Class: B.Com. Program

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Paper: Principles of microeconomics (Generic Elective)

Every economy must face three central problems.

What to produce?

What goods are to be produced, and In what quantity goods are to be produced. Broadly, goods are classified as -

(a) Capital goods, and

(b) Consumer goods.

Production of both capital and consumer goods is essential for the economy. Capital goods (like plant and machinery) are needed for further production and future growth. Consumer goods are needed for present consumption. If the limited resources are largely used for the production of consumer goods, the present generation will enjoy good quality of life. But, lack of capital goods would mean lack of future growth. The future generations would suffer. Likewise, if the limited resources are largely used for the production of capital goods, the future growth would be high. But, the lack of consumer goods would mean that the present generation will have low standard of living. Hence, the problem called the 'problem of choice' or the 'problem of allocation of limited resources' to different uses. Production of consumer goods is essential to raise standard of living of the present generations. Production of capital goods is essential for future growth.

How to produce?

Labour-intensive technique implies greater use of labour than capital, while capital-intensive technique implies greater use of capital (machines, etc.) than labour. Capital-intensive technique promotes efficiency. It accelerates the pace of growth. On the other hand, labourintensive technique promotes employment. The choice between the labour-intensive and capital-intensive techniques becomes a problem because labour-intensive technique helps reduce unemployment, while capital- intensive technique accelerates GDP growth. Here again, the root cause of the problem is 'scarcity of resources'. In countries like India, capital is so scarce that fuller utilisation of labour is not possible (Note- Employment of labour needs capital). In rich countries, labour is so scarce that fuller utilisation of capital becomes a problem.

(C) For whom to produce?

Owing to limited resources, an economy cannot produce goods for all sections of the society to the extent desired. Broadly, every economy has two sections of the society –

- (i) The rich, and
- (ii) The poor.

Production Possibility Curve (PPC) and Central Problems:

To illustrate and analyse the central problems, the economists use the technique of PPC (Production Possibility Curve), also called transformation curve or transformation line.

What is Production Possibility Curve (PPC)?

We know, resources are limited and have alternative uses. Let us assume that the given resources (along with given technology) are used in the production of apples and wheat.

If all the resources are used for the production of apples, 100 lakh tonnes of apples can be produced. And, if all the resources are used for the production of wheat, 40 lakh tonnes of wheat can be produced. If we decide to produce both apples and wheat, the various possible combinations of the two goods are as shown in Table 1. The table showing different possibilities of production of apples and wheat is called production possibility schedule.

Table 1. Production Possibility Schedule

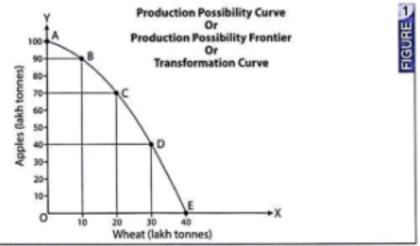
Goods	Production Possibilities				
	A	В	С	D	E
Apples (lakh tonnes)	100	90	70	40	0
Wheat (lakh tonnes)	0	10	20	30	40

This table is drawn on the following assumptions:

- (i) resources are given,
- (ii) given resources are fully & efficiently utilised, and
- (iii) technology remains constant.

Combination A shows that 100 lakh tonnes of apples can be produced without any production of wheat. Likewise, combination E shows that 40 lakh tonnes of wheat can be produced without any production of apples. Combination B shows that 90 lakh tonnes of apples and 10 lakh tonnes of wheat can be produced with the given resources and technology.

Likewise, combination C shows that 70 lakh tonnes of apples and 20 lakh tonnes of wheat can be produced with the given resources and technology. Combination D shows that 40 lakh tonnes of apples and 30 lakh tonnes of wheat can be produced with the given resources and technology. Representing these various production possibilities on a graph, we get production possibility curve as in Fig. 1.



Assumptions of PPC

The PPC is drawn on these assumptions:

(i) resources are given,

(ii) given resources are fully & efficiently utilised, and

(iii) technology remains constant.

Quantity of wheat is shown on X-axis (horizontal axis) and quantity of apples is shown on Yaxis (vertical axis). Points A, B, C, D and E show different possibilities of production, with the given resources and technology. Joining all these points, we get AE curve. It is the production possibility curve.

We can now define production possibility curve as under:

Production possibility curve is a curve showing different possible combinations of two goods which can be produced with the available resources.

The construction of PPC is based on these assumptions -

- (i) Resources are given,
- (ii) Given resources are fully & efficiently utilised, and
- (iii) Technology (technique of production) remains constant.

Note-

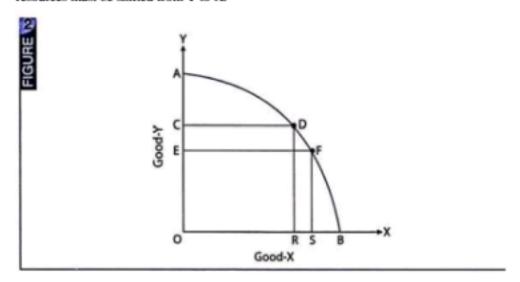
(i) Production possibility curve is a graphic representation of production possibility schedule.

(ii) Production possibility curve is also called Production Possibility Frontier or Transformation Curve.

In what follows, we illustrate the central problems using the concept of PPC:

(1) PPC and What to Produce:

What to produce is essentially the problem of choice – what quantity of Good-X and Good-Y is to be produced? More of Good-X must lead to lesser production of Good-Y. Because, resources are assumed to fully and efficiently utilized, and technology is assumed to be constant. Fig. 2 illustrates this situation. It shows that if production of Good-X is increased from OR to OS, the production of Good-Y must reduce from OC to OE. Because, some resources must be shifted from Y to X.



Some Related Information:

While illustrating the problem of what to produce, PPC offers some useful related information, as under:

 PPC helps identify attainable and non-attainable combinations output. This is illustrated through Fig. 3.