

Chapter 6

6. Methods of Data Collecting

6.1 Time Dimension in Survey

Types of surveys are classification according to the **time** of data collection:

- Longitudinal survey
- Cross –sectional survey

Longitudinal survey: It gather information at different points in time in order to **study changes over extended period of time**.

Three different designs are used in longitudinal survey: **panel studies**, **trend studies**, and **cohort studies**.

Panel studies: are studies in which the **same subjects** are surveyed at **different times** over an extended period.

The investigator observes exactly the same people, group organization across time periods.

Trend studies: Are studies in which **different people** from the same general population are surveyed at **different times**.

Cohort study: Is a study in which a specific population is followed over a length of time.

Cross –sectional surveys: Are studies in which a cross section (sample) of a population at a **single point in time**.

- It is usually the simplest and least costly alternative. Its disadvantage is that it cannot capture social process or change.

6.2 Data Gathering Techniques

What are the **major points determine** the **method of data collection**?

- ✓ Objective of the survey
- ✓ The nature of the items of information
- ✓ The operational feasibility and
- ✓ Cost

There are **three** different **methods of collecting data**. These are:

- ✓ Extraction of data from records
- ✓ Self –administered questionnaire
- ✓ Direct investigation

6.1.2 Extraction of data from records

It is usually possible to answer some of the questions survey is intended to cover from available data (**secondary data**).

For example, a mass of information about the population studied by social surveys is available in historical documents, statistics reports, records of institutions and other sources.

- Information from records may serve as complement for analysis and can be used as a base for preliminary investigation.
- Therefore, it is advisable to examine exhaustively what is available in records before launching any surveys.

6.2.2 Self – administered questionnaire

Mail and self –administered questionnaire is a method of data collection in which researchers can give questionnaires with instructions directly to respondents or mail them to respondents who read instructions and questions, then record their answers and give it back or return it by mail again to data collecting agency.

This type of survey has many **advantages**, which include:

- **Cheapest** and can be conducted by a **single** researcher
- Researcher can send questionnaires to a wide **geographical area**
- The respondent can complete the questionnaire when it is **convenient** and can check personal records if necessary
- Mail questionnaires offer **ambiguity** and **avoid** interviewer bias.
- They are very effective

The **disadvantages** of this method may include:

- ✓ **Low** response rate
- ✓ Researcher cannot **control** the conditions
- ✓ Researchers cannot **visually observe** the respondent's reactions to questions
- ✓ Mail questionnaire is not suitable for **illiterate community**

- Therefore, the use of this method is limited to **predominantly literate society**, as the method requires a clear understanding of the survey concepts through reading and writing.

6.2.3 Direct investigation

Measurement or **observation** of the subject and **interviewing** a respondent and obtaining the report on the matter are two approaches, which are by no means exclusive.

Measurements or Observations

Information on a topic can be gathered by **measurement if it is physically** measurable or observable.

Common types of data collected by observation and measurement includes:

- Land area measurement
- Crop output measurement
- Animal weight gain
- Instrument recordings or readings (e.g. rainfall, temperature, etc)
- Physical measurement or examination of people
- Counts of human, animal and plant populations
- etc

Interviewing (face- to – face, telephone)

- Face-to-face interview is a social process that involves the interviewer and respondent.
- It is the process in which the interviewer meets the respondents, explains the purpose of the study, forwards a set of questions and records the answers.

Some advantages of face –to face interviews:

- highest response rate and permit the longest questionnaires.
- It control the sequence of questions and can use some probes
- Respondent is likely to answer all the questions alone
- It can observe the surroundings and can use nonverbal communication and visual aids.
- Handle complex questions

Disadvantages

- Cost is high- the training, travel, supervision, and personnel costs for interviews can be high.
- Interviewer bias is also high in this method
- The appearance, tone of voice, question wording, and so forth of the interview may affect the respondent.

Telephone interviews

Advantages

- lower cost and faster completion with relatively high response rate
- less interviewer bias and less social desirability bias than with personal interviews
- Respondent anonymity

Disadvantages

- less opportunity for establishing **rapport** with the respondent than in face-to –face situation
- Survey exclusion