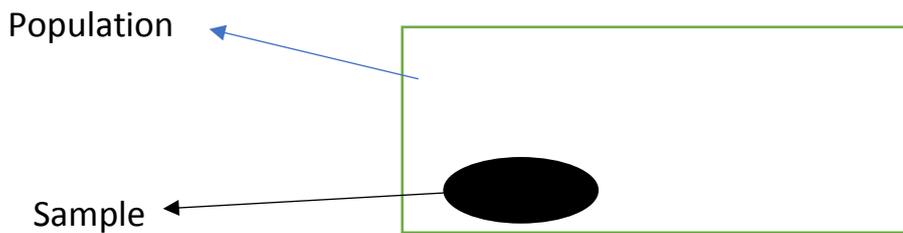


Topic – CONCEPT OF SAMPLING, SAMPLE DESIGN & PURPOSE OF SAMPLING.

Population: Total of items about which information is desired. It can be classified into two categories- finite and infinite. The population is said to be finite if it consists of a fixed number of elements so that it is possible to enumerate in its totality.



Sample: It is part of the population that represents the characteristics of the population.

Sampling: It is the process of selecting the sample for estimating the population characteristics. In other words, it is the process of obtaining information about an entire population by examining only a part of it.

Sampling Unit: Elementary units or group of such units which besides being clearly defined, identifiable and observable, are convenient for purpose of sampling are called sampling units. For instance, in a family budget enquiry, usually a family is considered as the sampling unit since it is found to be convenient for sampling and for ascertaining the required information. In a crop survey, a farm or a group of farms owned or operated by a household may be considered as the sampling unit.

Sampling Frame: A list containing all sampling units is known as sampling frame. Sampling frame consists of a list of items from which the sample is to be drawn.

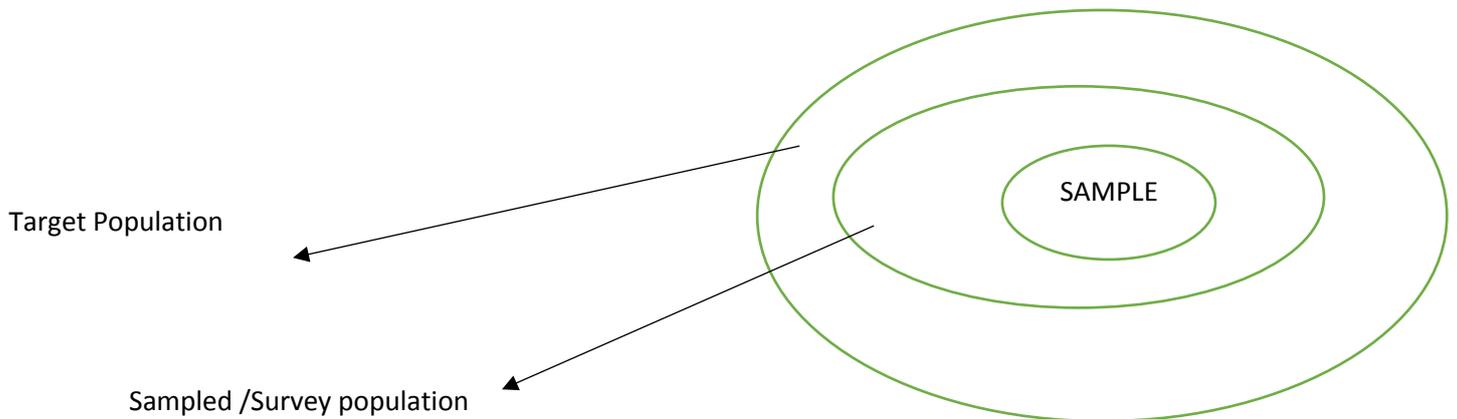
Sample Survey: An investigation in which elaborate information is collected on a sample basis is known as sample survey.

Statistic: Characteristics of the sample. For example, sample Mean, proportion, etc.

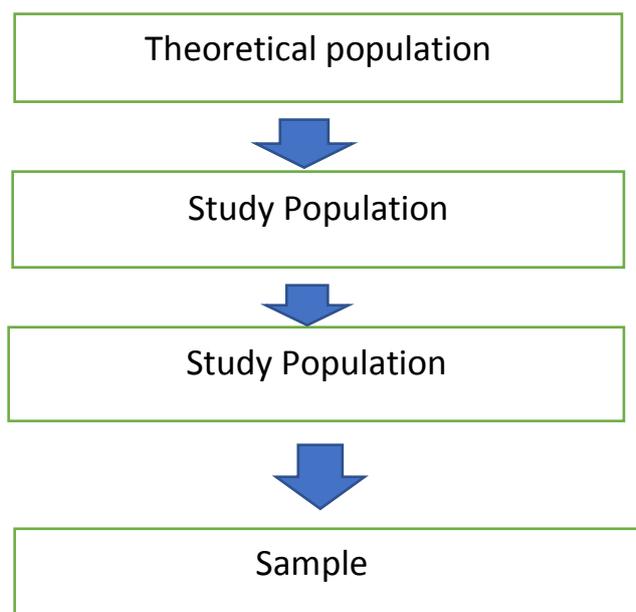
Parameter: Characteristics of the population. For example, population Mean, proportion, etc.

Target Population: A target population is the entire group about which information is desired and conclusion is made.

Sampled Population: The population, which we actually sample, is the sampled population. It is also called survey population.



Sample Design: Sample design refers to the plans and methods to be followed in selecting sample from the target population and the estimation technique formula for computing the sample statistics. These statistics are the estimates used to infer the population parameters.



PURPOSE OF SAMPLING –

The basic purpose of sampling is to provide an estimate of the population parameter and to test the hypothesis.

1. to Save time and money.
2. Enable collection of comprehensive data.
3. Enable more accurate measurement as it conducted by trained and experienced investigators.
4. Sampling remains the only way when population contains infinitely many members.
5. In certain situation, sampling is the only way of data collection. For example, in testing the pathological status of blood, boiling status of rice, etc. It provides a valid estimation of sampling error.