

## 2.1. SAMPLING

### 2.1.1. Introduction

Sampling is a process in which the fixed numbers of observations are taken randomly from a larger population. A technique which is fundamental for behavioural research is known as sampling and without using it, research work is not possible. It is impracticable and impossible to study the whole population due to practical limitations of cost, time and other factors that are indispensable and operative in studying the whole population. For the sole reason of making the research findings economical and accurate, the concept of sampling has been introduced.

**For example**, for taking decision about to purchase or not to purchase the fruits, a fruit merchant inspects randomly only a few of them rather than examining each and every fruit. The important objective of sampling is to obtain maximum information of the population under study using minimum of money, labour and time.

A definite plan to obtain a sample from the sampling frame is **sample design**. The method or technique which is adopted by the researcher in selecting the units of sampling from the population is called sampling design.

**According to Cochran**, "In every branch of science we lack the resources, to study more than a fragment of the phenomena that might advance our knowledge". In this definition a 'fragment' is the sample and 'phenomena' is the 'population'.

**According to Davis S. Fox**, "In the social science, it is not possible to collect data from every respondent relevant to our study but only from some fractional part is called sampling".

The basis for selecting a sample survey is the framework or roadmap which is called sample design and it affects other important aspects of the survey. For obtaining some type of relevant information using survey, researchers execute it for some population, or universe. The sampling frame must be defined in such a way that it represents the population of interest out of which a sample is to be drawn at random. This sampling frame should be either identical to the population or may be a part of it. The sampling frame can be indirectly related to the population subject to some under coverage (e.g., the population is preschool children and the frame is a listing of preschools). The design of the sample may be simple or complex which provides the fundamental plan and methodology for the selection of the sample.