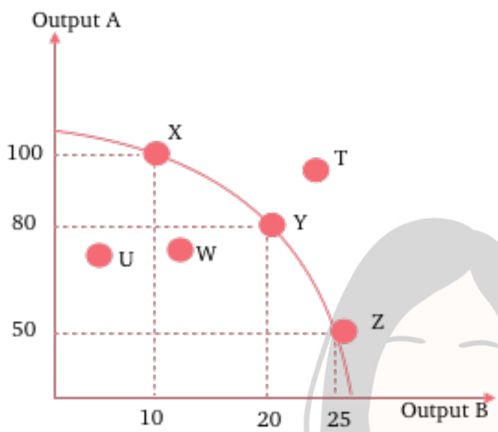
Production possibility frontiers

Production Possibility Frontiers(PPF) : a curve that shows the maximum combination of two goods that can be produced by existing resources and technology.

1. PPF and point (Efficient resources allocation)



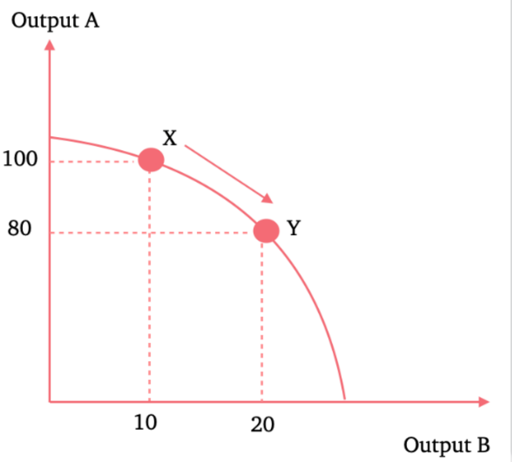
On PPF : **Point X, Y, Z** : shows maximum output and full capacity (fully employed). ⇒ ***Efficiency***

Below PPF : Point W, U : shows inefficient use of resources and below full capacity (Unemployment) ⇒ ***Inefficiency***

Above PPF : Point T :Unobtainable or above capacity

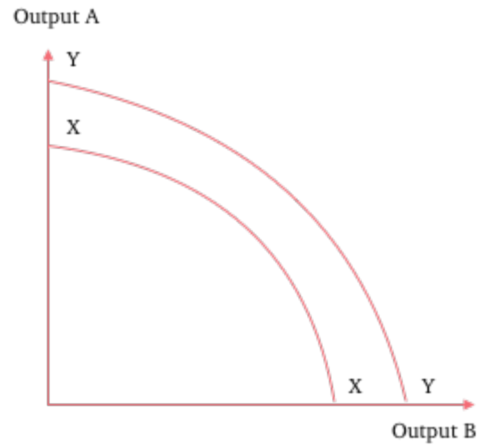
2. PPF and economic problem

- **Economic problem** is about limited resources and and limitless want



- **Economic problems** arise from limited resources and limitless want.
- When a country increases the production of output B from 10 units to 20 units, it has fewer resources available to produce output A. The production of output A falls from 100 units to 80 units from Point X to point Y.
- **The opportunity cost** of an extra 10 units of output B is the loss of 20(100-80) units of output A.

3. PPF and Economic growth



- **Economic growth:** an increase in productive potential of an economy over the period of time or an increase national income & output
- **The PPF shifts outward**(XX to YY)**;** meaning that there will be ***higher maximum outputs or economic growth***.

Factors causing a shift outward of PPF

Increase *Quantity* Factor of production	**Increase *Quality* Factor of production**	**Technological Advance**
e.g. labour immigration, investment in capital, lower school leaving age, higher retirement age.	e.g. training and education ⇒ more skills and higher productivity ⇒ potential to produce more output	Eg. Technological advance ⇒ higher productivity ⇒ potential to produce more output

Factors cause inward shift of PPF

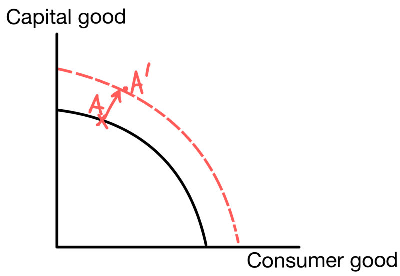
1. A fall in quantity of resources

2. A fall in quality of resources

3. Flood, natural disaster and Covid 19

4. PPF and resources allocation between consumer goods and capital goods

- **Capital goods:** used to produce the other goods.
- **Consumer goods:** for final consumption.
- ***If country allocates a large proportion of resources to produce capital goods***

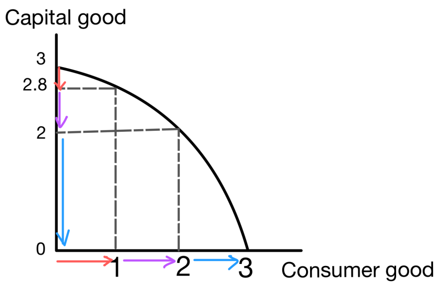


• It can increase maximum output in the future ***(shift outward of PPF)*** but it may reduce current living standards from a fall in consumer goods.

5. PPF and opportunity cost

- **Opportunity cost** arises because the country has limited resources, then allocating resources to produce a product. It will have lesser resources available to produce another product

1) PPF: Concave curve it shows increasing opportunity cost. As factors of production are not perfectly substituted to produce both products.



2) PPF: Straight line : it shows constant opportunity cost. As factors of production are perfectly substituted to produce both products.