

INTRODUCTION TO Microeconomics

Key Terms

1. Economy

It refers to the area where people live and earn.

2. Scarcity

It refers to a situation where demand for resources is more than their supply even at zero price level.

3. Economics

Economics refers to making choices in the presence of scarcity.

Two Branches of Economics

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graph TD; A[Two Branches of Economics] --> B[Microeconomics]; A --> C[Macroeconomics];
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Microeconomics

Macroeconomics

4. Microeconomics

It refers to the study of individual economics units of an economy.

5. Macroeconomics

It is the study of economy as a whole and its aggregates.

6. Positive Economics

It refers to the statements of economics related with the actual situation of 'What is'.

7. Normative Economics

It refers to the statements of economics related with the ideal situation of 'What should be'.

8. Opportunity Cost

It refers to the value of second-best alternative use of commodity.

9. Economizing of resources

It means making the best use of the available resources.



Types of Economy

1. Market economy / capitalist economy / free market economy / entrepreneur economy / laissez faire economy.
2. Socialistic economy / centrally planned economy.
3. Mixed economy

→ Market economy

1. It refers to the economy where all economic decisions are taken by the market.
2. Economic problems are solved by the market forces of demand and supply. This is called price mechanism.
3. Its main motive is profit maximization.

→ Planned economy

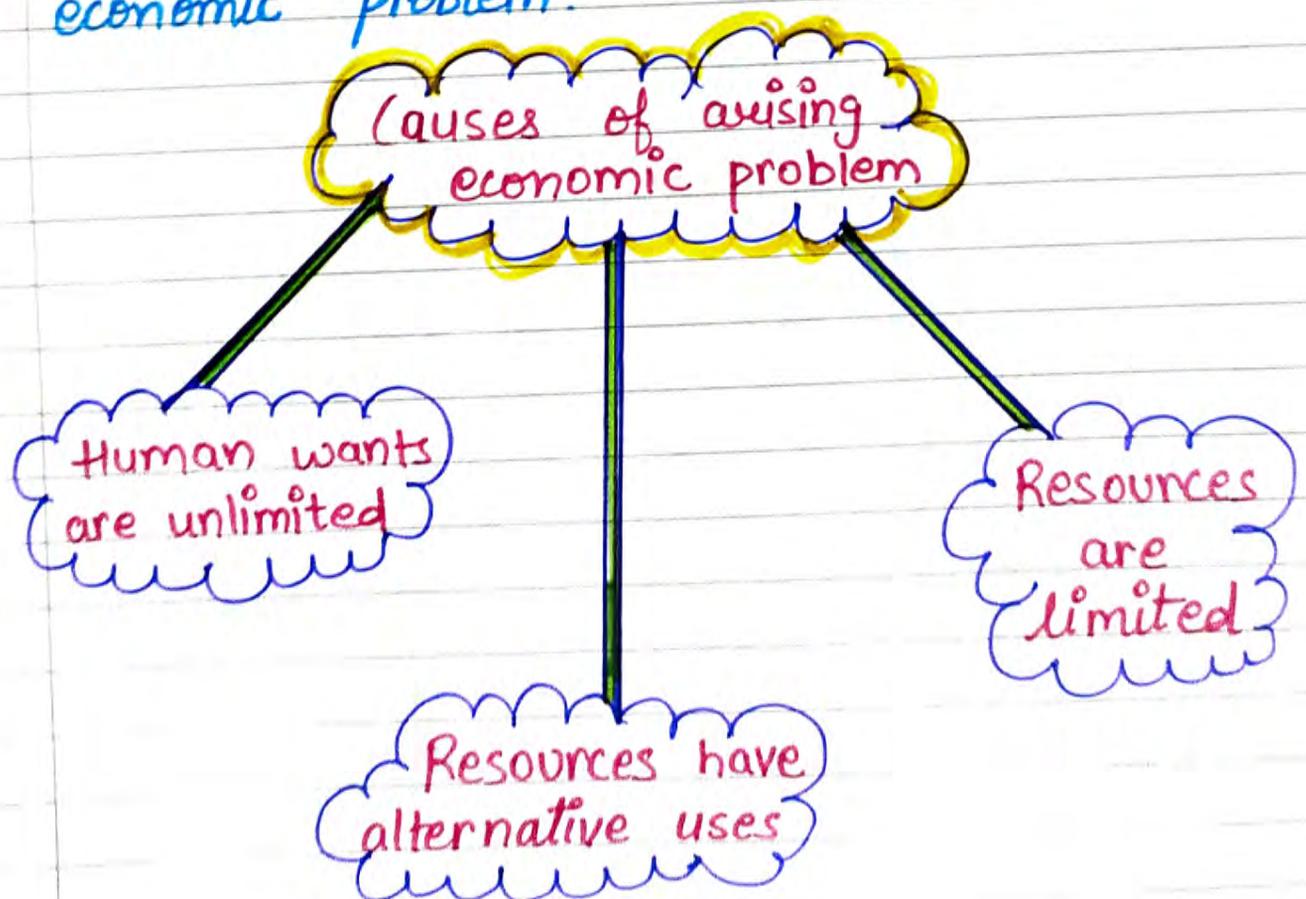
1. It refers to the economy where all economic decisions are taken by the central government.
2. Economic problems are solved by the centrally planned authority.
3. Its main motive is social welfare.

→ Mixed economy

1. It refers to the economy where economic decisions are taken by the both market and government.
2. Economic problems are solved by both market and government.
3. Its motives are both profit maximization and social welfare.

→ Economic Problem and its Causes

* Problem of making choices is the main economic problem.



→ Central problems of an economy OR problems of allocation of resources:

1.

What to Produce?

2.

How to Produce?

3.

For whom to Produce?

→ What to Produce?

- It refers to the problem of making choice of the good to be produced in an economy.
- There are millions of goods to be produced in an economy.
- For example -
 - (1) Capital goods like machinery, tractor etc.
 - (2) Consumer goods like toothpaste, sugar etc.
 - (3) War time goods like gun, bomb etc.

Once the selection about the goods to be produced is made then next problem arise of 'How much to be produced?'

→ How to Produce?

- It refers to the problem of choice related to production technology.
- There are two types of production technology:
 1. Labour intensive technology
 2. Capital intensive technology
- Labour intensive technology refers to the production technic where more labour and less capital is used.
- Capital intensive technology refers to the production technic where more capital and less labour is used.

For Whom to Produce?

1. This problem is related with the choice between social equality and GDP growth.
2. If goods are produced for poor, social equality will increase.
3. If expensive goods are produced, GDP will increase.

→ Production Possibility Curve

* It is a curve showing different combinations of production of 2 goods out of given resources and constant technology.

* other Names

Production Possibility Frontier

OR

Transformation Curve

OR

Production Possibility Boundary

* Assumptions of PPC

1. Resources are limited
2. Fuller utilization of resources
3. Production technology remains constant
4. MRT is rising, and no resource is equally efficient in the production of both the goods.
5. Only two goods are produced.

* Marginal Rate of Transformation (MRT)

It refers to change in the production of good-1 due to change in the production of good-2.

$$MRT = \frac{\text{change in Production of good-1}}{\text{change in Production of good-2}}$$

* Slope of PPC = MRT or MOC

* Features of Production Possibility Frontier —

(a) PPC slopes downward from left to right because if production of one commodity is to be increased then production of other commodity must be sacrificed as there is scarcity of resources.

(b) PPC is concave to the origin because of increasing marginal opportunity cost or marginal rate of transformation.

* Causes of shift in PPC —

The production possibility curve will shift under following two conditions:

(a) change in resources

(b) change in technology of production for both goods.

1. Rightward shift of PPF shows increase in resources or improvement in technology. example labour becoming more skilled, improvement in technology, increase in productivity of land.

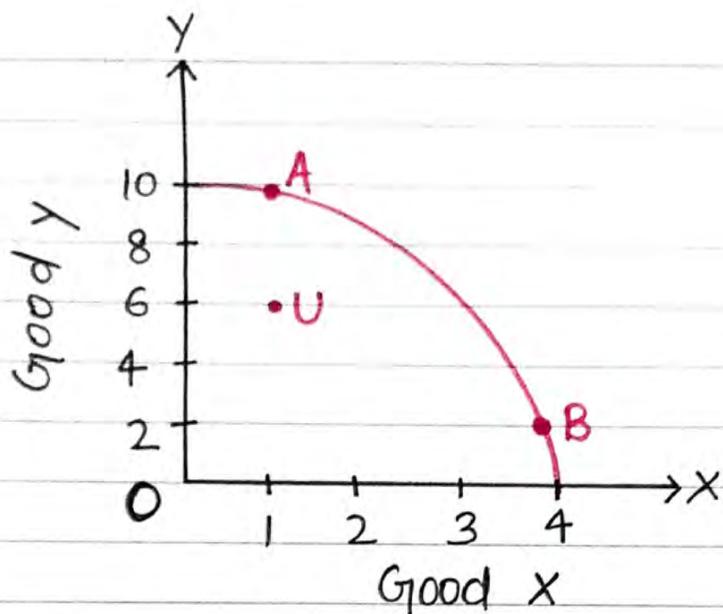
2. Leftward shift of PPF shows the decrease in resources or degradation of technology in the economy.

* Production in an economy is below its potential due to unemployment. Government starts employment generation schemes. Explain its effect using PPC.

— When the economy is below its potential due to unemployment the economy operates inside the PPC. When the government starts employment generation scheme, it enables the economy to utilise its existing resources in an optimum manner. The idle resource will now get utilised and the economy functions at its maximum capacity and moves from inside the PPC to points on the PPC. Thus, economy moves from inside the PPC to any point on PPC.

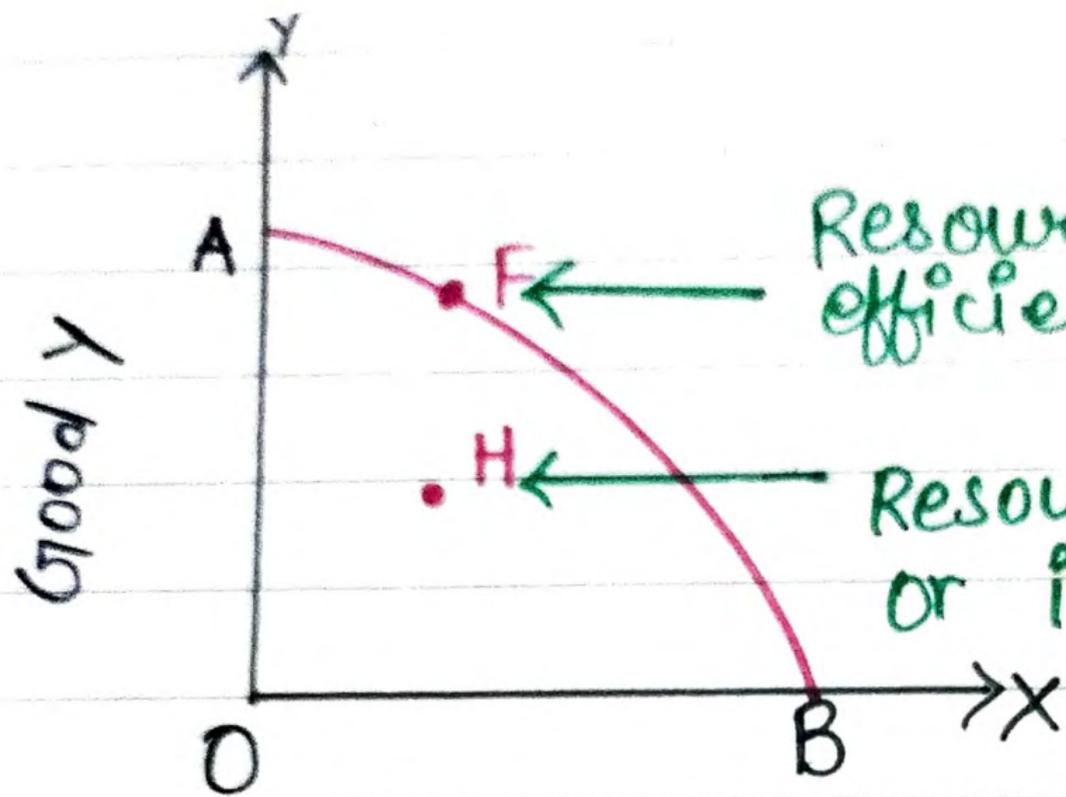
* What happens to PPC if resources are not fully and efficiently employed?

— If resources are not fully employed or not efficiently employed actual production will take place below PPC to say at point U. It means that economy is not producing goods and services to its full potential.



* "An economy always produces on, but not inside, a PPF". Defend or refute.

- The given statement is refuted. An economy operates on PPF, only when resources are fully efficiently utilized. It means, if there is unemployment or inefficient use of resources, then the economy may operate inside the PPF. So, the economy may operate at point 'H' in addition to the point on the curve AB on PPF.



Resources are fully and efficient utilised.

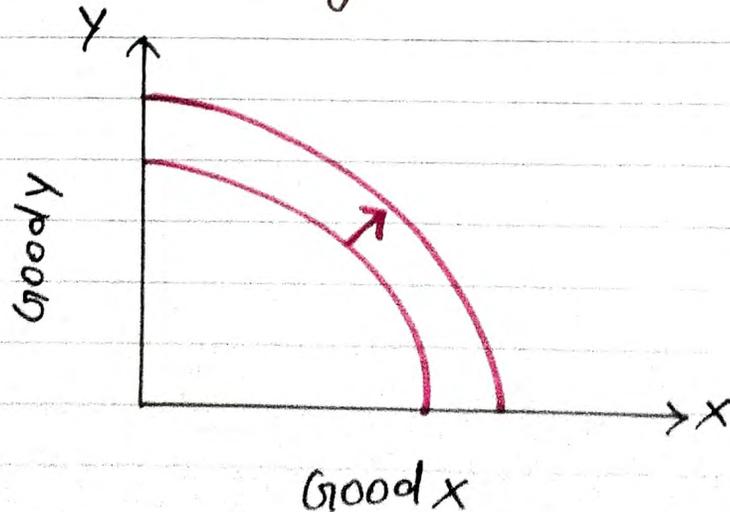
Resources are underutilised or insufficiently utilised.

Good X

Shift in Production Possibility Curve

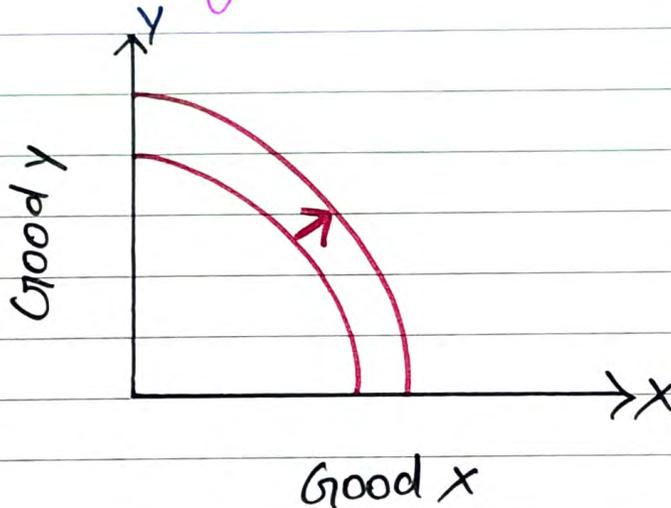
When resources increase -

Every economy tries to increase its resources so that more can be produced. PPC is based on the assumption that resources are fixed more of one good can be produced only by sacrificing some quantity of other goods. We cannot produce more of both the goods. However, when resources increased we can produce more of both goods. Therefore, PPC shifts upward or rightward.



When technology changes -

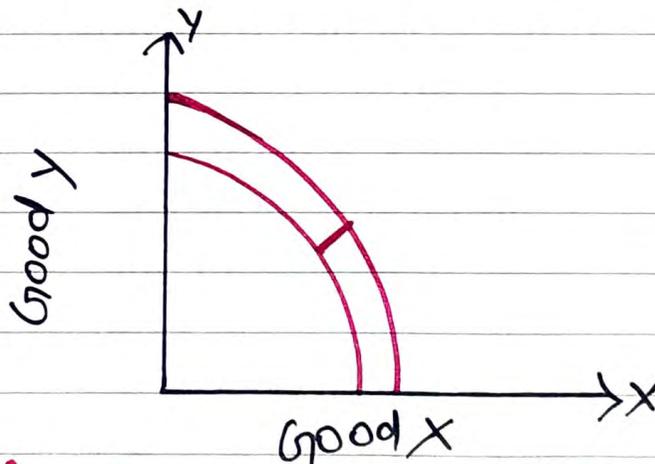
Generally change in technology is for better. Better technology means that more can be produced of both the good. Thus PPC shifts upward or rightward.



Shift of PP Frontier when Resources Increase.

When resources decrease -

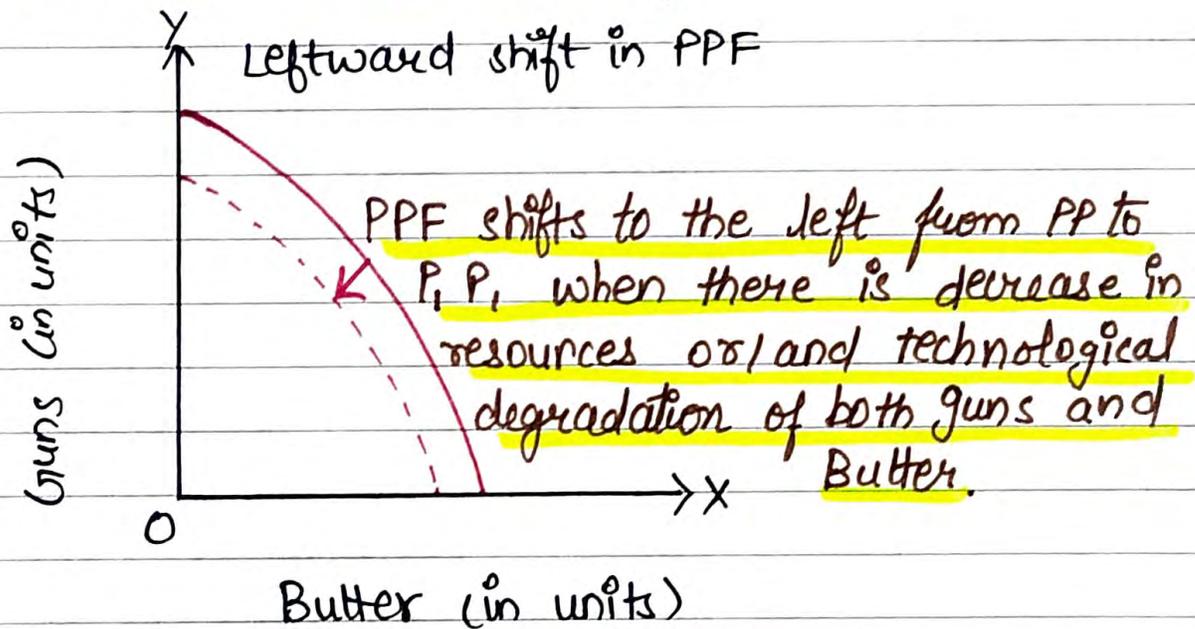
Resources with the society may decrease due to unusual happening like war, natural calamities like floods, earthquakes, epidemics, large scale migration of population to other countries. In such situations production potential of the economy decreases. Thus PPC shifts, left ward or down ward.



Shift of PP Frontier when Resources Decrease

* A lot of people died and many factories were destroyed in an earthquake. How will it affect the PPF of the economy?

PPF of the economy will shift to the left from PP to P_1P_1 . It happens because the number of possible combination available with the economy has decreased, due to destruction of resources in the economy.



* Massive unemployment will shift the PPF to the left. Defend or refute.

— The given statement is refuted. Massive unemployment does not decrease the capacity of economy to produce. So, there will be no shift of PPF. However, economy will operate at some point inside the PPF, due to underutilization of human resources.

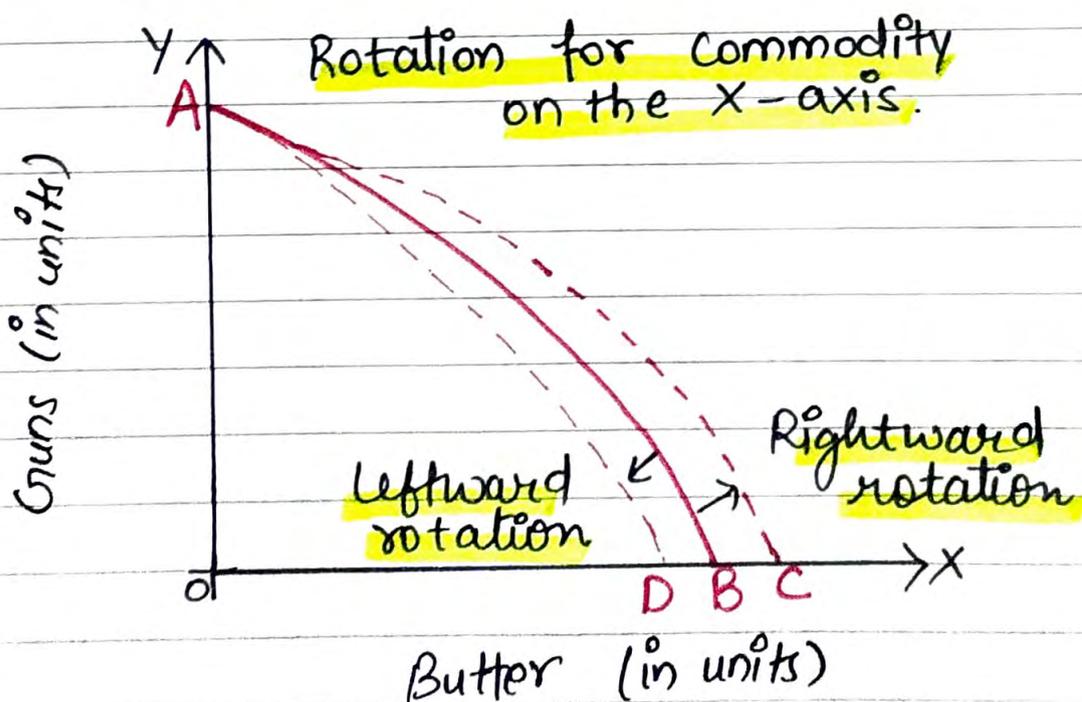
Rotation of PPF

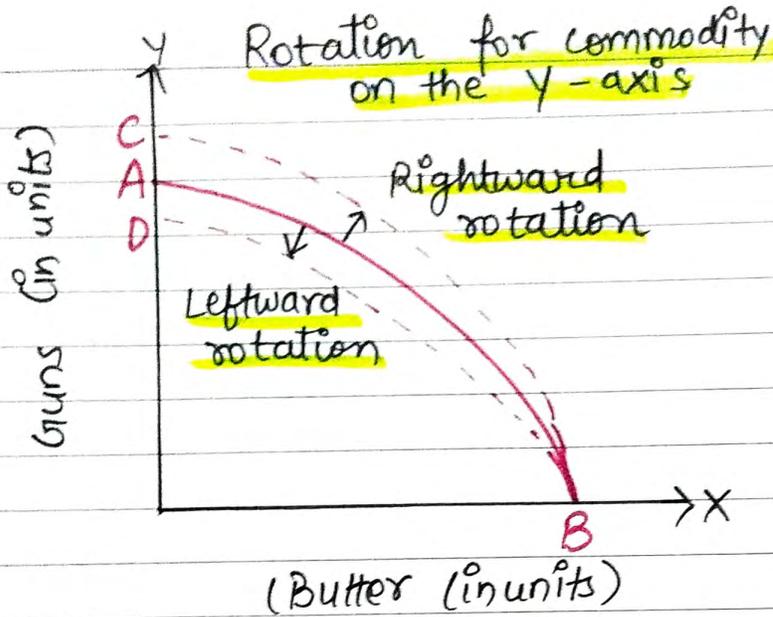
It happens when there is change in productive capacity (resources or technology) with respect to only one good. The rotation can be either for the commodity on the x-axis or for commodity on the y-axis.

1. Rotation for commodity on the X-axis.

When there is a technological improvement or an increase in resources for production of the commodity on the X-axis (say, butter), then PPF will rotate from AB to AC.

However, in case of technological degradation or decrease in resources for production of butter then PPF will rotate to the left from AB to AD.





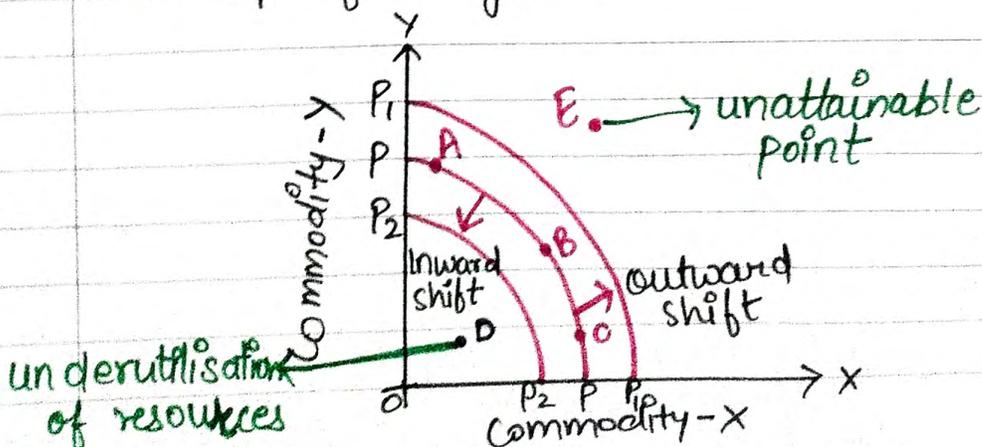
2. Rotation for commodity on the Y-axis

A technological improvement or an increase in resources for production of commodity on Y-axis (say, guns) will rotate the PPF from AB to CB.

However, in case of degradation in technology or a decrease in resources for production of guns, will rotate the PPF to the left from AB to DB as shown in

Overview of PPF

Let us quickly revise the concept of PPF with the help of diagram.



Possibilities of PPC

- If the economy is producing on PPC it indicates fuller utilization of resources.
- If the economy is producing at any point under the curve this shows resources are not utilized upto full level (underutilisation of resources).
- If the point is situated above PPC, it indicates growth of resources.

Important Points about PPC

1. PPC slopes downwards, as an increase in production of one good requires decrease in production of the other.
2. PPF is concave shaped due to increasing MOC/MRT
3. If the economy operates on PPF, it means resources are fully and efficiently utilized.
4. If the economy operates at any point inside PPF, it means resources are not fully and efficiently utilized.
5. Economy cannot operate at any point outside PPF, as it is unattainable with the available productive capacity.

If MRT is not increasing

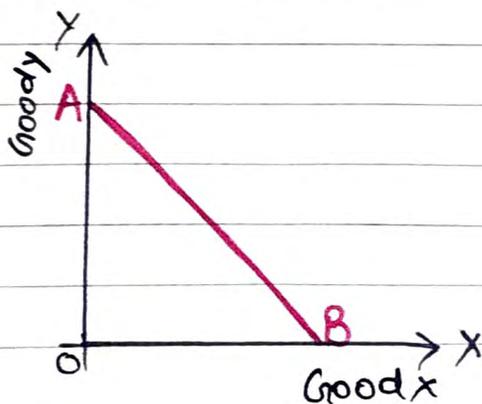
There are two possibilities

- a. MRT is constant
- b. MRT is falling

- MRT is constant

If MRT is constant it means that every time society is required to produce one additional unit of goods the rate of sacrifice of another goods are same. It means that all resources are equally efficient in production of goods.

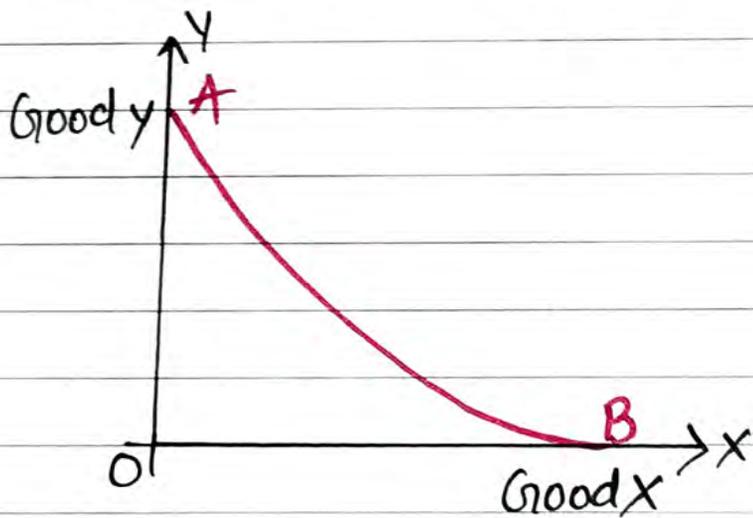
Combination	Good X	Good Y	MRT
A	0	5	—
B	1	4	1:1
C	2	3	1:1
D	3	2	1:1
E	4	1	1:1
F	5	0	1:1



- If MRT is falling

It means everytime additional unit of a good to be produced, the no. of unit of other goods sacrificed goes on decreasing. PPC is convex in this case.

Combination	Good X	Good Y	MRT
A	0	10	—
B	1	6	4:1
C	2	3	3:1
D	3	1	2:1
E	4	0	1:1



	Reasons for Rightward shift	Reasons for Leftward shift	No. change in PPC.
1.	Increase in Resources	Decrease in resources	Transfer of resources.
2.	Improvement in technology	Technological obsolescence	unemployment Eradication Programme
3.	Skill Development Programme (training)	Natural calamities (flood, earthquake, Tsunami, drought etc.)	
4.	Education for all	Migration	
5.	clean India campaign	War, terrorism	
6.	Yoga enhancement plans (health)		
7.	Beti Bachao, Beti Padhao (education)		
8.	Make in India (investment)		
9.	Increase in Foreign Capital (capital investment)		