HC - 07. 3RD SEMESTER

SAMPLING

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MEANING

- A survey is conducted either by ***Census Method or Sampling Method***.
- When the whole area or population is contacted it is known as ***Census Method***.
- On the other hand when a small group is selected as a representative of the whole mass it is known as ***Sampling Method.*** The basis of sampling depends on the following factors - (a)Underlying homogeneity amidst complexity (b) Possibility of representative selection (c) Absolute accuracy is not essential.
- TYPES OF SAMPLING — (***a) Random Sampling, (b) Purposive Sampling, (c) Stratified Sampling, (d) Quota Sampling, (e) Multi Stage Sampling, (f) Convenience Sampling, (g) Self Selected Sample***

ADVANTAGES OF SAMPLING

- Saving of time.
- Saving of money.
- Detailed study - The smaller number of cases in the sample permits a minute observation and detailed study.
- Accuracy of result - As sample service study a small portion of the population it may lead to inaccuracy, this is termed as sampling error. (Sampling error = Frame Error + Chance Error + Response Error) Techniques have been successfully evolved to calculate the sampling error by means of statistical methods.
- Administrative Convenience.
- Case where it is impossible to use census method.

DISADVANTAGES OF SAMPLING

- Chances of bias.
- Difficulties of a representative sample.
- Need for a specialised knowledge.
- Difficulties in sticking to sample - The samples maybe widely dispersed, some may refuse to cooperate and some maybe inaccessible. This may lead to the replacement of some samples.
- Impossibility of sampling - If the universe is heterogeneous then sampling is impossible.

RANDOM SAMPLING

- **Random Sampling** is also called proportionate sampling because each class of item is in the same proportion in the sample as in the universe. It is suitable for homogeneous and comparatively large groups.
- When the universe is composed of differing groups of varied sizes this method cannot be successfully used.
- METHODS OF DRAWING RANDOM SAMPLE —:
- A. **LOTTERY METHOD** - In this system the numbers or names of various units of the universe are written on chits, capsules or balls. They are thoroughly mixed and required number of chits are drawn.
- B. **SELECTION FROM SEQUENTIAL LIST** - The names are first arranged serially according to some particular order like alphabetical, geographical or simply serial. Then out of the list every 10th or any other number is may be taken up. For eg the selection may begin from 7 and continue like this - 17, 27, 37 and so on.

TYPES OF SAMPLING

- C. **GRID SYSTEM** - It is used for selecting a sample of area. According to this method a map of an entire area is prepared. Then a screen with squares is also made. Some squares are selected at random. The screen is then placed on the map and the areas falling within the selected squares are taken as samples.

- 2- **PURPOSIVE SAMPLING** - When the researcher deliberately selects certain units for the study from the universe it is known as purposive selection.

- 3- **STRATIFIED SAMPLING** - It is a combination of both random sampling and purposive selection. The universe is first divided into a number of strata or groups. Then from each group certain number of items are taken on random basis. Thus in the selection of strata we use purposive selection method. But in selecting actual units from each stratum random method is used.

TYPES OF SAMPLING

- 4- **QUOTA SAMPLING** - The universe is first divided into different strata. Then the number to be selected from each stratum is decided . This number is known as quota.
- 5- **MULTI-STAGE SAMPLING** - This method is used when samples are selected from a very large area. The procedure adopted here are — Divide the whole city into homogeneous regions. Select two primary sample areas from each region on random sampling method. Select some houses from each block cluster on the basis of random sampling.
- 6- **CONVENIENCE SAMPLING** - It is generally known as careless, unsystematic, accidental or opportunist sampling. The samples are chosen according to the convenience of the sampler. The convenience may be in respect of availability of source list, accessibility of the units etc. Convenience Sampling is used when the universe is not clearly defined, sampling unit is not clear and a complete source list is not available.

TYPES OF SAMPLING

- **SELF SELECTED SAMPLE** - Sometimes a sample is not actually selected but people themselves opt to be included in a sample. For example an enquiry has to be made about people's liking for a particular radio programme. An announcement to this effect is made on radio. Those who care to reply form a part of the sample.
- **SNOWBALL SAMPLING** - When the researcher does not know the best people to study because of the unfamiliarity of the topic or the complexity of the events, she therefore asks the participants during interviews to suggest other individuals to be sampled.

PROBABILITY/NONPROBABILITY SAMPLING

- **Random Sampling** comes under **Probability Sampling.**

- **Non-probability Sampling** comprise — **Convenience Sampling , Quota Sampling , Purposive Sampling , Snowball Sampling and Self selection Sampling.**