

# Role of Technology and Capital

## • Introduction :-

"Technology" refers to the sum of techniques, skills, methods and processes used in the production of goods and services or in the accomplishment of objectives, such as scientific investigation. In other words;

Technology can be defined as "the knowledge of techniques, processes which plays a most significant role in the production function."

Whereas,

"Capital" refers to the wealth in the form of money or other assets owned by a person or organisation or available for a purpose such as starting a company or investing.

In precise way, we can say "Capital is that part of wealth which helps to create more wealth"

## • Importance of capital and technology

It has been observed that the main cause of poverty in underdeveloped countries is that they suffer from basically the two problems i.e.,

i) Lack of Capital / Lack of Capital formation

ii) Technological backwardness

Technology and capital formation can be considered as the basic factors for the process of economic growth.

If any country is technically backward and having lack of capital formation then this country can not attain the motto of "Economic growth". So, in order to attain the target of Economic growth it is necessary for the country to become technically efficient with adequate amount of capital.

## → Role of Capital :

Prof. Simon Kuznets and Prof. Ragnar Nurkse regarded that capital occupies a central role in the theory of economic development.

### i) Helpful in Raising per capita productivity :-

Capital is helpful in raising per capita productivity as the stock of capital in an economy is closely related to the possibilities of effecting changes in the scale of technology of production. In fact, the economy remains in a better position to enjoy the advantages of large scale production and increased production.

### ii). Method of Production :-

Capital makes possible the sound about methods of production as there is a <sup>net</sup> gain in productivity as a result of using such methods. Rapid capital accumulation may further lead to an increased supply of tools and machinery per worker. They enable them to use mechanical devices for producing goods.

### iii). Cap's Supply of money capital :-

Capital, particularly "money-capital", enables the producer to buy essential raw materials, machinery and equipment which are needed for production. Money-capital is also necessary for meeting daily requirements of the producers and for paying wages and rent.

### iv). Role of fixed capital :-

Fixed capital (i.e., tools and machinery, factory building etc) plays a vital role in increasing the production of both consumer and capital goods. It constitutes the base of production.

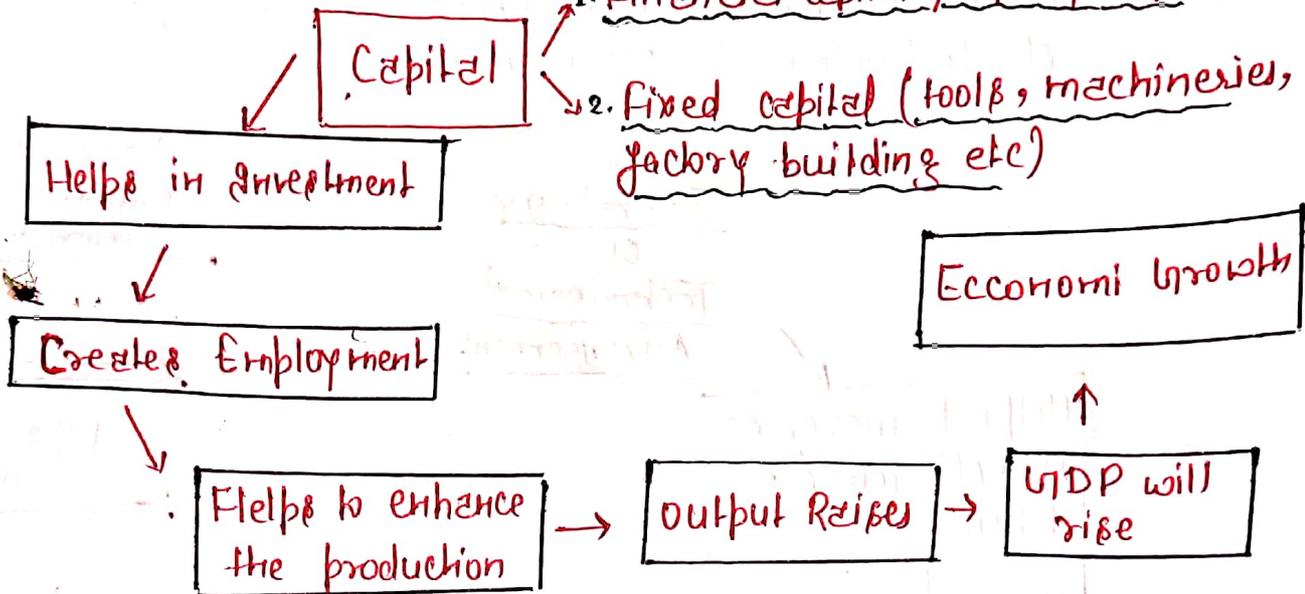
## v). It promotes Economic growth :-

The production of more and more capital goods for increasing the rate of capital formation is highly essential for accelerating the rate of economic growth in the developing economies (like India). It is so because capital goods are the creators of other goods.

### Types of Capital

1. Financial capital / Money Capital

2. Fixed capital (tools, machineries, factory building etc)



## • Role of Technology

- i). Time is Money : Technology can save the time it takes to produce a good or deliver a service, contributing to the overall profits of a business.
- ii). Efficiency : Technology can contribute to the efficiency of a business's output rate, allowing for larger quantities or products to be moved or of services to be rendered.
- iii). Specialization : Technology has led to an increase in the division of labour and specialization of jobs within a firm, further contributing to the efficiency with which a business / firm is able to run.
- iv). Natural Resources : Technology has a huge effect on the ability of business and governments to access natural resources and use them in most effective ways possible to benefit both the business and the economy.

- v). Industrial Expansion :- It helps to increase the efficiency of labour with the ever-improving state of technology, firms are able to increase total output, which in turn leads to higher profits and greater economic development.
- vi). Promotes Research :- Better technology has lead to further research into nearly every sector of business and science, meaning businesses can benefit from all sorts of technological advancements.

