

**INDIAN SCHOOL MUSCAT**  
**DEPARTMENT OF COMMERCE AND HUMANITIES**  
**STATISTICS FOR ECONOMICS**

**Chapter - 1 Statistics for Economics**

**INTRODUCTION**

- Economics is mainly around what *Alfred Marshall* called “*the study of man in the ordinary business of life*”.
- When you buy goods to satisfy your needs or your family needs, you are called a **consumer**.
- When you sell goods to make a profit for yourself you are called a **Seller**.
- When you produce goods, you are called a **Producer**.
- When you are in a job, working for some other person, and you get paid for it, you are called a **Service Holder**.
- When you provide some kind of service to others for a payment), you are called a **Service Provider**.
- In all these cases you will be called **Gainfully Employed in an Economic Activity**.
- **Economic activities are ones** that are undertaken for a monetary gain. This is what economists mean by **Ordinary Business of Life**.
- **Scarcity is the root of all economic** problems. Had there been no scarcity, there would have been no economic problem.
- We face scarcity because the things that satisfy our wants are limited in availability.
- The resources which the producers have are limited and also have alternative uses.
- Alternative uses of resources give rise to the problem of choice between different commodities that can be produced by those resources.

**BASIC ECONOMIC ACTIVITIES**

- Economics involves the study of man engaged in economic activities of production, consumption and distribution.
- **Consumption** is how the consumer decides, given his income and many alternative goods to choose from, what to buy when he knows the prices.
- **Production** is to know how the producer, similarly, chooses what to produce for the market when he knows the costs and prices.

- **Distribution** is to know how the national income or the total income arising from what has been produced in the country (Gross Domestic Product or GDP) is distributed through rent, wages, interest and profits
- Besides these three conventional divisions of the study of Economics about which we want to know all the facts, modern economics has to include some of the basic problems facing the country

### **DEFINITION OF ECONOMICS**

*“Economics is the study of how people and society choose to employ scarce resources that could have alternative uses in order to produce various commodities that satisfy their wants and to distribute them for consumption among various persons and groups in society.”*

### **STATISTICS IN ECONOMICS**

- Studies in economics require economic facts in terms of numbers. Such economic facts are also known as **Data**.
- The purpose of collecting data about these economic problems is to understand and explain these problems in terms of the various causes behind them or analyse the economic problems.
- The analysis helps solve an economic problem. In Economics, such measures are known as **policies**.

### **WHAT IS STATISTICS?**

- The word ‘Statistics’ is used in two distinct senses: singular and plural.
- In the plural sense, **‘statistics’ means ‘numerical facts systematically collected’**
- In singular sense it means the **‘science of collecting, classifying and using statistics’ or a ‘statistical fact’**.
- By data or statistics, we mean both quantitative and qualitative facts that are used in Economics.

### **QUANTITATIVE V/S QUALITATIVE FACTS**

- A statement in Economics like “the production of rice in India has increased from 39.58 million tonnes in 1974–75 to 58.64 million tonnes in 1984–85”, is a quantitative fact.

- Qualitative data are information that describes attributes of a single person or a group of persons that is important to record as accurately as possible even though they cannot be measured in quantitative terms. E.g. gender, nationality of a person.

### **STATISTICAL METHODS**

- Statistical methods involve collection and organisation of data. The collected data is then presented in tabular, diagrammatic and graphic forms.
- The data, then, is summarised by calculating various numerical indices such as mean, variance, standard deviation, etc. that represent the broad characteristics of the collected set of information.

### **WHAT STATISTICS DOES?**

1. Statistics is an indispensable tool for an economist that helps him to understand an economic problem.
2. It enables an economist to present economic facts in a precise and definite form that helps in proper comprehension of what is stated.
3. Statistics also helps in condensing the mass of data into a few numerical measures (such as mean, variance etc.) These numerical measures help summarise data.
4. Statistics is used in finding relationships between different economic factors. An economist may be interested in finding out what happens to the demand for a commodity when its price increases or decreases
5. An economist might be interested in predicting the changes in one economic factor due to the changes in another factor. Such an exercise cannot be undertaken without the knowledge of Statistics.
6. Formulation of plans and policies requires the knowledge of future trends. For example, an consumption of past years. Statistical methods help formulate appropriate economic policies that solve economic problems.
7. In economic policies, Statistical data plays a vital role in decision making.

### **CONCLUSION**

Today, we increasingly use Statistics to analyse serious economic problems such as rising prices, growing population, unemployment, poverty etc., to find measures that can solve such problems. Further it also helps evaluate the impact of such policies in solving the economic problems.