

## I. Introduction

### 1.1. Definition, Scope and Method of Economics

#### 1.1.1. Definition and Scope of Economics

##### What Economics is all about?

Although different people define Economics differently, their definitions have common features. Economics can be defined as:

“the study of how societies use scarce resources to produce valuable commodities and distribute them among different groups of society.”

Implications of the above definition

- i. Human wants: are desires of human beings to obtain and use various goods and services which give pleasure or satisfaction. Human needs are subsets of human wants which should be satisfied based on the economic development of the society (e.g. basic education, etc.). Basic necessities of human beings are wants or needs which we need to satisfy in order to survive. These basic necessities of survival are food, clothing and shelter.
- ii. Resources: include land, labor, capital, and entrepreneurial ability which are used to produce goods and services.
- iii. Scarcity: is the imbalance between unlimited human wants and available resources. It is the tension between unlimited human wants and the means of satisfying them. Scarcity of resources leads to choice. Scarcity doesn't mean shortage or poverty. It is problem for all societies while shortage and poverty are specific to particular societies and time period.
- iv. Choice: Because resources are not plenty, choice needs to be made on how to use the existing resources and making the best use of these scarce resources.

Choice is dictated by scarcity. Although societies have different amounts of resources, scarcity is still a problem for all societies since human wants are unlimited. Scarcity is at the heart of Economics and Economics explains how these scarce resources are allocated among competing activities. For this reason, Economics has sometimes been referred to as the '*Science of Scarcity or choice*'.

As economic resources are scarce or not available in plenty, they have non-zero prices. Price is the test of whether a resource is an economic or free good. Economic resources command a non-zero price, while free resources do not. In an ideal world, where resources are free and unlimited, there would be no need for economics. This is because in such situations all human wants could be fully satisfied.

The interaction between human wants and scarce resources can be depicted as follows:

### Human Wants



- N.B.
- Wants can be satisfied from free good (e.g. Air, solar energy, etc.) and scarce resources
  - Not all wants can be satisfied due to scarcity

### Why do we study Economics?

Since economic issues enter into both daily life and national issues, understanding it is vital for decision-making both at individual and government levels. Hence, Economics is studied for the following reasons:

- Personal stake in economics
  - What kinds of jobs are available? (the job market)
  - How much do they pay?
  - How much, in terms of goods, will the wage buy?
- Economics for the citizen: it enables us to understand economic problems facing citizens of a nation such as
  - Will the government tax me to help unemployed or are there other things it can do to help mitigate the problem of unemployment?
  - Should I vote to build a new school now; or vote to put this aside until business slackens and cement prices come down and jobs are needed?
- Economics for government: it helps government to promote growth and improve the quality of life of the population.

### Scope of Economics

#### Microeconomics versus Macroeconomics

**Microeconomics:** (micro  $\Rightarrow$  small)

- It deals with the economic behavior of individual economic units and markets such as consumers, firms and resource owners. It is concerned with specific economic units and a

dated consideration of the behavior and operation of individual economic units (a very small segment of the economy).

- Example: individual industry (food, textile, construction, etc.), number of owners employed in an industry, expenditure of a given industry, etc
- Household: income and expenditure of household, portfolio diversification of households, etc.

#### **Macroeconomics:** (macro $\Rightarrow$ large)

- It deals with the behavior and operation of the economy as a whole. It is concerned with obtaining an overview or outline of the structure of the economy and the relationship among the major aggregates which constitute the economy. Here, no attention is given to specific economic units which make up the various aggregates. It entails the decision on total output, the level of employment, total income, total expenditure, total investment, total savings, general price level, etc.
- “Macroeconomics studies the ‘forest’ while micro economics studies the ‘trees’.”

### **1.1.2. Methods in Economics**

Economics uses systematic methods of *observations, analysis* and *reasoning* to study economic problems of a nation. On the basis of this it makes generalization and formulates theories to describe, explain and make predictions about economic events that affect the lives of every society. e.g. an increase in income will cause an increase in expenditure.

#### **a. Economic Theory:**

Theory expresses a causal relationship between economic phenomenon. It consists of a set of definitions and assumptions as to how the world behaves. It also involves generalization, which are consistent statements of relationships among various elements of economic phenomena.

Steps in constructing an economic theory:

i. Selecting a problem;

The selection or identification of a problem is the first step in the formulation of an economic theory. The problem may be poverty, unemployment, growth, etc.

ii. Assumptions and hypothesis

Hypothesis is a suggested/proposed answer to the problem indicated in step (i) above. A hypothesis is developed from *observed facts, experience or previous knowledge*. Some assumptions may be introduced in order to develop the hypothesis fully.

**Example:** One may hypothesize that “There is a correlation between food prices and agricultural productions in an agricultural economy”. This is a plausible hypothesis-can be tested.

**Assumption:** other factors, such as industrial productions, fuel price, exchange rate and so on do not affect food prices in such economy.

### iii. Predictions/conclusions

These are implications of the theory, i.e. drawn implications from the hypothesis.

**Example:** (from above) Agricultural production is the key determinant of food prices in agrarian economy assuming other factors being constant (*ceteris paribus*).

### iv. Testing predictions

Predictions of a theory should be tested by the process of observation and statistical analysis of data.

**Example:** At this stage we collect data and see whether agricultural output is indeed the main determinant of food prices. If we find that there is no correlation between food prices and agricultural output, then the theory stands to be refuted, i.e. our observation fails to agree with (support) the prediction of the theory.

## **Uses of Economic Theory:**

- Explaining economic phenomena (e.g. causes of unemployment, causes of inflation ...)
- Predicting economic events (e.g. an increase in years of schooling leads to an increase in income)
- Judging the performance of the economy (to propose policy recommendation/solution)
  - e.g. If there is an increase in the prices of cement, the knowledge of price mechanism is necessary to decide whether the increase in price of cement is due to shortage of raw materials, increase in demand or other factors
- Formulating economic policies: every economic policy is backed by economic theory
  - e.g. Command economy, mixed economy, free market economy, Agricultural Development Led Industrialization (ADLI), etc

## **b. Deductive and Inductive Methods**

### **i. Deductive Method**

Deductive method proceeds from general to particular. It involves of reasoning from certain principles to the analysis of specific facts. Then conclusions are drawn which are verified against observed facts. (E.g. Man is mortal. Abebe is a man. Therefore, Abebe is mortal.)

Deduction involves certain steps:

- 1) Selection of economic phenomenon to be explained, i.e. identification of the problem
- 2) Formulation of assumptions
- 3) Making inferences/conclusions using logical reasoning
- 4) Verification of conclusions/inferences

If the conclusion agrees with the observed facts, the hypothesis is said to be verified.

## **ii. Inductive Method**

Inductive involves the process of reasoning from particular facts to general principles. It involves four steps:

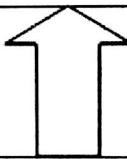
- Observation
- Formulation of hypothesis
- Generalization
- Verification

Example: One may observe that the prices of grains fall during harvest period. This may be connected with an increase in the supply of grain at that time of the year. From this observation a generalization can be made or established: "An increase in supply leads to a fall in prices, keeping other factors constant".

N.B. Deductive and inductive methods are *complementary*, i.e. one supports the other. They are not competing methods.

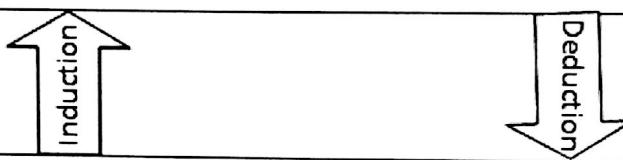
### 3. Policies

Policy economics is concerned with controlling or influencing economic behavior or its consequence



### 2. Principles or Theories

Theoretical economics involves generalizing about economic behavior



### 1. Facts

Descriptive or empirical economics is concerned with gathering the facts relevant to a specific problem or aspect of the economy and with testing hypothesis against the facts to validate the theories

## c. Positive versus Normative Economics

Positive economics is like a science, which deals with knowledge and facts, while normative is the engineering aspect of using/applying the knowledge to solve problems.

### i. Positive Economics

Positive economics deals with objective or scientific explanations of the workings of the economy. The aim of positive economics is to explain how a society makes decisions about consumption, production and exchange of good and services. It tries to find an answer to: **what is, what was, what will be** and so on. This is the science aspect.

In positive economics we are concerned with the proposition of the form "*if this is changed, then that will happen*". For instance, "if cement price increases, then construction will be damaged, *ceteris paribus*", "A minimum wage law increases youth unemployment". These are positive statements because each them can be verified.

## ii. Normative Economics

A normative economics offers recommendations based on value judgment. It deals with the questions like: **what should be; what ought to be; what must be**. It is based on opinion or view. As soon as we introduce the words ‘should’, ‘ought to be’ or ‘must be’, we are making subjective statements or normative statements. This is like engineering.

Example: The government should guarantee a minimum income for every individual

The national bank should decrease money supply

N.B. A statement could contain both normative and positive assertions.

Example: The elderly have very high medical expenses and the government should subsidize their health bills.

The first part of the above proposition, which claims that the aged have relatively high medical bills, is a statement in positive economics. It can be verified. The second part of the proposition is the recommendation what the government should do, which is an opinion. This should never be proved to be correct or incorrect by any scientific research. It is simply subjective value judgment based on the feeling of the person making the statement.

## 1.2. The use of graphs and equations in Economics

### Ceteris Paribus (other things being equal)

The phrase serves an important purpose in economic analysis. In many economic problems a number of factors are at work. In order to analyze the factor under consideration alone while keeping other factors constant, we use the phrase “other things being equal”. This approach is used to isolate or separate the impact of the factor under consideration alone on the economic problem we are studying.

Example: Car price and car sales

Since car sales can be affected by factors other than price of the car, such as income of buyers, fuel price, alternative mode of transportation, etc. it is necessary to acknowledge all the factors. In such a situation, one can formulate a hypothesis as:

“Other things being equal, an increase in the price of a car will cause a reduction in the level of car sales.”

In this way only the effect of car price change on car sales will be examined. Hence, we abstract the effect of one variable (price) from others (income, fuel price, substitutes, etc.). This is what is called model building.

## What is a Model?

Models are abstractions of reality because the level of reality is too complex to be meaningful. An economic model is a simplified picture or map of reality and hence enables us to understand the reality better, since it avoids the details of reality.

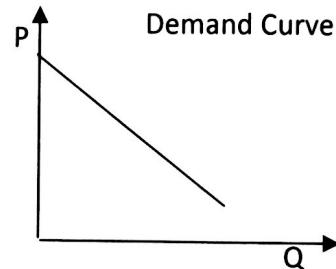
Economic model may take the form of verbal statement, empirical table, mathematical equations or graphs.

Example: The relationship between the price of a commodity/product and quantity of it which consumers buy, ceteris paribus, can be expressed using a graph (demand curve), a table or an equation.

$$Q = f(P) \text{ Demand Equation}$$

Demand Schedule

P	6	5	4	3	2	1	0
Q	0	2	4	6	8	10	12



## Why do we need a model?

- The real world is so complicated that it is necessary to simplify and abstract if any progress is to be made.
- A model may be the cheapest way of obtaining the needed information.

## Dangers of Models

If constructed properly, economic models are the main analytical tools in economics. The fundamental danger in constructing an economic model: one might fail to correctly distinguish between relevant and irrelevant facts.

One might abstract too many facts and construct a model which is hyper-abstract and truly out of touch with reality.

## 1.3. The production possibility frontier, efficiency and opportunity costs

### Definitions

- i) Production: The process of using the services of labor and other resources to make goods and services available.
- ii) Economic resources: are inputs used in the process of production. The outputs are commodities made available for use. Usually economic resources are divided into four broad categories. These are:

- a. Labour: represents the services of human beings in the production of goods and services. Human resources include both physical and mental labour. The compensation for mental labor is commonly termed as salary while that of physical is wage.
- b. Capital: includes equipment, tools, machinery, vehicles, etc. and skills created to help produce goods and services. These are simply capital goods. Capital goods differ from consumer goods since the latter satisfy wants directly while the former do so indirectly by aiding production of consumer goods. The reward for the services of capital is called interest.
- c. Natural resources/land: this includes minerals, land, etc. that are used in crude form in the production of goods and services. They are free gifts of nature. The reward for the service of land is known as rent.
- d. Entrepreneurial ability: is a special category of human resource. It is a talent to develop products and organize production so as to make goods and services available. Profit is the compensation that entrepreneurs earn.

Entrepreneurs have the following characteristics:

- They are innovators – they introduce new products, new production technology, new forms of business organizations, etc.
  - They take initiatives in combining resources to produce goods and services. They are the driving force behind production. They make basic business policy decisions.
  - They are risk takers in organizing business – entrepreneurs have no guarantee of profit. They risk not only their time, effort, and business reputation but also their invested funds.
- iii) Technology: is society's stock of knowledge. It is the knowledge of how to produce goods and services. It is society's pool of knowledge regarding how goods and services can be produced from a given amount of resources.
- iv) Efficiency: is producing the right goods and services in the right way. Efficiencies are of two types;

Allocative Efficiency: is production of goods and services that are most wanted by the society, i.e. producing the right product. This is the question of priority. It is difficult to assign top priority for everything because of resource limitation and no one can afford everything.

Production Efficiency: is the production of goods and services in the least costly way. i.e. producing goods and services in the right way. It is attained when the maximum possible amount of any one good is produced with a given amount of resources.

- v) Full employment: refers to a situation where no resources remain idle. All available resources are employed in the production process, avoiding involuntary unemployment of labour, capital, land, etc.

- vi) Full production: refers to a situation or condition where all employed resources should be used so that they yield the maximum possible satisfaction of human wants. This is use of resources efficiently, which implies both allocative and productive efficiency.

### The Production Possibility Frontier (PPF)

If resources are scarce, then output would be limited. If output is limited, then we cannot satisfy all of our wants. Thus choice should be made. The society must make choices as to what output to produce in what quantity and what output not to produce. Choice, intern, implies cost, i.e. choice involves sacrifices. That means, whenever choice is made, an alternative opportunity is sacrificed. This leads to the concept known as opportunity cost.

(Scarcity  $\Rightarrow$  Choice  $\Rightarrow$  Sacrifice  $\Rightarrow$  Opportunity Cost)

In a world of scarcity, a decision to have more of one thing, at the same time means a decision to have less of another thing. The value of the next best alternative that must be sacrificed is, therefore, the opportunity cost of the decision.

Opportunity cost is the value or amount of the next best alternative that must be sacrificed or forgone to obtain one more unit of a product. Note that the opportunity cost of getting one more unit of a product is the amount or value of the next best alternative that is sacrificed, not the value of all alternatives.

Once we understand the concept of scarcity, choice and opportunity cost, the next task is to investigate into the production possibilities available to a society, given the problem of scarcity.

**The Productions Possibilities Frontier/Curve (PPF or PPC)** is a curve that shows the various possible combinations of goods and services that the society can produce given its resources and technology. PPF is a simple graphical device that illustrates the principles of scarcity and choice.

#### Assumptions of PPF

Efficiency – the economy is operating at full employment and achieving full production

Fixed Economic Resources – The quantity or amount of resources of a given quality is fixed in supply. However, it is possible to reallocate resources to different uses.

Fixed Technology – the state of technology is fixed and does not change during a given period.

Specialization – we assume that some inputs are better adapted to the production of one good than another (transferring a skilled tailor from closing to food production will cause a greater loss in output of closing than transferring a truck driver from delivering cloth to delivering food)

Two products/goods – assume that the economy produces just two goods, say food (F) and clothing (C).

Period – is usually short duration.

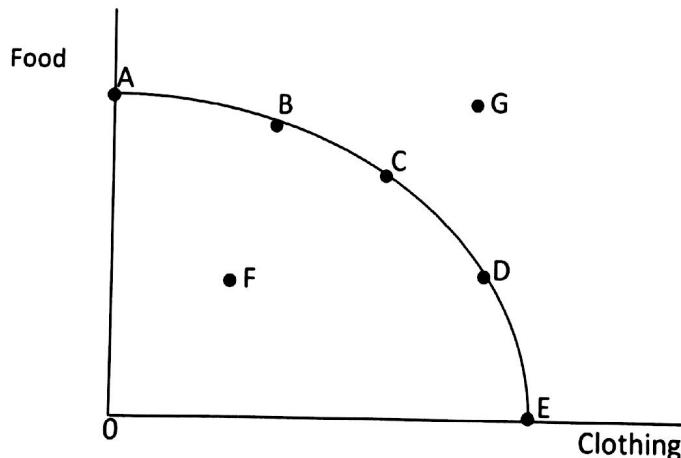
The production possibilities of these two goods can be presented in a table as follows.

Type of good	Production possibilities				
	A	B	C	D	E
Food (F) (tons)	50	42	32	18	0
Clothing (C) (numbers)	0	5	10	15	20

According to the above table, the country has five production possibilities. If it decides to use all its economic resources to produce food only, it can produce 50 tons of food and zero clothing. This is the maximum combination of the two goods that the society can produce if it uses all the available resources in food production. This is production possibility one, point A.

Now, the country wants 5 units of clothing. Since resources are scarce, however, production of food has to decline to 42, i.e. at B. Finally if the society decides to spend all of its resources to the production of clothing, it can produce 20 units of clothing but zero ton of food, point E.

Plotting these points will result in PPF or PPC, i.e the graphic representation of production possibilities.



### Regions of the PPF

1. Points lying outside the PPF (such as G): are unattainable with the current level of resources and technology.
2. Points lying inside the PPF (such as F): represents combinations of two goods that correspond to less than the maximum possible output. They are attainable but inefficient since there is underutilization of resources or mismanagement of resources.

3. Points on the PPF: represent the maximum possible output of the two goods. They represent effective utilization of productive resources. Hence, PPF illustrates the idea of scarcity in two ways;
  - a. It shows only a limited number of production possibilities existing in a given period with the current level of technology and resources (only points inside and on the curve are possible)
  - b. It also shows that the maximum amount of any one good is produced, given output of the other. Additional production of the first good requires a reduction of the other.

### **Properties of the PPF**

1. The PPF is a boundary; it shows the maximum limit to what extent a society can produce with the available resources and technology. It sets a maximum limit for the production of goods.
2. The PPF depicts the maximum production when all resources are fully and efficiently employed.  $\Rightarrow$  No underutilization of productive resources
3. The PPF is downward sloped; the negative slope indicates that more of one good can be produced only if less of another is produced. So, it shows scarcity.
4. The PPF shifts when there is a change in availability of resources, or technology or both.

The PPF describes three important concepts:

- A. Scarcity: any combination of the two outputs outside the curvature is unattainable. This means we cannot have unlimited amount of output even if all resources are employed and we use the best technology.
- B. Choice: any movement on the curve indicates the change in choice.
- C. Opportunity cost: when the economy produces on the PPF, producing more of one good requires sacrificing some of another product. It is reflected by the downward sloping of the PPF.

### **The Law of Increasing Opportunity Cost**

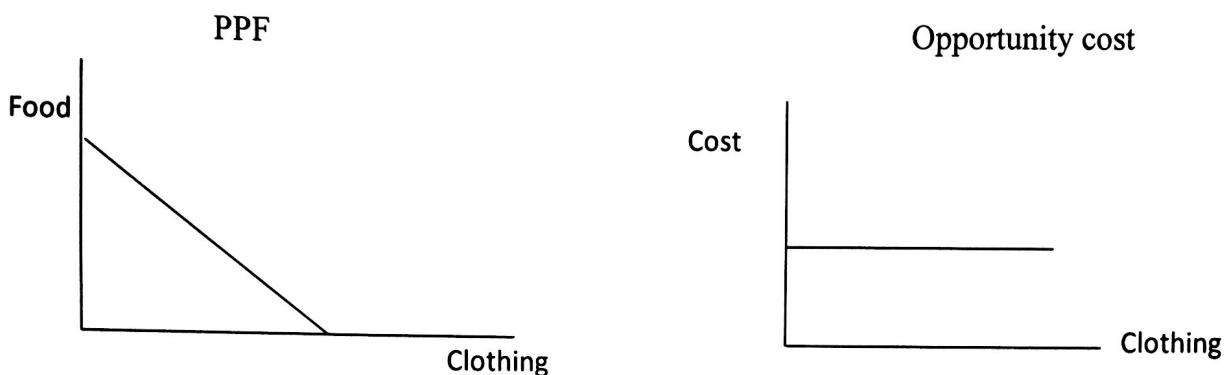
It states that the opportunity cost of each additional unit of output of a good over a period increases as more of that good is produced. In other words, as we produce more and more of a product, the opportunity cost per unit of the additional output increases. This makes the shape of the PPF concave to the origin.

The reason behind the increasing opportunity cost is that economic resources are not completely adaptable to alternate uses. In other words, due to the existence of specialized inputs, resources may not be equally productive in different uses or economic resources are not perfectly substitutable. Many resources are better at producing one good than another.

E.g. A textile engineer is more suited in the production of clothes than in the production of food.

If resources were completely adaptable, then the slope of the PPF would be a straight line, i.e constant slope (constant opportunity cost).

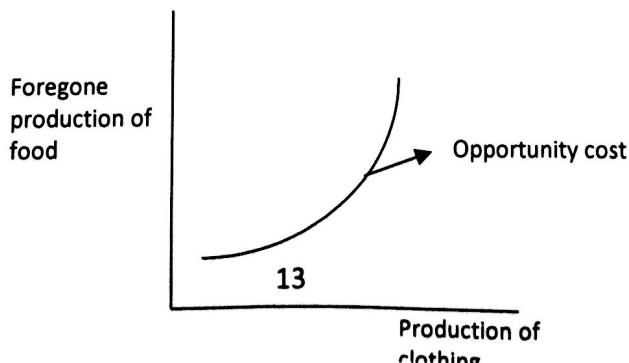
N.B. The slope of the PPF at a particular point is the opportunity cost of that particular choice (of that combination of goods).



Let us come back to our example to see the law of increasing opportunity cost.

Types of good	Production Possibilities				
	A	B	C	D	E
Food (F)	50	42	32	18	0
Clothing (C)	0	5	10	15	20
Increase in C ( $\Delta C$ )		5	5	5	5
Decrease in F ( $\Delta F$ )		8	10	14	18

Producing five units of clothing requires us an increasing loss of food production, i.e. from A to B, 8 tons of food is sacrificed, from B to C 10, C to D 14 and from D to E 18.



### **Calculation of opportunity cost**

The opportunity cost of a good is the ratio of the amount of the next best thing given up to the amount of a good gained. For instance, at point A, the opportunity cost of producing one unit of closing is  $\frac{\Delta F}{\Delta C} = \frac{42 - 50}{5 - 0} = \frac{-8}{5} = 1.6$  tons of food.

Similarly, if the society moves from D to E, the opportunity cost of getting additional clothing equals  $\frac{\Delta F}{\Delta C} = \frac{0 - 18}{20 - 15} = \frac{-18}{5} = 3.6$  tons of food.

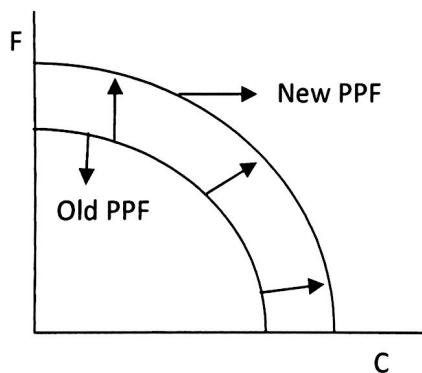
The two examples show the law of increasing opportunity cost.

### **Economic Growth and the PPF**

Economic growth is the increase in the real output level of an economy over time. Economic growth or an increase in the total output level occurs due to one or both of the following factors:

1. Increase in the quantity and/or quality of economic resources
2. Advances in technology

Economic growth is represented by an outward shift of the PPF.



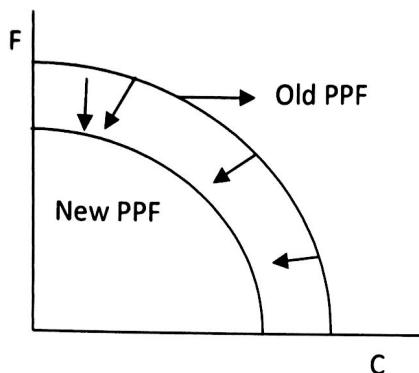
The area between the old and the new PPFs was unattainable combinations of clothing and food that become feasible now.

### **Improved quality of economic resources**

- Improvement in skills, education or training of the labour force can increase the output obtainable from any given combination of inputs.
- Improvement in the quality of machineries (production of more output by saving time and other inputs)

## Destruction of economic resources

A decline in the quality and quantity of resources will shift the PPF inwards to the origin, reducing the area of attainable region.



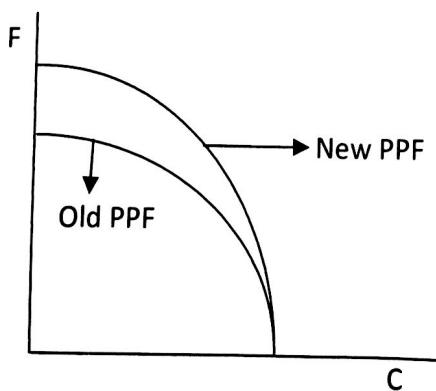
## Improvement in the technology

Advancements in the technology bring productivity in the economy. If there happens to be technological improvements in the way we produce food and clothing, such advancement will allow the country to better utilize the available resources and get more of both outputs.

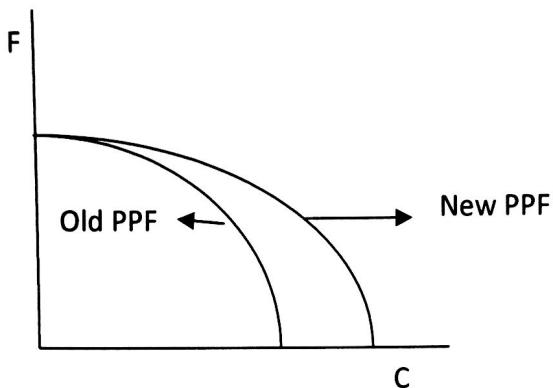
A change in technology can be symmetrical or non-symmetrical (asymmetric)

- When technological change occurs in both sectors, such changes are known as symmetrical technological change or unbiased.
- When technological change occurs in one sector only then this type of technological change is known as asymmetrical technological change or biased technological change.

Example: Suppose there is a technological improvement in food sector only. This makes the PPF rotate clockwise (as shown in the figure below).

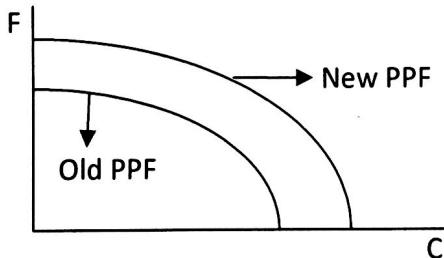


Here, the intercept on the clothing axis does not change. This means that the total output in clothing will not be changed after the technological advancement. i.e. if we devote all the resources in the production of clothing, then we will still be able to produce the same amount of clothing. The technology advancement in food production allows expanded production possibilities in both sectors. More clothing can be produced than before for any given positive output of food. This is because more resources will now be available for clothing for any given amount of food production, other things being equal. This is because food can be produced using fewer inputs now than it was required before.



The same happens for to clothing when there is advancements in technology in the clothing sector.

If there is a technology change in both sectors, then the PPF will shift parallel to the original PPF.



This is the case of unbiased or symmetrical or neutral technological change

#### 1.4. Basic Economic Problems and the Economic Systems

Scarcity is the fundamental economic problem that any human society faces. In connection with this fundamental problem, any society should confront and answer the following three questions. These are:

- 1. What to produce and in what quantity:-**

Given the problem of scarcity, any society should decide what outputs to produce and how much of each item. These decisions involve balancing needs and wants of the various groups in the economy. Hence, choices must be made about which goods and services to make available and which to forego.

- 2. How to produce them:-**

This is a decision on how to combine resources to produce the desired outputs. This is a question of technological choice. Example: choice between labor intensive and capital intensive technology.

### **3. For whom to produce:-**

This is a question of distribution. Are goods and services to be distributed to everyone or to those willing and able to pay?

## **Alternative Economic Systems**

The above mentioned questions are universal in nature that every human society should answer. But the solutions vary from society to society. The way a society tries to answer these questions is summarized by a concept known as *economic system*.

An economic system is an accepted way of organizing production, establishing rights to ownership, use of productive resources and government economic transactions in a society. Customarily, we can identify three types of economic systems: market economy, command economy and mixed economy.

### **a. A free market economic system:**

- It is also called “laissez-faire” which means “let it be” or “allow them to”
- It is a system where there is absolute minimum of government intervention in the economy
- It is characterized by private ownership of economic resources and use of market prices to coordinate and direct economic activities
- Under this system, the function of the government is to provide basic legal system, secure law and order, defense and foreign policy structure
- The central institution through which a laissez-faire economic system answers the basic economic problems is *Market*. A market is an institutional arrangement through which buyers and sellers interact and engage in exchange of goods and services.
- In such an economic system, price reflects the true value of goods and services and act as a signal to both buyers and sellers

In a free market economy

- Firms address the ‘what to produce’ question by producing those goods and services that give them maximum possible profit
- The ‘how to produce’ question is answered by choosing the technology of production which is least costly
- The ‘for whom to produce’ question is addressed depending on people’s decision as to how to spend their income

### **b. Command economy**

This is the polar alternative to a free market economy. This economic system is one in which the government makes all decisions through its central planning body. It is typified by public ownership of economic resources.

In such a system, all decisions regarding what, how and for whom to produce are determined by the government. In short, in pure capitalism production and distribution of goods and services are

decided by the private sector through market mechanism, while in command economy they are decided by the government.

### c. Mixed economy

In reality, no economy is of the above forms. And neither of them is completely satisfactory. So, all economies contain a mixture of both. Mixed economy is a system where there is private and public ownership of economic resources.

Market economy has one strong merit; it is good for efficiency since resources are allocated through market mechanism and everybody is acting in order to get the maximum possible benefit out of what it has. It enables the country to allocate resources efficiently. The disadvantage is that there are areas where market fails.

#### Why do markets fail?

- a. Existence of public goods such as roads, defense, streetlight, etc.
- b. The existence of externalities such as pollution
- c. Incomplete or missing markets (e.g. Banks are missing in rural areas)
- d. Existence of monopolies

The command economy, on the other hand, takes care of the undesirable consequences of unregulated markets on an economy. In short, the advantages of command economy are:

- Fair distribution of income
- Absence of business fluctuation
- Absence of monopolistic practices

However, economic inefficiency is the main problem of countries which were more or less under a command economic system.

It is to take the strong elements of the two systems that the mixed economic system evolved. In a mixed economic system, it is believed that market is good. But it is not enough. Government can also play important roles like

- Promoting economic growth and stability
- Providing public goods
- Bringing about equitable distribution of income
- Controlling factors that can disturb the free functioning of the market system such as monopoly and externalities

In a mixed economy system, both the private and public sectors are partners or complementary rather than substitutes.

## **1.5. Decision Making Units and Circular Flow of Economic Activities**

### **Definitions**

#### *i) Specialization*

- Is the concentration of efforts in particular area of production
- Use of resources of one individual to produce one or more goods and services for which there is a greater advantage
- Production of goods and services for which one has comparative advantage or absolute advantage

e.g. Fertile land (cereal production), Mineral rich land (mining), wood industry versus metal industry, weaver versus blacksmith

#### **Features of specialization**

- It saves time and cost of transferring non-specialized workers from one task to another (no need for transferring workers)
- It allows the unique talents of individual workers to be more utilized – addresses ability differences
- By devoting the entire time to a single task, one can develop his/her ability further (learning by doing)

Hence, specialization:

- Creates interdependence (for example wood industry depends on metal industry and vice versa)
- Requires cooperation (Who produces wood and who produces metal)
- Necessitate exchange

#### *ii) Division of labour (human labour specialization)*

- It is the distribution of the activities of production among the society
- Division of the work requires to produce a product in a number of different tasks, which are performed by different workers

#### *iii) Market- is an institution which brings buyers and sellers together*

**Types of markets:**

**Resource market:**

- Is a market where economic resources (labor, capital, etc.) are sold and bought
- Households are suppliers of economic resources as they own them
- Producers (firms) are buyers of economic resources to produce goods and services

**Goods market**

- Is a market arrangement where goods and services are traded
- Here, producers are suppliers, while households/consumers are buyers

## **The Circular Flow Frameworks**

The circular flow model is a diagrammatic representation, showing how economic activities are organized in a specialized society faced with interdependence, coordination and exchange. It is simply a flow of economic activities in a market economic system. The coordinating mechanism that aligns the decision of producers (businesses) and consumers (households) is the market system.

There are two types of flows:

(a) Physical flow or real flow:- clockwise flow

It is the flow of goods and services and economic resources from one market to another.

Example: Producers supply goods and services to goods market where households purchase.

Households supply economic resources to the resource markets and producers purchase these resources to produce goods and services.

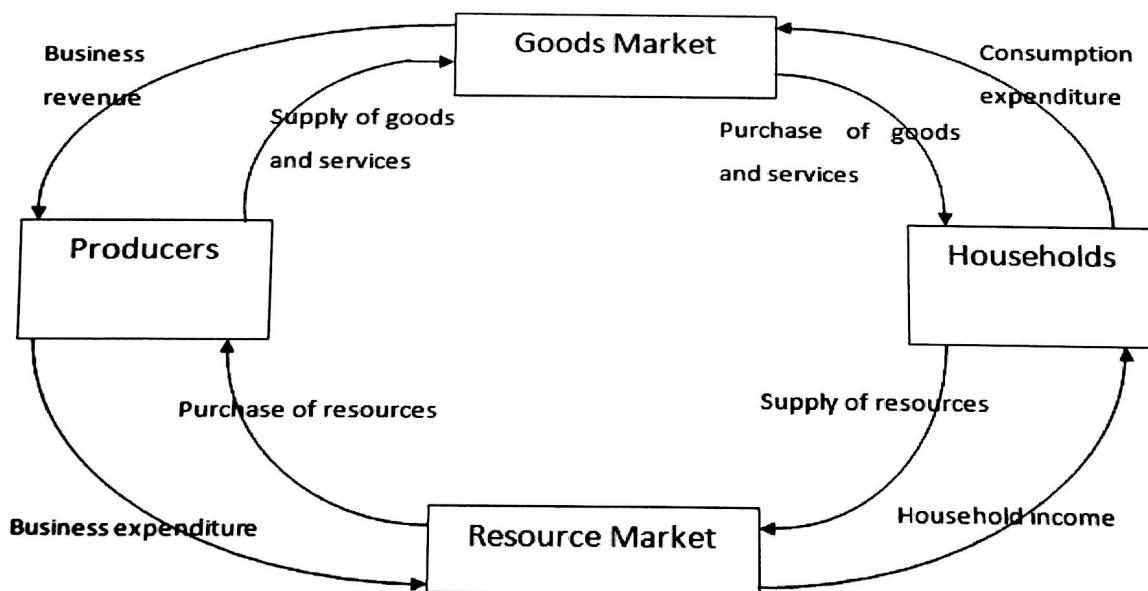
(b) Financial/Monetary flow:- counter clockwise flow

It is the flow of money from one market to another

Example: Households own resources and supply these to producers via resource market. By selling economic resources to producers, households get income while producers pay to households to obtain resources. This is called business expenditure.

Households use their income to buy goods and services from the producers through the product market. This represents consumption expenditure to the households, but it is also business income for producers.

The Circular Flow Model



**Note:**

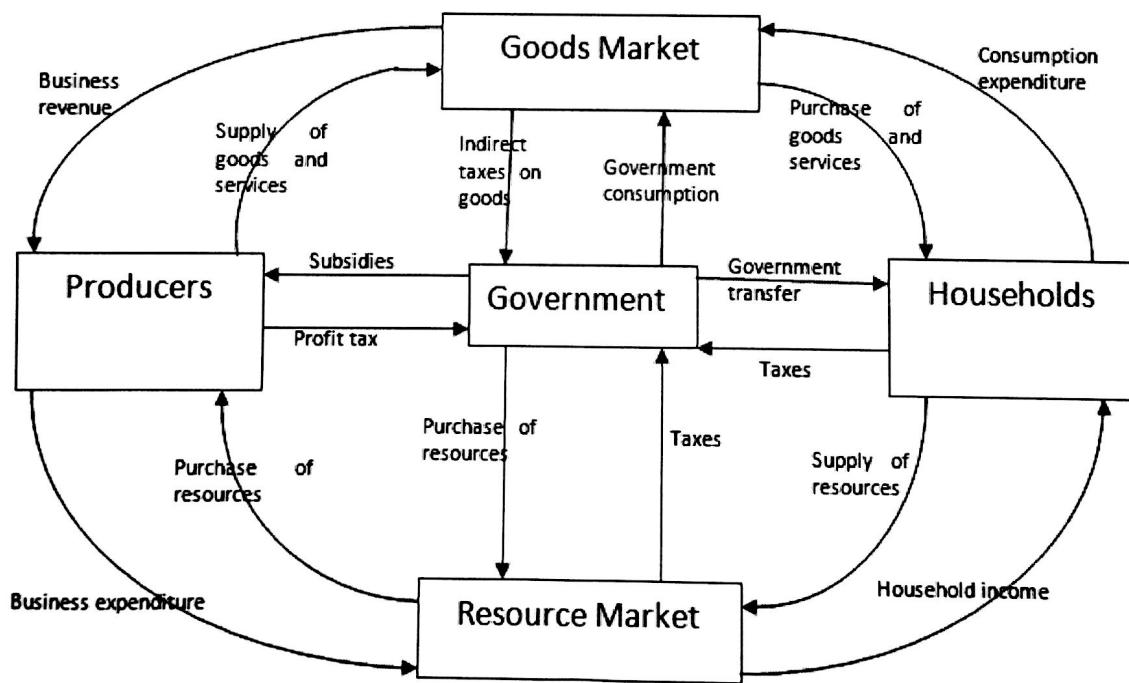
- 1- The interaction of households and producers in the goods market determines “what to produce and in what quantity”. Goods demanded by consumers are produced.

- 2- "How to produce" is determined in resource market. Businesses compete to buy resources most cheaply, which determines how goods are produced.
- 3- "For whom to produce" is determined in the goods market. Producers produce goods that are highly demanded.
- 4- "How fast to grow" is determined in both markets. Production of consumer goods versus capital goods.

### Limitations of the Model

- 1- Transactions within households and within producers are ignored (inter-household transaction and inter-firm linkages are missing)
- 2- Government is ignored in the model (economy without government)
  - Government has the following functions:
    - Stabilization of the economy
    - Control of externalities
    - Tax collection, etc.
- 3- Foreign sector is missing: the model is closed in the sense that no economic relationship between the domestic economy and the rest of the world (export, import, international debt, remittance, etc. are missing)

Now let us introduce the government to our circular flow model:



The introduction of government makes the circular flow model closer to real world (reality)

- Government collects taxes and gives subsidies to producers and households
- Government consumes goods and services

Now let us introduce the external sector (the rest of the world) to the model:



The inclusion of government and external sector into the model brings leakage and injections to the economic activity.

Leakages: are withdrawals of expenditure from the economic activity (example; taxes, savings, imports, etc.)

Injections: are additions to economic activities (example; subsidies, export, etc.)