

Definition of Statistics

Originally the word 'statistics' was used for the collection of data concerning states both historical and descriptive. Now it has acquired a much wider meaning and is used for all types of data and methods for the analysis of the data. Thus in recent times it is used in two senses, namely, singular and plural.

Statistics as Statistical Methods (Singular Sense):

In this category of definitions Statistics is in singular sense. In singular sense statistics is used to describe the principles and methods which are employed in collection, presentation, analysis and interpretation of data. These devices help to simplify the complex data and make it possible for a common man to understand it without much difficulty.

Simple and comprehensive meaning of statistics, in singular sense, can be that a device which is employed for the purpose of collection, classification, presentation, comparison and interpretation of data. The purpose is to make the data simple, lucid and easy to be understood by a common man of mediocre intelligence

Statistics as Numerical Data (Plural Sense):

In plural sense, statistics is considered as a numerical description of quantitative aspect of things. However, we give below some selected definitions of statistics as numerical data.

The definition of Statistics as given by Horace Secrist is most comprehensive and clearly points out certain essential characteristics which must be possessed by numerical data, in order to be called 'Statistics'.

Scope and importance of Statistics:

1. Statistics and planning: Statistics is indispensable into planning in the modern age which is termed as "the age of planning". Almost all over the world the govt. are re-storing to planning for economic development.
2. Statistics and economics: Statistical data and techniques of statistical analysis have to immensely useful involving economical problem. Such as wages, price, time series analysis, demand analysis.

3. Statistics and business: Statistics is an irresponsible tool of production control. Business executives are relying more and more on statistical techniques for studying the wants and desires of the valued customers.

4. Statistics and industry: In industry statistics is widely used in quality control. In production engineering to find out whether the product is conforming to the specifications or not. Statistical tools, such as inspection plan, control chart etc.

5. Statistics and mathematics: Statistics are intimately related recent advancements in statistical technique are the outcome of wide applications of mathematics.

6. Statistics and modern science: In medical science the statistical tools for collection, presentation and analysis of observed facts relating to causes and incidence of diseases and the result of application various drugs and medicine are of great importance.

7. Statistics, psychology and education: In education and psychology statistics has found wide application such as, determining or to determine the reliability and validity of a test, factor analysis etc.

8. Statistics and war: In war the theory of decision function can be a great assistance to the military and personal to plan “maximum destruction with minimum effort.”