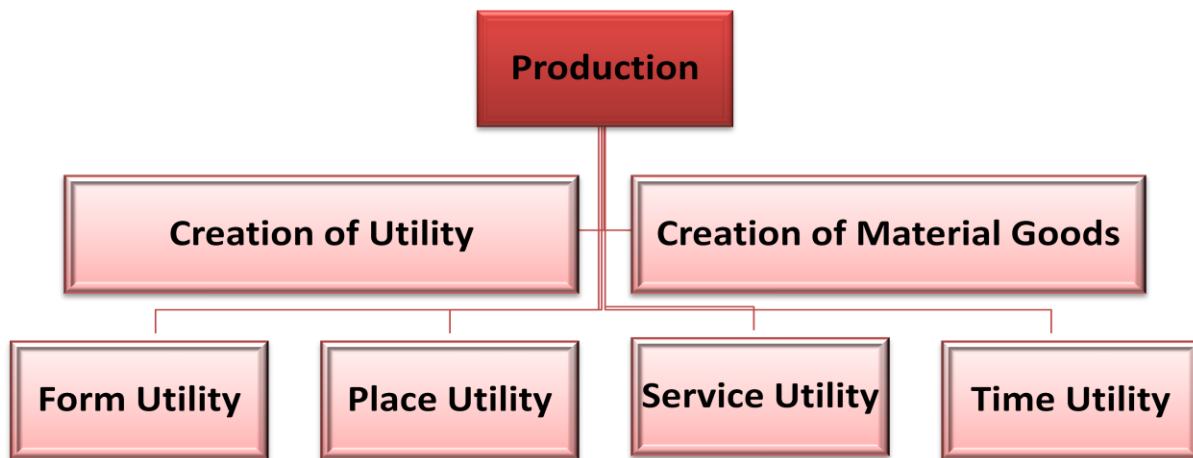


Factors of Production

The Productive Mechanism

The productive mechanism is the mechanism or system which determines the production of various goods and services in an economy. Production is the process of creating various goods and services which are consumed by the people of a country. It is a process in which some materials are transformed from one form to another. Things used in the production process are called inputs or factors of production and the things obtained from the process are called outputs. Production also means the creation of utility as shown below.



Form Utility

Utility is the want-satisfying power of a commodity. It is one way of creating utility by changing the form of a commodity. For example, a carpenter uses the wood to make a chair. The wood has utility for a carpenter, but it does not have utility for the final consumer. The consumer wants the chair. Hence, the carpenter creates utility when he makes a chair out of wood.

Place Utility

Utility may also be created by changing the location of a commodity. A commodity in Chennai does not have utility for a consumer in Delhi. This commodity will have utility only when it is transported from Chennai to Delhi. Hence, utility is created by transporting a commodity from one place to another.

Service Utility

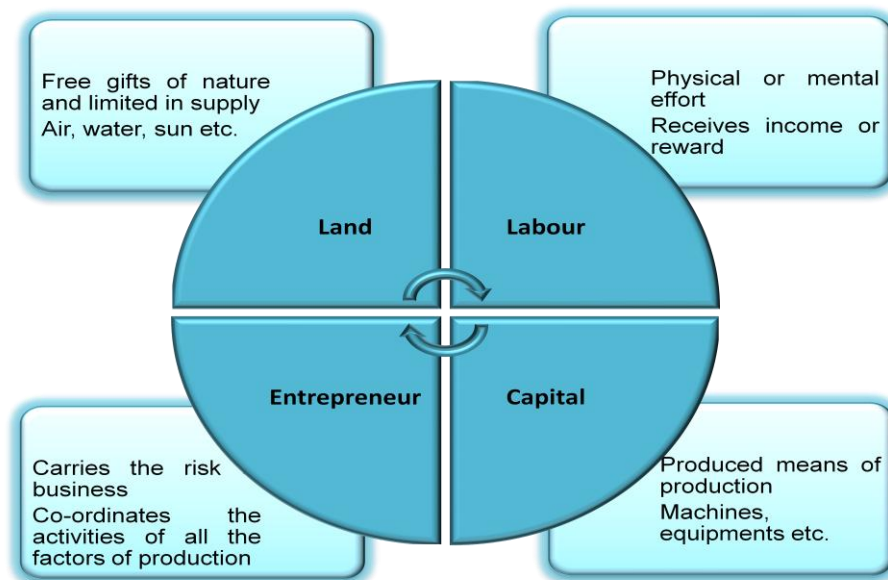
Utility may be created by performing services such as services of doctors, teachers, lawyers and chartered accountants. Hence, these services rendered by individuals should be considered creating utility.

Time Utility

Utility can also be created by storing surplus goods at one particular time period and supplied at another time period when they are scarce. The Food Corporation of India (FCI) creates time utility by creating a buffer stock of food grains in the harvesting season and supplies the same at a reasonable price in the lean season.

Meaning of Factors of Production

Factors which are used to carry out the process of production are called factors of production. In the modern economy, economists classified these factors into two categories. They are land and labour, as capital is created by the application of labour on land and an entrepreneur is the human resource who performs and controls the business. Therefore, land and labour are the primary factors of production, whereas capital and the entrepreneur are the secondary factors of production.



- Characteristics of the factors of production:
 - Factors of production are jointly used in the production of a commodity
 - Variable factor proportions
 - Physical existence
 - Use of factor services
 - Demand for a factor of production is derived
 - All factors of production are not equally mobile

Land

Land is defined so as to include not only the surface of the Earth but also all the other gifts of nature.

Characteristics of Land

- Land is limited in supply: Supply of land is fixed as it is given by nature.
- Gifts of nature: Land is a gift of nature which does not have any cost of production. Land is readily available for any use. However, other agents of production are available at a cost.
- Primary factor of production: Land is a basic factor of production because it cannot produce anything by itself.

- Land has alternative uses: Land can be used for alternative uses such as cultivation, dairy or poultry-farming, rearing of livestock, building of houses and playgrounds.
- Land is immobile: Land cannot move, but labour and capital can move in the process. It is fixed and cannot move from one place to another place.
- Land varies in fertility: Different types of land have wide range of production capacity. It depends on the chemical composition of the soil, availability of irrigational facilities and other climatic conditions.
- Law of diminishing marginal returns: Increased use of capital and labour on a particular area of land leads to an increase in the production at a diminishing rate.

Functions of Land

- Determines agricultural production: The supply of land resources determines the level of agricultural production in an economy. Nearly 43% of the land area of India is plain and suitable for crop cultivation.
- Industrial development: Land resources of an economy help in the process of industrialisation. The mineral resources are used in different industries. For example, different countries in the Middle East are rich in crude oil resources. So, the petroleum industry has expanded in those countries. The supply of different materials for the expansion of the construction industry also depends on the total land area of the country. For example, the supply of bricks and stones.
- Supply of natural resources: Availability of natural resources is determined by the availability of total land area in a country. It helps in raising the total output of the country.
- Maintaining proper land–man ratio.
- Helping the process of industrialisation and urbanisation: Land resources of a country help the process of industrialisation and urbanisation in the country because it requires sufficient supply of land areas for smooth progress.

Importance of Land

- Determines the total production: The national output of a country depends on the availability of land.
- Determines the agricultural output: The agricultural output of a country is determined by the availability of cultivable land in a country.
- Determines industrial production: The industrial output of a country also depends on total area of land.
- Influences economic growth: The economic growth of a country depends on the growth rate of national output or per capita output. However, the growth rate of national output or per capita output depends on the land availability and other related resources. Proper use of these resources can raise the level of national output.
- Satisfies the basic needs of the people: The basic needs of the people are satisfied directly or indirectly by the supply of land in a country such as food, shelter and clothing.

Productivity of Land

The productivity of land means the capacity of a piece of land to produce a crop. The average productivity of land is the output obtained from the land divided by the area of land, say output per acre or per hectare of land. The marginal productivity of land is the increase in the output obtained from land when the area of the land used increases by one unit, say by one acre.

- Determinants of land
 - Natural factors
 - Proper use of land
 - Investment on land

- Location of land
- Scientific method of cultivation using improved technology
- Social conditions

Destruction of Ecosystem

An ecosystem is a group of living and non-living things which are interdependent and are found in a particular type of environment.

Causes of Destruction of an Ecosystem

- Changes in land use: Because of an increase in the population growth rate and per capita consumption of resources, the ecosystem is being changed and destroyed. Hence, there is a change in land use. Deforestation is undertaken to accommodate more agricultural activity, human settlement and construction of dams. Changes in land use have destroyed the natural habitats of organisms, resulting in many being on the verge of extinction.
- Industrialisation: The process of industrialisation was started during the second five-year plan in India. Because of the progress of industries such as iron and steel, chemical, coal, cement and thermal power, non-renewable resources are slowly depleting. Accumulation of waste through industrial practices is one of the major reasons for environmental problems.
- Impacts of industrialisation on the environment:
 - Mining is the removal of minerals and other materials from the Earth's crust for the welfare of people.
 - Manufacturing industries generate many kinds of chemical waste products in the production process.
 - Automobiles are the major source of air pollution. The engine used in most motor vehicles does not burn all the fuel. Because of this, in addition to emitting carbon dioxide and various oxides of nitrogen, these engines emit several incompletely burnt waste products.
- Urbanisation: Urbanisation is a process of relative growth in a country's urban population. Because of urbanisation, there is a change in land use, depletion of water resources, use of large quantities of building materials for construction purposes and development of slums. More use of land for housing and industries has caused the loss of biological diversity forever. Because of widespread construction, the local groundwater level has declined and cities have to make provision for external sources of water.

Labour

Labour consists of all human efforts of the body or mind which are undertaken in the expectation of reward.

Characteristics of Labour

- Labour cannot be separated from the labourer: A landowner as a person and the land owned by her/him can be considered different entities. Likewise, a capitalist as a person is distinct from the capital owned by her/him.

- Labour is an active factor of production: Land and capital are passive factors, but labour is an active factor of production. Land and capital cannot produce anything without labour.
- Labour is mobile: Labour can move from one place to another place and from one occupation to another occupation.
- Labour has alternative uses: Any labourer can engage in different fields of work. An unskilled labourer can work as a hawker or peddler.
- Labour cannot be accumulated: Labour cannot be accumulated by a labourer; however, a capitalist can accumulate capital and a landowner can accumulate the land owned.

Supply of Labour

The supply of labour is usually measured in units of man-days per year. Factors determining the supply of labour are

- Population: The most important factor affecting the supply of labour in a country is its population. A larger population with necessary skills to perform physical or mental work will increase the supply of labour to the market.
- Age structure: The total population of an economy is not considered under supply of labour. Supply of labour depends on the age structure of the population. Working age is legally determined. Child labour is prohibited by law. Salaried people have to retire after attaining a certain age. Hence, only a certain age group of people is considered under supply of labour.

Efficiency of Labour

Efficiency of labour is the productive capacity of a worker. It indicates the ability of the worker to do more or better work during a given period of time. Factors influencing the efficiency of labour:

- The ability and willingness of workers to work and learn skills depend on their health and therefore on the wage rate and the standard of living. The improvement in standard of living leads to an improvement in health through better nourishment. It also depends on the average age of the labourer.
- Literacy is perhaps a priority in improving the efficiency of labour. Adequate provisions for imparting training to workers will improve the efficiency of labour.
- Climatic differences affect the efficiency of labour in production. The hot and humid climate of most states of India is a factor which prevents people from doing more work, and thus, the ability to display high efficiency.
- A healthy and conducive work environment increases the level of efficiency. The facilities available at the workplace determine labour efficiency to a great extent.

Mobility of Labour

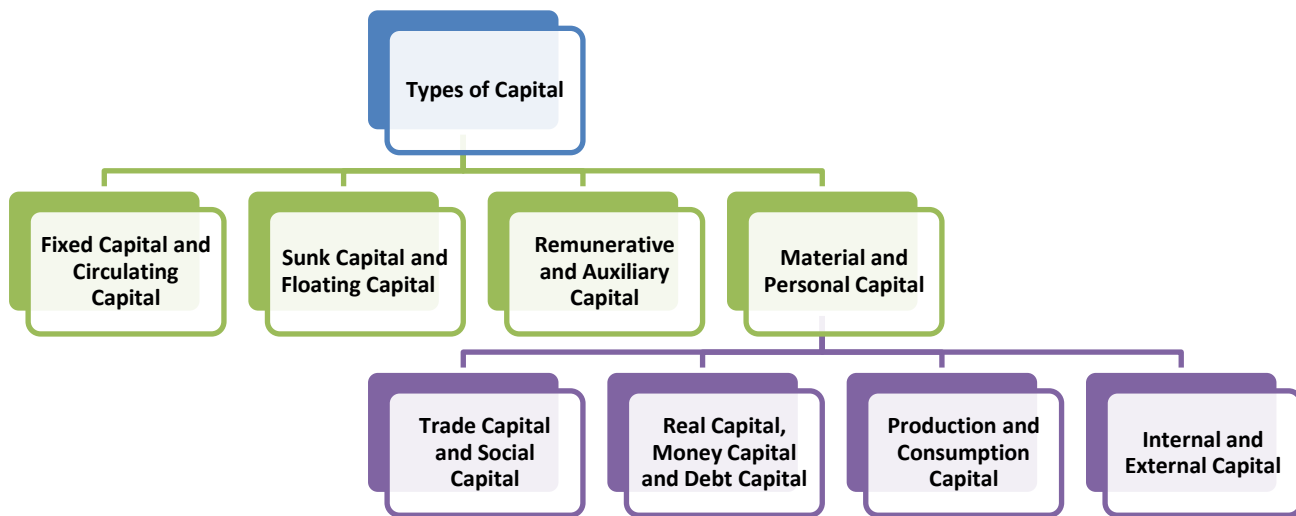
Mobility of labour is the ability and the capacity of labour to move easily and quickly from one place to another place and from one occupation to another occupation. Types of mobility are geographical mobility, occupational mobility and social mobility.

Division of Labour

Division of labour increases the efficiency of labour. A worker becomes more specialised, if she/he is entrusted with only a part of the work in the process of production. As the efficiency of labour increases, the quantity and quality of production increase in the production process. Society can produce goods at a lower cost of production.

Capital

Capital is known as the produced means of production. First, it is created by man and is not a gift of nature. Second, it is a means of production and used as an input in producing other goods. Such type of goods is not directly consumed.



Characteristics of Capital

- Capital is man-made: Capital is the result of savings which are made by man. It is the outcome of the past workers on natural resources.
- Capital is durable: Capital goods are durable goods which might last for few years or many years.
- Capital is a passive factor of production: It cannot produce by itself and it becomes effective only when it is used by labour.
- Supply of capital is elastic: The supply of capital is elastic which can be easily increased or decreased as it is man-made.
- Capital is a mobile factor: Capital is the most mobile factor of production which is easily transferable from one place to another and one occupation to another.

Capital Formation

Capital formation is the creation of capital. A change in the stock of any capital during a particular period of time is called capital formation.

- Three important stages of capital formation
 - Creation of saving: Savings are transformed into capital. If an individual does not save money, then there cannot be any capital formation, even if other conditions are favourable for capital formation.
 - Mobilisation of savings: Despite a high income, if a person holds savings in the form of cash instead of depositing them in the bank, then the savings cannot be mobilised for investment. Hence, savings must be mobilised from the savers. These functions are performed by financial and other institutions and the capital markets.

- Investment of mobilised savings: The mobilised savings must be actually used by producers for investment. Money kept by the people in banks must be lent out by the banks to producers for business investments such as the purchase of machinery and raw materials.
- Reasons for the slow rate of capital formation in India
 - Lack of ability to save: Because of poverty, poor people are unable to save more than a negligible part of their earnings. Hence, a low rate of savings leads to a low rate of capital formation in the Indian economy.
 - Lack of willingness to save: In certain parts of the country, there still exists a feudal economic system. Even people who have the ability to save money are not willing to save and spend all their income on day-to-day consumption.
 - Insufficient mobilisation of savings: People are not mobilising their savings for capital formation. Most of their savings are kept in the form of gold and cash at home. These savings are not used productively because of poor banking knowledge and poor banking network in underdeveloped states.

Entrepreneur

An entrepreneur is a person who carries the risk of business and coordinates the activities of all the other factors of production.

Qualities of an Entrepreneur

- Courage and ability to tackle problems
- Ability to make quick decisions
- Obtaining business knowledge
- Efficient in identifying the skilled resource to assign work according to taste and preferences
- Ability to predict future markets and business conditions
- Efficient organiser possessing leadership qualities
- Obtaining experience

Role of an Entrepreneur in Economic Development

- Risk bearing and innovative capabilities are associated with entrepreneurship. Entrepreneurs introduce cost-reducing or demand-creating innovations in various industries, and industrial production becomes a factor. Hence, the country would become self-sufficient in the production of a variety of industrial goods of high quality to cater to the changing needs of domestic and international markets.
- Contribution towards the generation of higher employment and income opportunities. They spend a greater portion of their profits in new ventures or for productive purposes. Hence, higher investment can create more employment and income opportunities within the country.