Scarcity & Production Possibilities Frontier

Scarcity

- This is when wants exceed the resources available to satisfy them
 - Scarcity is a common situation, even the people in the richest country have to face scarcity.

Production Possibilities Frontier

*the boundary between those combinations of goods and services that can be produced and those that cannot.

Production Areas

- Please group yourselves into 4 groups.
- Set up your production areas near the four corners of the classroom.
- You are going to produce 2 types of products:
 - Paper rings
 - Aeroplanes

Instructions of producing Paper Rings

1. Fold and tear the A5 paper to 4 long strips

2. Roll each strips so that A meets B

3. Staple it

В

Instructions of producing aeroplanes

1. Fold the A5 paper into half.



2. Fold the indicated triangle up along the dotted line (for both sides).



3. Fold along the dotted line for both sides.



4. Then you will have the following:

Rounds of Production

You will have 5 rounds of production and you will have 30 seconds for each round.

Round no.	Labor used in producing paper rings	Labor used in producing paper rings
1	0	1 0
2	3	7
3	5	5
4	7	3
5	1 0	0

Quality Control

- *Two students of each group will be the Quality Control.
 - Group 1's QCs should monitor group 2's products;
 - Group 2's QCs should monitor group 3's products;
 - Group 3's QCs should monitor group 4's products;
 - Group 4's QCs should monitor group 1's products;

Prizes

- the group's QC will report to me the number of qualified paper rings and aeroplanes.
- I will keep the record in this excel worksheet/on this flipchart paper.
- The group that produces the largest number of paper rings and/or aeroplanes will win a prize!

- Each group of you represents an economy.
- Can you tell me what are the resources you have in your own economy?
- ❖ Labor
- Papers
- * Stapler
- Staples
- ❖ Working area



- Can you suggest a reason behind the negative slope of this curve?
 - > Because of scarcity, you can only produce limited amounts of Good X and Good Y.
 - > If you want to increase the production of Good X, you have to forgo a given amount of Good Y
 - > Therefore, when the production of Good X increase, the production of Good Y decrease.

Scarcity



the negative slope of PPF

- *What is the reason behind the concavity of the PPF?
 - ➤ Not all resources are equally efficient in producing the same thing. Some are better for Good X while others are better for Good Y.
 - >When the production of Good X is increased, resources will be diverted from the production of Good Y.

- >Those resources most suited to the production of Good X will be shifted first, leaving those who which are less and less suitable.
- >So, as the production of Good X increases, the sacrifice of Good Y becomes greater and greater.

Increase opportunity cost concavity of the PPF

The Second Game

- You will again have 30 seconds for each round and a total of 5 rounds.
- Basically labor arrangement will be exactly the same as the first time we played just now.
- * The only difference is you have a cutter.

- What happen to our PPF this time?
 - The new PPF should shift outward along the Paper Rings axis.

What contributes to the difference in these two PPFs?

- The new piece of technology i.e., the cutter, benefits only the production of paper rings, so the production of paper rings increases.
- "Practice makes perfect", more of aeroplanes may be produced this time, but it should increase at a lesser extend than the increase in paper rings.

*What happens if there are more labor added to each group? What will happen to the PPF?

Increase in labor

- →Increase in resources (labor is also resource)
- **→**Increase in productivity
- **→**Outward shifting of PPF
- **→** Growth of economy