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Factors of Production:

Production of a commodity or service requires the use of certain resources or factors of production. Since most of the resources necessary to carry on production are scarce relative to demand for them they are called economic resources.

Resources, which we shall call factors of production, are combined in various ways, by firms or enterprises, to produce an annual flow of goods and services.

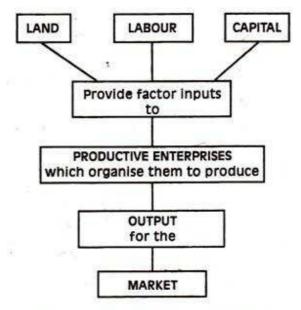


Fig. 5.1. The organisation of production

Name	Nature	Reward
Land	Any natural resources	Rent
Labour	Toil and/or skills	Wage
Capital	Man-made resource	Interest
Enterprise	Risk taking and organising	Profit

Each factor gets a reward on the basis of its contribution to the production process, as shown in the table.

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In fact, the resources of any community, referred to as its factors of production, can be classified in a number of ways, but it is common to group them according to certain characteristics which they possess. If we keep in mind that the production of goods and services is the result of people working with natural resources and with equipment such as tools, machinery and buildings, a generally acceptable classification can readily be derived. The traditional division of factors of production distinguishes labour, land and capital, with a fourth factor, enterprise, some-times separated from the rest.

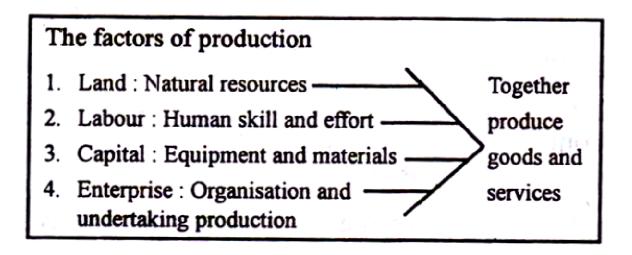
The people involved in production use their skills and efforts to make things and do things that are wanted. This human effort is known as labour. In other words, labour represents all human resources. The natural resources people use are called land. And the equipment they use is called capital, which refers to all man-made resources.

The first three factors—land; labour and capital do not work independently or in isolation. There is need to combine these factors and co-ordinate their activities. This two-fold function is performed by the organiser or the entrepreneur.

But this is not the only function of the entrepreneur. In fact, production can never take place without some risk being involved; the decision to produce something has to be taken in anticipation of demand and there must be some element of uncertainty about that demand materialising.

Thus, risk taking or enterprise can be considered as a fourth factor of production, and those responsible for taking these risks are usually referred to as entrepreneurs (see the box below which is self-explanatory). We may now study the nature and characteristics of four factors against this backdrop. But before we proceed further we may make a passing reference to factor mobility.

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(1) Land and Natural Resources:

In economics the term land is used in a broad sense to refer to all natural resources or gifts of nature. As the Penguin Dictionary of Economics has put it: "Land in economics is taken to mean not simply that part of the earth's surface not covered by water, but also all the free gifts of nature's such as minerals, soil fertility, as also the resources of sea. Land provides both space and specific resources".

From the above definition, it is quite clear that land includes farming and building land, forests, and mineral deposits. Fisheries, rivers, lakes, etc. all those natural resources (or gifts of nature) which help us (the members of the society) to produce useful goods and services. In other words, land includes not only the land surface, but also the fish in the sea, the heat of the sun that helps to dry grapes and change them into resins, the rain that helps farmers to grow crops, the mineral wealth below the surface of the earth and so on.

Characteristics:

Land has certain important characteristics:

1. Fixed supply:

The total land area of earth (in the sense of the surface area available to men) is fixed. Therefore, the supply of lands is strictly limited. It is, no doubt, possible to increase the supply of land in a particular region to some extent through reclamation of land from sea areas or deforestation. But

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this is often offset by various kinds of soil erosion. The end result is that changes in the total area are really insignificant. Of course, the effective supply of agricultural (farm) land can be increased by drainage, irrigation and use of fertilisers.

In consequence, the prices of land and natural resources tend to be extremely sensitive to changes in consumer demand, rising sharply if they become more desirable. In this context, we may refer to the sharp increase in the price of building land in Bombay in the last five decades. However, new discoveries are often stimulated by high prices (as in the case of Calcutta's Salt Lake area), and like that of oil in the U.K.'s North Sea, which tend to moderate price increases.

2. Alternative uses:

Although the total supply of land is fixed, land has alternative uses. The same plot of land can be used to set up factories or to grow wheat or sugarcane or even to build a stadium. This means that the supply of land to a particular use is fairly (if not completely) elastic. For example, the amount of land used for growing tomato can be increased by growing less of some other crop (e.g., cauliflower). The supply of building land can be increased by reducing the area under agricultural operation.

3. No cost of production:

Since land is a gift of nature, it has no cost of production. Since land is already in existence, no costs are to be incurred in creating it. In this sense, land differs from both labour (which has to be reared, educated and trained) and capital (which has to be created by using labour and other scarce resources or by spending money).

So, it logically follows that the entire return from land—called rent—is a surplus income (at least from society's point of view). As Stanlake has rightly put it, "any increase in the value of natural resources due to rising populations and rising incomes accrues to the owners of these resources as a windfall gain—it does not arise from any efforts on their part".

However, the above argument is not valid today. In fact, much of the services of land required expenditure of resources to obtain or maintain them and hence they are often called capital (i.e. produced means of production). So is land, as a factor of production, 'really distinct' from capital.

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4. Differences in fertility:

Another important feature of land is that it is not homogeneous. All grades (plots) of land are not equally productive or fertile. Some grades of land are more productive than others. And Ricardo argued that rent arises not only due to scarcity of land as a factor but also due to differences in the fertility of the soil.

5. Operation of the law of diminishing return:

Finally, we may refer to a special feature of land, not shared by other factors. In fact, production on land is subject to the operation of the law of diminishing return. As Alfred Marshall has put it "while the part which nature plays in production shows a tendency to diminishing return, the part which man plays shows a tendency to increasing return".

This simply means that as more and more workers are employed on the same plot of land, output per worker will gradually fall (because each additional worker will make less and less contribution to total product). The law of diminishing return refers to diminishing marginal product of the variable factor.

Mobility:

Land is not geographically mobile. But, it is occupationally mobile. In most parts of India, for example, land has many alternative uses. It might be used for farmland, roads, railways, airlines, public parks, playgrounds, residential housing, office buildings, shopping complex, and so on. Some of the land, for example, in hill area, of say, Shillong, or Darjeeling, has an extremely limited degree of occupational mobility, being useful perhaps for sheep grazing, golf course or as a centre of tourism.

Return:

The income received by the owner of land is known as rent. It may be noted that rent is usually paid for something more than the use of land or another natural resource, but includes also an element of payment for another factor which is involved in making the resource available in a usable form.

An example of this is the labour which assists in the process of bringing minerals to the surface. Iron ore is of no use while it is still under the ground. Productivity and value of land can be

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increased if it is improved with fertilisers, irrigation and the erection of fences and buildings. So rent paid for this kind of fertile land is rather a mixed type of factor income.