

Axe №03: Factors of production

The four factors of production are inputs used in various combinations for the production of goods and services to make an [economic profit](#). The factors of production are land, labor, capital, and entrepreneurship.

To put it in different terms, the factors of production are the inputs needed for [supply](#). Mainly, the factors of production consist of any resource that is used in the creation of goods and services.

Since these factors are limited by nature, and human wants are unlimited, we, as a country, face a shared decision over the efficient allocation of these scarce resources or factors of production.

The Four Factors of Production.

Our understanding of the concept of factors of production is rooted for the most part in neoclassical economics. Other strains of economic theory also contribute to our current understanding, including socialism's view of labour as one of the factors. Influential political economists like David Ricardo, Karl Marx, and Adam Smith initially labeled land, labor, and capital as the factors of production.

Productive resources used to produce a given produce are called factors of production. These productive resources may be raw materials, services of various categories of labourers, or capital supplied by capitalists or entrepreneurship of an entrepreneur who assembles the other factors of production. These factors or resources are also called inputs. Thus, the factors of production are traditionally classified as land, labour, capital and organization. Production, in economics, is understood as the transformation of inputs (or) factors into outputs.

1) Land: Land, as ordinarily understood, refers to earth's surface. But in economics, the term land is used in a very wider sense. Marshall defined land as "the materials and forces which nature gives freely for man's aid in land and water, in air and light and heat". Land refers to those natural resources that are useful and scarce. In other words, land stands for all natural resources, which yield an income or have an exchange value.

▪ **Characteristics Features of Land:** Land as a factor of production has the following characteristic features:

- Land is fixed in quantity. It is said that land has no supply price. That is, price of land prevailing in the market cannot affect its supply; the price may be high or low, its supply remains the same.
- Land has original and indestructible properties.
- Land lacks mobility in the geographical sense.
- Land differs in fertility.

2) Labour: Labour would mean any work, manual or mental, which is done for a reward. Marshall defined labour as "any exertion of mind or body undergone partly or wholly with a view

to some good other than the pleasure derived directly from the work". A person who is working in his rose-garden as a hobby is not a labourer. But, if he works in rose garden, which is cultivated for sales, then he is a labourer.

▪ **Characteristics of Labour:**

- Labour cannot be separated from the labourer. Hence, a labourer has to sell his labour in person.
- Labour is highly perishable. A labourer cannot preserve his labour and deliver it in the future. A day without work in a worker's life is lost forever.
- Labourer has a weak bargaining power. As labour is perishable, it has no reserve price. Hence, labourers have to accept low wages rather than being idle or unemployed.
- The supply of labour changes slowly. Supply of labour cannot be curtailed immediately, even if wages fall. This is due to the fact that labourers must earn their subsistence, somehow. Conversely, increase in labour supply depends on new births and a long period of training.
- Labour is not so mobile as capital due to differences in language, environment, habits, etc in different localities.

▪ **The amount of labour available in a country,** it depends on two factors:

- Quantity of labour.
- Quality of labour.

▪ **Qualitative aspects of labour:** it refers to the **efficiency of labour**. Efficiency of labour means the amount of work, which a labourer can do with minimum cost and minimum time. Efficiency of labourer refers to the work turned out by a labourer per unit cost and per unit time. The factors which influence efficiency of labour:

- ✓ **Race:** Hereditary and racial characters influence the efficiency of labour. The efficiency of Japanese is higher than that of other human races.
- ✓ **Climate:** Cool climate is more conducive for hard work than the hot climate.
- ✓ **Education:** A higher educated or technically trained man has more efficiency than an uneducated or untrained person.
- ✓ **Personal Qualities:** If a person has a strong physique, mental alertness and intelligence, his efficiency will be greater.
- ✓ **Organization and equipment:** A well-organized labour combined with sophisticated equipments would improve labour efficiency.
- ✓ **Environment:** Good lighting, ventilation and recreation facilities would improve labour efficiency.
- ✓ **Working hours:** Long working hours without sufficient intervals will reduce the efficiency of labour.

✓ **Fair and prompt payment.** High and prompt payment to a labourer would increase his efficiency.

✓ **Labour organization.** If labourers are properly organized in the form of strong trade union, their efficiency will go up.

✓ **Welfare activities.** Welfare activities like provision of housing, transport and educational facilities, insurance benefits, social security scheme etc. would increase labour efficiency.

▪ **Division of Labour:** When the making of an article is split up into several processes and each process is entrusted to a separate set of workers, it is called division of labour. Division of labour is associated with the labour efficiency and it helps in large scale production. For instance, making the number of chairs will be more, if the process is split up into different parts like making seat, back-rest, and legs and then assembling the parts instead of making the chairs individually.

✓ **Advantages of Division of Labour:**

➤ **Increases productivity.** As the individual worker concentrates on only one process of the work, he is able to do it quickly and thus, the productivity of labour increases.

➤ **Increases dexterity and skill.** The worker becomes an expert due to repetitive performance of the same work (process).

➤ **Large scale production.** Division of labour improves production not only in terms of quantity but also in quality since goods are made by specialists.

➤ **Right man in the right place.** Under division of labour, workers are so distributed among various works that each worker is put according to his ability.

✓ **Disadvantages of Division of Labour:**

➤ **Monotony.** As the worker repeats the same work for a long time, it becomes monotonous to the worker and soon he lacks interest in his work.

➤ **Risk of unemployment.** If a worker (specialist) happens to lose his present job, he may not be able to get similar job elsewhere immediately.

✓ **Mobility of Labour.** Since the labour has to be delivered by labourer himself, he has to move from one place to another in order to get employment. There are different kinds of mobility of labour.

➤ **Geographical mobility.** It is the movement of labourer from one place to another. This is also called migration. If labourers move out of the country, it is called emigration. If they enter in to the country, it is called immigration.

➤ **Vertical mobility.** This implies a change in occupation from a lower to a higher order. (E.g.) An Assistant Professor is promoted as Associate Professor.

➤ **Horizontal mobility:** This means mobility from one occupation to another without any change in the occupational status. (E.g.) A stenographer shifting from one department/firm to another without any promotion or change in his/her occupational status.

▪ **Quantitative Aspect of Labour:** Quantitative aspect of labour refers to the size of working population in a country. There are certain theories of population, which explain why and how population increases and they also indicate the optimum size of population.

Theories of population can be classified into two categories on the basis of:

- ✓ food supply (Malthusian theory).
- ✓ per capita output (optimum theory).

3) Capital. Capital is a man-made material. Man produces capital equipments or goods to help him in the production of other goods and services. Capital is, therefore, defined as “the produced means of further production”. The word ‘capital’ is often interchangeably used for concepts like money, wealth and land. Hence, the definition of capital is made clearer in the following section:

a) **Capital and Money:** Money can be used to buy consumer goods (rice) as well as capital goods (tractor). Money used to buy capital goods is also called capital, while money used to buy consumer goods is not capital.

b) **Capital and Wealth:** Wealth included both consumer goods and capital goods. Hence, all capital is wealth, but all wealth is not capital.

c) **Capital and Land:** Land is a free gift of nature but capital is man-made. Capital is perishable, i.e., it can be destroyed. But land is indestructible and permanent. Capital is mobile when compared with land. The quantity of capital can be changed depending upon its price. But the land area is fixed and limited in supply.

3-1) Characteristics of Capital.

- Capital is man-made (artificial)
- It increases the productivity of resources.
- Supply of capital is elastic. It can be produced in large quantity when its requirement increases.
- Capital is perishable as it can be destroyed.
- Capital is highly mobile.

3-2) Types of Capital.

- **Fixed capital and working capital.**

– **Fixed capital** can be used many times in the production process. The level of fixed capital does not vary with the level of production in a very short period, (E.g.) farm buildings, tractors, farm tools, etc.

- **Working capital** or variable capital or circulating capital can be used only once and they are not available for further use. The level of working capital increases (decreases) with the increase (decrease) in the level of production, (E.g.) raw cotton or lint used to spin yarn, fertilizer used to produce paddy, etc.

• **Sunk capital and floating capital.** Sunk capital is meant only for a specific purpose, (E.g.) cane crusher, paddy thrasher etc. They cannot be used for any other purpose. Floating capital can be employed for any use, (E.g.) money.

• **Social capital and private capital.** Private capital is owned by individuals and the income or benefit derived from these assets are available only to the individuals who own them (E.g.) tractors, private factories etc. Social capital is owned by the society as a whole and the benefits derived from these assets are shared among the members of the society, E.g. Bridge, dam, government owned factories, etc.

3-3) **Capital Formation.** Capital formation or capital accumulation means the increase in the stock of real capital in a country. In other words, capital formation involves making of more capital goods such as machines, tools, etc, which are all used for further production of goods. Also, capital formation creates employment at two stages.

First, when the capital is produced, some workers have to be employed to make capital goods like machineries, tools, etc.

Secondly, more labour has to be employed when capital has to be used for producing other goods.

• **Phases of capital formation.** There are three phases in the process of capital formation or capital accumulation.

- **Creation of savings.** In order to accumulate capital goods some current consumption has to be sacrificed. If people are willing to reduce their present consumption, they can devote more resources to build up capital goods for the use in future.

- **Mobilization of capital.** The savings must be mobilized and transferred to business men or entrepreneurs who require them for making investment. In the capital market, funds are supplied by the individual investors (share holders), banks, investment trusts, insurance companies, government, etc.

- **Investment of savings in real capital.** Investment is done by entrepreneurs. The level of investment or capital accumulation is determined by the cost or supply price of capital (interest and other cost of acquiring capital), the expectations of profits and the size of market for goods to be produced.

4) Entrepreneurship: An entrepreneur is the co-coordinator of all other factors of production. He has to plan, organize and direct other factors of production arrange for marketing the produce and take risks and uncertainties.

4-1) Functions of an Entrepreneur:

- **Function of initiation.** An entrepreneur makes proper assessment of markets (both input and output markets) and decides upon what, when and how with regard to production and marketing of a commodity.
- **Function of choice and location.** He decides upon the particular place to locate the concern or unit where facilities regarding production and marketing are available.
- **Function of co-ordination.** The entrepreneur has to co-ordinate, direct and supervises the functioning of other factors of production.
- **Function of innovation.** The entrepreneur has to introduce new technologies, machineries and tools in order to increase the labour productivity and also to reduce the cost of production.
- **Function of bearing risk and uncertainty.** Taking risks means accepting a probability that things will turn out badly. Under risk the occurrence of future events can be predicted fairly accurately by specifying the level of probability, E.g. prediction on monsoon rain, storm, etc. In the case of uncertainty, the future occurrences of an event cannot be predicted accurately. E.g. price fluctuation. In both cases, the entrepreneur may likely to incur losses. So, he has to anticipate risk and uncertainties and provide necessary alternatives to face them.