## **Quadrant II - Notes**

Paper Code: ECD113

Module Name: Different types of samples

Module No: 15

The different types of sampling techniques are used for drawing a sample. These may be classified into two categories

- i) probability sampling and
- ii) Non-probability sampling

In Probability sampling each unit has some definite pre-assigned probability of being chosen in the sample.

Non-probability sampling or judgement sampling is based on the personal judgement. Under this method a desired number of sample units are selected deliberately or purposely depending upon the object of enquiry so that only the important items representing the true characteristics of the population are included in the sample.

Probability sampling is of the following types:

- 1. Simple random sampling
- 2. Stratified random sampling
- 3. Systematic random sampling
- 4. Cluster sampling
- 5. Multi-stage sampling

Non-probability sampling may be classified into:

- 1. Convenience or accidental sampling
- 2. Purposive or judgement sampling
- 3. Quota sampling
- 4. Snow-ball sampling.

## **Probability sampling**

 Simple random sampling: A simple random is defined as one in which each element of the population has an equal and independent chance of being selected. Simple random sampling can be done in two different ways i.e 'with replacement' and 'without replacement'. A simple random sample can be drawn through either of the two procedures i.e through lottery method or through random number tables.

2. Stratified random sampling: In this method, the population is sub-divided into homogenous groups or strata and from each stratum, random sample is drawn. Example students of the college can be divided into strata on the basis of gender, courses offered, age etc.

3. Systematic sampling: It is a very versatile and simple form of probability sampling. In this method every n<sup>th</sup> item within a defined population is selected in the sample. As the interval between sample units is fixed, the method is also known as fixed interval method.

4. Cluster sampling: In this method, groups of elements that are heterogeneous in nature within group are chosen randomly. Unlike stratified sampling where groups are homogenous and few elements are randomly chosen from each group, in cluster sampling the group with intra group heterogeneity are developed and all the elements within the group become a part of the sample.

5.Multi-stage sampling: The method is generally used in selecting a sample from a very large area. As the name suggests multi-stage sampling refers to a sampling technique which is carried out in various stages. At each stage there is random selection and the size of the sample may be proportional or disproportional depending on the size and character of variations based on the purpose of enquiry.

## Non-probability sampling

1. Convenience sampling: In this the researcher has the freedom of choosing any respondent based on his convenience. Respondents become a part of

the sample because they happen to be at the right place and at the right time.

2. Judgement sampling: It is a kind of purposive sampling where those respondents are deliberately made a part of the sample, by virtue of their position, knowledge or any other criteria, which meet research purpose. In this case the researcher uses his own judgement or expertise to decide who would be a part of the sample.

3. Quota sampling: This method is used when a researcher needs certain groups to be adequately represented. In this groups are created which are homogeneous with respect to certain characteristics within group.The researcher while drawing the sample, using this method, tries to ensure that the composition of the sample is the same as the composition of population with respect to the characteristics of interest.

## 4. Snow ball sampling

In this a set of respondents are selected initially and interviewed. After this respondent are asked to list the names of other people who in their opinion are a part of the target population. It has been seen that people referred by the respondents have greater demographic and psychographic characteristics similar to them than they would occur by chance.