

Meaning and Definition of Statistics

Meaning:

“Statistics”, that a word is often used, has been derived from the Latin word ‘Status’ that means a group of numbers or figures; those represent some information of our human interest.

We find statistics in everyday life, such as in books or other information papers or TV or newspapers.

Although, in the beginning it was used by Kings only for collecting information about states and other information which was needed about their people, their number, revenue of the state etc.

But now-a-days due to its pervading nature, its scope has increased and widened. It is now used in almost in all the fields of human knowledge and skills like Business, Commerce, Economics, Social Sciences, Politics, Planning, Medicine and other sciences, Physical as well as Natural.

Definition:

The term ‘Statistics’ has been defined in two senses, i.e. in Singular and in Plural sense.

“Statistics has two meanings, as in plural sense and in singular sense”.

A. In the Plural Sense:

“Statistics are numerical statements of facts in any department of enquiry placed in relation to each other.” —A.L. Bowley

B. In the Singular Sense:

“Statistics refers to the body of technique or methodology, which has been developed for the collection, presentation and analysis of quantitative data and for the use of such data in decision making.” —Nettor and Washerman

“Statistics may rightly be called the science of averages.” —Bowleg

“Statistics may be defined as the collection, presentation, analysis, and interpretation of numerical data.” —Croxtton and Cowden

Stages of Investigations:

1. Collection of Data:

It is the first stage of investigation and is regarding collection of data. It is determined that which method of collection is needed in this problem and then data are collected.

2. Organisation of Data:

It is second stage. The data are simplified and made comparative and are classified according to time and place.

3. Presentation of Data:

In this third stage, organised data are made simple and attractive. These are presented in the form of tables diagrams and graphs.

4. Analysis of Data:

Forth stage of investigation is analysis. To get correct results, analysis is necessary. It is often undertaken using Measures of central tendencies, Measures of dispersion, correlation, regression and interpolation etc.

5. Interpretation of Data:

In this last stage, conclusions are enacted. Use of comparisons is made. On this basis, forecasting is made.

Distinction between the two types of definition

Statistics as Data (In Plural Sense)	Statistics as Methods (In Singlar Sense)
It is plural.	It is singular.
It refers to series of data.	It refers to statistical methods.
It may be of primary or secondary nature.	It is always of scientific nature.
It is in the form of raw material	It is in the form of tools applied to process the materials.

Some Modern Definitions:

From the above two senses of statistics, modern definitions have emerged as given below:

“Statistics is a body of methods for making wise decisions on the face of uncertainty.” —Wallis and Roberts

“Statistics is a body of methods for obtaining and analyzing numerical data in order to make better decisions in an uncertain world.” —Edward N. Dubois

So, from above definitions we find that science of statistics also includes the methods of collecting, organising, presenting, analysing and interpreting numerical facts and decisions are taken on their basis.

The most proper definition of statistics can be given as following after analysing the various definitions of statistics.

“Statistics in the plural sense are numerical statements of facts capable of some meaningful analysis and interpretation, and in singular sense, it relates to the collection, classification, presentation and interpretation of numerical data.”