

II: FACTORS OF PRODUCTION

There are three basic factors in the production of goods and services. These are known respectively as LAND, LABOUR and CAPITAL.

LAND, in this context, is the earth itself, as each generation receives it from their predecessors.

The earth contains 150 million sq. Km. of land¹, which is divided into a huge number of individual locations or "sites".

Some sites remain in their natural state, untouched by man. Others are used merely as a source for timber or minerals, foraged over by individuals in search of food or fuel, or used for recreational purposes. Still others are used as farms, orchards, market gardens or plantations, or as the site for homes, shops, factories, schools, hospitals and other buildings.

Each site includes any natural flora or fauna that may cover or occupy the site, any minerals on or under its surface, and any scenic views or other amenities enjoyed from it.

Thus, the term "land" includes all sites and amenities that have not been produced, altered, re-arranged or re-located by man, as well as sites cleared, levelled or drained by earlier generations. These latter sites are usually included under the generic title "land" once their man-made improvements have merged with the site and have become almost indistinguishable from it.

Labour

Land, in general, is not a man-made entity. LABOUR, by contrast, is man-made, and it is

through labour that we each obtain our "daily bread".

Labour includes all forms of physical or mental work, whether performed in primary or secondary industry, in service industries or professions, or in and around the home. All who work for a living, whether for themselves or for an employer, are labourers in this sense, as are all housewives, handymen and hobbyists. All such people contribute, in various ways, towards the production of goods and services.

Capital

CAPITAL is not so easy to define. However, one dictionary definition is: "accumulated wealth, especially as used in further production".

That definition explains, in part, why some people are richer than others. Some nations and individuals may fulfil their basic needs and still have time or money to spare. They may use it to build or buy machines and other goods or services that facilitate production. In this way, they increase their work output and standard of living in leaps and bounds.

Aids to production are not limited to obvious things like power tools and other time or labour saving devices. Less obvious capital items include the nation's transport system, its oil wells and power stations, and the various services that keep the workforce fit. Other aids to production include libraries to store knowledge, schools and colleges where knowledge and skills are transmitted from one generation to the next, and the universities and research institutes where mankind's store of knowledge is increased. These things all facilitate the production of goods and services. Many of them also help the community to acquire further capital,

and to widen the range of satisfactions available to its citizens.

The Value of Capital

A man who owns plenty of tools can produce far more than he could ever produce without them.

Because of this, wealth tends to increase with every addition to individual or national stores of capital - as is widely known. Rich nations are all highly mechanized, with plenty of transport facilities, power stations, schools and hospitals. Poorer nations can only catch up if they, in turn, increase their stock of capital.

Acquiring Capital

Capital is "accumulated wealth, especially as used in further production".

To accumulate wealth (or "save up") one requires either:

- (a) an excess of income over expenditure, or:
- (b) spare time in which to manufacture tools.

People who spend all their income as living expenses cannot save. That is the situation of peasants and tenant farmers who barely scrape a living from the soil. These folk cannot improve their lot in life. They have neither time nor money with which to acquire tools, and without tools they cannot increase their output and income, lighten their workload, or shorten their working day.

Borrowing, Leasing and Company Formation

Those who lack savings of their own can sometimes borrow from others. If the borrowed funds are

spent on tools that increase productivity, then the borrowers may - in time - both lift their standard of living and repay the loan.

Others who lack savings achieve a similar result by hiring or leasing tools.

Still other individuals or groups acquire machinery by forming a company - whereby many relatively small amounts of savings are aggregated to provide the necessary capital. Any profit the company makes after payment of wages, taxes and other costs is then distributed as dividends to the shareholders.

Not the Complete Answer

Borrowing or leasing help many people to improve their standard of living, while companies provide numerous jobs that might not exist otherwise. However, these practices do not provide a complete answer to poverty and unemployment, because poor and/or unemployed people are still plentiful. Even highly industrialized nations are not immune from this socio-economic disease.

The reason for this may become obvious if we look closely at the means whereby wealth is produced.

LAND, LABOUR AND TOOLS

Most of the wealth created in an industrialized society is produced by a combination of land, labour and tools.

Tools increase or even multiply the effectiveness of labour. Tools, in turn, are produced from savings or capital.

Therefore, capital is a most important element in production. Our standard of living depends,

largely, upon the amount of capital we form. Capital - in the form of schools, roads, machinery, power stations, oil rigs, etc., - increases output per man hour and shortens the average working day. Without it, we might all work from dawn to dusk merely to produce our daily needs, or suffer hardship like the poor of India and other under-developed countries.

Tools a Secondary Factor in Production

However, even though tools are important, they are a secondary factor in production. Labour and land are the primary or basic factors, because:

- (a) some goods and services can be produced without machinery - as long as labour and land are available,
- (b) production can continue in the absence of machinery, but ceases in the absence of either labour or land, and:
- (c) even the most costly and sophisticated machinery is powerless without workers to install, use, guide and maintain it, or without land on which it can be used.

These facts should be self-evident, but they are often overlooked.

Primary Factors: Labour and Land

In poor nations, food is often planted, tended and harvested by hand, and transported on human backs or heads. Roads may also be made in laborious and back-breaking ways.

Even in industrialized societies, some fruit or vegetables is still grown without the help of piped water and other capital goods, and cows

are occasionally milked by hand.

Services can also be rendered without mechanical aid. The services provided by ministers of religion, psychiatrists, psychologists and solicitors frequently come within this category. Doctors, nurses and chemists perform some of their work without machinery. A teacher does not need machines in order to teach.

In all such cases, production goes ahead without capital, but it ceases if either land or labour is withdrawn.

This fact - where labour is concerned - becomes obvious when striking workers bring factories, transport systems or power stations to a halt. Similarly, each individual's production ceases when he is totally incapacitated or resting from all work.

The need for land is equally obvious where primary production is concerned. No farmer can plant rice or graze animals if he is locked out from all the land within his reach.

This need seems to diminish in the case of secondary and service industries, but it is still present. For instance, secondary industry is carried on in shops, offices, factories and workshops - all of which stand on land. Likewise, professionals need consulting rooms, with space for themselves and their clients and provision for privacy. Teachers and ministers require space for their pupils or congregations as well.

Schools, churches and professional suites all stand on land. Therefore, land is an indispensable element in all types of production. No one can establish himself in any industry or profession, or produce anything, until he has obtained the use of a suitable site.

This remains true even for persons who work in multi-storied buildings. Each building stands on a site or building block. The occupants of a twenty-storied building all make use of land.

It remains true, also, for industry carried on in space, and for transport systems that use the air and sea.

These vehicles and industries use media that cannot be individually appropriated. Nevertheless, even spacecraft must be built on land and launched from the earth. Similarly, planes use aerodromes and ships berth at harbours - all of which occupy sites. Buses and transport vehicles stop and start at depots and the roads on which they travel are built on land.

Land and Life

But that is not the end of the story. The need for sites extends to life itself, and we must all buy, beg, borrow or rent a foothold on earth if we are to live at all. Not even death extinguishes our need for sites. We must all be buried somewhere - although this need could be reduced by cremation or by burial at sea.

Under Our Feet

Land is under our feet to such an extent that we often forget it - until we need a site for a home, farm, factory, shop or professional suite. Even then we may not think of land as such if we are setting up house or business in pre-existing premises. Nevertheless, when we buy or rent an established building, or lease floor space in a multi-storied block, we are buying or renting land - because some of the money we spend is offered in exchange for the site.