

## **SAMPLE SIZE**

It is difficult to decide the size of the sample. It is the one of the problems confronted by the researcher. If the sample is larger than what is required, it will increase cost and time of the researcher. If a small sample is selected, the result obtained may be relatively less accurate. So the size of the sample may be optimized size. An optimum sample may be defined as that size of sample, which fulfills the requirements of efficiency, representativeness, reliability, and flexibility. A lot of factors have to be considered while deciding the size of the sample. Practical issues such as time and other resources will be influential but there are other more theoretical considerations.

### **DETERMINANTS OF OPTIMUM SAMPLE SIZE**

- 1. Nature of the population**
- 2. Complexity of tabulation**
- 3. Problems related with collection of data**
- 4. Type of sampling**
- 5. Basic information**
- 6. Degree of accuracy required for the study**

### **PRINCIPLES OF SAMPLING**

There are two important principles upon which the theory sampling is based.

1. The Law of Statistical Regularity :- A reasonably large sample selected at random from a large population will be on average representative of the characteristics of that population. This law is derived from the mathematical theory of probability.
2. The Law of the Inertia of Large Numbers :- large groups of data shows a higher degree of stability than a smaller ones; there is a tendency for variation in the data to be cancelled out by each other.

### **Criteria for Selecting Sampling Procedure**

The quality of research, the validity of its findings, among other things depends upon the suitability of the sampling design selected for study. The researcher considers a number of factors while selecting a sampling plan. They are

1. The nature of the problem
2. The goal of researcher
3. The geographical area covered by survey.
4. The size of population under study.
5. The extend of facts available about the population.
6. Availability of funds
7. The available time for study.
8. Desired reliability of the results