate due to ‘push factors’ such as unemployment, hunger and starvation. When they do not find means of livelihood in their home villages, they are ‘pushed’ out to the nearby or distant towns.

Millions of people who migrated from their far-off villages to the big cities of Kolkata, Mumbai or Delhi did so because these cities offered them some promise for a better living. Their home villages had virtually rejected them as surplus population which the rural resources of land were not able to sustain any longer.

Rural-urban migration

It is the movement of people from the countryside to the city. This causes three things to happen: **Urban** growth - towns and cities are expanding, covering a greater area of land. Urbanisation - an increasing proportion of people living in towns and cities.

Major Impacts (Effects):

On migrants and their families: Poorer migrant workers, crowded into the lower ends of the labour market, have few entitlements vis a vis their employers or the public authorities in the destination areas. They have meagre personal assets and suffer a range of deprivations in the destination areas. In the source areas, migration has both negative and positive consequences for migrants and their families.

Living conditions:

Migrant labourers, whether agricultural or non-agricultural, live in deplorable conditions. There is no provision of safe drinking water or hygienic sanitation. Most live in open spaces or makeshift shelters in spite of the Contract Labour Act which stipulates that the contractor or employer should provide suitable accommodation. Apart from seasonal workers, workers who migrate to the cities for job live in parks and pavements. Slum dwellers, who are mostly migrants, stay in deplorable conditions, with inadequate water and bad drainage. Food costs more for migrant workers who are not able to obtain temporary ration cards.

Health and Education:

labourers working in harsh circumstances and living in unhygienic conditions suffer from serious occupational health problems and are vulnerable to disease. Those working in quarries, construction sites and mines suffer from various health hazards, mostly lung diseases. As the employer does not follow safety measures, accidents are quite frequent. Migrants cannot access various health and family care programmes due to their temporary status. Free public health care facilities and programmes are not accessible to them. For women workers, there is no provision

of maternity leave, forcing them to resume work almost immediately after childbirth. Workers, particularly those working in tile factories and brick kilns suffer from occupational health hazards such as body ache, sunstroke and skin irritation.

As there are no crèche facilities, children often accompany their families to the workplace to be exposed to health hazards. They are also deprived of education: the schooling system at home does not take into account their migration pattern and their temporary status in the destination areas does not make them eligible for schooling there. In the case of male-only migration, the impact on family relations and on women, children and the elderly left behind can be quite significant. The absence of men adds to material and psychological insecurity, leading to pressures and negotiations with wider family. Male outmigration has been seen to influence the participation of women in the directly productive sphere of the economy as workers and decision-makers and increase the level of their interaction with the outside world and forthcoming). But given the patriarchal set up, women may have to cope with a number of problems which are exacerbated due to the uncertainty of the timing and magnitude of remittances on which the precarious household economy depends. This, in turn, pushes women and children from poor laboring households to participate in the labour market under adverse conditions. Thus, the impact of migration on the women can be two-sided but the strong influence of patriarchy restricts the scope of women's autonomy.

The impact of male migration can be especially adverse for girls, who often have to bear additional domestic responsibilities and take care of younger siblings. The absence of male supervision further reduces their chances of acquiring education. There are several cases where women participate in the migration streams along with male members of their households. It is usual in such cases for younger siblings and older children to accompany their parents and to work along with them. Family migration usually implies migration of the younger members of the family, leaving the elderly to cope with additional responsibilities while at the same time fend for their subsistence and other basic requirements.

Changes in migrants' attitudes: Exposure to a different environment, including the stresses that it carries, has a deep impact on the attitudes, habits and awareness levels of migrant workers, depending upon the length of migration and the place to which it occurs. Changes are more dramatic in the case of urban migrants. Migrant workers develop greater awareness regarding conditions of work. Life style and changes in awareness may lead to a mixed impact on family members. The increased awareness which migrants, especially in urban areas, gain often helps them realize the importance of their children's education.

CONCEPT OF NATIONAL INCOME

National income means the value of goods and services produced by a country during a financial year. The National Income is the total amount of income accruing to a country from economic activities in a years time. It includes payments made to all resources either in the form of wages, interest, rent, and profits.

Definition of National Income

Traditional Definition: According to Marshall: "The labor and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kinds. This is the true net annual income or revenue of the country or national dividend."

Modern Definition: Simon Kuznets defines national income as "the net output of commodities and services flowing during the year from the country's productive system in the hands of the ultimate consumers."

Basic concepts in National Income

- Gross Domestic Product (GDP)
- Net Domestic Product (NDP)
- Gross National product (GNP)
- Net National Product (NNP)
- Personal Income (PI)
- Disposable Personal Income (DPI)
- Real Income

a). Gross Domestic Product (GDP)

The total value of goods produced and services rendered within a country during a year is its Gross Domestic Product.

GDP is calculated at market price and is defined as GDP at market prices.

Different constituents of GDP are:

1. Wages and salaries
2. Rent
3. Interest
4. Undistributed profits
5. Mixed-income
6. Direct taxes
7. Dividend
8. Depreciation

b). Net Domestic Product (NDP)

While calculating GDP no provision is made for depreciation allowance (also called capital consumption allowance). In such a situation gross domestic product will not reveal complete flow of goods and services through various sectors.

A part of is therefore, set aside in the form of depreciation allowance. When depreciation allowance is subtracted from gross domestic product we get net domestic product.

NDP = GDP – Depreciation

c). Gross National Product (GNP)

Gross national product is defined as the sum of the gross domestic product and net factor incomes from abroad. Thus in order to estimate the gross national product of India we have to add net factor income from abroad – income earned by non-resident in India to form the gross domestic product of India.

GNP = GDP +NFIA

Where,

GDP = Gross Domestic Product

NFIA = Net Factor Income from Abroad

d). Net National Product (NNP)

It can be derived by subtracting depreciation allowance from GNP. It can also be found out by adding the net factor income from abroad to the net domestic product.

NNP = GNP – Depreciation

Or

NNP = NDP + NFIA

b) Personal Income (PI) : It may be defined as the current income of persons or households from all services during a given period. Personal income is not a measure of production.

c) Disposal Income: All personal income is not at the disposal to be spent on consumption. Individuals have to pay personal direct taxes to the government. They are free to spend only after the payment of taxes.

DPI = Personal Income – Personal Direct Taxes.

f). Real Income

- Real income is an economic measure that provides an estimation of an individual's actual purchasing power in the open market after accounting for inflation.

- Since national income does not reveal the real state of the economy, the concept of real income has been used to find out the real income of the country, a base year is selected and the price level of that year is assumed to be =100.

Real income = (Money Income/Price index) x 100

Methods for Measuring National Income

1. Product Method: In this method, national income is measured as a flow of goods and services. We calculate money value of all final goods and services produced in an economy during a year. Final goods here refer to those goods which are directly consumed and not used in further production process.

Gross Value Added = Value of Output – Value of intermediate goods Net Value Added = Gross Value Added - Depreciation

Income Method

- The net income received by all citizens of a country in a particular year, i.e. total of net rents, net wages, net interest and net profits.
- It is the income earned by the factors of production of a country.
- **GNP = Wages/Salaries + Rent + Interest + Dividends + undistributed corporate profits + mixed incomes + Direct taxes + Indirect taxes + Depreciation + Net income from abroad**.

Expenditure Method

The total expenditure incurred by the society in a particular year is added together to get that year's national income.

Components of Expenditure are;

- ❖ Personal consumption expenditure
- ❖ Net domestic Investment
- ❖ Government expenditure on goods and services and
- ❖ Net foreign Investment

QUESTIONS

PART - A

1. State the meaning of economic system.
2. List few characteristics of under developed countries.
3. Give the types of economic systems.
4. Define economic development.
5. Mention the advantages of capitalist economy.
6. Recall the meaning of mixed economy.
7. Differentiate economic development and economic growth.
8. Define population size.
9. Interpret push and pull factors.
10. Define National Income.
11. Write about GDP.
12. What is real income?
13. Outline the concept of national income.
14. Infer rural and urban migration.
15. Write short note on: (i) Life expectancy index, (ii) Education index
16. What is horticulture?
17. Write short note on mineral resources.
18. List few land ad water resources.

Part – B

1. Elaborate on the types of Economic system
2. Analyze the reasons for Population Growth and discuss the effects of Population Explosion.
3. Discuss the characteristics of Developed and Under developed Countries.
4. Elaborate on the determinance of economic development.
5. Explain about the various natural resources in India.
6. "Economic growth and Economic Development". Do they mean the same of different? Discuss with examples.
7. Analyze the consequences of rapid increase in population in India.
8. Elaborate about national income and discuss the methods for measuring national income.
9. Summarize on the water resources in India.
10. Enumerate the features, advantages and disadvantages of socialist and mixed economy.

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SCHOOL OF MANAGEMENT STUDIES

UNIT – 2 – Indian Economy – SBAA1203

UNIT 2 AGRICULTURE

Agriculture - Contribution to economic development - Green Revolution and the two phases of green revolution - Irrigation - Live stock resources - Public Distribution System and Food security -Agricultural Finance - Role of NABARD & RRB's in Rural Credit- Agricultural Marketing.

TRENDS IN AGRICULTURAL PRODUCTION AND PRODUCTIVITY

(A). Production versus Productivity

Production: Production is the process of combining units of inputs (natural, man-made and human resources) to create output (goods and services) capable of satisfying human needs and wants.

Production is the act of creating output, goods or services which have values and contributes to the utility of individuals. This may include factors of production other than labour. The factors of production are the inputs to the production process. The finished goods are the output. The input determines the quality of the output product. Input is the starting point and output is the end point of the production process, and such an input-output relationship is called as the production function.

There are three basic factors of production: land, labour and capital. All three are required in combination at a time to produce a commodity. In economics, production means creation or an addition of utility. Factors of production are any commodities or services used to produce goods or services. These factors are specifically referred to as primary factors. Energy and material are referred to as secondary factors. The primary factors facilitate production but neither become part of the product nor become significantly transformed by the production process. Human capital and entrepreneurship are also considered as factors of production.

Productivity: Productivity is the increase of output from each unit in the production process. There are several ways of achieving productivity. These include the training of workers and the introduction of machinery and equipment into the production process.

Productivity is the ratio of output to input in production. It is a measure of the efficiency of production. It is related to the utilization or the use of resources to produce goods. It increases the output. It is the increase of output from each unit in the production process. If inputs remain the same and the production of output increases, then there is a rise in the level of productivity. If the output rises in a greater proportion than the increase in the input, there is still a proportionate rise in the level of productivity. However, if the output rises at a lower rate than the input, then there will be a fall in the productivity, even though there is an increase in production on the whole. Higher productivity results in a lower cost per unit of output resulting in higher levels of profit for a company. Thus, it refers to efficient utilization of resources. High productivity increase the economic well-being. It increases the income and the standard of living of the people. It brings in money for the company.

Importance of Productivity

Productivity increases output. High productivity results in lower cost per unit of output resulting in higher levels of profit for a business. For example, a factory worker can produce 10 items in an hour and he subsequently produces 20 units in the same hour after some training. His

productivity has doubled and the business will benefit from a fall in unit cost as more units are being produces at the same costs of production.

Higher profits for the firm will mean more funds available for its expansion, new business ventures and community support. It may also wish to pass on the benefits of lower costs to consumers in the form of lower prices.

Productivity has the following advantages:

- It emphasizes the efficient utilization of all the factors of production which are scarce universally. It

attempts to eliminate wastage.

- It facilitates the comparison of the performance of a company to its competitors or Related firms, in terms of aggregate results and of major components of performance.
- It enables the management to control the performance of the company by identifying the comparative benefits arising out of the use of different inputs.

	Production	**Productivity**
Meaning	It is defined as the act of manufacturing goods for their use or sale.	It is defined as the rate at which goods are produced.
Use	It is the actual process of conversion.	It is the utilization of resources to form goods.
Work done	It is the amount of work done or manufactured that is the output.	It is the amount of work one gets for a certain spending cost.
Measurement	It is the measure of produced goods	It is the measure of efficiency.

(B). Trends in Agricultural Production

Agricultural production in India can be broadly classified into food crops and commercial crops. In India the major food crops include rice, wheat, pulses, coarse cereals etc. Similarly, the commercial crops or non-food crops include raw cotton, tea, coffee, raw jute, sugarcane, oil seeds etc.

In India, total agricultural production has been increasing with the combined effect of growth in total cultivated areas and increases in the average yield per hectare of the various crops. Table reveals the trend in total agricultural production in India since independence.

The Table reveals that total production of food grains had increased from 55 million tonnes in 1949-50 to 89 million tonnes in 1964-65 and then increased to 176 million tonnes in 1990-91. But in 1991-92, total production of food grains came down to 167 million tonnes mainly due to fall in the production of coarse cereals and in 1993-94, the production was around 184 million tonnes.

In 2002- 03, total production of food grains has further decreased to 174.8 million tonnes. As per advance estimates, total production of food grains has again increased to 233.9 million tonnes in 2008-09. Thus in the pre-green revolution period (1950-65) the food grains production had experienced impressive annual growth rate of 3.2 per cent and in the post- green revolution period (1967-2007), the same annual growth rate was to the extent of 2.7 per cent.

The major cereals like rice and wheat recorded a high growth rate, i.e., 3.5 and 4.0 per cent respectively during the first period (1950-65) and again to the extent of 2.2 and 5.0 per cent respectively during the second period (1967-2007). But the growth rate in coarse cereals and pulses remained quite marginal.

Total production of rice and wheat have increased from 24 million tonnes and 6 million tonnes in 1949-50 to 39 million tonnes and 12 million tonnes in 1964-65 and then to 99.2 million tonnes and 80.6 million tonnes respectively in 2008-09. In respect of non-food grains the trends in production in respect of potato and sugarcane were quite impressive and that of cotton and oilseeds were not up to the mark.

The table further shows that the new agricultural strategy could not bring a breakthrough in agricultural output of the country excepting wheat and potato which recorded about 4.8 per cent and 6.7 per cent annual growth rate

respectively during the post-green revolution period. The growth in output in respect of all other crops remained low and that of coarse cereals and pulses were only marginal where the annual growth rates were only 0.4 and 1.04 per cent respectively.

From the above analysis we can draw the following important observations:

(i) In the pre-green revolution period, the growth of output has mainly contributed by the growth or expansion in area but in the post-green revolution period, improvement in agricultural productivity arising from the adoption of modern technique has contributed to growth in output.

(ii) In-spite of adopting modern technology, the growth rate in output, excepting wheat could not maintain a steady level.

(iii) During the post-green revolution period the growth rate in output was comparatively lower than the first annual growth rate in food grains was maintained at the level of 2.7 per cent in the second period.

(iv) The growth rate in output of oil seeds, pulses and coarse food grains declined substantially in the second period as the cultivation of these crops have been shifted to inferior lands.

(v) Although agricultural production attained a substantial increase since independence but these production trends have been subjected to continuous fluctuations mainly due to variation of monsoons and other natural factors.

(C). Trends in Agricultural Productivity

By the term agricultural productivity we mean the varying relationship between the agricultural output and one of the major inputs such as land. The most commonly used term for representing agricultural productivity is the average yield per hectare of land.

After the introduction of modern agricultural technique along-with the adoption of hybrid seeds, extension of irrigation facilities and application of intensive method of cultivation in India, yield per hectare of all crops has recorded a steep rising trend. Table shows the trend in agricultural productivity in India, i.e., the average yield per hectare.The Table reveals that in India the average yield per hectare for all food-grains has recorded an increase from 5.5 quintals in 1949- 50 to 7.6 quintals in 1964-65 and then to 18.98 quintals in 2008- 09 showing an annual growth rate of 1.4 per cent during 1950-65 and 2.4 per cent during 1965-2007.

Moreover, the average yield per hectare in respect of rice and wheat which were 7.1 quintals and 6.6 quintals respectively in 1949-50 gradually increased to 10.8 quintals and 9.1 quintals in 1964-65 showing an annual growth rate of 2.1 per cent and 1.3 per cent in respect of rice and wheat respectively.

Again during the post-green revolution period (1965-2009), the average yield per hectare in respect of rice and wheat has again increased to 21.86 quintals and 28.91 quintals respectively showing a considerable annual growth rate of 3.4 per cent in respect of wheat and 2.3 per cent in respect of rice. But the annual growth rate of coarse cereals increased by only 1.3 per cent and that of pulses of only 0.5 per cent during the period 1967-2009. Moreover, the annual growth rate of yield per hectare of all crops went up to 2.49 per cent during the period 1980-81 to 1993- 94 as compared to that of 1.28 per cent during 1967-68 to 1980-81.

Among the non-food-grains, cotton and sugarcane achieved a modest growth rate of 2.0 per cent and 1.0 per cent respectively during 1950-65 and again to the extent of 2.4 per cent and 1.2 per cent respectively during 1967-2009.

Moreover, potato has recorded a considerable increase in annual growth rate from 1.6 per cent during 1950-65 to 3.0 per cent during 1967-2009. Again, taking all crops together, the annual average growth rate of all crops rose from 1.3 per cent during 1950-1965 to 1.9 per cent during 1967-2009. Thus the above data reveal that the green revolution and the application of new bio- chemical technology have become very much effective only in case of wheat and potato but proved ineffective in case of other crops.

Moreover, if we compare the average yield per hectare of various crops in India with foreign countries then we find that India lags far behind the other developed countries of the world. In 1990- 91, the annual average yield of rice per hectare was only 17.5 quintals in India as against 41 quintals in U.S.A., 61.9 quintals in Japan and 54 quintals in China. Again, the annual average yield of wheat per hectare was only 22.7 quintals in India as against

68 quintals in Germany, 61 quintals in France and 30 quintals in China.

NEW AGRICULTURAL STRATEGY

FEATURES OF NEW AGRICULTURAL STRATEGY

1. Consolidation of Land Holdings:

Land ownership rights to the tillers and basic forward outlook Punjab farmers were the basic reason for providing ground to the green revolution in the northern India.

2. Improved Variety of Seeds:

Agricultural revolution is primarily due to the miracle of improved varieties of seeds which have increased yields per acre.

3. Greater Intensity of Cropping:

The new agricultural strategy is not only concerned with higher yield but also with greater intensity of cropping. Therefore, new crop rotations have been made possible by developing short duration varieties of paddy, jowar, bajra and maize which are suited to different agro- climatic conditions. In the same way, other crops like barley, oilseed, potato and vegetables have also been considered for rotation.

4. Extension of Irrigation:

In the areas, where new agricultural strategy is being applied, irrigation facilities are speedily being expanded to assure the adequate water supply. During the last 10-12 years, there has occurred a remarkable growth of tube-wells, pump-sets etc.

5. Modern Farm Machinery:

Modern farm machinery like tractors, harvesters, pumping sets, tube-well, etc. are being increasingly used and are replacing the bullocks. Being, time saving, use of modern machinery in agriculture is conducive to multiple cropping. Because of accuracy and timelines of use of inputs by machines, the costs have been reduced.

6. Role of Public Institutions:

Several new public institutions like National Seeds Corporation, Agro Industries Corporations, National Co-operative Development Corporation etc. have been set up to promote services to the cultivators at door steps. Moreover, they have been provided with sufficient funds to lend liberal loans to peasants to adopt latest farm technology.

7. Package of Inputs:

The main thrust of the new agricultural strategy is the application of the package of improved practices. In other words, it aimed at making the cultivators to adopt simultaneously all the elements needed for augmenting production. The main constituents of the package practices are improved seed, fertilizers, plant protection measures and water use etc.

8. Guaranteed Minimum Prices:

The guaranteed minimum prices have been given due recognition as an incentive to agricultural production. Support price policy for food-grains was adopted in 1964 throughout the country. In order to advice the govt. for suitable price policies for agriculture, Agricultural Price Commission was set up in the subsequent years. Similarly, Food Corporation of India was also set up to purchase food-grains.

9. Agricultural Research and Education:

A number of measures have been adopted in this direction of facilitate organisation and development of agricultural research. The Indian Council of Agricultural Research was reorganised in 1965. Agricultural Universities have been set up in most of the states which were conceived as combining the function of education, research and extension.

10. Plant Protection Measures:

As pests and diseases have been causing severe damage to crops, plant protection has been considered another major component of new agricultural strategy. This programme includes seeds treatment, intensive aerial and ground spraying against insects, weed control and rodent control.

NATIONAL AGRICULTURAL POLICY 2000

The first ever National Agriculture Policy was announced on 28th July, 2000. The formulation of Agriculture Policy had been under consideration of the Government for the last few years as a comprehensive National Agriculture Policy was absolutely essential to build on the inherent strength of the agriculture and allied sectors to address the constraints and to make optimal use of resources and opportunities emerging as a result of advancement in science and technology and emerging of a new economic regime.

National Agriculture Policy seeks to actualise vast untapped growth potential of Indian Agriculture, strengthen rural infrastructure to support faster agricultural development, promote value addition, accelerate the growth of agro-business create employment in rural areas, secure affair standard of living for the farmers and agricultural workers and their families, discourage

migration to urban areas and face the challenges arising out of economic liberalization and globalization over the next two decades, it aims to attain:

- A growth rate in excess of four per cent annum in the agriculture sector;
- Growth that is based on efficient use of resources and conserves our soil, water and bio- diversity;
- Growth with equality, i.e. growth which is widespread across regions and famers;
- Growth that is demand driven and caters to domestic markets and maximizes benefits from exports of agricultural products in the face of the challenges arising from economic liberalization and globalisation
- Growth that is sustainable technologically, environmentally and economically.

A nine pronged strategy has been devised to meet the challenges of enhancing production and strengthening rural economies while taking care to promote technically sound, economically viable, environmentally non-degrading and socially acceptable use of country's natural resources-land and water particular.

The unutilised wastelands will be put to use for agriculture and afforestation besides reclamation of degraded lands. Integrated and holistic development of rainfed areas, conjunctive use of surface and ground water, on farm water management, sensitization of farming community with environmental concerns will be given priority. Survey and evaluation of genetic resources and safe conservation of both indigenous and exogenously introduced genetic variability in crop productivity and utility needs particular attention. The use of bio-technologies will be promoted for evolving plants which consume less water, are drought resistant, pest resistant, contain more nutrition, give higher yields and are environmentally safe. Conservation of bio-resources through their exsitu preservation in gene banks as also in situ conservation in their natural habitats through bio-diversity parks, etc will receive a high priority to present their extinction.

A regionally differentiated strategy for development of crops horticulture, floriculture, roots and tubers, plantation crops, aromatic and medicinal plants, bee keeping and sericulture shall be adopted. Live-stock breeding, dairying, poultry, agriculture shall be promoted through generation and dissemination of appropriate technologies. Research and extension linkages will be broad based and strengthened to improve effective use of new technologies. Adequate and timely supply of quality inputs such as seed, fertilizers, plant protection chemicals, bio pesticides, agriculture machinery and credit at reasonable rates to farmers will be the endeavour of the government.

Agriculture in India has suffered for want of infrastructural facilities. The National Agriculture Policy gives emphasis on stepping up public investment for narrowing regional imbalances, accelerating development of supportive infrastructure for agriculture and rural development particularly rural connectivity. A conducive climate will be created through a favourable price

and trade regime to promote farmers' own investments as also investments by industries producing inputs for agriculture and agro-based industries. High priority is also given to rural electrification, development of market infrastructure and setting up of agro-processing units to reduce wastage particularly of horticulture produce, and to enhance value addition with the objective to create off- farm employment in rural areas. To safeguard the interest of farmers, National Agricultural Insurance Scheme covering all farmers and all crops throughout the

country with built in provisions for insulating farmers from financial distress caused by natural disasters and making agriculture financially viable will be made more farmer specific and effective. Endeavour will be made to provide a package insurance policy for the farmers, right from sowing of the crops to post harvest operations, including market fluctuations in the prises of agriculture produce.

Indian Agriculture is characterised by predominance of small and marginal farmers. Institutional reforms will be so pursued as to channelize their energies for achieving productivity and production. The approach to rural development and land reforms will focus on the following areas:

- Consolidation of holdings all over the country on the pattern of north-western states
- Redistribution of ceiling surplus lands and waste lands among the landless farmers, unemployed youth with initial start with capital
- Tenancy reforms to recognise the rights of the tenants and share croppers
- Development of lease markets for increasing the size of the holdings by making legal provisions for giving private lands on lease for cultivation and agri-business
- Updating and improvement of land records, computerization and issue of land pass-books to the farmers; and
- Recognition of women's rights on land

People's participation through Panchayati Raj Institutions, Voluntary groups, social activists and community leaders shall be adequately encouraged for implementation of programmes. Progressive institutionalization of rural and farm credit for providing timely and adequate credit to farmers will be continued Cooperative sector shall be strengthened by:

- Structural reforms for promoting greater efficiency and viability by freeing them from excessive bureaucratic control and political inferences;
- Creation of infrastructure and human resource development
- Improvement in financial viability and organizational sustainability of cooperatives
- Democratization of management and increased professionalism in their operation and
- Creating a viable interface with other grassroots organization

GREEN REVOLUTION

Green Revolution Definition:

(i) a large increase in crop production in developing countries achieved by the use of artificial fertilizers, pesticides, and high-yield crop varieties.

(ii) a dramatic rise in concern about the environment in industrialized countries.

Green Revolution in India

When the British left India in 1947, India continued to be haunted by memories of the Bengal Famine. It was therefore natural that food security was one of the main items on free India's agenda. This awareness led, on one hand, to the Green Revolution in India and, on the other, legislative measures to ensure that businessmen would never again be able to hoard food for reasons of profit.

It was mainly found by M.S. Swaminathan. This was part of the larger Green revolution endeavor initiated by Norman Borlaug, which leveraged agricultural research and technology to increase agricultural productivity in the developing world. The Green Revolution within India commenced in 1958 that led to an increase in food grain production, especially in Punjab, Haryana, and Uttar Pradesh. Major milestones in this undertaking were the development of high-yielding varieties of wheat and rust resistant strains of wheat.

The Green Revolution, spreading over the period from1967/68 to 1977/78, changed India's status from a food-deficient country to one of the world's leading agricultural nations. Until 1967 the government largely

concentrated on expanding the farming areas. But the population was growing at a much faster rate than food production. This called for an immediate and drastic action to increase yield. The action came in the form of the Green Revolution. The term 'Green Revolution' is a general one that is applied to successful agricultural experiments in many developing countries. India is one of the countries where it was most successful.

There were three basic elements in the method of the Green Revolution:

a) Continuing expansion of farming areas

b) Double-cropping in the existing farmland

c) Using seeds with improved genetics

The area of land under cultivation was being increased from 1947 itself. But this was not enough to meet the rising demand. Though other methods were required, the expansion of cultivable land

also had to continue. So, the Green Revolution continued with this quantitative expansion of farmlands.

Double cropping was a primary feature of the Green Revolution. Instead of one crop season per year, the decision was made to have two crop seasons per year. The one-season- per-year practice was based on the fact that there is only one rainy season annually. Water for the second phase now came from huge irrigation projects. Dams were built and other simple irrigation techniques were also adopted.

Using seeds with superior genetics was the scientific aspect of the Green Revolution. The Indian Council for Agricultural Research (which was established by the British in 1929) was reorganized in 1965 and then again in 1973. It developed new strains of high yield variety seeds, mainly wheat and rice and also millet and corn.

The Green Revolution was a technology package comprising material components of improved high yielding varieties of two staple cereals (rice and wheat), irrigation or controlled water supply and improved moisture utilization, fertilizers, and pesticides, and associated management skills.

Some of the important components of the green revolution in India:

i. High Yielding Varieties (HYV) of seeds.
ii. Irrigation - (a) surface and (b) ground.
iii. Use of fertilizers (chemical).
iv. Use of Insecticides and Pesticides.
v. Command Area Development (CAD).
vi. Consolidation of holdings.
vii. Land reforms.
viii. Supply of agricultural credit.
ix. Rural electrification.
x. Rural Roads and Marketing.
xi. Farm Mechanisation.
xii. Agricultural Universities.

Benefits

Thanks to the new seeds, tens of millions of extra tonnes of grain a year are being harvested. The Green Revolution resulted in a record grain output of 131 million tonnes in 1978/79. This established India as one of the world's biggest agricultural producers. Yield per unit of farmland improved by more than 30% between1947 (when India gained political independence) and 1979. The crop area under high yielding varieties of wheat and rice grew considerably during the Green Revolution.

The Green Revolution also created plenty of jobs not only for agricultural workers but also industrial workers by the creation of related facilities such as factories and hydroelectric power stations.

MAJOR ECONOMIC IMPACT OF GREEN REVOLUTION IN INDIA:

1. Increase in Agricultural Production:

The introduction of Green Revolution in 1967-68 has resulted in phenomenal increase in the production of agricultural crops especially in food-grains. From 1967 onwards, the Green Revolution aimed at bringing about a Grain Revolution.

2. Prosperity of Farmers:

With the increase in farm production the earnings of the farmers also increased and they became prosperous. This has, especially, been the case with big farmers having more than 10 hectares of land.

3. Reduction in import of food-grains:

The main benefit of Green Revolution was the increase in the production of food-grains, as a result of which there was a drastic reduction in their imports. We are now self sufficient in food-grains and have sufficient stock in the central pool. Sometimes we are in a position to export food-grains also.

4. Capitalistic Farming:

Big farmers having more than 10 hectares of land have tended to get the maximum benefit from Green Revolution technology by investing large amount of money in various inputs like HYV seeds, fertilizers, machines, etc. This has encouraged capitalistic farming.

5. Ploughing back of profit:

The introduction of Green Revolution helped the farmers in raising their level of income. Wiser farmers ploughed back their surplus income for improving agricultural productivity. This led to further improvement in agriculture. According to a study conducted by Punjab Agriculture University, Ludhiana farmers plough back about 55 per cent of their income for agricultural progress.

6. Industrial Growth:

Green Revolution brought about large scale farm mechanisation which created demand for different types of machines like tractors, harvestors, threshers, combines, diesel engines, electric motors, pumping sets, etc. Besides, demand for chemical fertilizers, pesticides, insecticides, weedicides, etc. also increased considerably.

7. Rural Employment:

While on one hand, large scale unemployment was feared due to mechanization of farming with the introduction of Green Revolution technology in India, there was an appreciable increase in the demand for labour force due to multiple cropping and use of fertilizers.

8. Change in the Attitude of Farmers:

The Indian farmer had remained illiterate, backward and traditional and had been using conventional methods of cultivation since the early times. But Green Revolution has brought about a basic change in his attitude towards farming. The way he has readily adopted the Green Revolution technology has exploded the myth that the Indian farmer is basically tradition bound and does not use new methods and techniques.

SHORTCOMINGS OR WEAKNESSES OF GREEN REVOLUTION

Following are some of basic weaknesses of Green Revolution

(i) More inequality among farmers (Inter-personal inequalities):

The new technology requires a huge amount of investment which can be only, afforded by the big farmers. Hence, these farmers are getting the absolute benefits of the green revolution and became comparatively more rich than farmers. This increases inequality in rural India

(ii)Regional inequality:

Benefits of the new technology remained concentrated in wheat growing area since green revolution remained limited to wheat for a number of years. These were thy regions of Punjab, Haryana and Western Uttar Pradesh. On account of the above reasons new agricultural strategy has led to an increase in regional inequalities.

(ii) The Question of Labour Absorption:

There is a general consensus that the adoption of new technology had reduced labour absorption in agriculture. The uneven regional growth was mainly responsible for the low absorption of labour within agriculture. The growth of output was also slow to generate

adequate employment opportunities. The sudden rise in the demand for labour in these areas induced mechanisation and labour-saving practices in general.

(iv) Undesirable Social Consequences:

Some micro level socio-economic studies of green revolution areas have revealed certain undesirable social consequences of the green revolution. Many large farmers have evicted tenants as they now find it more profitable to cultivate land themselves.

(v) Health Hazards:

The health hazards of the new technology can also not be lost sight of. Increased mechanization that has accompanied the modernisation of farm technology in green revolution areas carries with it the risk of incapitation due to accidents. The attitude of the Government towards the problems of treatment and rehabilitation of victims of accidents on farm machines is that of total ambivalence. Meagre compensation is provided to victims.

(vi) Change in Attitudes:

A healthy contribution of green revolution is the change in the attitudes of fanners in areas where the new agricultural strategy was practised. Increase in productivity in these areas has enhanced the status of agriculture from a low level subsistence activity to a money- making activity. The desire for better farming methods and better standard of living is growing up.

PUBLIC DISTRIBUTION SYSTEM (PDS)

The Public distribution system (PDS) is an Indian food Security System established under the Ministry of Consumer Affairs, Food, and Public Distribution. PDS evolved as a system of management of scarcity through distribution of food grains at affordable prices. PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through Food Corporation of India (FCI), has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments. The operational responsibilities including allocation within the State, identification of eligible families, issue of Ration Cards and supervision of the functioning of Fair Price Shops (FPSs) etc., rest with the State Governments. Under the PDS, presently the commodities namely wheat, rice, sugar and kerosene are being allocated to the States/UTs for distribution. Some States/UTs also distribute additional items of mass consumption through the PDS outlets such as pulses, edible oils, iodized salt, spices, etc.

Objectives of PDS

The objectives of the Public Distribution System are as follows:

- To improve distribution of basic goods
- To control prices of essential commodities & stability in prices
- To meet consumption needs of masses
- To maintain good quality at low cost
- To work the production and marketing system into a unified whole
- To provide essential goods to the weaker section at a cheap and subsided prices
- To increase the facilities for the poor and rationing during situations of scarcity

Evolution of PDS in India

- PDS was introduced around World War II as a war-time rationing measure. Before the 1960s, distribution through PDS was generally dependant on imports of food grains.
- It was expanded in the 1960s as a response to the food shortages of the time; subsequently, the

government set up the Agriculture Prices Commission and the FCI to improve domestic procurement and storage of food grains for PDS.

- By the 1970s, PDS had evolved into a universal scheme for the distribution of subsidised food
- Till 1992, PDS was a general entitlement scheme for all consumers without any specific target.
- The Revamped Public Distribution System (RPDS) was launched in June, 1992 with a view to strengthen and streamline the PDS as well as to improve its reach in the far-flung, hilly, remote and inaccessible areas where a substantial section of the underprivileged classes lives.
- In June, 1997, the Government of India launched the Targeted Public Distribution System (TPDS) with a focus on the poor.
- Under TPDS, beneficiaries were divided into two categories: Households below the poverty line or BPL; and Households above the poverty line or APL.
- Antyodaya Anna Yojana (AAY): AAY was a step in the direction of making TPDS aim at reducing hunger among the poorest segments of the BPL population.
- A National Sample Survey exercise pointed towards the fact that about 5% of the total population in the country sleeps without two square meals a day. In order to make TPDS more focused and targeted towards this category of population, the "Antyodaya Anna Yojana” (AAY) was launched in December, 2000 for one crore poorest of the poor families.
- In September 2013, Parliament enacted the National Food Security Act, 2013. The Act relies largely on the existing TPDS to deliver food grains as legal entitlements to poor households. This marks a shift by making the right to food a justiciable right.

Features of the Public Distribution System

- Free market mechanism co-exists with the PDS
- Selected commodities, essential basically, are distributed through the fair-price shops and cooperatives which operate under governmental control and direction
- The government maintains a buffer stock and restores the same through the system of procurement
- It has been primarily an urban oriented system

- Prices charged are lower than the market prices, generally, subsidies are extended by the government
- Subsidies are given by the government for essential commodities hence the commodities are available at a lower cost than the market price

Importance of PDS

- It helps in **ensuring Food and Nutritional Security** of the nation.
- It has helped in **stabilising food prices** and making food available to the poor at affordable prices.
- It **maintains the buffer stock of food grains** in the warehouse so that the flow of food remain active even during the period of less agricultural food production.
- It has helped in **redistribution of grains** by supplying food from surplus regions of the country to deficient regions.
- The system of minimum support price and procurement has contributed to the increase in food grain production.

Issues Associated with PDS System in India

- **Identification of beneficiaries:** Studies have shown that targeting mechanisms such as TPDS are prone to **large inclusion and exclusion errors.** This implies that entitled beneficiaries are not getting food grains while those that are ineligible are getting undue benefits.
- According to the estimation of an expert group set up in 2009, PDS suffers from nearly 61% error of

exclusion and 25% inclusion of beneficiaries, i.e. the misclassification of the poor as non-poor and vice versa.

- **Leakage of food grains:** (Transportation leakages + Black Marketing by FPS owners) TPDS suffers from large leakages of food grains during transportation to and from ration shops into the open market. In an evaluation of TPDS, the erstwhile Planning Commission found 36% leakage of PDS rice and wheat at the all-India level.
- **Issue with procurement:** Open-ended Procurement i.e., all incoming grains accepted even if buffer stock is filled, creates a shortage in the open market.
- **Issues with storage:** A performance audit by the **CAG** has revealed a serious **shortfall in the government's storage capacity.**
- Given the increasing procurement and incidents of **rotting food grains,** the lack of adequate covered storage is bound to be a cause for concern.
- The provision of **minimum support price (MSP)** has encouraged farmers to divert land from production of coarse grains that are consumed by the poor, to rice and wheat and thus, **discourages crop diversification.**
- **Environmental issues:** The over-emphasis on attaining self-sufficiency and a surplus in food grains, which are water-intensive, has been found to be **environmentally unsustainable.**

- Procuring states such as Punjab and Haryana are under environmental stress, including **rapid groundwater depletion, deteriorating soil and water conditions from overuse of fertilisers.**
- It was found that due to cultivation of rice in north-west India, the water table went down by 33 cm per year during 2002-08.

PDS Reforms

- **Role of Aadhar:** Integrating Aadhar with TPDS will help in better identification of beneficiaries and **address the problem of inclusion and exclusion errors.** According to a study by the Unique Identification Authority of India, using Aadhaar with TPDS would help eliminate duplicate and ghost (fake) beneficiaries, and make identification of beneficiaries more accurate.
- **Technology-based reforms of TPDS implemented by states: Wadhwa Committee,** appointed by the Supreme court, found that certain states had implemented computerisation and other technology-based reforms to TPDS. Technology-based reforms helped plug leakages of food grains during TPDS.
- Tamil Nadu implements a **universal PDS,** such that every household is entitled to subsidized food grains.
- States such as Chhattisgarh and Madhya Pradesh have implemented IT measures to streamline TPDS, through the digitisation of ration cards, the use of GPS tracking of delivery, and the use of SMS based monitoring by citizens.

ROLE OF NABARD IN RURAL CREDIT

The National Bank for Agriculture and Rural Development is popularly referred to as NABARD.

NABARD is designated as an apex development bank in the country. This national bank was established in 1982 by a Special Act of the Parliament, with a mandate to uplift rural India by facilitating credit flow in agriculture, cottage and village industries, handicrafts and small-scale industries. It is also required to support non-farm sector while promoting other allied economic activities in rural areas. NABARD functions to promote sustainable rural development for attaining prosperity of rural areas in India.

It is basically concerned with "matters concerning policy, as well as planning and operations in the field of credit for agriculture and other economic activities in rural areas in India". It is worth noting with reference to NABARD that RBI has sold its own stake to the Government of India. Therefore, Government of India holds 99% stake in NABARD.

Role of NABARD:

- It is an apex institution which has power to deal with all matters concerning policy, planning as well as operations in giving credit for agriculture and other economic
- It is a refinancing agency for those institutions that provide investment and production activities in the rural areas. credit for promoting the several developmental programs for rural development.
- It is improving the absorptive capacity of the credit delivery system in India, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, and training of personnel.
- It co-ordinates the rural credit financing activities of all sorts of institutions engaged in developmental work at the field level while maintaining liaison with Government of India, and State Governments, and also RBI and other national level institutions that are concerned with policy formulation
- It prepares rural credit plans, annually, for all districts in the country.
- It also promotes research in rural banking, and the field of agriculture and rural development.

Functions of NABARD:

- NABARD gives high priority to projects formed under IRDP.
- It provides refinance for IRDP accounts in order to give highest share for the support for poverty alleviation programs run by IRDP.
- Other than the activities included under IRDP, it also makes the service area plan, to provide backward and forward linkages and also infrastructural support.
- NABARD also prepares guidelines for promotion of group activities under its programs and provides 100% refinance support for them.
- It is making efforts to establish linkages between Self-Help Group(SHG) that are organized by voluntary agencies for poor and needy in rural areas and other official credit agencies.
- It refinances to the complete extent for those projects that are taken under the 'National Watershed Development Programme' and the 'National Mission of Wasteland Development'.
- It also has a system of District Oriented Monitoring Studies, under which, study is conducted for a cross section of schemes that are sanctioned in a district to various banks, to ascertain their performance and to identify the constraints in their implementation, It also initiates appropriate action to remedy them.
- It also supports Vikas volunteer Vahini programs which offer credit and development activities to poor farmers.
- It also inspects and supervises the cooperative banks and RRBs to periodically ensure the development of the rural financing and farmers' welfare.
- NABARAD also recommends about licensing for RRBs and Cooperative banks to RBI.
- NABARD also provides assistance and support for the training and development of the staff of various other credit institutions that are engaged in credit distributions.
- It also runs programs for agriculture and rural development.
- It is engaged in regulations of the cooperative banks and the RRB's, and manages their talent acquisition through IBPS CWE conducted across the country.

SOME OF THE MILESTONES IN NABARD'S ACTIVITIES ARE:

A. Business Operations:

a. **Production Credit:** NABARD sanctioned aggregating of 66,418 crore short term loans to Cooperative Banks and Regional Rural Banks (RRBs) during 2012-13, against which, the maximum outstanding was 65,176 crore.

b. **Investment Credit :** Investment Credit for capital formation in agriculture & allied sectors, non-farm sector activities and services sector to commercial banks, RRBs and co- operative banks reached a level of 17,674.29 crore as on 31 March 2013 registering an increase of 14.6 per cent, over the previous year.

c. **Rural Infrastructure Development Fund (RIDF):** Through the Rural Infrastructure Development Fund (RIDF) 16,292.26 crore was disbursed during 2012-13. A cumulative amount of 1,62,083 crore has been sanctioned for 5.08 lakh projects as on 31 March 2013 covering irrigation, rural roads and bridges, health and education, soil conservation, drinking water schemes, flood protection, forest management etc.

B. New Business Initiatives:

a) **NABARD Infrastructure Development Assistance (NIDA):** NABARD has set up NIDA, a new line of credit support for funding of rural infrastructure projects. The sanctions under NIDA during the year 2012-13 was 2,818.46 crore and disbursement was 859.70 crore.

b. **Producers Organisations Development Fund (PODF):** In its endeavour to support Producer's Organizations in a comprehensive manner, NABARD sanctioned as assistance of 55.95 crore out of Producer Organization Development Fund (PODF) to 34 PO's during 2012-13. The disbursment amounted to 29.18 crore covering major activities like dairy, fishery, marketing infrastructure and agro processing infrastructure.

c. **Direct refinance assistance to CCBs for short term multipurpose credit:** Direct refinance assistance to CCBs was conceived and additional line of finance for CCBs in the light of recommendations of the "Task Force on Revival of Short Term Rural Cooperative Credit Structutre, which enables the latter to raise financial resources other than from StCBs. During 2012-13, refinance assistance aggregating 3,385 crore was sanctioned to 42 CCBs and three StCBs and disbursement stood at 2,363.45 crore.

d. **Support to develop PACS as Multi Service Centres:** Keeping in mind the wide coverage of PACS at the ground level and the limited products at their disposal, NABARD extended financial support to StCBs/CCBs/PACS to develop PACS as Multi Service Centre (MSCs) so as to serve as "one Stop Shop"unit for meeting the various requirements of the farmers. During 212-13,747 PACS were supported with sanction of 141.17 crore and the disbursements thereagainst stood at 48.84 core, assistance for estabilishment of agro service, processing, storage and information centres, etc.

e. **NABARD Initiated Project on Core Banking Solutions (CBS) in Co-operatives :** Through Core Banking Solution (CBS), Co-operatives are being brought to a higher technology platform so as to compete with other banks for business and growth. The programme made rapid strides with 5,543 branches of 163 banks across 10 States joining the platform in the first phase and 42 banks joining in the second phase, a total of 7,088 branches of 205 StCBs and CCBs across 16 States and three UTs came into the umbrella of the programme as on 31 March 2013.

C. Development Initiatives:

a. **Watershed Development Fund (WDF):** The cumulative number of watershed projects sanctioned under Watershed Development Fund (WDF) stood at 586 in 16 States covering an area of 5.40 lakh ha with total commitment (loan and grant component) of 306.36 crore as on 31 March 2013.

b. **Farm Innovation and Promotion Fund (FIPF) and Farmers' Technology Transfer Fund (FTTF):** The funds were created out of the operating profits of NABARD to support innovative ventures and to support technology transfer in farm sector and its corpus stood at 50.00 crore and 61.21 crore respectively as on 31 March 2013. Grant assistance of 9.90 croreand 39.79 crore, respectively, were disbursed for various interventions under the programme during 2012-13.

c. **Farmers' Clubs:** With the launching of 24,802 new Farmers' Clubs during the year, the number of clubs reached 1.27 lakh as on 31 March 2013.

d. **Umbrella Programme on Natural Resource Management (UPNRM):** UPNRM aims to boost rural livelihoods by supporting community-managed sustainable natural resource management projects. Assistance of 174.30 crore was sanctioned during 2012-13 taking the cumulative sanction to 386.92 crore as at the end of March 2013. The cumulative disbursment under the programme amounted to 217.57 crore, including 207.23 crore as loan and 10.34 crore as grant.

e. **Tribal Development Fund (TDF):** During the year 2012-13, financial assistance of 224.26 crore was sanctioned for 69 projects benefiting 53,700 tribal families in 14 States. The cumulative sanction as on 31 March 2013 was 1,432 crore, covering 3.80 lakh families in 484 projects across 26 States/UTs.

f. **Financial Inclusion Fund (FIF) and the Financial Inclusion Technology Fund (FITF) :** As on 31 March 2013, the cumulative sanctions under FIF and FITF were 181.64 crore and 365.49 crore, respectively againstwhich disbursements were 69.77 crore and 201.30 crore, respectively.

g. **SHG-Bank Linkage Programme:** As on 31 March 2013, there were more than 73.18 lakh savings linked Self Help Groups (SHG) and more than 44.51 lakh credit-linked SHGs covering over 10.3 crore poor households under the micro-finance programme. NABARD carried forward its guiding role in the microfinance programme during 2012- 13 by taking a host of new initiatives and consolidating some of the already operational interventions.

ROLE OF RRB's IN RURAL CREDIT

The Regional Rural Banks (RRBs) aimed at providing credit and other facilities to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs in rural areas.

The RRB Act, 1986, empowers the Central Government to establish in a State or Union Territory one or more RRBs when any sponsor bank makes such a request The sponsor bank assists the RRB in many ways by subscribing to its share capital, by helping in its establishment, by assisting in recruitment and training of its cadre, and in general providing such managerial and financial assistance sought by the RRB.

The RRB functions within the local limits as specified by government notification. It can have its branches at any place as notified by the government.

Structure and Organization of the RRB:

The authorized capital of an RRB is fixed at Rs. 1 crore and its issued capital at Rs. 2 lakhs. Of the issued capital, 50 per cent is to be subscribed by the Central Government, 15 per cent by the concerned State Government and the rest 35 per cent by the sponsoring bank.

The working and affairs of the RRB are directed and managed by a Board of Directors consists of a Chairman, three directors to be nominated by the Central Government, and not more than two directors to be nominated by the State Government concerned, and not more than 3 directors to be nominated by the sponsoring bank. The chairman is appointed by the Central Government and his term of office does not exceed five years.

The following is the decision-making hierarchy of officials in a Regional Rural Bank.

- Board of Directors
- Chairman & Managing Director
- General Manager
- Assistant General Manager
- Regional Manager/Chief Manager
- Senior Manager
- Manager
- Officer
- Office Assistant
- Office Attendant

Regional Rural Banks were established with the following objectives in mind:

a) Taking the banking services to the doorstep of rural masses, particularly in hitherto unbanked rural areas. Identify the financial need specifically in rural areas.

b) Making available institutional credit to the weaker section of the society who had by far little or no access to cheaper loans and had perforce been depending on the private money lenders. To enhance banking & financing facilities in backward or unbanked areas.

c) Mobilize rural savings and channelize them for supporting productive activities in rural areas.

d) To provide finance to the weaker sections of society like small farmers, rural artisans, small producer, rural labourers etc.

e) To create a supplementary channel for the flow the central money market to the rural areas through refinances.

f) To provide finance to co-operative societies, Primary Credit societies, Agricultural marketing societies.

g) To provide finance to co-operative societies, Primary Credit societies, Agricultural marketing societies.

h) Enhance & improve banking facilities to semi urban, rural & other untapped market. With these objectives in mind, knowledge of the local language by the staff is an important qualification.

Functions of the RRB:

a. Granting of loans and advances to small and marginal farmers and agricultural labourers, whether individually or in groups, and to co-operative societies, agricultural processing societies, co-operative farming societies, primarily for agricultural purposes or for agricultural operations and other related purposes;

b. Granting of loans and advances to artisans, small entrepreneurs and persons of small means engaged in trade, commerce and industry or other productive activities within its area of co-operation; and

c. Accepting deposits.

State wise list of Regional Rural Banks

Presently there are 45 RRBs in India. On 1 April 2020 the Bank Reduced from 45 to 36

Name of State	**Name of RRB**	**Name of State**	**Name of RRB**
Andhra Pradesh	• Andhra Pragathi Grameena Bank Chaitanya Godavari Grameena Bank Saptagiri Grameena Bank	Jharkhand	• Jharkhand Rajya Gramin Bank
Arunachal Pradesh	• Arunachal Pradesh Rural Bank	Karnataka	• Karnataka Gramin Bank • Karnataka Vikas Grameena Bank

Assam	• Assam Gramin Vikash Bank	Kerala	• Kerala Gramin Bank
Bihar	• Dakshin Bihar Gramin Bank • Uttar Bihar Gramin Bank	Madhya Pradesh	• Madhyanchal Gramin Bank • Madhya Pradesh Gramin Bank
Chhattisgarh	• Chhattisgarh Rajya Gramin Bank	Maharashtra	• Maharashtra Gramin Bank • Vidharbha Konkan Gramin Bank • Wainganga Krishna Gramin Bank
Gujarat	• Baroda Gujarat Gramin Bank • (i) Saurashtra Gramin Bank	Manipur	• Manipur Rural Bank
Haryana	• Sarva Haryana Gramin Bank	Meghalaya	• Meghalaya Rural Bank
Himachal Pradesh	• Himachal Pradesh Gramin Bank	Mizoram	• Mizoram Rural Bank
Nagaland	• Nagaland Rural Bank	Odisha	• Odisha Gramya Bank • Utkal Grameen Bank
Puducherry	• Puduvai Bharathiar Grama Bank	Punjab	• Punjab Gramin Bank
Rajasthan	• Baroda Rajasthan Kshetriya Gramin Bank • Rajasthan Marudhara Gramin Bank	Tamil Nadu	• Tamil Nadu Grama Bank
Telangana	• Telangana Grameena Bank • (i) Andhra Pradesh Grameena Vikas Bank	Tripura	• Tripura Gramin Bank
Uttar Pradesh	• Aryavart Bank • Prathama UP Gramin Bank • Baroda UP Bank • (i) Purvanchal Bank • (ii) Baroda UP Gramin Bank • (iii) Kashi Gomti Samyut Gramin Bank	Uttarakhand	• Uttarakhand Gramin Bank
West Bengal	• Bangiya Gramin Vikash Bank • (i) Paschim Banga Gramin Bank • (ii) Uttarbanga Kshetriya Gramin Bank	Jammu and Kashmir	• J&K Grameen Bank • (i) Ellaquai Dehati Bank

QUESTIONS

PART – A

1. List any four features of New Agricultural Strategy.
2. Give the important components of Green Revolution
3. Define productivity in agriculture.
4. State the importance of productivity.
5. Mention the trends in agricultural productivity.
6. Write about the aims of national agriculture policy 2000.
7. What is green revolution.
8. Recall the meaning of public distribution system.
9. Interpret the short comings of Green Revolution
10. Infer on the objectives of Public Distribution System.
11. Give the expansion of NABARD.
12. List few cash crops and food crops.
13. Differentiate between production and productivity.
14. Mention the functions of RRB.

PART – B

1. Summarize the objectives, evolution, features and importance of Public Distribution System.
2. Explain in detail the role of NABARD in Rural Credit.
3. Elaborate on the features of new agricultural strategies.
4. Analyze the important components of Green Revolution.
5. Discuss the major economic impact and short comings of Green Revolution in India.
6. Summarize the role of regional rural banks in rural credit
7. What are causes for low productivity in agriculture?
8. Offer suggestions for raising the agricultural productivity in India and the income of farmers.
9. Enumerate some of the milestones in NABARD's activities.
10. Explain production and productivity.

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SCHOOL OF MANAGEMENT STUDIES

UNIT – III – Indian Economy – SBAA1203

UNIT 3 INDUSTRY

Industry - Large and Small scale Industries - Role of industries in economic development - Industrial licensing policy- FEMA, FERA- MSME- Role of Public sector enterprisers in India's industrialization. Financial Sector: Sources of Finance - Foreign Trade and balance of trade and Balance of Payments; Role of FDI.

MEANING OF INDUSTRY

The industry refers to economic activity that is concerned with the production of goods, extraction of minerals, or the provision of services. Industries are classified according to the raw material used, size, and ownership.

LARGE SCALE INDUSTRIES

Industries which requires huge infrastructure and manpower with an influx of capital assets are Large Scale Industries. In India, large-scale industries are the ones with a fixed asset of more than one hundred million rupees or Rs. 10 crores.

The Indian economy relies heavily on such industries for economic growth, generation of foreign currency, and the creation of job opportunities for millions of Indians.

The following heavy industries fall under the purview of large scale industries:

- Iron and Steel Industry
- Textile Industry
- Automobile Manufacturing Industry
- Over the last two decades, Information and Technology (IT) industry has evolved and has contributed huge revenues while creating thousands of jobs for Indians. Hence, many economists include it in the large-scale industry sector.
- Telecom Industry

SMALL SCALE INDUSTRIES

Essentially small scale industries comprise of small enterprises who manufacture goods or services with the help of relatively smaller machines and a few workers and employees. Basically, the enterprise must fall under the guidelines set by the Government of India. At the time being such limits are as follows,

- For Manufacturing Units for Goods: Investment in plant and machinery must be between 25 lakhs and five crores.
- For Service Providers: Investment in machinery must be between 10 lakhs and two crores. Examples and Ideas of Small Scale Industries
- Bakeries
- Candles

- School stationeries
- Water bottles
- Leather belt
- Small toys
- Paper Bags
- Xerox and printing
- T-shirt Printing
- Photography

Characteristics of Small Scale Industries

- Ownership: Such units are generally under single ownership. So it is a sole proprietorship or sometimes a partnership.
- Management: Both the management and the control generally is with the owner/owners. So the owner is actively involved with the daily running of the business.
- Limited Reach: Small scale industries have a restricted area of operations. So they meet local and regional demand.
- Labor Intensive: These small scale industries tend to use labour and manpower for their production activities. So their dependence on technology is pretty limited.
- Flexibility: These units are more adaptable to their changing business environment. So in case of sudden changes or unexpected developments, they are flexible enough to adapt and keep carrying on. Large industries do not have this advantage.
- Resources: They use local and readily available resources. This also helps the economy with better utilization of natural resources and less wastage.

CLASSIFICATION OF INDUSTRIES IN INDIA

I. On the Basis of Strength of Labour:

1. Large Scale Industry:

Industries which employ a large number of labourers in each unit are called large-scale industries. Cotton or jute textile industries are large scale industries.

2. Medium Scale Industries:

The industries which employ neither very large nor very small number of labourers are put in the category of medium scale industries. Cycle industry, radio and television industries are some examples of medium scale industries.

3. Small Scale Industries:

Industries which are owned and run by individuals and which employ a small number of

labourers are called small scale industries.

II. On the Basis of Raw-Material and Finished Goods:

Industries classified on the basis of raw materials and finished goods are:

1. Heavy Industries:

Industries which use heavy and bulky raw-materials and produce products of the same category are called heavy industries. Iron and steel industry presents a good example of heavy industries.

2. Light Industries:

The light industries use light raw-materials and produce light finished products. Electric fans, sewing machines are light industries.

III. On the basis of Ownership:

Since the start of the planned development of Indian economy in 1951, industries are divided in the following four classes:

1. Private Sector Industries:

Industries owned by individuals or firms such as Bajaj Auto or TISCO situated at Jamshedpur are called private sector industries.

2. Public Sector Industries:

Industries owned by the state and its agencies like Bharat Heavy Electricals Ltd., or Bhilai Steel Plant or Durgapur Steel Plant are public sector industries.

3. Joint Sector Industries:

Industries owned jointly by the private firms and the state or its agencies such as Gujarat Alkalies Ltd., or Oil India Ltd. fall in the group of joint sector industries.

4. Co-operative Sector Industries:

Industries owned and run co-operatively by a group of people who are generally producers of raw materials of the given industry such as a sugar mill owned and run by farmers are called co-operative sector industries.

IV. On the Basis of Source of Raw Material:

On the basis of source of raw materials, industries are classified as under:

1. Agro Based Industries:

Agro based industries are those industries which obtain raw-material from agriculture. Cotton textile, jute textile, sugar and vegetable oil are representative industries of agro-based group of industries

2. Mineral Based Industries:

The industries that receive raw materials primarily from minerals such as iron and steel, aluminium and cement industries fall in this category.

3. Pastoral-Based Industries:

These industries depend upon animals for their raw material. Hides, skins, bones, horns, shoes, dairy, etc. are some of the pastoral-based industries.

4. Forest Based Industries:

Paper card-board, lac, rayon, resin, tanning of leather, leave- utensils, basket industries are included in this type of industries.

V. Miscellaneous Industries:

Industries are also classified into the following miscellaneous categories.

1. Village Industries:

Village industries are located in villages and primarily cater to the needs of the rural people. They usually employ local machinery such as oil extraction, grain grinding and agricultural implements.

2. Cottage Industries:

Industries which artisans set up in their own houses, work with wood, cane, brass, stone, etc. are called cottage industries. Handloom, khadi and leather work at the artisans house fall in this category.

3. Consumer Goods Industries:

Consumer industries convert raw materials or primary products into commodities directly used by the people. Textiles, bakeries, sugar, etc. are some of the consumer goods industries.

4. Ancillary Industries:

The industries which manufacture parts and components to be used by big industries for manufacturing heavy articles like trucks, buses, railway engines, tractors, etc. are called ancillary industries.

5. Basic Industries:

Industries on which depend many other industries for their manufacturing processes are called basic industries. Iron and steel industry and power generating industry are included in this category.

6. Capital-Intensive Industries:

Industries requiring huge investments are called capital-intensive industries. Iron and steel, cement and aluminium are outstanding examples of capital-intensive industries.

7. Labour-Intensive Industries:

Industries which require huge labour force for running them are called labour-intensive industries. In these industries, labour is more important than capital. Shoe- making and bidi- manufacturing, etc. are included in these industries.

SMALL SCALE INDUSTRIES

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- Flexibility: These units are more adaptable to their changing business environment. So in case of sudden changes or unexpected developments, they are flexible enough to adapt and keep carrying on. Large industries do not have this advantage.
- Resources: They use local and readily available resources. This also helps the economy with better utilization of natural resources and less wastage.

ROLE OF INDUSTRIES IN ECONOMIC DEVELOPMENT

1. **Modernisation of Industry:**

Industrial development is necessary for modernisation of agriculture. In India, agriculture is traditional and backward. The cost of production is high and productivity is low. We need tractors, threshers, pump sets and harvesters to modernise agriculture. To increase productivity, we need chemical fertilizers, pesticides and weedicides etc. These are all industrial products. Without industrial development, these goods cannot be produced. Agricultural products like jute, cotton, sugarcane etc. are raw materials. To prepare finished products like flex, textiles and sugar etc. we need industrialisation. So industrial development is necessary for modernisation of agriculture.

2. **Development of Science and Technology:**

Industrial development encourages the development of science and technology. The industrial enterprises conduct research and develop new products. Ethanol in the form of biofuel is an example of industrial development. Industry conducts research on its wastes and

develops byproducts like biodiesel from Jatropha seeds. Due to industrialisation, we have made progress in atomic science, satellite communication and missiles etc.

3. **Capital Formation:**

Acute deficiency of capital is the main problem of Indian economy. In agricultural sector, the surplus is small. Its mobilisation is also very difficult. In large scale industries, the surplus is very high. By using external and internal economies, industry can get higher profit. These profits can be reinvested for expansion and development. So industrialisation helps in capital formation.

4. **Industrialisation and Urbanisation:**

Urbanisation succeeds industrialisation. Industrialisation in a particular region brings growth of transport and communication. Schools, colleges, technical institutions, banking and health facilities are established near industrial base. Rourkela was dense forest but now is ultra modern town in Orissa. Many ancillary units have been established after setting up of big industry.

5. **Self-reliance in Defence Production:**

To achieve self-reliance in defence production, industrialisation is necessary. During war and emergency dependence on foreign countries for war weapons may prove fatal. Self-reliance in capital goods and industrial infra-structure is also necessary. Atomic explosion at Pokhran (Rajasthan) and Agni Missile are examples of industrial growth.

6. **Importance in International Trade:**

Industrialisation plays an important role in the promotion of trade. The advanced nations gain in trade than countries who are industrially backward. The underdeveloped countries export primary products and import industrial products. Agricultural products command lower prices and their demand is generally elastic. While industrial products command higher values & their demand is inelastic. This causes trade gap. To meet the deficit in balance of payments we have to produce import substitute products or go for export promotion through industrial development.

7. **Use of Natural Resources:**

It is a common saying that India is a rich country inhabited by the poor. It implies that India is rich in natural resources but due to lack of capital and technology, these resources have not been tapped. Resources should be properly utilized to transform them into finished industrial products. The British people took India's cheap raw-materials for producing industrial goods in their country. India was used as a market for their industrial products. So India fought with poverty and England gained during industrial revolution. Hence industrialisation plays important role for proper utilisation of resources.

8. **Alleviation of Poverty and Unemployment:**

Poverty and unemployment can be eradicated quickly through rapid industrialisation. It has occurred in industrially advanced countries like Japan. The slow growth of industrial sector

is responsible for widespread poverty and mass unemployment. So with fast growth of industrial sector, surplus labour from villages can be put into use in industry.

9. Main Sector of Economic Development:

Industry is viewed as leading sector to economic development. We can have economies of scale by applying advanced technology and division of labour and scientific management. So production and employment will increase rapidly. This will bring economic growth and capital formation.

10. Fast Growth of National and Per Capita Income:

Industrial development helps in the rapid growth of national and per capita income. The history of economic development of advanced countries shows that there is a close relation between the level of industrial development and the level of national and per capita income. For instance, the share of industrial sector to national income was 26% and the per capita income in year 2000 was 36,240 dollar in USA.

The share of agriculture in the same year was only 2%. In Japan, the share of industrial sector in her GDP was 36% and her per capita income was 36210 dollar. In India due to industrialisation, the contribution of industrial sector to GDP has gone upto 28.5% in 2000-01 and per capita income has risen to Rs. 16,486 in 2000.

11. Sign of Higher Standard of Living and Social Change:

A country cannot produce goods and services of high quality in order to attain decent living standard without the progress of industrial sector.

INDUSTRIAL POLICY 1991

MAJOR OBJECTIVES OF INDIA'S NEW INDUSTRIAL POLICY 1991 ARE AS FOLLOWS;

With the gradual liberalisation of the 1956 Industrial policy in the mid-eighties the tempo of industrial development started picking up. But the industry was still feeling the burden of many controls and regulations. For a faster growth of industry, it was necessary that even these impediments should be removed. The new government by Shri Narasimha Rao, which took office in June 1991, announced a package of liberalisation measures under its Industrial Policy on July 24, 1991.

Objectives:

The New Industrial Policy,1991 seeks to liberate the industry from the shackles of licensing system Drastically reduce the role of public sector and encourage foreign participation in India's industrial development.

The broad objectives of New Industrial Policy are as follows:

1. Liberalizing the industry from the regulatory devices such as licenses and controls.
2. Enhancing support to the small scale sector.
3. Increasing competitiveness of industries for the benefit of the common man.
4. Ensuring running of public enterprises on business lines and thus cutting their losses.
5. Providing more incentives for industrialization of the backward areas, and
6. Ensuring rapid industrial development in a competitive environment .

The New Industrial Policy has made very significant changes in four main areas viz., industrial licensing role of public sector, foreign investment and technology and the MRTP act.

THE MAJOR PROVISIONS OF THIS POLICY ARE DISCUSSED BELOW.

(1) Abolition of Industrial Licensing:

In the earlier industrial policy, industries were subjected to tight regulation through the licensing system. Though some liberalisation measures were introduced during 1980's that positively affected the growth of industry. Still industrial development remained constrained to a considerable extent.

The new industrial policy abolishes the system of industrial licensing for most of the industries under this policy no licenses are required for setting up new industrial units or for substantial expansion in the capacity of the existing units, except for a short list of industries relating to country's security and strategic concerns, hazardous industries and industries causing environmental degradation.

To begin with, 18 industries were placed in this list of industries that require licenses. Through later amendment to the policy, this list was reduced. It now covers only five industries relating to health security and strategic concerns that require compulsory licensing. Thus the industry has been almost completely made free of the licensing provisions and the constraints attached with it.

(2) De-reservation of Industries for Public Sector:

The public sector which was conceived as a vehicle for rapid industrial development, largely failed to do the job assigned to it. Most public sector enterprises became symbols of inefficiency and imposed heavy burden on the government through their perpetual losses. Since a large field of industry was reserved exclusively for public sector where it remained a virtual non performer (except for a few units like the ONGC). The industrial development was thus the biggest casualty. The new industrial policy seeks to limit the role of public sector and encourage private sector's participation over a wider field of industry. With this view, the following changes were made in the policy regarding public sector industries:

(i) Reduced reservation for public sector:

Out of the 17 industries reserved for the public sector under the 1956 industrial policy, the new policy de-reserved 9 industries and thus limited the scope of public sector to only 8 industries. Later, a few more industries were de-reserved and now the exclusive area of the public sector remains confined to only 4 industrial sectors which are: (i) defence production,

(ii)atomic energy, (iii) railways and (iv) minerals used in generation of atomic energy. However, if need be even some of these areas can be opened up for the private sector. The public sector can also be allowed to set up units in areas that have now been thrown open for private sector, if the national interest so demands.

(ii) Efforts to revive loss making enterprise:

Those public enterprises which are chronically sick and making persistent losses would be returned to the Board of Industrial and Financial Reconstruction (BIFR) or similar other high level institutions created for this purpose. The BIFR or other such institutions will formulate schemes for rehabilitation and revival of such industrial units.

(iii) Disinvestment in selected public sector industrial units:

As a measure to raise large resources and introduce wider private participation in public sector units, the government would sell a part of its share holding of these industries to Mutual Funds, financial institutions, general public and workers. For this purposes, the Government of India set up a 'Disinvestment Commission' in August 1996 which works out the modalities of disinvestment. On the basis of recommendations of the 'Disinvestment Commission' the government sells the shares of public enterprise.

(iv) Greater autonomy to public enterprises:

The New Industrial Policy seeks to give greater autonomy to the public enterprises in their day-to-day working. The trust would be on performance improvement of public enterprises through a mix of greater autonomy and more accountability.

(3) Liberalised Policy Towards Foreign Capital and Technology:

The inflow of foreign capital and import of technology was tightly regulated under the earlier Industrial policy. Each proposal of foreign investment was to be cleared by the Government in advance. Wherever foreign investment was allowed, the share of foreign equity was kept very low so that majority of ownership control remains with Indians. But such a policy kept the inflow of foreign capital very small and industrial development suffered for want of capital resources and technology. The July, 1991 Industrial policy made several concessions to encourage flow of foreign capital and technology into India, which are follows:

(i) Relaxation in Upper Limit of Foreign Investment:

The maximum limit of foreign equity participation was placed at 40 per cent in the total equity capital of industrial units which were open to foreign investments under the 1991 policy; this limit was raised to 51 per cent. 34 specified more industries were added to this list of 51 per cent foreign equity participation. In some industries the ratio of foreign equity was raised to 74 percent. Foreign Direct Investments (FDI) was further liberalised and now 100 per cent foreign equity is permitted the case of mining, including coal and lignite, pollution control related equipment, projects for electricity generation, transmission and distribution, ports, harbours etc. Recent decision taken to further liberalise FDI include

permission for 100 per cent FDI in oil refining, all manufacturing activities in Special Economic Zones (SEZ's), some activities in telecom see tor etc.

(ii) Automatic Permission for Foreign Technology Agreement:

The New Industrial Policy states that automatic permission will be granted to foreign technology agreements in the high priority industries. Previously technology agreement by an Indian company with foreign parties for import of technology required advance clearance from the government.

This delayed the import of technology and hampered modernisation of industries. Now the Indian companies could enter into technology agreements with foreign companies and import foreign technology for which permission would be automatically granted provided the agreements involved a lump sum payment of upto Rs. 1 crore and royalty upto 5 percent on domestic sales and 8 per cent on exports.

(4) Changes in the MRTP Act:

According to the Monopolies and Restrictive Trade Practices (MRTP) Act, 1969, all big companies and large business houses (which had assets of Rs. 100 crores or more, according to the 1985 amendment to the Act) were required to obtain clearance from the MRTP Commission for setting up any new industrial unit, because such companies (called MRTP companies) were allowed to invest only in some selected industries.

Thus, besides obtaining a licence they were also required to get MRTP clearance. This was a big impediment for industrial development as the big business firms which had the resources for development could not grow and diversify their activities. The Industrial Policy, 1991 has put these industries on par with others by abolishing those provisions of the MRTP Act which mediate mandatory for the large industrial houses to seek prior clearance from MRTP Commission for their new projects.

Under the amended Act, the MRTP Commission will concern itself only with the control of Monopolies and Restrictive Trade Practices that are unfair and restrict competition to the detriment of consumer s interests. No prior approval of or clearance from the MRTP Commission is now required for setting up industrial units by the large business houses.

(5) Greater Support to Small-Scale Industries:

The New Industrial Policy seeks to provide greater government support to the small-scale industries so that they may grow rapidly under environment of economic efficiency and technological upgradation. A package of measures announced in this context provides for setting up of an agency to ensure that credit needs of these industries are fully met. It also allows for equity participation by the large industries in the small scale sector not exceeding 24 per cent of their total shareholding. This has been done with a view to provide small scale sector an access to the capital market and to encourage their upgradation and modernisation the government would also encourage the production of parts and components required by the public sector industries in the small-scale sector.

(6) Other Provisions:

Besides above discussed measures, the Industrial Policy 1991 announced some more steps to promote rapid industrial development. It said that the government would set up a special board (which was established as Foreign Investments Promotion Board—FIPB) to negotiate with a number of international companies for direct investment in industries in India. It also announced the setting up of a fund (called National Renewal Fund) to provide social security to retrenched workers and provide relief and rehabilitate those workers who have been rendered unemployed due to technological changes. The New Policy also removed the mandatory convertibility clause under which the Public Sector Financial Institution were asked to convert the loans given by them to private industries in equity (shares) and thus become partners in their management. This removed a big threat to the private sector industries as they were always under threat that their management and control could pass on into the hands of the Government owned financial institutions.

EVALUATION OF THE NEW INDUSTRIAL POLICY:

The New Industrial Policy 1991 aims to unshackle Indian's industrial economy from the cobwebs of unnecessary bureaucratic control. According to this policy the rate of the government should change from that of only exercising control over industries to that of helping it to grow rapidly by cutting down delays.

Removal of entry barriers and bringing about transparency in procedures. This policy therefore also at virtually ending the 'Licence-Permit Raj' which has hampered private

initiative and industrial development. The new policy therefore throws almost the entire field of industry wide upon for the private sector. The public sector's role has been confined largely to industries of defence, strategic and environmental concerns. Thus new policy is more market friendly and aims at making the best use of available entrepreneurial talent in a congenial industrial environment. The industry is thus expected to grow faster under the new industrial policy 1991.

MICRO, SMALL AND MEDIUM ENTERPRISES DEVELOPMENT (MSMED):

Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 which was notified on October 2, 2006, deals with the definition of MSMEs. The MSMED Act, 2006 defines he Micro, Small and Medium Enterprises based on

1. The investment in plant and machinery for those engaged in manufacturing or production, processing or preservation of **goods** and
2. The investment in equipment for enterprises engaged in providing or rendering of **services**.

The guidelines with regard to investment in plant and machinery or equipment as defined in the MSMED Act, 2006 are:

Nature of activity of the Enterprise	Manufacturing Enterprise (Investment in Plant and Machinery)	Service Enterprise (Investment in Equipment)
Micro	Not exceeding Rs.25.00 Lakhs	Not exceeding Rs.10.00 Lakhs
Small	More than Rs.25.00 lakhs but does not exceed Rs.500.00 lakhs	More than Rs.10.00 lakhs but does not exceed Rs.200.00 lakhs
Medium	More than Rs.500.00 lakhs but does not exceed Rs.1000.00 lakhs	More than Rs.200.00 lakhs but does not exceed Rs.500.00 lakhs

Share of MSME in Manufacturing, Exports and Employment sectors in India:

	Sector	Percentage(%) share
1	Manufacturing	45
2	Exports	40
3	Employment	69

MAJOR CHALLENGES FACED BY THE SECTOR

1. **Policy and institutional interventions:** In order to provide support to the MSME sector and to facilitate its growth, there are numerous institutions in the country. At the apex level, the Ministry of MSME formulates policies for overall growth of the sector while the Office of Development Commissioner MSME implements these policies through its various organisations. MSMED Act, 2006 contains various facilitative provisions for the promotion and development of the MSME sector. SIDBI is the apex financial Institution for supporting financing and development of MSMEs. RBI and SEBI frame broad policies for facilitating funding support to the sector. The above institutions through their legislative and policy interventions are enabling growth of the sector. However, formulation of targeted policies in the areas of infrastructure development, formalisation,

technology adoption, backward and forward linkage, credit gap reduction and timely payments to MSMEs and their effective implementation has been a challenge for all the stakeholders. Government interventions have tended to be fairly supply-side oriented and unable to effectively respond to demands of the market.

2. **Accelerating growth and enabling formalization:** The role of MSME sector is critical in job creation, innovation, and entrepreneurship and supply chains. Hence, there is a need to facilitate, nurture and support innovative business ideas and shape them into enterprises. Further, with limited number of entrepreneurial development and incubation centres, entrepreneurial ethos of the MSME eco- system is not evolving. Utilisation and reach of various schemes and credit support is constrained due to lack of formalisation and low level of registration of MSMEs in Udyog Aadhaar Memorandum (UAM). Promoting formalization and digitisation amongst MSMEs and encouraging them to register in UAM has remained a challenge.

3. **Addressing infrastructural bottlenecks:** Infrastructural bottlenecks affect the competitiveness of MSMEs and reduces their ability to venture into domestic as well as global markets. Inadequate availability of basic amenities such as work sheds, tool rooms, product testing laboratories, electricity, rural broadband and innovation hubs is acting as a deterrent to the growth of the sector. Development of MSME clusters has been largely confined to Government organisations with low level of private investment.

4. **Facilitating capacity building:** Traditionally, MSMEs are subject to severe information asymmetry problems. Lack of information about various schemes for instance, deprive MSMEs from availing benefits offered by Government, banks and other agencies. Access to information about market opportunities is sub optimal and unstructured. In many cases, they also lack managerial, legal and technical knowhow and the necessary wherewithal to function effectively.

5. **Facilitating access to credit and risk capital:** Due to their informal nature, MSMEs lack access to formal credit as banks face challenges in credit risk assessment owing to lack of financial information, historical cash flow data, etc. Further, very few MSMEs are able to attract equity support and venture capital financing.

6. **Technological interventions for improving underwriting standards and delivery:** Implementation of GST has made turnover data available at a single network. However, MSMEs are not identifiable as the data on investments in plant and machinery is not captured under GSTN. Income tax data base contains information relating to financials of the units. On the other hand, Udyog Aadhaar portal contains registration related information of MSMEs. However, there is no single interface available for the lenders to access, map or triangulate data from these data sources and they have to primarily rely upon manual information furnished by borrowers. Further, absence of data protection laws and unique enterprise identifier limit ability of various agencies to share data.

7. **Enabling market linkage and tie-up with public procurement platforms:** MSMEs face the twin challenge of limited access to quality raw material and market for finished product. National Small Industries Corporation (NSIC) through market assistance scheme facilitates MSMEs to discover markets for their products and the Government e-Marketplace (GeM) portal has enabled MSMEs to connect with buyers from Public Sector Undertakings (PSUs) and Government Departments. However, the number of MSMEs

availing benefits under the schemes are few. For example, the GeM portal has 38,609 registered MSMEs on the platform as on June 12, 2019.

IMPORTANCE OF MSME IN ECONOMIC DEVELOPMENT:

1. **Creates large scale employment:** Since the enterprises falling in this sector require low capital to start the business, it creates huge employment opportunities for many unemployed youth. India produces about 1.2 million graduates per year, of the total number about 0.8 million are engineers. And, there is no economy in the world that can provide jobs to so many fresh graduates in one year. MSME is the boon for many of these fresh manpower.

2. **Economic stability in terms of Growth and leverage Exports:** MSME is a significant growth driver in India, with it contributing to the tune of 8% to GDP. As mentioned in the table, Exports sector in India constitutes about 40% of contribution from MSME alone. Looking at the kind of contribution of MSME to manufacturing, exports and employment, other sectors are also benefitting from MSME. MNCs today are buying semi-finished, and auxiliary products from small enterprises, for example, buying of clutches, and brakes by automobile companies. It helps create a linkage between MSME and big companies.even after the implementation of the GST 40% msme sector also applied GST Registration which increase the government revenue by 11%.

3. **Encourages Inclusive Growth:** About 50% of wealth in India in owned by just 100 people which is due to unequal distribution of wealth. Inclusive growth is on top of the agenda of Ministry for Medium, and Small, and Medium sized enterprises for several years. While poverty and deprivation are a deterrent to the development of India, including marginalized sections of society is a key challenge lying before the Ministry of MSME.

4. **Cheap Labor and minimum overhead:** In large scale organizations, one of the key challenges is to retain the human resource through an effective human resource management professional manager. But in case of an MSME, the requirement of labor is less, and it does not need a highly skilled laborer. Hence, the indirect expenses incurred by the owner are also low.

5. **Simple Management Structure for Enterprises:** MSMEs do not require a huge capital to start. With limited resources available within the control of the owner, decision-making becomes easy and efficient. As in case of a large corporation wherein a specialist is required for every departmental functioning because of complex organizational structure, a small enterprise does not need to hire an external specialist for its management. The owner himself/herself can manage it. Therefore, it can be run single-handedly.

6. **Plays an important role in making “Make in India” possible:** Post the inception of ‘Make in India’, a signature initiative by the prime minister of India, the process of incorporating a new business has been made easy. Since the MSME is the backbone in making this dream a possibility, the government has directed the financial institution to lend more credit to enterprises in MSME sector.

ROLE OF PUBLIC SECTOR ENTERPRISES IN INDIA'S INDUSTRIALIZATION

1. Generation of Income:

Public sector in India has been playing a definite positive role in generating income in the economy. The share of public sector in net domestic product (NDP) at current prices has increased from 7.5 per cent in 1950-51 to 21.7 per cent in 2003-04. Again the share of public

sector enterprises only (excluding public administration and defence) in NDP was also increased from 3.5 per cent in 1950-51 to 11.12 per cent in 2005-06.

2. Capital Formation:

Public sector has been playing an important role in the gross domestic capital formation of the country. The share of public sector in gross domestic capital formation has increased from 3.5 per cent during the First Plan to 9.2 per cent during the Eighth Plan. The comparative shares of public sector in the gross capital formation of the country also recorded a change from 33.67 per cent during the First Plan to 50 per cent during the, Sixth Plan and then declined to 21.9 per cent in 2005-06.

3. Employment:

Public sector is playing an important role in generating employment in the country.

a) Public sector employment in government administration, defence and other government services and

(b) Employment in public sector economic enterprises of both Centre, State and Local bodies. In 1971, the public sector offered employment opportunities to about 11 million persons but in 2003 their number rose to 18.6 million showing about 69 per cent increase during this period.

4. Infrastructure:

Without the development of infrastructural facilities, economic development is impossible. Public sector investment on infrastructure sector like power, transportation, communication, basic and heavy industries, irrigation, education and technical training etc. has paved the way for agricultural and industrial development of the country leading to the overall development of the economy as a whole. Private sector investments are also depending on these infrastructural facilities developed by the public sector of the country.

5. Strong Industrial base:

Another important role of the public sector is that it has successfully build the strong industrial base in the country. The industrial base of the economy is now considerably strengthened with the development of public sector industries in various fields like—iron and steel, coal, heavy engineering, heavy electrical machinery, petroleum and natural gas, fertilizers, chemicals, drugs etc.

6. Export Promotion and Import Substitution:

Public sector enterprises have been contributing a lot for the promotion of India's exports. The foreign exchange earning of the public enterprises rose from Rs. 35 crore in 1965-66 to Rs. 5,831 crore in 1984-85 and then to Rs. 34,893 crore in 2003- 04. Thus, the export performance of the public sector enterprises in India is quite satisfactory.

7. **Contribution to Central Exchequer:**

The public sector enterprises are contributing a good amount of resources to the central exchequer regularly in the form of dividend, excise duty, custom duty, corporate taxes etc. During the Sixth Plan, the contribution of public enterprises to the central exchequer was to the tune of Rs. 27,570 crore.

8. **Checking Concentration of Income and Wealth:**

Expansion of public sector enterprises in India has been successfully checking the concentration of economic power into the hands of a few and thus are redressing the problem of inequalities of income and-wealth of the economy. Thus, the public sector can reduce this problem of inequalities through diversion of profits for the welfare of the poor people, undertaking measures for labour welfare and also by producing commodities for mass consumption.

9. **Removal of Regional Disparities:**

From the very beginning industrial development in India was very much skewed towards certain big port cities like Mumbai, Kolkata and Chennai. In order to remove regional disparities, the public sector tried to disperse various units towards the backward states like Bihar, Orissa, and Madhya Pradesh. Thus, considering all these foregoing aspects it can be observed that in-spite of showing poor performance, the public sector is playing dominant role in all-round development of the economy of the country.

INDUSTRIAL FINANCE IN INDIA:

Finance is considered as the life-force of industry. Without getting adequate finance industrial development is not at all possible. Due to the lack of adequate finance, industrial development in India could not achieve a significant position and shape. Industries require both short term, medium term and long term finance for meeting their requirements of fixed capital expenditure and also to meet their working capital needs.

Long-Term, Medium-Term and Short-Term Finance:

Long term finance for industries includes those financial resources which are advanced to the industries by the banks for a period of 3 years and above. Long term finance is quite important for the expansion and modernisation of industrial projects and also to meet its fixed capital expenditure requirement.

Long term finance is mostly available from the sale of shares and debentures, and loan from term lending financial institutions like IDBI, IFCI, ICICI etc. Medium term loan is also available from banks and other financial institutions for a period above 1 year and up to 3 years.

Short-term finance for industries includes those financial resources which are advanced by hanks to the industries for a period varying between 1 month to 12 months. Short-term finance is required to meet working capital needs and other sundry expenses of the industrial projects. Commercial banks offer short term loans on cash-credit basis on the security or stocks and overdraft facilities to the industries. Industries can also raise short term finance by raising public deposits for one to three years.

SOURCES OF INDUSTRIAL FINANCE IN INDIA

(A) Internal Self-Finance:

One source, quantitatively of big importance, is the saving of the unit itself. It may be the household, the business or the government. The savings of the business, comprised of

depreciation and the retained earnings, are normally short of its investment. Hence it also borrows from financial institutions. Government too finances a part of their investment from internally generated funds.

An advantage of investment through internally generated funds is that it combines the acts of saving and investment. As such certain costs are internalized and reduced. These costs pertain to collection of information in respect of borrowers, transactions with them, monitoring the use of funds, and enforcement of the conditions of borrowing.

(B) Equity, Debentures and Bonds:

A large part of finance for fixed investments [building, machines, etc.] comes from different types of equity or shares such as ordinary, cumulative and non-cumulative preference shares. These shares bear risks of different degrees and are tailored to suit the temperament of different investors.

Often industrial companies also get long-term finance through the issues of debentures and bonds. These are debt (loans), instruments. The buyers of those debentures and bonds are the creditors of companies. They get a fixed rate of interest on the money invested in these securities.

(C) Public Deposits:

Another source is public deposits. It is also a debt-instrument, mostly for short-term finance. Under this system, people keep their money as deposit with these companies or managing authorities for a period of six months, a year, two years, three years or so. Depositors receive a fixed interest.

(D) Loans from Banks:

Commercial banks can do also provide funds for meeting short-term needs or for working capital. Loans are given against the guarantee of government securities and stocks with companies. Loans are advanced in the form of overdraft and credit limit. Commercial banks are generally reluctant to put their money in the purchase of shares.

(E) The Managing Agency System:

The system of industrial finance, peculiar to India, and which prevailed till the recent times, is of little importance now days. Under this system an individual or a group of individuals finance the initial stage of the establishment of industries, and manage many activities of the company thus established very often, one managing agent controls more than one concern and uses fund of one concern to meet the needs of others under him.

(F) Indigenous Bankers:

Inspite of the establishment of new financial institutions, indigenous bankers also advance financial help to a few large-scale industries, particularly during the time of stress, both for fixed capital and working capital. But mainly they have provided finance to small scale industries.

(G) Development Finance Institutions:

Established with the help of the Government to fill-in the gap in industrial finance and to promote the objective of planning, these institutions cater to the needs of large and small industries.

The new institutions supplying industrial finance are Industrial Development Bank of

India, Industrial Finance Corporation of India, Unit Trust of India, and General Insurance Corporation of India, Industrial Reconstruction Bank of India, State Financial Corporations, and State Industrial Development Corporations.

(H) Foreign Capital:

As a supplement to domestic finance, external capital too has been made use of in meeting the needs of industrial finance, mostly for long-term needs. This has taken several forms. There is the foreign aid (i.e., loans on concessional term) from foreign governments and foreign institutions (like the World Bank) extended to the Government.

A part of this assistance has also gone to the private sector. A part of foreign funds has come through foreign companies which have Indian subsidiaries in our country or through Multinational Corporations which have branches in India.

TERM LENDING INSTITUTIONS OF INDIA:

1. Industrial Finance Corporation of India (IFCI):

After the Second World War, there was a great need for the expansion of industries in India. Again with the introduction of planned industrial development, the industrial finance became inadequate to meet the requirements of industrial development of the country. Thus in July 1, 1948 the Industrial Finance Corporation of India (IFCI) was established by the Government under a special Act.

The prime object of IFCI is to provide medium term and long-term finance to public limited companies and co-operative organisations. The authorized share capital of the IFCI is now raised to Rs. 20 crore. The IDBI, scheduled banks, insurance companies, investment trusts and co-operative banks are the shareholders of the IFCI.

2. State Financial Corporations (SFCs):

As the scope of IFCI was limited, thus it was felt that financial institutions should also be set up in each state to provide sufficient finance to medium and small scale industries for

promoting industrial development there. To meet the requirement, State Financial Corporations (SFCs) were set up in different states.

The Government of India also passed the State Financial Corporation Act in 1951 and made it applicable to all states of India. The authorized capital of such corporation can vary within the maximum and minimum limit of Rs. 50 lakh and Rs. 5 crore.

3. State Industrial Development Corporations (SIDCs):

In most of the states of our country State Industrial Development Corporations have been established for the rapid industrialization of all the states. There are 24 such SIDCs working in different states of the country.

These corporations are providing financial assistance to small entrepreneur and particularly to those industries which are established in backward areas. During 1992-93, these corporations sanctioned assistance to the extent of Rs. 1,140 crore as against Rs. 1,010 crore, advanced during the previous year. At the end of March. 1993, the aggregate amount of loan sanctioned by SIDCs was Rs. 7,710 crore.

4. Industrial Credit and Investment Corporation of India (ICICI):

In January 1955, the Industrial Credit and Investment Corporation of India was set up with the sponsorship of the World Bank for the development of small and medium industries in the private sector. The corporation was having an authorized capital of Rs. 60 crore and a subscribed Capital to the extent of Rs. 22 crore. The issued capital of this Corporation has been subscribed by Indian banks, insurance companies, individuals and corporations of United States, British eastern exchange banks and other companies and the general public in India.

5. **The Industrial Development Bank of India (IDBI):**

In order to meet the needs of rapid industrialisation in the country and to coordinate the activities of all agencies a new institution with huge financial resources was necessary. Thus, to fulfill this two-fold objective, the Government of India has decided to set up the Industrial Development Bank of India (IDBI).

Accordingly in July 1964, the IDBI was set up formally to provide term finance to industries. Till 1976 this bank was a wholly owned subsidiary of the Reserve Bank of India. But ill 1976 the IDBI was delinked from the RBI and was taken over by the Government of India. Since then IDBI became an autonomous, corporation.

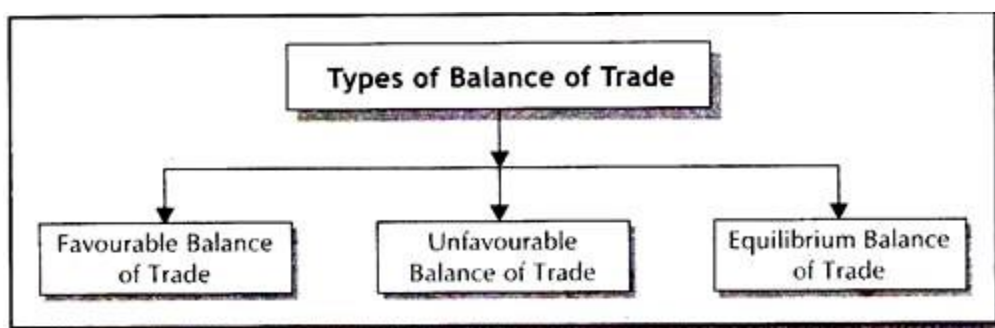
6. **Unit Trust of India (UTI):**

To assist the small investors of middle income group in finding a safe and remunerative investment, the Unit Trust of India (UTI) was established in February 1964. The Unit Trust had an initial capital worth Rs. 5 crore contributed by RBI, Insurance Companies, State Bank of India, Scheduled banks and other financial institutions.

BALANCE OF TRADE: FEATURES AND TYPES | FOREIGN EXCHANGE

The balance of trade (BOT), also known as the trade balance, refers to the difference between the monetary value of a country's imports and exports over a given time period.

Types of Balance of Trade:



Various Types of Balance of Trade

Let us try to understand the various concepts one by one.

1. **Favourable Balance of Trade:**

The situation, wherein country's exports exceed imports is a situation of favourable or surplus balance of trade.

Favourable Balance of Trade = Exports of Goods > Imports of Goods

2. **Unfavourable/Deficit Balance of Trade:**

Excess of total value of goods, imported over the total value of goods exported is termed as unfavourable or adverse or deficit balance of trade.

It may also be expressed as under:

Unfavourable Balance of Trade = Exports of Goods $<$ Imports of Goods

3. **Equilibrium in Balance of Trade:**

   Equality between the total value of goods exported and total value of goods imported is termed as equilibrium in balance of trade.

   It may also be expressed as under:

Equilibrium Balance of Trade = Exports of Goods = Imports of Goods

BALANCE OF PAYMENTS (BOP)

BoP is a systematic record of a country's economic and financial transactions with the rest of the world over a period of time.

When a payment is received from a foreign country, it is a credit transaction while a payment to a foreign country is a debit transaction. The principal items shown on the credit side are exports of goods and services, transfer receipts in the form of gift etc., from foreigners, borrowing from abroad, foreign direct investment and official sale of reserve assets including gold to foreign countries and international agencies.

The principal items on the debit side include imports of goods and services, transfer payments to foreigners, lending to foreign countries, investments by residents in foreign countries and official purchase of reserve assets or gold from foreign countries and international agencies.

Balance of Payment (BOP) Account Chart

Credit (Receipts) – Debit (Payments) = Balance [Deficit (-) , Surplus (+)]

COMPONENTS OF BOPS

a. The current account,

b. The capital account, and

c. The official settlements account or official reserve assets account.

b. **The Current Account:** It includes all international trade transactions of goods and services, international service transactions (i.e. tourism, transportation and royalty fees) and international unilateral transfers (i.e. gifts and foreign aid).

c. **The Capital Account:** Financial transactions consisting of direct investment and purchases of interest- bearing financial instruments, non- interest bearing demand deposits and gold fall under the capital account.

d. **The Official Reserve Assets Account:** Official reserve transactions consist of movements of international reserves by governments and official agencies to accommodate imbalances arising from the current and capital accounts.

BALANCE OF PAYMENTS DISEQUILIBRIUM

The BoP is said to be balanced when the receipts (R) and payments (P) are just equal, i.e,

R / P =1.

Favorable BoP

When receipts exceed payments, the BoP is said to be favourable. That is,

R / P > 1.

Unfavourable BOP

When receipts are less than payments, the BoP is said to be unfavourable or adverse.That is

R / P < 1.

FOREIGN EXCHANGE REGULATION ACT (FERA), 1973

Foreign Exchange Regulation Act (FERA) was promulgated in 1973 and it came into force on January 1, 1974. Section 29 of this Act referred directly to the operations of MNCs in India. According to the Section, all non-banking foreign branches and subsidiaries with foreign equity exceeding 40 per cent had to obtain permission to establish new undertakings, to purchase shares in existing companies, or to acquire wholly or partly any other company.

An Act to consolidate and amend the law regulating certain payments, dealings in foreign exchange and securities, transactions indirectly affecting foreign exchange and the import and export of currency, for the conservation of the foreign exchange resources of the country and the proper utilization thereof in the interests of the economic development of the country.

Features of FERA:

(1) This Act may be called the Foreign Exchange Regulation Act, 1973.

(2) It extends to the whole of India.

(3) It applies also to all citizens of India outside India and to branches and agencies outside India of companies or bodies corporate, registered or incorporated in India.

(4) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint in this behalf.

FOREIGN EXCHANGE MANAGEMENT ACT (FEMA), 1999

The Foreign Exchange Management Bill (FEMA) was introduced by the Government of India in Parliament on August 4, 1998. The Bill aims "to consolidate and amend the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.

Among the various objectives of the Foreign Exchange Management Act (FEMA), an important one is to revise and unite all the laws that relate to foreign exchange. Further FEMA targets to promote foreign payments and trade in the country. Another important motive of the Foreign Exchange Management Act (FEMA) is to encourage the maintenance and improvement of the foreign exchange market in India.

Features of the FEMA

The following are some of the important features of Foreign Exchange Management Act:

a. It is consistent with full current account convertibility and contains provisions for progressive liberalization of capital account transactions.

b. It is more transparent in its application as it lays down the areas requiring specific permissions of the Reserve Bank/Government of India on acquisition/holding of foreign exchange.

c. It classified the foreign exchange transactions in two categories, viz. capital account and current account transactions.

d. It provides power to the Reserve Bank for specifying, in , consultation with the central government, the classes of capital account transactions and limits to which exchange is admissible for such transactions.

e. It gives full freedom to a person resident in India, who was earlier resident outside India, to hold/own/transfer any foreign security/immovable property situated outside India and acquired when s/he was resident.

f. This act is a civil law and the contraventions of the Act provide for arrest only in exceptional cases.

g. FEMA does not apply to Indian citizen's resident outside India.

The differences between FERA and FEMA

S.N.	FERA	FEMA
1.	It was approved by the Parliament in 1973.	It was approved by the Parliament in 1999.
2.	Currently it is not in force.	Currently it is not in force.
3.	It had 81 sections.	It had 49 sections.
4.	It was implemented to regulate foreign payments and to ensure optimum use of foreign currency in India.	It aims to promote foreign trade, foreign payments and to increase size of foreign exchange reserve in the country.
5.	Under FERA, only "citizenship" was a criterion to conclude the residential status of a person.	As per this law; a person who is living in India from last 6 months can be considered as an Indian.
6.	The crime was kept in criminal offence category.	The crime was kept in Civil offence category.

7.	If anyone found guilty of FERA violation; there was a provision of punishment directly.	Fine or imprisonment (if the person does not deposit the prescribed penalty within 90 days from the date of conviction).
8.	The accused was considered guilty as soon as the lawsuit was filed and he had to prove that he is innocent.	In FEMA, the accused is not liable to prove his innocence but burden lies on the FEMA officer to prove him guilty.
9.	A person has to obtain permission of RBI with regard to transfer of funds related to external operations.	There is no requirement of pre approval from RBI related to remittances & external trade.

FOREIGN DIRECT INVESTMENT (FDI)

Foreign Direct Investments (FDI) is investment of foreign assets into domestic structures, equipment, and organizations. FDI inflows are into the primary market and do not include foreign investments into the stock markets. It is a long-term investment and is used by the developing countries as a source of their economic development, productivity growth, to improve the balance of payments and employment generation.

Its aim is to increase the productivity by utilizing the resources to their maximum efficiency. According to International Monetary Fund, FDI is defined as Investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor. The investor's purpose being to have effective voice in the management of the enterprise.

FDI is normally defined as a form of investment made in order to gain unwavering and long- lasting interest in the enterprises that are operated outside of the economy of the shareholder. There is a parent enterprise and a foreign associate to form a Multinational Corporation (MNC). Parent enterprise has power and control over its foreign affiliate on the investment.

Types of FDI

i. Greenfield Investment:

It is the direct investment in new facilities or the expansion of existing facilities. It is the principal mode of investing in developing countries like India.

ii. Mergers and Acquisition:

It occurs when a transfer of existing assets from local firms takes place.

ROLE OF FDI IN INDIAN ECONOMY

1. **Increased Employment and Economic Growth:**

   Creation of jobs is the most obvious advantage of FDI. It is also one of the most important reasons why a nation, especially a developing one, looks to attract FDI. Increased FDI boosts the manufacturing as well as the services sector. This in turn creates jobs, and helps reduce unemployment among the educated youth - as well as skilled and unskilled labour - in the country. Increased employment translates to increased incomes, and equips the population with enhanced buying power. This boosts the economy of the country.

2. **Human Resource Development:**

   This is one of the less obvious advantages of FDI. Hence, it is often understated. Human Capital refers to the knowledge and competence of the workforce. Skills gained and enhanced through training and experience boost the education and human capital quotient of the country. Once developed, human capital is mobile. It can train human resources in other companies, thereby creating a ripple effect.

3. **Development of Backward Areas:**

   This is one of the most crucial benefits of FDI for a developing country. FDI enables the transformation of backward areas in a country into industrial centres. This in turn provides a boost to the social economy of the area.

4. **Provision of Finance & Technology:**

   Recipient businesses get access to latest financing tools, technologies and operational practices from across the world. Over time, the introduction of newer, enhanced technologies and processes results in their diffusion into the local economy, resulting in enhanced efficiency and effectiveness of the industry.

5. **Increase in Exports:**

   Not all goods produced through FDI are meant for domestic consumption. Many of these products have global markets. The creations of 100% Export Oriented Units and Economic Zones have further assisted FDI investors in boosting their exports from other countries.

6. **Exchange Rate Stability:**

   The constant flow of FDI into a country translates into a continuous flow of foreign exchange. This helps the country's Central Bank maintain a comfortable reserve of foreign exchange. This in turn ensures stable exchange rates.

7. **Stimulation of Economic Development:**

   This is another very important advantage of FDI. FDI is a source of external capital and higher revenues for a country. When factories are constructed, at least some local labour, materials and equipment are utilised. Once the construction is complete, the factory will employ some local employees and further use local materials and services. The people who are employed by such factories thus have more money to spend. This creates more jobs. These factories will also create additional tax revenue for the Government that can be infused into creating and improving physical and financial infrastructure.

8. **Improved Capital Flow:**

   Inflow of capital is particularly beneficial for countries with limited domestic resources, as well as for nations with restricted opportunities to raise funds in global capital markets.

9. **Creation of a Competitive Market:**

By facilitating the entry of foreign organisations into the domestic marketplace, FDI helps create a competitive environment, as well as break domestic monopolies. A healthy competitive environment pushes firms to continuously enhance their processes and product offerings, thereby fostering innovation. Consumers also gain access to a wider range of competitively priced products.

QUESTIONS

PART – A

1. State the meaning Industry.
2. Define Industrial Policy.
3. What is FERA?
4. Expand the term FEMA.
5. Interpret on Large Scale Industries.
6. Classify the industries on the basis of Raw Material.
7. List the main features of Industrial policy of 1991.
8. Infer Balance of Trade.
9. Recall the meaning of Balance of Payments.
10. Expand MSME.
11. Mention two important sources of Internal finance.
12. Expand IDBI
13. Write a note on FDI.

PART B

1.Discuss on the role of Industries in Economic Development.

2.Classify the various types of Industries.

3.Summarize the Provision, Features and Evaluation of the New Industrial Policy of 1991.

4.Explain the Role of Public Sector Enterprises in India's Industrialization.

5.Elaborate on the various sources of Industrial Finance in India.

6.Analyze on the Term Lending Institutions of India.

7.Enumerate the types and discuss the role of FDI in Indian Economy.

8.Write Short note on

(A) FERA

(b) FEMA

9.Analyze in detail about Micro, Small and Medium Enterprises Development.

10.Discuss about Balance of Trade and Balance of Payment Concepts.

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SCHOOL OF MANAGEMENT STUDIES

UNIT – IV – Indian Economy – SBAA1203

UNIT 4 POLICY REGIMES

The evolution of planning - Economic development under Five Year Plans - New Economic Reforms- Indian Economic Policies- Monetary and Fiscal policies.

HISTORICAL ASPECTS OF PLANNING IN INDIA

First of all the idea of planned economy was crystallized in 1930s when our national leaders came under the influence of socialist philosophy. India's Five year plans were very much impressed by the rapid strides achieved by the USSR through five years plans.

In 1934, Sir M. Visvesvaraya had published a book titled "Planned Economy in India", in which he presented a constructive draft of the development of India in next ten years. His core idea was to lay out a plan to shift labor from agriculture to industries and double up National income in ten years. His core idea was to lay out a plan to shift labor from agriculture to industries and double up National Income in ten years. This was the first concrete scholarly work towards planning. The economic perspective of India's freedom movement was formulated during the thirties between the 1931 Karachi session of Indian National Congress, 1936 Faizpur session of India National Congress.

National Planning Commission (1938)

In 1938, 'National Planning Commission' was set – up under the chairmanship of JL Nehru by the Indian National Congress. Its recommendations could not be implemented because of the beginning of the Second World War and changes in the Indian political situation.

Bombay Plan (1944)

In 1944, 'Bombay Plan' was presented by 8 leading industrialists of Bombay. The Bombay Plan a fifteen year investment plan for India proposed in 1944 by a group of prominent Indian industrialists and technocrats. This plan envisaged doubling the per capita income in 15 years and tripling the national income during this period. Nehru did not officially accept the plan, yet many of the ideas of the plan were inculcated in other plans which came later.

Gandhian Plan (1944)

In 1944, 'Gandhian Plan' was given by S N Agarwal. This plan mainly focuses on the agriculture and rural economy. It emphasized the economic decentralization with primacy to rural development by developing the cottage industries.

People Plan (1945)

In 1945, 'People's Plan' was given by M N Roy. It called for nationalization of all agricultural production and distribution besides development of consumer goods industries by the state only.

Sarvodaya Plan (1950)

In 1950, 'Sarvodaya Plan' was given by J P Narayan. A few points of this plan were accepted by the GovernmentThis plan emphasized on agriculture and small & cottage industries. It also suggested the freedom from foreign technology and stressed upon land reforms and decentralized participatory planning.

Planning Commission (1950)

The Planning Commission was set up by the Government of India in March 1950. The Commission was instructed to (a) make an assessment of the material capital and human resources of the country, and formulate a plan for the most effective and balanced utilisation of them; (b) determine priorities, define the stages for carrying the plan and propose the allocation of resources for the due completion of each stage; (c) identify the factors which tend to retard economic development; and (d) determine the conditions which (in view of the then current socio-political conditions) should be established for the execution of the plan.

OBJECTIVE OF ECONOMIC PLANNING OF INDIA

1. Economic Development:

The main objective of Indian planning is to achieve the goal of economic development economic development is necessary for under developed countries because they can solve the problems of general poverty, unemployment and backwardness through it. Economic development is concerned with the increase in per capita income and causes behind this increase.

2. Increase Employment:

Another objective of the plans is better utilization of man power resource and increasing employment opportunities. Measures have been taken to provide employment to millions of people during plans. It is estimated that by the end of Tenth Plan (2007) 39 crore people will be employed.

3. Self-Sufficient:

It has been the objective of the plans that the country becomes self-sufficient regarding food grains and industrial raw material like iron and steel etc. Also, growth is to be self sustained for which rates of saving and investment are to be raised. With the completion of Third Plan, Indian economy has reached the take off stage of development. The main objective of the Tenth Plan is to get rid of dependence on foreign aid by increasing export trade and developing internal resources.

4. Economic Stability:

Stability is as important as growth. It implies absence of frequent end excessive occurrence of inflation and deflation. If the price level rises very high or falls very low, many types of structural imbalances are created in the economy. Economic stability has been one of the objectives of every Five year plan in India. Some rise in prices is inevitable as a result of economic development, but it should not be out of proportions.

***5.* Social Welfare and Services:**

The objective of the five year plans has been to promote labour welfare, economic development of backward classes and social welfare of the poor people. Development of social services like education, health, technical education, scientific advancement etc. has also been the objective of the Plans.

6. Regional Development:

Different regions of India are not economically equally developed. Punjab, Haryana, Gujarat, Maharashtra, Tamil Nadu, Andhra Pradesh etc. are relatively more developed. But U.P., Bihar, Orissa, Nagaland, Meghalaya and H.P. are economically backward. Rapid economic development of backward regions is one of the priorities of five year plans to achieve regional equality.

7. Comprehensive Development:

All round development of the economy is another objective of the five year plans. Development of all economic activities viz. agriculture, industry, transport, power etc. is sought to be simultaneously achieved. First Plan laid emphasis on the development of agriculture. Second plan gave priority to the development of heavy industries. In the Eighth Plan maximum stress was on the development of human resources.

8. To Reduce Economic Inequalities:

Every Plan has aimed at reducing economic inequalities. Economic inequalities are indicative of exploitation and injustice in the country. It results in making the rich richer and the poor poorer. Several measures have been taken in the plans to achieve the objectives of economic equality specially by way of progressive taxation and reservation of jobs for the economically backward classes. The goal of socialistic pattern of society was set in the second plan mainly to achieve this objective.

9. Social Justice:

Another objective of every plan has been to promote social justice. It is possible in two ways, one is to reduce the poverty of the poorest section of the society and the other is to reduce the inequalities of wealth and income. According to Eighth Plan, a person is poor if the spends on consumption less than Rs. 328 per month in rural area and Rs. 454 per month in urban area at 1999-2000 prices. About 26 percent of Indian population lives below poverty line. The tenth plan aims to reduce this to 21%.

10. Increase in Standard of Living:

The other objective of the plan is to increase the standard of living of the people. Standard of living depends on many factors such as per capita increase in income, price stability, equal distribution of income etc. During the period of Plans, the per capita income at current prices has reached only up to Rs. 20988.

ECONOMIC DEVELOPMENT UNDER FIVE YEAR PLAN

First five-year plan (1951 – 1956)

- The First Five Year Plans was one of the most important because it had a great role in the launching of Indian development after Independence.
- The first Indian Prime Minister, Jawaharlal Nehru presented the First Five-Year Plan to the Parliament of India.

- The First Five-Year Plan was on the Harrod–Domar model with few modifications.
- The total plan budget of Rs.2069 crore (2378 crore later) was allocated to seven broad mainly concentrated on Agriculture and Transport and Communications.
- At the end of the plan period in 1956, five Indian Institutes of Technology (IITs) took a start as major technical institutions.
- The target growth rate was 2.1%.
- The achieved growth rate was 3.6%.

Second Five-year Plan (1956 – 1961)

- The Second Plan was particularly in the development of the public sector and rapid Industrialization.
- The plan is made on the Mahalanobis model, an economic development model.
- Indian statistician Prasanta Chandra Mahalanobis in 1953 made a development to the plan.
- The total amount under the Second Five-Year Plan in India was Rs.48 billion.
- The target growth rate was 4.5%.
- The actual growth rate was 4.27%.

Third Five Year Plan (1961 – 1966)

- The Third Five-year Plans, the main focus was on agriculture and improvement in the production of wheat.
- Many cement and fertilizer plants built. Punjab began producing an abundance of wheat.
- Panchayat elections were started and the states were given more development responsibilities.
- Due to the miserable failure of the Third Plan, the government forcibly declared "plan holidays" (from 1966–67, 1967–68, and 1968–69).
- The main reasons for plan holidays were the war, lack of resources, and an increase in inflation after that planned holiday.
- The target growth rate was 5.6%.
- The actual growth rate was 2.4%.

Plan Holiday (1966 – 1969)

Due to miserable failure of the Third Plan the government was forced to declare "plan holidays" (from 1966–67, 1967–68, and 1968–69). Three annual plans were drawn during this intervening period. During 1966–67 there was again the problem of drought. Equal priority was given to agriculture, its allied activities, and industrial sector. The government of India declared "Devaluation of Rupee" to increase the exports of the country. The main reasons for plan holidays were the war, lack of resources and increase in inflation.

Fourth Five Year Plan (1969 – 1974)

- During the fourth five year plan Indira Gandhi was the there.
- The Indira Gandhi government nationalized 14 major Indian banks and the Green Revolution in India advanced agriculture.
- India tests the Smiling Buddha underground nuclear test (Pokhran-1) in Rajasthan.
- A Slogan of Garibi Hatao is given during the 1971 elections by Indira Gandhi.
- The target growth rate was 5.6%.
- The actual growth rate was 3.3%.

Fifth Five Year Plan (1974 – 1979)

- The Fifth Five-Year Plan laid stress on employment, poverty alleviation (Garibi Hatao), and justice.
- The plan focus was on self-reliance in agricultural production and defence.
- The Electricity Supply Act came into force from 1975.
- In 1978 Morarji Desai government rejects the plan.
- The target growth rate was 4.4%.
- The actual growth rate was 4.8%.

Rolling Plan (1978 – 1980)

- The Janata Party government rejects the Fifth Five-Year Plan and made an introduction to a new Sixth Five-Year Plan (1978–1980).
- This plan got rejection by the Indian National Congress government in 1980.
- A new Sixth Plan took place.
- The Rolling Plan consists of three kinds of plans.

Sixth Five Year Plan (1980 – 1985)

- The Sixth Five-Year Plan marked the beginning of economic liberalization.
- This was the end of Nehruvian socialism.
- Family planning was also expanded in order to prevent overpopulation.
- The target growth rate was 5.2%.
- The actual growth rate was 5.7%.
- Sixth five-year plan is the only Five-Year Plan which was done twice.

Seventh Five Year Plan (1985 – 1990)

- The Seventh Five-Year Plan marked the comeback of the Congress Party to power.
- The plan laid stress on improving the productivity level of industries by upgrading of technology.
- The main objectives of the Seventh Five-Year Plan were to establish growth in areas of increasing economic productivity, production of food grains, and generating employment through Social Justice.
- The target growth rate was 5.0%.
- The actual growth rate was 6.01%.

Annual Plans (1990 -1992)

- The Eighth Plan could not take off in 1990 due to the fast changing political situation at the centre.
- The years 1990–91 and 1991–92 were known as Annual Plans.

Eight Five Year Plan (1992 – 1997)

- Modernization of industries was a major highlight of the Eighth Plan.
- Meanwhile, India became a member of the World Trade Organization on 1 January 1995.
- The major objectives were controlling population growth, poverty reduction, employment generation, strengthening the infrastructure, institutional building, tourism management, human resource development, involvement of Panchayati Raj, Nagar Palikas, NGOs, decentralization and people's participation.
- Energy is the major priority with 26.6% of the outlay.
- The target growth rate was 5.6%.

- The actual growth rate was 6.8%.

Ninth Five Year Plan (1997 -2002)

- The Ninth Five-Year Plan came after 50 years of Indian Independence.
- Atal Bihari Vajpayee was the Prime Minister of India during the Ninth Five-Year Plan.
- The Ninth Five-Year Plan saw contributions towards development from the general public as well as governmental agencies in both the rural and urban areas of the country.
- The Ninth Five-Year Plan focused on the relationship between rapid economic growth and the quality of life for the people of the country.
- The target growth was 7.1%.
- The actual growth was 6.8%.

Tenth Five year Plan (2002 -2007)

- The main objectives of the Tenth Five-Year Plan were
- Attain 8% GDP growth per year
- Reduction of poverty rate by 5% by 2007
- Providing gainful and high-quality employment at least to the addition to the labor force
- Reduction in gender gaps in literacy and wage rates by at least 50% by 2007
- The Target growth was 8.1%.
- The actual growth was 7.7%.

Eleventh Five year Plan (2007 -2012)

- C. Rangarajan prepared the Eleventh Five-year Plan.
- The main focus is for faster and more inclusive growth.
- Its growth rate was 8.1%.
- Its Actual growth was 7.9%.

Twelfth Five Year Plan (2012 – 2017)

- This plan is focused on Faster and focused on more sustainable growth.
- The Twelfth Five-Year Plan of the Government of India has made to achieve a growth rate of 8.2%.

- But the National Development Council (NDC) on 27 Dec 2012 approved 8% growth rate for the 12th five-year plan.
- The plan aims towards the betterment of the infrastructural projects of the nation avoiding all types of bottlenecks.

NITI Aayog (National Institution for Transforming India)

Government of India has replaced the old planning commission started in 1950 with a new institution called NITI Aayog on 1 January 2015. It works under the chairmanship of Prime Minister. NITI Aayog will seek to provide a critical directional and strategic input into the development process. It focuses on co-operative federalism.

Objectives of Niti Aayog

- To evolve a shared vision of national development priorities, sectors and strategies with the active involvement of States.
- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government.
- To ensure, on areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy.
- To pay special attention to the sections of our society that may be at risk of not benefiting adequately from economic progress.
- To design strategic and long term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid-course corrections.
- To provide advice and encourage partnerships between key stakeholders and national and international like-minded Think tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
- To offer a platform for resolution of inter-sectoral and inter departmental issues in order to accelerate the implementation of the development agenda.
- To maintain a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stake-holders.

- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery.
- To focus on technology upgradation and capacity building for implementation of programmes and initiatives.
- To undertake other activities as may be necessary in order to further the execution of the national development agenda, and the objectives mentioned above.

INDIAN ECONOMY UNDER FIVE YEAR PLAN PERIOD: ACHIEVEMENTS AND FAILURE

Achievements of Planning:

1. A Higher Growth Rate:

Economic planning in India aims at bringing about a rapid economic development in all sectors. That is to say, it aims at a higher growth rate. India's macroeconomic performance has been only moderately good in terms of GDP growth rates. The overall rate of growth stands at 4.8 per cent for the whole planning period (1950-2007) Compared with India's own past (1900- 1920) when she was caught in a low level equilibrium trap, growth acceleration during the last 60 years has been impressive indeed.

2. Growth of Economic Infrastructure:

India's performance in building up the necessary economic infrastructure is really praiseworthy. At the inception of economic planning, road kilometer was 4 lakh kms. India has now more than 3 million km of road network, making it one of the largest in the world.

Railway route length increased from 53,596 kms in 1951 to nearly 63,500 kms in 2005-06. Today, the Indian railway system is the largest in Asia and the fourth largest in the world. Similarly, other modes of transport like shipping, civil aviation, etc., have also expanded phenomenally.

3. Development of Basic and Capital Goods Industries:

Another major area of success of Indian planning is the growth of basic and capital goods industries. With the adoption of the Mahalanobis Strategy of development during the Second Plan period, some basic and capital goods industries like iron and steel witnessed spectacular growth.

4. Higher Growth of Agriculture:

The most significant aspect of India's Five Year Plans is that the overall rate of growth of food production has now exceeded the rate of growth of population. Though in the early years of planning, agricultural performance was miserable resulting in the emergence of food crisis. But now, due to the impact of bio-chemical revolution in Indian agriculture, food crisis seems to be a thing of the past. She has attained self-sufficiency in food grains.

5. Savings and Investment:

The rise in the domestic savings rate from 10 p.c. of GDP at the initial stages of planning to around 19 p.c. in 1980-81 is definitely impressive. However, this rate increased to 34.8 p.c. by the end of March 2007. Similarly, India's record in gross domestic capital formation rose from 20.3 p.c. in 1980-81 to 22.8 p.c. of GDP in 2001- 02. But it rose to 36 p.c. in 2006-07.

Major Failures of Planning:

Indian planning is yet to score good marks.

The major areas of failure of planning in India are:

1. Inadequate Growth Rate:

In quantitative terms, the growth rate of the Indian economy may be good but not satisfactory by any standards. Except the First and Sixth Five Year Plans, the actual growth rate remained below the targeted growth rates of GNP and per capita income.

Only in recent plans (both Ninth and Tenth plan), actual growth rate has exceeded the plan targets. In terms of per capita income, India is one of the poorest nations of the world even after more than 58 years of democratic planning.

2. Whither India's Socialistic Society:

Indian planning aims at building up a 'socialistic pattern of society', in an otherwise capitalistic framework, through various socialistic measures. We have not yet made any significant progress towards the goal of attaining a socialistic pattern of society even after nearly 58 years of planning. The concept of socialistic pattern of building a society has been altogether discarded when we introduced new economic policy measures in mid-1991. Instead, Indian economy very much moves on the capitalistic path.

3. Economic Inequality and Social Injustice:

The twin aspects of social justice involves on the one hand, the reduction in economic inequalities, and, on the other, the reduction of poverty. A rise in national income with concentration of economic power in the hands of a few people is not desirable.

In an otherwise capitalist framework, inequality in the distribution of income and wealth is inevitable. In India's socio-political set-up, vast inequalities exist. Indian plans aim at reducing such inequalities, so that the benefits of economic development percolate down to the lower group of the society.

4. Unemployment:

Removal of unemployment is considered to be another important objective of India's Five Year Plans. But, unfortunately, it never received the priority it deserved. In the Sixth Plan (1978-83) of the Janata Government, employment was accorded a pride of place for the first time. However, the Seventh Plan treated employment as a direct focal point or

policy. As a result, the employment generation programme in India has received a rude shock and the problem of unemployment is mounting up plan after plan. The number of job-seekers increased from 363 lakh as on December 1991 to 406 lakhs as on June 2006. In the recent years, the trend is on the rise.

NEW ECONOMIC REFORMS 1991

New Economic Policy of India was launched in the year 1991 under the leadership of P. V. Narasimha Rao. This policy opened the door of the India Economy for the global exposure for the first time. In this New Economic Policy P. V. Narasimha Rao government reduced the import duties, opened reserved sector for the private players, devalued the Indian currency to increase the export. This is also known as the LPG Model of growth.

New Economic Policy refers to economic liberalisation or relaxation in the import tariffs, deregulation of markets or opening the markets for private and foreign players, and reduction of taxes to expand the economic wings of the country.

Former Prime Minister Manmohan Singh is considered to be the father of New Economic Policy (NEP) of India. **Manmohan Singh introduced the NEP on July 24,1991.**

MAIN OBJECTIVES OF NEW ECONOMIC REFORMS – 1991

1. The main objective was to plunge **Indian Economy** in to the arena of 'Globalization and to give it a new thrust on market orientation.
2. The NEP intended to bring down the rate of inflation
3. It intended to move towards higher economic growth rate and to build sufficient foreign exchange reserves.
4. To achieve economic stabilization and to convert the economy into a market economy by removing all kinds of un-necessary restrictions.
5. To permit the international flow of goods, services, capital, human resources and technology, without many restrictions.
6. It wanted to increase the participation of private players in the all sectors of the economy. That is why the reserved numbers of sectors for government were reduced.

MAIN FEATURES OF NEW ECONOMIC REFORMS

1. **Dereservation of the industrial sector**– the industrial sector of the economy has been opened up to the private sector after the New Industrial Policy of 1991. Previously, the public sector has given reservation especially in the capital goods and key industries. Other operators- private sector and foreign investors were not allowed in these critical industries. Deregulation of the industrial sector allowed private sector operation in most of these sectors except in eight selected areas including atomic energy, mining and railways.

2. **Industrial delicensing policy:** the most important part of the new industrial policy of 1991 was the end of the industrial licensing or the license raj or red tapism. Under the previous industrial licensing policies, private sector firms have to secure licenses to start an industry. This has created long delays in the startup of industries. The industrial policy of 1991 has almost abandoned the industrial licensing system. It has reduced industrial licensing to fifteen sectors.

3. **Opening up of the economy to foreign competition:** another major feature of the economic reform measure was that it has given welcome to foreign investment and foreign technology. Opening up of the economy to foreign competition started a new era in India's economic policy with permission to FDI upto 51 per cent in selected sectors.

4. **Liberalization of trade and investment:** the economic reforms introduced extensive liberalization of foreign trade and foreign investment. The import substitution and import restriction policies were abandoned and instead import liberalization and export promotion policies were introduced. On the investment front, the economic reforms mark the era of capital mobility in the country. Foreign capital in the form of FDI (Foreign Direct Investment) and FPI (Foreign Portfolio Investment) were entered into our country.

5. **Financial Sector Reforms:** on the financial sector the government is introducing numerous measures for the deregulation as well as liberalisation of the sector. Different banking sector reforms including removal of control on interest rate and branch licensing policy liberalization were launched. Capital market reforms and money market reforms were extensive after 1994.

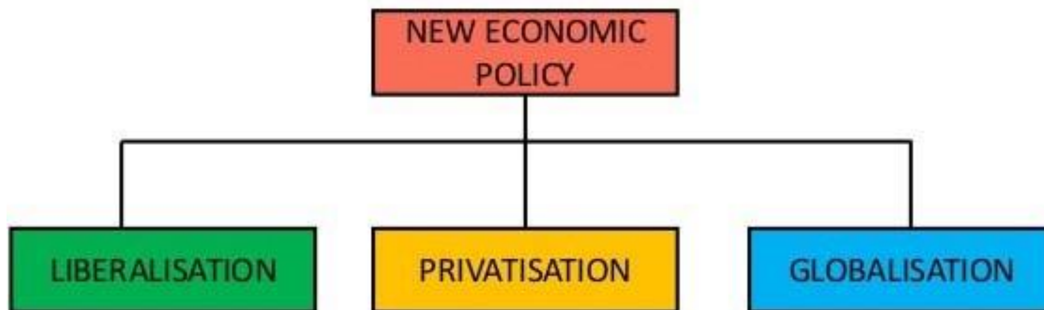
6. **Reforms related to the Public sector enterprises:** reforms in the public sector were aimed at enhancing efficiency and competitiveness of the sector. The public sector will be concentrating in key and strategic sectors. Government has adopted disinvestment policy for the restructuring of the public sector in the country along with several other policies.

7. **Abolition of MRTP Act:** The New Industrial Policy of 1991 has abolished the Monopoly and Restricted Trade Practice Act. In 2010, the Competition Commission has emerged as the watchdog in monitoring competitive practices in the economy.

MAIN MEASURES ADOPTED IN THE NEW ECONOMIC POLICY

Due to various controls, the economy became defective. The entrepreneurs were unwilling to establish new industries (because laws like **MRTP Act 1969** de-motivated entrepreneurs). Corruption, undue delays and inefficiency risen due to these controls. Rate of economic growth of the economy came down. So in such a scenario economic reforms were introduced to reduce the restrictions imposed on the economy.

BRANCHES OF NEW ECONOMIC POLICY



Steps were taken under the Liberalization measure

(i) Free determination of interest rate by the commercial Banks:

Under the policy of liberalisation interest rate of the banking system will not be determined by RBI rather all commercial Banks are independent to determine the rate of interest.

(ii) Increase in the investment limit for the Small Scale Industries (SSIs):

Investment limit of the small scale industries has been raised to Rs. 1 crore. So these companies can upgrade their machinery and improve their efficiency.

(iii) Freedom to import capital goods:

Indian industries will be free to buy machines and raw materials from foreign countries to do their holistic development.

(v) Freedom for expansion and production to Industries:

In this new liberalized era now the Industries are free to diversify their production capacities and reduce the cost of production. Earlier government used to fix the maximum limit of production capacity. No industry could produce beyond that limit. Now the industries are free to decide their production by their own on the basis of the requirement of the markets.

(vi) Abolition of Restrictive Trade Practices:

According to **Monopolies and Restrictive Trade Practices (MRTP) Act 1969,** all those companies having assets worth Rs. 100 crore or more were called MRTP firms and were

subjected to several restrictions. Now these firms have not to obtain prior approval of the Govt. for taking investment decision. Now MRTP Act is replaced by the competition Act, 2002.

1. Liberalisation

Removal of Industrial Licensing and Registration:

Previously private sector had to obtain license from Govt. for starting a new venture. In this policy private sector has been freed from licensing and other restrictions.

Industries licensing is necessary for following industries:

(i) Liquor

(ii) Cigarette

(iii) Defence equipment

(iv) Industrial explosives

(v) Drugs

(vi) Hazardous chemicals

2. **Privatisation***:*

Simply speaking, privatisation means permitting the private sector to set up industries which were previously reserved for the public sector. Under this policy many PSU's were sold to private sector. Literally speaking, privatisation is the process of involving the private sector-in the ownership of Public Sector Units (PSU's).

The main reason for privatisation was in currency of PSU's are running in losses due to political interference. The managers cannot work independently. Production capacity remained under-utilized. To increase competition and efficiency privatisation of PSUs was inevitable.

Step taken for Privatisation:

The following steps are taken for privatisation:

1. Sale of shares of PSUs:

Indian Govt. started selling shares of PSU's to public and financial institution e.g. Govt. sold shares of Maruti Udyog Ltd. Now the private sector will acquire ownership of these PSU's. The share of private sector has increased from 45% to 55%.

2. Disinvestment in PSU's:

The Govt. has started the process of disinvestment in those PSU's which had been running into loss. It means that Govt. has been selling out these industries to private sector. Govt. has sold enterprises worth Rs. 30,000 crores to the private sector.

3. Minimisation of Public Sector:

Previously Public sector was given the importance with a view to help in industralisation and removal of poverty. But these PSU's could not able to achieve this objective and policy of contraction of PSU's was followed under new economic reforms. **Number of industries reserved for public sector was reduces from 17 to 2.**

(a) Railway operations

(b) Atomic energy

4. Globalization:

Literally speaking Globalisation means to make Global or worldwide, otherwise taking into consideration the whole world. Broadly speaking, Globalisation means the interaction of the domestic economy with the rest of the world with regard to foreign investment, trade, production and financial matters.

Steps taken for Globalisation:

Following steps are taken for Globalisation:

(i) Reduction in tariffs:

Custom duties and tariffs imposed on imports and exports are reduced gradually just to make India economy attractive to the global investors.

(ii) Long term Trade Policy:

Forcing trade policy was enforced for longer duration.

Main features of the policy are:

(a) Liberal policy

(b) All controls on foreign trade have been removed

(c) Open competition has been encouraged.

(iii) Partial Convertibility of Indian currency:

Partial convertibility can be defined as to convert Indian currency (up to specific extent) in the currency of other countries. So that the flow of foreign investment in terms of Foreign Institutional Investment (FII) and foreign Direct Investment (FDI).

This convertibility stood valid for following transaction:

(a) Remittances to meet family expenses

(b) Payment of interest

(c) Import and export of goods and services.

(iv) Increase in Equity Limit of Foreign Investment:

Equity limit of foreign capital investment has been raised from 40% to 100% percent. In 47 high priority industries foreign direct investment (FDI) to the extent of 100% will be allowed without any restriction. In this regard **Foreign Exchange Management Act (FEMA)** will be enforced.

If the Indian economy is shining at the world map currently, its sole attribution goes to the implementation of the New Economic Policy in 1991.

IMPACT OF ECONOMIC REFORM

Positive Impacts of New Economic Reforms

1. Sharp correction in fiscal deficit-GDP ratio and reduced monetization of deficits.
2. New industrial policy fostered competitions
3. Real GDP growth averaged 5.7 per cent per annum in the 1990s, which accelerated further to 7.3 per cent per annum in 2000s.
4. There is gain in the share of services, including construction, from 5 per cent to 65 per cent during the period 1990s to 2010-2011
5. Exports and imports of goods and services have more than doubled from 23 per cent of GDP in the 1990s to 50 per cent in the year 2009-11
6. Debt-GDP ratio has declined from 29% to 18.6 %. & Debt-service ratio fell to 24.9 % to 4.7 % for the period of 1991 to 2009-11
7. The high growth was achieved in an environment of price stability as headline WPI inflation dropped to an annual average of 5.5 per cent in 2008 from 8.1 per cent in 1990s.

Negative Impact of New Economic Reforms

1. Agriculture as a percentage of real GDP declined from 3.2 % to .4 %. There is a need to increase agricultural productivity
2. Failed to address labour market inflexibility and there by increasing concentration of labour force in agricultural sector hence high unemployment
3. It could not attract sufficient investment in infrastructure
4. Credit market has still remain an important issue

INDIAN ECONOMIC POLICIES

1. Industrial Policy:

The first Industrial Policy based on the mixed economy principle was announced in 1948 which demarcated clearly the areas of operation of the public and private sectors. This policy was revised in 1956 which laid greater emphasis on the expanding role of the public sector. This was in keeping with the Mahalanobis strategy of industrialisation embodied in the Second Five Year Plan (1956-1961).

India reached the crossroads in 1991 when unprecedented economic crises called for unprecedented changes in economic policies. Making a sharp departure from the 1956 Industrial Policy, the Government of India announced liberalised Industrial Policy on July 24, 1991. Instead of state-sponsored development, the new policy put emphasis on market-led development.

a. Industrial Policy Resolution of 1948:

In a mixed economy of our sort, the government should declare its industrial policy clearly indicating what should be the sphere of the State and of the private enterprise. A mixed economy means coexistence of the two sectors public and private. This the Government of India did by a policy resolution on 30 April 1948 called the First Industrial Policy Resolution or Industrial Policy Resolution of 1948, which made it clear that India was going to have a mixed economy.

b. Industrial Policy Statement of 1956:

On 30 April 1956, the Government revised its first Industrial Policy (i.e., the policy of 1948), and announced the Industrial Policy of 1956.

c. Industrial Policy of 1991:

The long-awaited liberalised industrial policy was announced by the Government of India on 24 July 1991. There are several important departures in the latest policy. The New Industrial Policy has scrapped the asset limit for MRTP companies and abolished industrial licensing of all projects, except for 18 (now 5) specific groups.

2. Trade Policy:

The two giant advocates of free trade—Adam Smith and David Ricardo—about two hundred years ago argued that free flow of goods and services, i.e., unrestricted trade, would be beneficial.

As a result of free trade, each country specialises in production in which it has a comparative advantage. This will enable each country to reap gain from trade. After the Second World War (1939-1945), commercial policy underwent a change when the wave of protectionism swept all over the world. It was argued at that time that though some trade is better than no trade, there is no reason to suppose that free trade is the best.

3. Monetary Policy:

Monetary policy or credit policy concerns itself with the cost (i.e., the rate of interest) and the availability of credit to affect the overall supply of money. The hallmark of the RBI's monetary policy in the 1950s was that of controlled monetary expansion. To supplement the process of macro stabilisation and structural adjustment programmes launched in mid-1991, monetary policy has been redesigned. Market-oriented reforms (such as interest rate liberalisation, entry of private Indian and foreign banks, development of alternative system of monetary controls, etc.), are being constantly made since monetary policy measures are continuous.

4. Fiscal Policy:

Another arm of economic policy is the fiscal policy which is concerned with the policy of taxation, expenditure and borrowing. Fiscal policy as evolved over time has resulted in a tax structure with its great reliance on indirect taxation. As it has failed to contain non-plan expenditures, reinvestible surpluses could not be generated. The government then relied on deficit financing and public borrowing.

5. Indian Agricultural Policy:

Immediately after independence, the country was faced with two major problems: food crisis and shortage of industrial raw materials. The major objectives of the First Plan in the field of agriculture were to correct the imbalances caused by Partition in the supply of food grains and commercial crops and improve infrastructural facilities.

At the time of launching of the First Five Year Plan (1951), socialists believed that institutional factors were responsible for low productivity. Another school of thought pointed to the technological backwardness as the prime factor in holding back agricultural production.

6. National Agricultural Policy:

In view of the problems associated with the agricultural sector during the 1990s, the National Agricultural Policy was announced on July 2000.

7. International Trade Policy:

Whether external trade should be allowed to prosper uninterruptedly or be regulated by various means is a matter of great controversy. A country's position on this issue is commonly known as commercial policy or trade policy. A country's trade policy, thus, centres around free trade versus protection.

India followed a restrictive or protective trade policy up to June 1991 when liberal free trade environment was ushered in. India now moved from 'inward' to 'outward' looking trade policies. She then gradually removed various kinds of trade restrictions.

8. Exchange Rate Management Policy:

Although a nation's BOP always balances in the accounting sense, it need not balance in an economic sense. An unbalance in the BOP account has the following implications.

9. EXIM Policy:

The Exim Policy (1997-2002):

The export-import policy for five years 1997- 2002 (co-terminus with the Ninth Plan) was announced on March 31, 1997.

The Exim Policy (2002-07):

On March 31, 2002 the GOI announced a new five-year Exim Policy- with a view to achieving 1% share of global exports. Quantitative restrictions have been lifted and various incentives offered to agricultural exports and special economic zones to achieve the $ 80 billion annual exports target by 2007.

MONETARY POLICY

Monetary policy refers to the use of instruments under the control of the central bank (RBI) to regulate the availability, cost and use of money and credit.

According to **Johnson**, "Monetary policy is defined as policy employing central bank's control of the supply of money as an instrument for achieving the objectives of general economic policy."

OBJECTIVES OF MONETARY POLICY

1. Maintaining price stability
2. Ensuring adequate flow of credit to the productive Sectors of the economy to support economic growth
3. Rapid economic growth
4. Balance of payment equilibrium
5. Full employment
6. Equal income distribution

INSTRUMENTS OF MONETARY POLICY

1. Bank Rate

Bank Rate is also known as discount rate. It is the rate at which RBI lends to the commercial banks or rediscounts their bills. If bank rate is increased ,then commercial banks also charge higher rate of interest on loans given by banks to public because now commercial banks get funds from RBI at higher rate of interest. Higher rate of interest will contract credit in the economy i.e. public will take lesser loans because of higher rate of interest. The current bank rate is 6.75%.

2. Cash Reserve Ratio (CRR)

Cash Reserve Ratio is a certain percentage of bank deposits which banks are required to keep with RBI in the form of reserves or balances . Higher the CRR with the RBI lower will be the liquidity in the system and vice-versa. RBI is empowered to vary CRR between 15 percent and 3 percent. But as per the suggestion by the Narshimam committee Report the CRR was reduced from 15% in the 1990 to 5 percent in 2002. The current CRR is 4.00 %.

3. Statutory Liquidity Ratio (SLR)

It means a certain percentage of deposits is to be kept by banks in form of liquid assets. This is kept by bank itself the liquid assets here include government securities, treasury bills and other securities notified by RBI. If SLR is more then banks have to keep more part of deposits in specified securities and banks will have less surplus funds for granting loans. It will contract credit. SLR is fixed by RBI and usually it has been ranging between 25% to 40%. By an amendment of the Banking regulation Act (1949) in January 2007, the floor rate of 25% for SLR was removed. The current SLR is 20.75 %.

4. Repo Rate & Reserve Repo Rate

Repo rate is the rate at which RBI lends to commercial banks generally against government securities. Reverse Repo rate is the rate at which RBI borrows money from the commercial banks. Reduction in Repo rate helps the commercial banks to get money at a cheaper rate and increase in Repo rate discourages the commercial banks to get money as the rate increases and becomes expensive. As the rates are high the availability of credit and demand decreases resulting to decrease in inflation. This increase in Repo Rate and Reverse Repo Rate is a symbol of tightening of the policy. The current repo rate is 6.25 % and reserve repo rate is 5.75 %.

5. Open Market Operations

It means that the bank controls the flow of credit through the sale and purchase of securities in the open market. When securities are purchased by central bank, then RBI makes payment to commercial banks and public. So, the public and commercial banks now have more money with them. It increases money supply with commercial banks and public. This will expand credit in the economy. In year 2012-13 RBI Purchases securities 8,000 crore.

<u>FISCAL POLICY</u>

"It refers to a policy concerning the use of state treasury or the government finances to achieve the macro-economic goals".

"Government policy of changing its taxation and public expenditure programs intended to achieve its objective".

"Government uses its expenditure and revenue program to produce desirable effects on National Income production and employment".

Fiscal policy deals with the taxation and expenditure decisions of the government. These include, tax policy, expenditure policy, investment or disinvestment strategies and debt or surplus management. - Kaushik Basu (Former Chief Economic Adviser)

OBJECTIVES OF FISCAL POLICY

1. Increase in capital formation
2. Degree of Growth
3. To achieve desirable price level
4. To achieve desirable consumption level
5. To achieve desirable employment level
6. To achieve desirable income distribution

INSTRUMENTS OF FISCAL POLICY

1. Deficit Policy

Deficit Financing refers to financing the budgetary deficit. Budgetary deficit here means excess of government expenditure over government income. It means "Taking loans from reserve bank of India by the government to meet the budgetary deficit". Reserve bank gives loans buy issuing new currency notes. Increase in money supply leads to fall in value of money. Fall in value of money in turn leads to increase in price level. So deficit financing should be kept low as it leads to price rise in economy. Thus due to deficit financing necessary funds are made available for economic Growth and on the other inflation of country increases.

2. Public Expenditutre

Public expenditure influences the economic activities of country very much. Public expenditure may be of two kinds i.e. developmental and non developmental. Expenditure on developmental activities requires huge amount of capital. So much capital cannot be made available by private sector alone. It requires substantial increase in public expenditure. Public expenditure may be made in many ways:- (1) Development of state enterprises, (2) Support to private sector, (3) Development of infrastructure & (4) Social Welfare.

3. Taxation Policy

Taxes are the main source of revenue of government. Government levies both direct and indirect taxes in India. Direct taxes are those which are directly paid by the assesses to the government i.e. income tax, wealth tax etc. Indirect tax are paid indirectly by the public to the government i.e. excise duty, custom duty, VAT etc. Direct tax are progressive in nature. Indirect tax are not progressive. These change from all the segments of society at same rate. The main objectives of taxation policy are: (1) Mobilization of resources, (2) To promote saving, (3) To promote saving & (4) To bring Equality of income and wealth.

4. Public Debt

Government needs lot of funds for economic development of the country. No government can mobilize so much funds by way of tax alone. It is therefore , ecomes inevitable for the government to mobilize resources for economic development by resorting the public debt. Public debt is obtained from two kinds:- (1) Internal Debt (2) External Debt.

QUESTIONS

PART A

1. Write about Sarvodaya Plan 1950.
2. What is Economic Stability.
3. Mention any two objectives of economic planning.
4. Write about the First Five year plan (1951 – 1956).
5. What do you mean by reduction of economic inequalities?
6. Infer on plan holiday 1966 – 1969.
7. State the meaning of NITI AAYOG.
8. Mention any two achievements and failures under Five year plan period.
9. Interpret the significant shift in the strategy of Second plan (1956-1961).
10. State the main objectives of new economic reforms 1991.
11. List the branches of new economic policy.
12. Write about Exim policy.
13. Define Monetary policy.
14. Define Fiscal policy.
15. What is Repo rate?
16. Interpret cash reservation.'

PART – B

1. Explain the objectives of economic planning.
2. Discuss about the first second and third Five year plan.
3. Elaborate on the objectives of NITI AAYOG.
4. Discuss on the achievements and failure of Indian Economy under Five year plan period.
5. Elaborate the main objectives and features of New Economic reforms – 1991.
6. Explain in detail about the branches of New Economic policy.
7. Analyze the Indian Economic Policies.
8. Summarize the objects and instruments of Monetary policy.
9. Elaborate the objectives and instruments of Fiscal policy.
10. Explain about the significant shift in strategy from Sixth to Twelfth Five year plan.

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UNIT – V – Indian Economy – SBAA1203

UNIT 5 INFRASTRUCTURE AND CONTEMPORARY CONCEPTS

Infrastructure - Types- Role in Economic development - Inflation: Causes of rising and falling inflation, inflation and interest rates -Unemployment - Brain Drain - Labour market and its interaction with production system.

INFRASTRUCTURE

Infrastructure is the basic requirement of economic development. It does not directly produce goods and services but facilitates production in primary, secondary and tertiary economic activities by creating external economies. It is an admitted fact that the level of economic development in any country directly depends on the development of infrastructure.

MEANING OF INFRASTRUCTURE

Simply speaking, "Infrastructure means those basic facilities and services which facilitates different economic activities and thereby help in economic development of the country, Education, Health, Transport and Communication, banking and insurance, irrigation and power and science and technology etc. are the examples of infrastructure. These are also called social over head capital. These do not directly produce goods and services but induce production in agriculture, industry and trade by generating external economies. For example, an industry situated on or near the railway line or national highway will produce commodities at less cost.

DEFINITIONS

The Readers Digest Universal Dictionary defines the term infrastructure as "an underlying base or supporting structure, the basic facilities, equipment, services and installations needed for the growth and functioning of a country, community, operation or organization".

The Infrastructure Development Department (IDD) of Government of Karnataka defines the term 'infrastructure' as "any public work relating to facilities for utilization of natural resources or provision of services, by way of Physical structures or systems".

Dr. C. Rangarajan Commission's Notion of Infrastructure (2001):

The Rangarajan Commission indicated six characteristics of infrastructure sectors, (a) Natural monopoly, (b) High-sunk costs, (c) Nontradability of output, (d) Non-rivalness (up to congestion limits) in consumption, (e) Possibility of price exclusion, and (f) Bestowing

Commission recommended inclusion of following in infrastructure in the firststage:

- Railway tracks, signaling system, stations
- Roads, bridges, runways and other airport facilities.
- T and D of electricity
- Telephone lines, telecommunications network
- Pipelines for water, crude oil, slurry, waterways, port facilities

- Canal networks for irrigation, sanitation or sewerage.

The Commission further recommended that considering characteristics (b), (d) and (e) also, the above list may be extended to include the following in the second stage:

- Rolling stock on railways
- Vehicles, aircrafts
- Power generating plants
- Production of crude oil, purification of water
- Ships and other vessels

However, the Rangarajan Commission recommended that the list of infrastructure activities should be finalized by the Ministry of Statistics and Programme Implementation (MOSPI) on the basis on the characterists recommended by them for identification of infrastructure.

Reserve Bank of India (RBI) circular on Definition of Infrastructure:

As per the RBI, a credit facility is treated as "infrastructure lending" to a borrower company which is engaged in developing, operating and maintaining or developing, operating and maintaining any infrastructure facility that is a project in any of the following sectors, or any infrastructure facility of a similar nature;

1. A road, including toll road, a bridge or a rail system;
2. A highway project including other activities being an integral part of the highway project;
3. A port, airport, inland waterway or inland port;
4. A water supply project, irrigation project, water treatment system, sanitation and sewerage system or solid waste management system;
5. Telecommunication services whether basic or cellular, including ratio paging, domestic satellite service (i.e. a satellite owned and operated by an Indian company for providing telecommunication service), network of runking, broadband network and internet services;
6. An industrial park or special economic zone;
7. Generation or generation and distribution of power;
8. Transmission or distribution of power by laying a network of new transmission or distribution lines;
9. Construction relating to projects involving agro-processing and supply of inputs to agriculture;
10. Construction for preservation and storage of processed agroproducts, perishable goods such as fruits, vegetables and flowers including testing facilities for quality;
11. Construction of educational institutions and hospitals;
12. Any other infrastructure facility of similar nature.

For raising external commercial borrowings funds, the RBI has defined infrastructure to include (i) power, (ii) telecommunication, (iii) railways, (iv) road including bridges, (v) sea port and airport, (vi) industrial parks and (vii) urban infrastructure (water supply, sanitation and sewage projects) vide their circular dated 2nd July, 2007.

World Bank:

The World Bank treats power, water supply, sewerage, communication, roads & bridges, ports, airports, railways, housing, urban services, oil/gas production and mining sectors as infrastructure.

TYPES OF INFRASTRUCTURE:

There is no unanimity of opinion among developmental economists with regard to the items to be included in infrastructure. A large number of items extending from transport and power to education, law and order and social values have been included in infrastructure given by various economists.

Singer has included education system, health services, housing, transport, power and irrigation among over head capital.

Economic Infrastructure:

1. Transport:
    a. Roads
    b. Railways
    c. Shipping ports and harbours
    d. Airports
    e. Transport Equipments.
2. Communication:
    a. Ports
    b. Telegraphs
    c. Telephones
    d. Radio
    e. Television
    f. Cinema etc
3. Energy/Power:
    a. Coal
    b. Electricity

c. Wind power

d. Solar energy

e. Oil

f. Gas and Bio-gas

4. Intermediate goods and output:

a. Minerals

b. Steel

c. Metals other than steel

d. Basic chemicals

e. Fertilizers and pesticides

f. Machinery and machine tools

5. Increasing productivity of natural resources:

a. Reclamation of land

b. Irrigation (Major/Medium/Minor)

c. Drainage

d. Contour building and land reshaping.

e. Consolidation of holdings

f. High yielding bovine varieties g.

Fishing boats

h. Fishing equipments and refrigeration

i. Afforestation and development of commercial projects.

6. Science and Technology:

a. Teaching basic and applied research

b. National laboratories

c. Liaison with production units

7. Information system:

a. Mass Media

b. Libraries and Museums

c. Fairs and exhibitions

d. Books and journals.

Finance Infrastructure:

i. Finance and Banking

a. Savings institutions (public private and co-operative sectors)

b. Credit and lending institutions.

c. Capital Markets

Social Infrastructure:

1. Human Resource Development:

a. Health

b. Clean drinking water

c. Disease eradication

d. Public hygiene

e. Family Planning

f. Medical facilities

g. Education, Literacy

h. Schools, Colleges and Universities

i. Professional Education

j. Technical and industrial schools

k. Development disciplines

Thus, the scope of infrastructure is growing rapidly over time. The items to be covered in the term infrastructure are rather difficult. They differ from country to country depending on the level of economic development. A country may go in for broader base of infrastructure development as development proceeds over the time periods.

Infrastructure is also classified into different categories based on the purpose of the study. It is classified as 'hard' and 'soft' infrastructure, development and rehabilitative infrastructure (on the basis of stages of development) urban and rural infrastructure and institutional and on institutional infrastructure.

In the economic category all these facilities are included which are directly required for the process of development of productive activities.
They are mainly

i. Irrigation

ii. Power

iii. Transport and

iv. Communication

On the other hand the term ‘social infrastructure’ refers to those overhead facilities which lead to the improvement in the quality of the population. These may include facilities like,

1. Health Services
2. Educational facilities.
3. Provision of nutrition
4. Water supply (Clean drinking water)
5. Sanitation etc

COMPONENTS OF INFRASTRUCTURE

I. Economic Infrastructure

1. Transport and Communication
2. Energy
3. Banking
4. Cooperatives
5. Irrigation

II. Social Infrastructure

1. Education
2. Health

SIGNIFICANCE OF ECONOMIC INFRASTRUCTURE

According to Dr V. K. R. V. Rao, “The link between infrastructure and development is not a once for all affair. It is a continuous process and progress in development has to be preceded, accompanied and followed by progress in infrastructure; if we are to fulfil our declared objectives of a self-accelerating process of economic development”.

Discussed below are some of the most critical significance of economic infrastructure and its impact on the economy.

1. **The smooth functioning of the economy.** Infrastructural facilities are very necessary and vital for the smooth functioning of the economy. They are like wheels of development without which the economy will not be able to function properly.

2. **Development of agriculture.** The development of agriculture, to a considerable extent, depends on the adequate expansion and development of irrigation, credit, transport, power, marketing, training and education. It also depends on the improvement of research and development and other such facilities.

3. **Development of industry.** Industrial production requires not only machinery and equipment but also requires the following. Energy, skilled manpower, management, banking, insurance and transportation services are crucial. These activities and facilities will directly lead to the development of the industrial sector of the economy.

4. **Promotion of investment.** Infrastructural development is definitely a pre-condition got increasing economic investments. Those areas with the sound infrastructural base may succeed in attracting all the more capital for investment.

5. **Improvement in productivity**. Infrastructural development such as transportation facilities and education increase the productivity. Development of science and technology is also important in improving the economic productivity. Moreover, research and development also play a critical role in economic improvement.

6. **Employee generation.** Infrastructures play a crucial role in the generation of employment opportunities. They improve mobility, efficiency and productivity of labour. Moreover, larger investment, development of industry and agriculture create all the more employment opportunities.

7. **Development of backward regions.** The development of backward regions and the removal of regional imbalances is yet another significant contribution of infrastructural facilities. The lack of infrastructural facilities in the backward regions will act as a constraint on the development of those regions.

8. **Social change.** Infrastructural facilities will also act as an instrument of social changes. Development of industries, transport facilities and education will change the outlook of people. Apart from these, even science, technology and growth of towns and cities will lead to a changed economic outlook.

9. **The growth of GDP.** There exists a very close relationship between spending for infrastructure and GDP growth. Studies reveal that 1% growth in the stock of infrastructure often associates with 1% growth in per capita GDP.

10. **All round development/Overall development.** Infrastructural development is important not only for economic growth but also for the overall development. The all-round development of the country and economy is crucial. Infrastructural facilities are also necessary for technological innovation. Along with technological innovation, economic infrastructural facilities are also important for the eradicating poverty and enhancing globalization.

IMPORTANCE OF ECONOMIC INFRASTRUCTURE

Economic infrastructure is the nerve centre of the economic system. It plays an important role in the development of not only the economy but of the civilization as well. It is a public utility service which gives place and time utility to goods and services. They link

production, distribution centres and the end consumers as well. Therefore, infrastructures bring together the elements of the economic system.

To conclude, let us discuss some of the prime importance of infrastructures.

a. They help in the development of the market and all the elements within.
b. It also facilitates large-scale production for the purpose of smooth functioning of the economy.
c. They result in the territorial division of labour which is great.
d. They also ensure price stability in the market.
e. Economic infrastructure definitely ensures the mobility of labour and capital within/from the economy.
f. It results in the overall growth of towns and cities.
g. Infrastructures provide for a lot of employment generation and employment opportunities.
h. They also play a crucial role in national defence activities.
i. Infrastructures in the economy directly result in the unity of various economic components.
j. The economy and the nation will be able to meet any emergencies that arise.
k. It creates a place and time utility.
l. Infrastructural development plays a vital role in the development of agriculture and industry.
m. Infrastructure like transportation, communication and telecommunication breaks any economic isolation that prevails in the country.
n. They are a great and rich source of revenue to the Government.
o. The development of economic infrastructure will directly result in the development of economic trade.

INFRASTRUCTURE DEVELOPMENT IN INDIA

1. In the Union Budget 2017-18, the Government of India has given a massive push to the infrastructure sector by allocating US$ 61.92 billion for the sector.
2. The infrastructure sector in India witnessed 33 deals in FY2016-17 involving US$ 3.49 billion as against US$ 2.98 billion raised across 31 deals in FY2015-16, with the majority of deals led by the power, roads and renewable sectors. Also, in April 2017, companies in Malaysia and India signed deals for infrastructure projects worth US$ 3.86 to be implemented in India.

3. Private sector is emerging as a key player across various infrastructure segments, ranging from roads and communications to power and airports

4. In 2016, India jumped 19 places in World Bank's Logistics Performance Index (LPI) 2016, to rank 35th amongst 160 countries.

5. FDI received in Construction Development sector (townships, housing, built up infrastructure and construction development projects) from April 2000 to June 2017 stood at US$ 24.54 billion ; and in Construction (Infrastructure) activities stood at US$ 9.82 billion.

Increasing FDI Inflows into the Infrastructure Sector in India

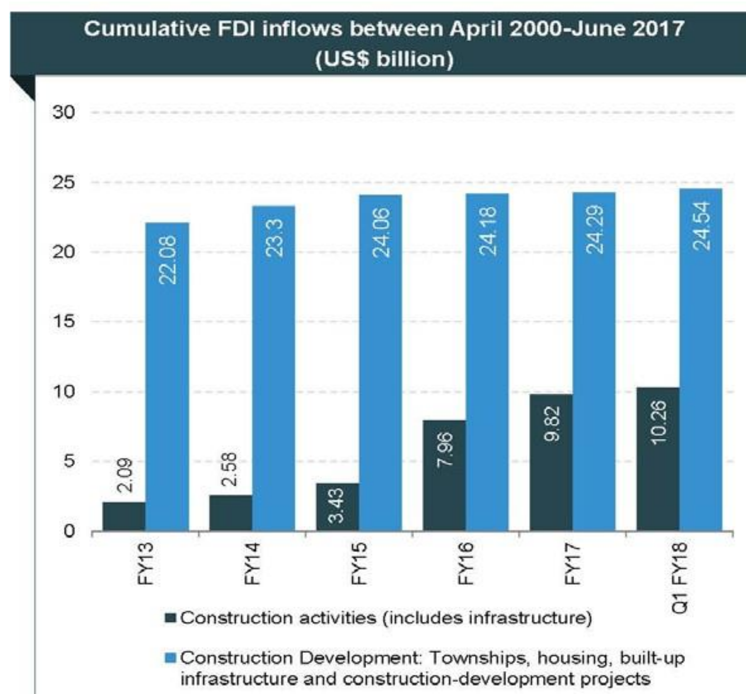
- Cumulative FDI inflows in the Construction Activities sector, which includes infrastructure, reached US$ 10.26 billion between April 2000 – June 2017.

- Cumulative FDI inflows in the Construction Development sector, which includes townships, built-up infrastructure and construction-development projects, reached US$ 24.54 billion between April 2000 – June 2017.

- UAE-based firm, DP World, having previously invested US$ 1 billion in India, is planning to invest another US$ 1 billion in India's infrastructure sector along with logistics and container terminals

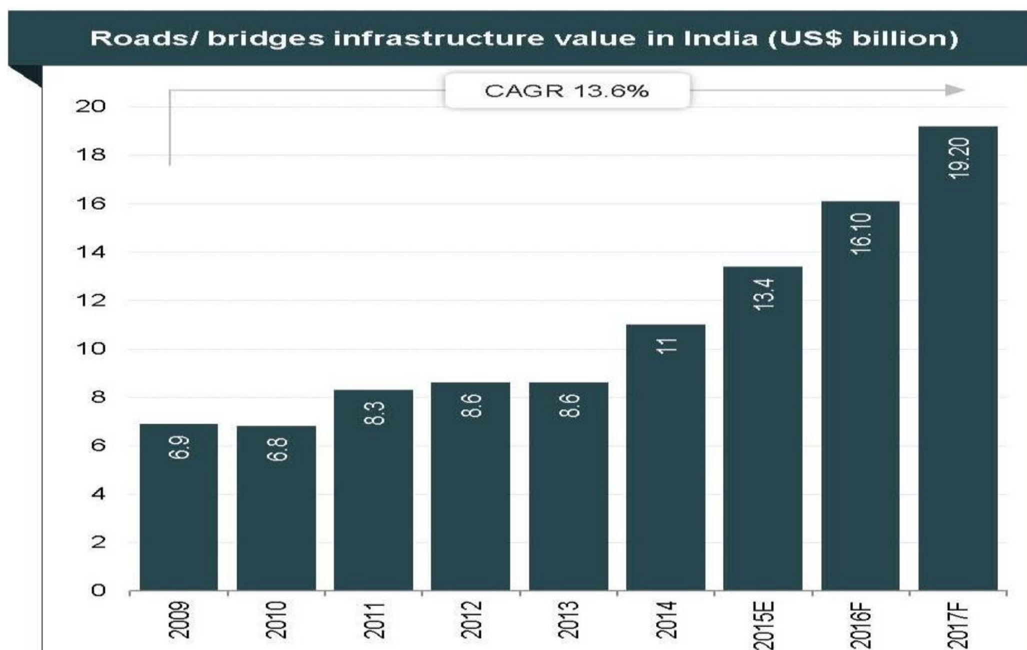
- Squared Capital, a global infrastructure investment company, plans to raise up to US$

4 billion through its second infrastructure fund, which will be invested in infrastructure assets in India and across the globe.



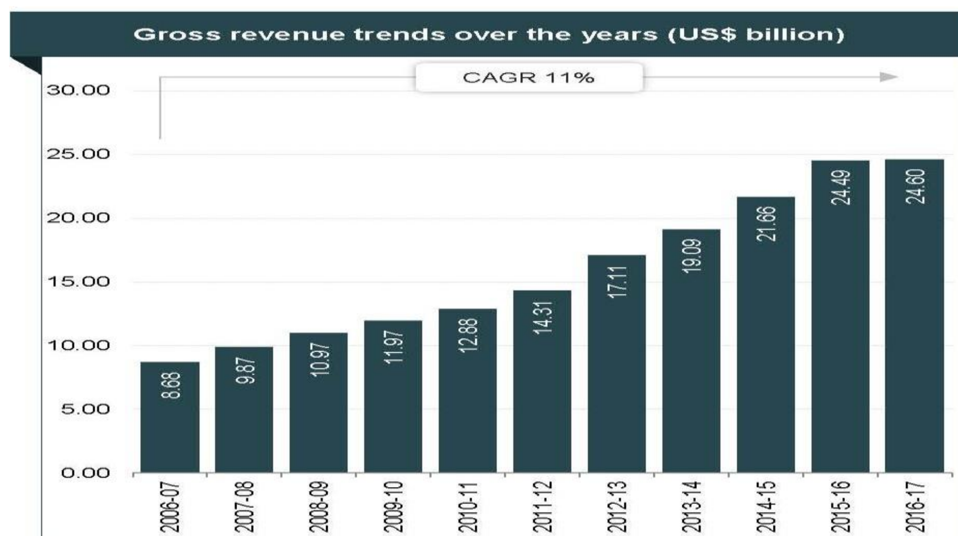
Strong momentum n Expansion of Roadways

- Value of total roads and bridges infrastructure in India is estimated to have expanded at a CAGR of 13.6 per cent over FY09–17 to US$ 19.2 billion
- In April 2017, the National Highways and Infrastructure Development Corp. bagged a project to build 5 tunnels worth US$ 3.42 billion. These tunnels, namely, Zojila tunnel at Zojila Pass (14 kms), Vailoo Tunnel at Sinthan Pass (8-10 kms), Z-Morah tunnel (6.5 kms), Pir-Ki-Gali Tunnel on National Highway-244 (8.5 kms) and Daranga Tunnel at Shudh Mahadev (4.5 kms), will help in avoiding road accidents because of avalanches
- An outlay of Rs 6.92 trillion (US$ 107.64 billion) was approved by the Government of India in October 2017 to build a road network of 83,677 km over the next five years. The outlay includes the Bharatmala projects worth Rs 5.35 trillion (83.25 billion).
- In January 2017, the government proposed to lay down cycle tracks on all highways and major roads pan India, to promote the use of electric cars and public transport.
- Highway network in the country is expected to cover 50,0000 km by 2019. The National Highway Authority of India has created a new highway operations division to focus on all non-commercial highway operational activities like electronic toll collection, road safety, incident management, and other modern amenities .



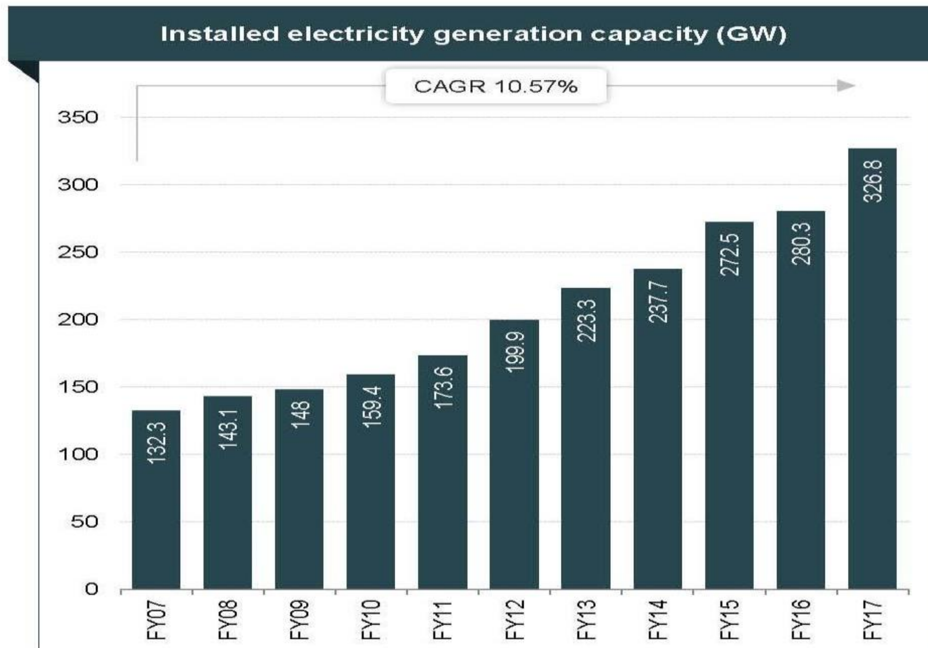
Strong revenue growth for Indian Railways

- Revenue growth has been strong over the years; during FY07–17, revenues increased at a CAGR of 11 per cent to US$ 24.60 billion in FY17.
- Revenues from the sector are estimated to reach to US$ 44.5 billion by the end of FY20
- The Ministry of Railways is working on a plan to earn Rs 15,000 crore (US$ 1.56 billion) over the next 10-20 years through a rail display network (RDN), enabling real-time information to passengers.
- Indian Railway sector aims to boost passenger amenities
- In March 2017, Railways started a new segment of revenue generation channel through auctioning for advertising and branding contracts on 1000 trains. The front running brands are to sign this contract for 5 years.
- All Indian Railways trains will become electric by 2022, resulting in annual savings of Rs 11,500 crore (US$ 1.79 billion).



Power Generation Capacity has increased at A Healthy Pace

- Installed capacity increased steadily over the years, posting a CAGR of 10.57 per cent in FY09–17 and stood at 326.84 (GW) by the end of FY17.
- As of October 2017, India had a power generation capacity of 331.1 GW.
- As of June 2017, energy generation from conventional sources stood at 307.7 billion units (BU).
- Indian energy sector is expected to offer investment opportunities worth US$ 300 billion over the next 10 years.



Summary of Infrastructure Projects completed during the 12th Five Year Plan

Sector	**Number of Projects**	**Cumulative Expenditure (US$)**
Road Transport and Highways	91	8.7 billion
Power	73	16.63 billion
Petroleum	65	19.48 billion
Railways	33	3.81 billion
Steel	20	8.13 billion
Shipping and Ports	20	1.78 billion
Telecommunications	14	463.62 million
Coal	9	2.26 billion
Fertilisers	6	596.24 million
Civil Aviation	5	861.16 million
Urban Development	5	678.83 million
Atomic Energy	1	168.93 million

INFLATION

Inflation is the rate in which the prices for goods and services increase. Inflation often affects the buying capacity of consumers.

According to Crowther, “Inflation is a state in which the value of money is falling, i.e, prices are rising”.

However, we should remember one important point. That is, there can be inflation even without a rise in the price level. This is known as *‘Repressed Inflation’*.

TYPES OF INFLATION

1. **Demand-pull inflation**:

It is loosely described as "too much money chasing too few goods". This refers to the situation where general price level rises because the demand for goods and services exceeds the supply available at the existing prices.

2. **Cost-push inflation:**

Cost – push inflation is induced by rising costs, including wages, so that rising wages and other costs push up prices. We can also speak of wage inflation or price inflation when we mean increase in wages or prices.

3. **Other types of Inflation**

   a) **Creeping or Persistent inflation :** Since the end of world War II, i.e. since 1945, there has been a tendency for prices and wages to push one another upwards. This situation has been described as creeping or persistent inflation.

   b) **Hyper – Inflation:** This is a serious type of inflation. For example, it was experienced in Germany after World War I and in Hungary and China after World War II. In this situation, prices rise to a very great extent at high speed and high prices have to be paid even for cheap things. And money becomes quite worthless and new currency has to be introduced. This situation is known as galloping inflation or hyper-inflation.

   c) **Bottleneck Inflation :** This refers to inflation that results from shortages, imbalances and rising marginal costs as full employment output is approached.

d) **Profit – Push Inflation :** Just as trade unions manage to push up wages, oligopolists and monopolists will raise prices more than enough to cover increase in costs with the aim of making monopoly profits.

CAUSES FOR INFLATION

1. Money Supply: Excess currency (money) supply in an economy is one of the primary cause of inflation. This happens when the money supply/circulation in a nation grows above the economic growth, therefore reducing the value of the currency.

2. National Debt: There are a number of factors that influence national debt, which include the nations borrowing and spending. In a situation where a country's debt increases, the respective country is left with two options: (i) Taxes can be raised internally, (ii) Additional money can be printed to pay off the debt.

3. Demand-Pull Effect: The demand-pull effect states that in a growing economy as wages increase within an economy, people will have more money to spend on goods and services. The increase in demand for goods and services will result in companies to raise prices that consumers will bear in order to balance supply and demand.

4. Cost-Push Effect: This theory states that when companies face increased input costs on raw materials and wages for manufacturing consumer goods, they will preserve their profitability by passing the increased production cost to the end consumer in the form of increased prices.

5. Exchange Rates: An economy with exposure to foreign markets mostly functions on the basis of the dollar value. In a trading global economy, exchange rates play an important factor in determining the rate of inflation.

METHODS OF CONTROLLING INFLATION

1. Increased taxation
2. By reducing government expenditure on capital projects
3. Restrictions on imports
4. Rationing and
5. Price controls

Note: A healthy inflation rate (2-3%) is considered positive because it directly results in increasing wages and corporate profitability and maintains capital flowing in a growing economy.

INFLATION AND INTEREST RATE

The interest rate affects inflation and both are closely related. They are generally referred together in macroeconomics.

Inflation is the rate at which the general level of prices for goods and services rises. As for price increase, this leads to falling in the purchasing power of the currency. It is very much necessary to keep inflation rate within permissible limits for the smooth functioning of an economy.

Interest rate is the rate at which the lender is lending funds to the borrower. The interest rate has a vital impact on the economy of the country and has a major impact on stock and other investments.

The interest rate is decided by considering two factors.

- Capital availability, if a rate of interest is high then capital is costly.
- If the rate of interest is low, bank customers will not get sufficient return on their fund which will demotivate customers to keep the amount in the bank, as a result, the bank will not have funds.

If money is cheap, people will get the motivation to get money in the market and as a result, the value of money will decrease. This will increase inflation.

The rate of interest for loans and deposit are different. The rate of interest for loans are high whereas for deposits comparatively less. The interest rate is a price for holding or loaning money i.e. price for depositing or borrowing of money.

Relationship between inflation and Interest rate

Basis	**Interest Rate**	**Inflation**
Effect of Increase	If the interest rate increase, inflation decreases	If inflation increase, interest rate decreases
	Money Circulations in the market decreases	Money Circulations in the market increases
	Borrowing became expensive	Borrowing became cheap
	Demand for goods & services decrease	Demand for goods & services increase
	Interest rate increase leads to a fall in the price of services and goods	Inflation leads to a rise in the price of service and goods

Effect of Decrease	If interest rate decrease, inflation increases	If inflation decreases, the interest rate increase
	Money Circulations in the market increases	Money Circulations in the market decreases
	Borrowing became cheap	Borrowing became expensive
	Demand for goods & services increase	Demand for goods & services decrease
	Interest rate decrease leads to a rise in the price of services and goods	Inflation decrease leads to a fall in the price of services and goods

Through this, we can say that the inflation and interest rate are dependent on each other and the relation between them is an inverse relationship where one increases and other decrease and vice versa.

UNEMPLOYMENT

Unemployment occurs when workers who want to work are unable to find jobs, which means lower economic output, while still requiring subsistence.

Unemployment may be defined as "a situation in which the person is capable of working both physically and mentally at the existing wage rate, but does not get a job to work".

In other words unemployment means only involuntary unemployment wherein a person who is willing to work at the existing wage rate does not get a job.

High rates of unemployment are a signal of economic distress, but extremely low rates of unemployment may signal an overheated economy.

TYPES OF UNEMPLOYMENT IN MODERN SOCIETIES

1. Open Unemployment:

Open unemployment is a situation where in a large section of the labour force does not get a job that may yield them regular income. This type of unemployment can be seen and counted in terms of the number of unemployed persons. The labour force expands at a faster rate than the growth rate of economy. Therefore all people do not get jobs.

2. Disguised Unemployment:

It is a situation in which more people are doing work than actually required. Even if some are withdrawn, production does not suffer. In other words it refers to a situation of employment with surplus manpower in which some workers have zero marginal productivity.

3. Seasonal Unemployment:

It is unemployment that occurs during certain seasons of the year. In some industries and occupations like agriculture, holiday resorts, ice factories etc., production activities take place only in some seasons. So they offer employment for only a certain period of time in a year. People engaged in such type of activities may remain unemployed during the off- season.

4. Cyclical Unemployment:

It is caused by trade cycles at regular intervals. Generally capitalist economies are subject to trade cycles. The down swing in business activities results in unemployment. Cyclical unemployment is normally a shot-run phenomenon.

5. Educated Unemployment:

Among the educated people, apart from open unemployment, many are underemployed because their qualification does not match the job. Faulty education system, mass output, preference for white collar jobs, lack of employable skills and dwindling formal salaried jobs are mainly responsible for unemployment among educated youths in India. Educated unemployment may be either open or underemployment.

6. Technological Unemployment:

It is the result of certain changes in the techniques of production which may not warrant much labour. Modern technology being capital intensive requires less labourers and contributes to this kind of unemployment.

7. Structural Unemployment:

This type of unemployment arises due to drastic changes in the economic structure of a country. These changes may affect either the supply of a factor or demand for a factor of production. Structural employment is a natural outcome of economic development and technological advancement and innovation that are taking place rapidly all over the world in every sphere.

8. Underemployment:

It is a situation in which people employed contribute less than their capacity to production. In this type of unemployment people are not gainfully employed. They may be employed either on part-time basis, or undertake a job for which lesser qualification is required. For example a Post Graduate may work as a clerk for which only S.S.L.C. is enough.

9. Casual Unemployment:

When a person is employed on a day-to-day basis, casual unemployment may occur due to short-term contracts, shortage of raw materials, fall in demand, change of ownership etc.

10. Chronic Unemployment:

If unemployment continues to be a long term feature of a country, it is called chronic unemployment. Rapid growth of population and inadequate level of economic development on account of vicious circle of poverty are the main causes for chronic unemployment.

11. Frictional Unemployment:

Frictional unemployment is caused due to improper adjustment between supply of labour and demand for labour. This type of unemployment is due to immobility of labour, lack of correct and timely information, seasonal nature of work. etc.

12. Voluntary Unemployment:

In every society, there are some people who are unwilling to work at the prevailing wage rate, and there are some who are lucky enough to get a continuous flow of unearned income from their unemployed status. Jobs are available for them but they do not want to accept them. Voluntary unemployment may be a national waste of human energy, but it is not a serious economic problem with any social repercussions. Voluntary unemployment is consistent with the state of full employment.

MEASUREMENT OF UNEMPLOYMENT:

There are three measures or estimates of unemployment. These are developed by National Sample Survey Organisation (NSSO). They are:

1. Usual Status Unemployment:

Also known as open unemployment or chronic unemployment. This measure estimates the number of persons who remained unemployed for a major part of the year. This measure gives the lowest estimates of unemployment. This concept used to determine the usual activity status of a person as employed or unemployed or outside the labour force. The persons covered may be classified into those working or available for work in their principal activity sector and subsidiary sector.

2. Weekly Status Unemployment:

The estimate measures unemployment with respect to one week. A person is said to be unemployed if he is not able to work even for an hour during the survey period. In other words according to this estimate a person is said to be employed for the week even if he/she is employed only for a day during that week.

3. Current Daily Status Unemployment:

It considers the activity status of a person for each day of the preceding seven days. The reference period here is a day. If a person did not find work on a day or some days during the survey week, he/she is regarded as unemployed. Normally if a person works for four hours or more during a day, he or she is considered as employed for the whole day. The daily status unemployment is considered to be a comprehensive measure of unemployment.

MAIN CAUSES OF UNEMPLOYMENT IN INDIA

(i) Caste System:

In India caste system is prevalent. The work is prohibited for specific castes in some areas. In many cases, the work is not given to the deserving candidates but given to the person belonging to a particular community. So this gives rise to unemployment.

(ii) Slow Economic Growth:

Indian economy is underdeveloped and role of economic growth is very slow. This slow growth fails to provide enough unemployment opportunities to the increasing population.

(iii) Increase in Population:

Constant increase in population has been a big problem in India. It is one of the main causes of unemployment. The rate of unemployment is 11.1% in 10th Plan.

(iv) Agriculture is a Seasonal Occupation:

Agriculture is underdeveloped in India. It provides seasonal employment. Large part of population is dependent on agriculture. But agriculture being seasonal provides work for a few months. So this gives rise to unemployment.

(v) Joint Family System:

In big families having big business, many such persons will be available who do not do any work and depend on the joint income of the family. Many of them seem to be working but they do not add anything to production. So they encourage disguised unemployment.

(vi) Fall of Cottage and Small industries:

The industrial development had adverse effect on cottage and small industries. The production of cottage industries began to fall and many artisans became unemployed.

(vii) Slow Growth of Industrialisation:

The rate of industrial growth is slow. Though emphasis is laid on industrialisation yet the avenues of employment created by industrialisation are very few.

(viii) Less Savings and Investment:

There is inadequate capital in India. Above all, this capital has been judiciously invested. Investment depends on savings. Savings are inadequate. Due to shortage of savings and investment, opportunities of employment have not been created.

(ix) Causes of Under Employment:

Inadequate availability of means of production is the main cause of under employment. People do not get employment for the whole year due to shortage of electricity, coal and raw materials.

(x) Defective Planning:

Defective planning is the one of the cause of unemployment. There is wide gap between supply and demand for labour. No Plan had formulated any long term scheme for removal of unemployment.

(xi) Expansion of Universities:

The number of universities has increased manifold. There are 385 universities. As a result of this educated unemployment or white collar unemployment has increased.

(xii) Inadequate Irrigation Facilities:

Even after the completion of 9th five plans, 39% of total cultivable area could get irrigation facilities. Due to lack of irrigation, large area of land can grow only one crop in a year. Farmers remain unemployed for most time of the year.

(xiii) Immobility of labour:

Mobility of labour in India is low. Due to attachment to the family, people do not go to far off areas for jobs. Factors like language, religion, and climate are also responsible for low mobility. Immobility of labour adds to unemployment.

DEFINITION OF BRAIN DRAIN

Cambridge Online Dictionary states: “Large numbers of educated and very skilled people leave their own country to live and work in another one where pay and conditions are better”

The Oxford Advanced Learner’s dictionary defines Brain Drain as: “**Movement of highly skilled and qualified people to a country where they can work in better conditions and earn more money**”.

Additionally, brain drain has also been defined as the loss of human capital, since it involves people with myriad specialized skills leaving their home country.

Undisputedly, brain drain has financial repercussions on a country.

TYPES OF BRAIN DRAIN

1. Primary external brain drain

It occurs when human resources leave their country (such as India) to go and work overseas in developed countries such as Europe, North America and Australia.

2. Secondary external brain drain

It occurs when human resources leave their country (such as India) to go and work elsewhere in the nearer region e.g. Sri Lanka, Malaysia, and Singapore.

3. Internal brain drain

It occurs when human resources are not employed in the fields of their expertise in their own country or when human resources move from the public sector to the private sector or within a sector. Many of our own IIT engineers take up banking jobs with alacrity. Money ultimately beckons and our companies ask for a management degree everywhere.

CAUSES OF BRAIN DRAIN

There are various causes of brain drain, but they differ depending on the country that's experiencing it. The main causes include seeking employment or higher paying jobs, political instability, and to seek a better quality of life. Causes of brain drain can be categorized into push factors and pull factors.

Push factors: are negative characteristics of the home country that form the impetus for intelligent people migrating from *Lesser Developed Countries* (LDC). In addition to unemployment and political instability, some other push factors are the absence of research facilities, employment discrimination, economic underdevelopment, lack of freedom, and poor working conditions.

Pull factors: are the positive characteristics of the developed country from which the migrant would like to benefit. Higher paying jobs and a better quality of life are examples of pull factors. Other pull factors include superior economic outlook, the prestige of foreign training, relatively stable political environment, a modernized educational system to allow for superior training, intellectual freedom, and rich cultures. These lists are not complete; there may be other factors, some of which can be specific to countries or even to individuals.

In recent times, brain drain from India has several factors:

- *Very high salaries paid in foreign countries.*
- *Lack of adequate employment opportunities in India.*
- *Non availability of avenues to utilize education and skills.*
- *Hope of a better and comfortable lifestyle abroad.*
- *Prestige involved in working in foreign countries.*
- *To acquire financial well-being and capability to buy assets in India.*
- *Belief that working abroad improves marriage prospects in India.*
- *Prospects of continually learning newer technologies and upgrading skills.*

BRAIN DRAIN DESTINATIONS

Some of the topmost destinations where Indian brains migrate are

1. *USA*
2. *Saudi Arabia*
3. *United Arab Emirates*
4. *European Union*
5. *Canada*
6. *Australia*
7. *New Zealand*
8. *Kuwait*
9. *South Africa*
10. *Qatar*
11. *Thailand*
12. *Singapore*
13. *Malaysia*
14. *Israel*
15. *Oman*

EFFECTS OF BRAIN DRAIN ON THE HOME COUNTRY

When brain drain is prevalent in a developing country, there may be some negative repercussions that can affect the economy. These effects include but are not limited to:

- Loss of tax revenue
- Loss of potential future entrepreneurs
- A shortage of important, skilled workers
- The exodus may lead to loss of confidence in the economy, which will cause persons to desire to leave rather than stay
- Loss of innovative ideas
- Loss of the country's investment in education
- The loss of critical health and education services

LABOUR MARKET

Definition: A labour market is the place where workers and employees interact with each other. In the labour market, employers compete to hire the best, and the workers compete for the best satisfying job.

Description: A labour market in an economy functions with demand and supply of labour. In this market, labour demand is the firm's demand for labour and supply is the worker's supply of labour. The supply and demand of labour in the market is influenced by changes in the bargaining power.

THE FUNCTIONS OF LABOUR MARKET

1. ***Distribution function*** of employment on sectors, industries, professions (occupations), qualifications, territorial areas in line with volume and structure of the labour demand; 203
2. ***Training function*** and revenue sharing of economic operators; through this function the labour remuneration is achieved;
3. ***Social function;*** through the labour market the supply and demand of labour meet, the improvement of labour conditions, the humanization of labour, social protection of the unemployed and their retraining are done;
4. ***Educational and training function***,; this feature provides the information necessary for education, vocational training, retraining and reintegration of labour, the accumulation of work experience;
5. ***Political function***; the feature that reinforces social and political stability.

FORMAL AND INFORMAL LABOR MARKET OR ORGANIZED AND UNORGANIZED LABOR MARKET

India’s large working population is the part of the unorganized sector that is over 94 percent. The Indian labour market is divided in two segments viz organized or formal sector and other is unorganized sector which is also known as informal sector. Organized sector in India is that sector which are registered as well as pay tax (income tax, sales tax) or which are licensed organization. All self-employed, unlicensed or unregistered economic activity such as rural traders, handicrafts, farmers and owner manned general stores etc. refers to unorganized sector or own account enterprises.

In India the unorganized labor is divided into four sections as per the India‟s Ministry of labour, in its 2008 report. The Indian unorganized labour force has been divided into following sections nature of employment, occupation service segment and 47 especially wrecked (distressed) section. The unorganized nature of employment category includes attached agricultural labourers, migrant workers, bonded labourers, casual and contract labours. A separate category of occupation group which includes landless agricultural labours, share croppers, small and marginal farmers, fishermen, weavers, leather workers those engaged in animal husbandry, labeling and packing, beedi rolling, building and construction workers, salt washers, artisans, workers in oil mills, workers in brick klins and stone quarries and workers in saw mills. Another separate category dedicated in service workers such as, domestic based workers, vegetable and fruit sellers, barbers, pavement

hawker, newspaper sellers, and handcart operators. The last unorganized category labour includes especially distressed that is scavengers, toddy tapper , drivers (animal driven vehicles), loaders and un-loaders. The condition of the unorganized sector is not so good in India which has low productivity as well as bad living and working condition and also have low wages. More over unorganized sector in India has about 94 percent of workers in it which in turn creates 57 percent of India"s national domestic product which is still very less per workers than the organized sector.

TRENDS IN FORMAL- INFORMAL EMPLOYMENT

Formal-Informal employment is spread across two sectors viz; organised (formal) and unorganised (informal). The National Commission for Enterprises in the Unorganised Sector (NCEUS) has defined the informal/ unorganised sector as all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten workers. Informal workers being spread both in the organised and unorganised sector, the NCEUS also gave a definition of informal workers as, ―Informal workers consist of those working in the informal sector or households, excluding regular workers with social security benefits provided by the employers and the workers in the formal sector without any employment and social security benefits provided by the employers‖. The present article uses the NCEUS definition to identify the spread of formal / informal employment across organised- unorganised sectors.

Formal-Informal Employment across Organised and Unorganised Sectors (In millions)

2004-2005			
	Organised	Unorganised	Total
Formal	32.06 (52)	1.35 (0.3)	33.41 (7.3)
Informal	29.54 (48)	396.66 (99.7)	426.20 (92.7)
Total	**61.61 (13)**	**398.01 (87)**	**459.61 (100)**
2011-2012			
	Organised	Unorganised	Total
Formal	37.18 (45.4)	1.39 (0.4)	38.56 (8.1)
Informal	44.74 (54.6)	390.92 (99.6)	435.66 (91.9)
Total	**81.92 (17.3)**	**392.31 (82.7)**	**474.23 (100)**

Source: Computed using unit level data of NSSO various rounds
Note: Population projected for year 2004-05 and 2011-12 using decadal population growth rate between Census 2001 and 2011.

The composition of employment in the organised vs unorganised sector was in the proportion 13:87 in 2004-05 and 17:83 in 2011-12 (Table-1) indicating an increase in organised sector employment from 13 per cent in 2004-05 to 17 per cent in 2011- 12. But this increase in organised sector employment was informal in nature (48 per cent in 2004-05 increased to 55 per cent in 2011-12) while the share of organised formal employment decreased (52 per cent in 2004-05 decreased to 45 per cent in 2011-12). But in the unorganised sector the share of formal employment marginally increased from 0.3 to 0.4 per cent and that of informal employment declined marginally from 99.7 to 99.6 per cent. On the whole the number of formally employed increased from 33.41 million in 2004- 05 to 38.56 million in 2011-12 , while informally employed increased from 426.20 million to 435.66 million during this period.

SECTORAL DISTRIBUTION OF EMPLOYMENT In agriculture sector which is the main contributor of employment, nearly 97 per cent of the employment is informal in nature (Table-2). But the share of agriculture in total employment has decreased from 58.50 per cent in 2004-05 to 48.90 per cent in 2011-12 which is indicative of the structural transformation of the sector. In manufacturing sector the increase in share of employment was accounted for by the organised sector which showed an increase in both formal and informal employment. In non-manufacturing which comprises of the construction sector there was an increase in employment across both the organised and unorganised sector as well as in the formal and informal sector, though the share of informal employment was higher. The same trend was observed in the services sector also.

Sectoral Distribution of formal and informal Employment in India

2004-2005	Organised Sector		Unorganised Sector		Total
	Formal	**Informal**	**Formal**	**Informal**	
Agriculture	0.76	0.99	0.00	56.75	58.50
Manufacturing	1.21	2.10	0.10	8.33	11.73
Non Manufacturing	0.53	1.45	0.00	4.42	6.41
Services	4.48	1.89	0.19	16.80	23.36
Total	**6.98**	**6.43**	**0.29**	**86.30**	**100.00**
2011-2012	Organised Sector		Unorganised Sector		Total
	Formal	**Informal**	**Formal**	**Informal**	
Agriculture	0.06	0.16	0.00	48.69	48.90
Manufacturing	1.48	2.79	0.06	8.28	12.60
Non Manufacturing	0.69	3.77	0.07	7.18	11.65
Services	5.62	2.72	0.22	18.29	26.84
Total	**7.84**	**9.43**	**0.29**	**82.43**	**100.00**

(In percent share)

Source : calculated using unit level data of NSSO various rounds

QUESTIONS

PART - A

1. State the meaning of infrastructure.
2. Define infrastructure as given by RBI.
3. List the components of infrastructure.
4. Interpret the significance of Economic infrastructure.
5. What is inflation?
6. Mention the causes for inflation.
7. Relate inflation and interest rate.
8. Recall the meaning of unemployment.
9. Write about underemployment.
10. Define Brain drain.
11. What is Labor market?
12. State the causes of unemployment in India.

PART – B

1. Explain in detail about the types of infrastructure.
2. Summarize on the components, significance and importance of infrastructure.
3. Elaborate on the types and causes of inflation.
4. Analyze the methods of controlling inflation and bring about the relationship between inflation and interest rate.
5. Describe in detail the various types of unemployment in modern society.
6. Criticize the main causes unemployment in India.
7. Categorize the various types of Brain drain and highlight the various causes.
8. Explain in detail the functions of Labor market.
9. Analyze on the infrastructure development and increasing FDI inflows into the infrastructure sector in India.
10. Discuss about sectoral distribution of employment.

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