

# Chapter 1

## *Introduction*



### 1.1 A SIMPLE ECONOMY

Think of any society. People in the society need many goods and services<sup>1</sup> in their everyday life including food, clothing, shelter, transport facilities like roads and railways, postal services and various other services like that of teachers and doctors. In fact, the list of goods and services that any individual<sup>2</sup> needs is so large that no individual in society, to begin with, has all the things she needs. Every individual has some amount of only a few of the goods and services that she would like to use. A family farm may own a plot of land, some grains, farming implements, maybe a pair of bullocks and also the labour services of the family members. A weaver may have some yarn, some cotton and other instruments required for weaving cloth. The teacher in the local school has the skills required to impart education to the students. Some others in society may not have any resource<sup>3</sup> excepting their own labour services. Each of these decision making units can produce some goods or services by using the resources that it has and use part of the produce to obtain the many other goods and services which it needs. For example, the family farm can produce corn, use part of the produce for consumption purposes and procure clothing, housing and various services in exchange for the rest of the produce. Similarly, the weaver can get the goods and services that she wants in exchange for the cloth she produces in her yarn. The teacher can earn some money by teaching students in the school and use the money for obtaining the goods and services that she wants. The labourer also can try to fulfill her needs by using whatever money she can earn by working for someone else. Each individual can thus use her resources to fulfill her needs. It goes without saying that no individual has unlimited resources compared to her needs. The amount of corn that the family farm can produce is limited by the amount of resources it has, and hence, the amount of different goods

<sup>1</sup>By goods we mean physical, tangible objects used to satisfy people's wants and needs. The term 'goods' should be contrasted with the term 'services', which captures the intangible satisfaction of wants and needs. As compared to food items and clothes, which are examples of goods, we can think of the tasks that doctors and teachers perform for us as examples of services.

<sup>2</sup>By individual, we mean an individual decision making unit. A decision making unit can be a single person or a group like a household, a firm or any other organisation.

<sup>3</sup>By resource, we mean those goods and services which are used to produce other goods and services, e.g. land, labour, tools and machinery, etc.

and services that it can procure in exchange of corn is also limited. As a result, the family is forced to make a choice between the different goods and services that are available. It can have more of a good or service only by giving up some amounts of other goods or services. For example, if the family wants to have a bigger house, it may have to give up the idea of having a few more acres of arable land. If it wants more and better education for the children, it may have to give up some of the luxuries of life. The same is the case with all other individuals in society. Everyone faces scarcity of resources, and therefore, has to use the limited resources in the best possible way to fulfill her needs.

In general, every individual in society is engaged in the production of some goods or services and she wants a combination of many goods and services not all of which are produced by her. Needless to say that there has to be some compatibility between what people in society collectively want to have and what they produce<sup>4</sup>. For example, the total amount of corn produced by family farm along with other farming units in a society must match the total amount of corn that people in the society collectively want to consume. If people in the society do not want as much corn as the farming units are capable of producing collectively, a part of the resources of these units could have been used in the production of some other good or services which is in high demand. On the other hand, if people in the society want more corn compared to what the farming units are producing collectively, the resources used in the production of some other goods and services may be reallocated to the production of corn. Similar is the case with all other goods or services. Just as the resources of an individual are scarce, the resources of the society are also scarce in comparison to what the people in the society might collectively want to have. The scarce resources of the society have to be allocated properly in the production of different goods and services in keeping with the likes and dislikes of the people of the society.

Any allocation<sup>5</sup> of resources of the society would result in the production of a particular combination of different goods and services. The goods and services thus produced will have to be distributed among the individuals of the society. The allocation of the limited resources and the distribution of the final mix of goods and services are two of the basic economic problems faced by the society.

In reality, any economy is much more complex compared to the society discussed above. In the light of what we have learnt about the society, let us now discuss the fundamental concerns of the discipline of economics some of which we shall study throughout this book.

## 1.2 CENTRAL PROBLEMS OF AN ECONOMY

Production, exchange and consumption of goods and services are among the basic economic activities of life. In the course of these basic economic activities, every society has to face **scarcity** of resources and it is the scarcity of resources that gives rise to the problem of **choice**. The scarce resources of an economy have competing usages. In other words, every society has to decide on how to use its scarce resources. The problems of an economy are very often summarised as follows:

<sup>4</sup>Here we assume that all the goods and services produced in a society are consumed by the people in the society and that there is no scope of getting anything from outside the society. In reality, this is not true. However, the general point that is being made here about the compatibility of production and consumption of goods and services holds for any country or even for the entire world.

<sup>5</sup>By an allocation of the resources, we mean how much of which resource is devoted to the production of each of the goods and services.

### What is produced and in what quantities?

Every society must decide on how much of each of the many possible goods and services it will produce. Whether to produce more of food, clothing, housing or to have more of luxury goods. Whether to have more agricultural goods or to have industrial products and services. Whether to use more resources in education and health or to use more resources in building military services. Whether to have more of basic education or more of higher education. Whether to have more of consumption goods or to have investment goods (like machine) which will boost production and consumption tomorrow.

### How are these goods produced?

Every society has to decide on how much of which of the resources to use in the production of each of the different goods and services. Whether to use more labour or more machines. Which of the available technologies to adopt in the production of each of the goods?

### For whom are these goods produced?

Who gets how much of the goods that are produced in the economy? How should the produce of the economy be distributed among the individuals in the economy? Who gets more and who gets less? Whether or not to ensure a minimum amount of consumption for everyone in the economy. Whether or not elementary education and basic health services should be available freely for everyone in the economy.

Thus, every economy faces the problem of allocating the scarce resources to the production of different possible goods and services and of distributing the produced goods and services among the individuals within the economy. *The allocation of scarce resources and the distribution of the final goods and services are the central problems of any economy.*

### Production Possibility Frontier

Just as individuals face scarcity of resources, the resources of an economy as a whole are always limited in comparison to what the people in the economy collectively want to have. The scarce resources have alternative usages and every society has to decide on how much of each of the resources to use in the production of different goods and services. In other words, every society has to determine how to allocate its scarce resources to different goods and services.

An allocation of the scarce resource of the economy gives rise to a particular combination of different goods and services. Given the total amount of resources, it is possible to allocate the resources in many different ways and, thereby achieving different mixes of all possible goods and services. The collection of all possible combinations of the goods and services that can be produced from a given amount of resources and a given stock of technological knowledge is called the **production possibility set** of the economy.

### EXAMPLE 1

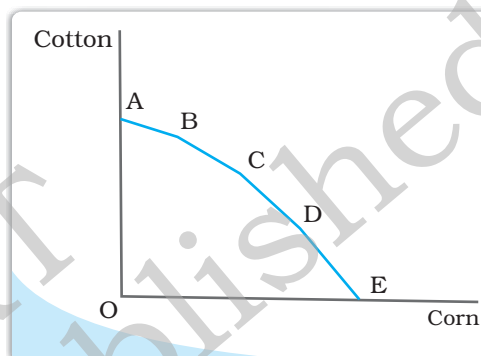
Consider an economy which can produce corn or cotton by using its resources. Table 1.1 gives some of the combinations of corn and cotton that the economy can produce.

**Table 1.1: Production Possibilities**

Possibilities	Corn	Cotton
A	0	10
B	1	9
C	2	7
D	3	4
E	4	0

If all the resources are used in the production of corn, the maximum amount of corn that can be produced is 4 units and if all resources are used in the production of cotton, at the most, 10 units of cotton can be produced. The economy can also produce 1 unit of corn and 9 units of cotton or 2 units of corn and 7 units of cotton or 3 units of corn and 4 units of cotton. There can be many other possibilities. The figure illustrates the production possibilities of the economy. Any point on or below the curve represents a combination of corn and cotton that can be produced with the economy's resources. The curve gives the maximum amount of corn that can be produced in the economy for any given amount of cotton and vice-versa. This curve is called the **production possibility frontier**.

The **production possibility frontier** gives the combinations of corn and cotton that can be produced when the resources of the economy are fully utilised. Note that a point lying strictly below the production possibility frontier represents a combination of corn and cotton that will be produced when all or some of the resources are either underemployed or are utilised in a wasteful fashion.



If more of the scarce resources are used in the production of corn, less resources are available for the production of cotton and vice versa. Therefore, if we want to have more of one of the goods, we will have less of the other good. Thus, there is always a cost of having a little more of one good in terms of the amount of the other good that has to be forgone. This is known as the **opportunity cost<sup>a</sup>** of an additional unit of the goods.

Every economy has to choose one of the many possibilities that it has. In other words, one of the central problems of the economy is to choose from one of the many production possibilities.

<sup>a</sup>Note that the concept of opportunity cost is applicable to the individual as well as the society. The concept is very important and is widely used in economics. Because of its importance in economics, sometimes, opportunity cost is also called the economic cost.

### 1.3 ORGANISATION OF ECONOMIC ACTIVITIES

Basic problems can be solved either by the free interaction of the individuals pursuing their own objectives as is done in the market or in a planned manner by some central authority like the government.

#### 1.3.1 The Centrally Planned Economy

In a centrally planned economy, the government or the central authority plans all the important activities in the economy. All important decisions regarding production, exchange and consumption of goods and services are made by the government. The central authority may try to achieve a particular allocation of resources and a consequent distribution of the final combination of goods and services which is thought to be desirable for society as a whole. For example, if it is found that a good or service which is very important for the prosperity and

well-being of the economy as a whole, e.g. education or health service, is not produced in adequate amount by the individuals on their own, the government might try to induce the individuals to produce adequate amount of such a good or service or, alternatively, the government may itself decide to produce the good or service in question. In a different context, if some people in the economy get so little a share of the final mix of goods and services produced in the economy that their survival is at stake, then the central authority may intervene and try to achieve an equitable distribution of the final mix of goods and services.

### 1.3.2 The Market Economy

In contrast to a centrally planned economy, in a **market economy**, all economic activities are organised through the market. A **market**, as studied in economics, is an institution<sup>6</sup> which organises the free interaction of individuals pursuing their respective economic activities. In other words, a market is a set of arrangements where economic agents can freely exchange their endowments or products with each other. It is important to note that the term 'market' as used in economics is quite different from the common sense understanding of a market. In particular, it has nothing as such to do with the marketplace as you might tend to think of. For buying and selling commodities, individuals may or may not meet each other in an actual physical location. Interaction between buyers and sellers can take place in a variety of situations such as a village-chowk or a super bazaar in a city, or alternatively, buyers and sellers can interact with each other through telephone or internet and conduct the exchange of commodities. The arrangements which allow people to buy and sell commodities freely are the defining features of a market.

For the smooth functioning of any system, it is imperative that there is coordination in the activities of the different constituent parts of the system. Otherwise, there can be chaos. You may wonder as to what are the forces which bring the coordination between the activities of millions of isolated individuals in a market system.

In a market system, all goods or services come with a **price** (which is mutually agreed upon by the buyers and sellers) at which the exchanges take place. The price reflects, on an average, the society's valuation of the good or service in question. If the buyers demand more of a certain good, the price of that good will rise. This will send a signal to the producer of that good to the effect that the society as a whole wants more of that good than is currently being produced and the producers of the good, in their turn, are likely to increase their production. In this way, prices of goods and services send important information to all the individuals across the market and help achieve coordination in a market system. Thus, in a market system, the central problems regarding how much and what to produce are solved through the coordination of economic activities brought about by the price signals.

In reality, all economies are mixed economies where some important decisions are taken by the government and the economic activities are by and large conducted through the market. The only difference is in terms of the extent of the role of the government in deciding the course of economic activities. In the United States of America, the role of the government is minimal. The closest example of a centrally planned economy is the Soviet Union for the major part of the twentieth century. In India, since Independence, the government has played a major role in planning economic activities. However,

<sup>6</sup>An institution is usually defined as an organisation with some purpose.



the role of the government in the Indian economy has been reduced considerably in the last couple of decades.

#### 1.4 POSITIVE AND NORMATIVE ECONOMICS

It was mentioned earlier that in principle there are more than one ways of solving the central problems of an economy. These different mechanisms in general are likely to give rise to different solutions to those problems, thereby resulting in different allocations of the resources and also different distributions of the final mix of goods and services produced in the economy. Therefore, it is important to understand which of these alternative mechanisms is more desirable for the economy as a whole. In economics, we try to analyse the different mechanisms and figure out the outcomes which are likely to result under each of these mechanisms. We also try to evaluate the mechanisms by studying how desirable the outcomes resulting from them are. Often a distinction is made between **positive economic analysis** and **normative economic analysis** depending on whether we are trying to figure out how a particular mechanism functions or we are trying to evaluate it. **In positive economic analysis, we study how the different mechanisms function, and in normative economics, we try to understand whether these mechanisms are desirable or not.** However, this distinction between positive and normative economic analysis is not a very sharp one. The positive and the normative issues involved in the study of the central economic problems are very closely related to each other and a proper understanding of one is not possible in isolation to the other.

#### 1.5 MICROECONOMICS AND MACROECONOMICS

Traditionally, the subject matter of economics has been studied under two broad branches: **Microeconomics** and **Macroeconomics**. In microeconomics, we study **the behaviour of individual economic agents in the markets for different goods and services and try to figure out how prices and quantities of goods and services are determined through the interaction of individuals in these markets.** In macroeconomics, on the other hand, we try to **get an understanding of the economy as a whole by focusing our attention on aggregate measures such as total output, employment and aggregate price level.** Here, we are interested in finding out how the levels of these aggregate measures are determined and how the levels of these aggregate measures change over time. Some of the important questions that are studied in microeconomics are as follows: What is the level of total output in the economy? How is the total output determined? How does the total output grow over time? Are the resources of the economy (eg labour) fully employed? What are the reasons behind the unemployment of resources? Why do prices rise? Thus, instead of studying the different markets as is done in microeconomics, in macroeconomics, we try to study the behaviour of aggregate or macro measures of the performance of the economy.

#### 1.6 PLAN OF THE BOOK

This book is meant to introduce you to the basic ideas in microeconomics. In this book, we will focus on the behaviour of the individual consumers and producers of a single commodity and try to analyse how the price and the quantity is determined in the market for a single commodity. In Chapter 2, we

shall study the consumer's behaviour. Chapter 3 deals with basic ideas of production and cost. In Chapter 4, we study the producer's behaviour. In Chapter 5, we shall study how price and quantity is determined in a perfectly competitive market for a commodity. Chapter 6 studies some other forms of market.

## Key Concepts



Consumption	Production	Exchange
Scarcity	Production possibilities	Opportunity cost
Market	Market economy	Centrally planned economy
Mixed economy	Positive analysis	Normative analysis
Microeconomics	Macroeconomics	

## Exercises



1. Discuss the central problems of an economy.
2. What do you mean by the production possibilities of an economy?
3. What is a production possibility frontier?
4. Discuss the subject matter of economics.
5. Distinguish between a centrally planned economy and a market economy.
6. What do you understand by positive economic analysis?
7. What do you understand by normative economic analysis?
8. Distinguish between microeconomics and macroeconomics.