

9.9.4 Data Collection

The methods of obtaining evidence must be appropriate to the kinds of information being collected. Questions must be worded carefully to obtain reliable unbiased data. A pre-test of questionnaire is most desirable. Some important methods of data collection are discussed here.

a) Mail Questionnaire

The evaluator develops a questionnaire. It is then field tested for its validity and reliability. Then it is mailed to the members of the selected sample along with a self addressed stamped envelop. It has the advantage of being a reasonably responsive method of data collection. However, it has the disadvantage that questions may not be understood as there is no opportunity to explain theme, returns are fewer, and follow-up is necessary. It is impracticable in situations where people are illiterate or where mail service is unreliable.

b) Face to Face Individual Interviews

The evaluator develops an interview scheduled. It is then field tested for its validity and reliability. Interviews are conducted in individual settings. This method allows the evaluator/interviewer to explain the questions and to keep the interest of the respondents for a considerable period of time. Reasons for resistance may be discovered and overcome. The personal contact offers the interviewer opportunities to establish friendly relations, observe personal reactions, and to secure fairly complete answers. However it has the disadvantage that it is relatively expensive, and the interviewer's bias may become a part of collected information.

c) **Telephone Interviews**

In this method the evaluator/interviewer interviews respondents through telephone. In advanced countries the use of telephone in interview studies has greatly increased in recent years. It has many advantages. Subjects from a much broad population can be selected. It is relatively less expensive method. However, it has many disadvantages such as many people do not have telephone facilities. Limited information may be found through telephones.

d) **Focus Group Interviews**

A focus group interview is an interview with a small group of people on specific topic. The participants are generally a homogeneous group of 6-8 people who are asked to reflect the questions asked by the interviewer. They hear each other's responses and make additional comments. The focus in this interview is getting high-quality data in a social context when people can consider their own views in the content of the views of others. Focus group interviews is considered very efficient qualitative data collection technique.

e) **Key-Informant Interview**

This is a kind of ethnographic data collection technique. The key informants are people having special knowledge or perceptions that are not otherwise available to the evaluator. They have generally more knowledge, better communication skills, or perspectives which different from other people.

f) **Observation**

The method requires keenly observing and describing the evaluation object. The purpose of observational data is to describe the setting that was observed, the activities that took place in that setting, the people who participated in those activities, and the meanings of what was observed from the perspective

of those observed. It has the advantage that the first hand information may be obtained through this methods. The disadvantage is that it requires sufficient amount of time and money to train observers.

g) Delphi Technique

In this method a panel of selected experts responds independently to a set of questions. A follow-up report to the panel summarizes responses using the mean, median, and range as descriptive statistics for the responses to each original question. Each member of the panel receives a reminder of how he responded to the original questions. He is asked to compare his first response to the panel summary and revise any response if he desires. If his second response is outside the inter quartile range, he is asked to justify his deviation from the panels majority judgement. After three or four rounds the panel members are asked to revise their responds, on last time, given the results and agreements yielded by the previous rounds. This method is generally used to find out the group consensus.

h) Checklists

Checklists are often used in order to enable people to make one or more choices from a list of statements regarding a problem or an idea. Usually a statement of the problem is made followed by a list of several possible answers from which a choice may be made.

i) Rating scales

In rating scales the members of the sample choose, among various degrees of opinion, a feeling or interest about a problem or idea. Descriptive words such as "good", "average", "poor" and numerical ratings should be defined in terms of characteristics to be measured. Following is an example of a rating scale. In a doctoral research study extension workers

were asked to assess their competencies according to the following scale
 Level of competency possessed. Level of Importance of competency

Very Low	Low	Avg	High	Very High	Very Low	Low	Avg	High	Very High
1	2	3	4	5	1	2	3	4	5

j) Case studies

There are studies of a limited number of problems or situations which are valuable for providing concrete information on problems or solutions, and on sequences of events leading to problem solution. They are useful in testing approaches to a specific type of problem. However, they do not provide information for general conclusions and require a great deal of time for observing, requiring facts and preparing reports. Relatively few cases can be observed and reported.

k) Q-Sort

The Q-sort technique requires following steps.

- Place unambiguous statements of needs or objectives on cards, one to a card. Theoretically, at least 75 but no more than 140 items should be sorted.
- Shuffle or randomly order the cards and give them to someone to sort. The same random order should be given to each person.
- Sort the cards into some predetermined distribution. Usually 7 to 13 piles of cards are used, but this can be modified, depending on the needs of the investigator. For example, if 80 items were to be sorted into a somewhat normal distribution, the instruction might be to sort the cards into 9 piles, with the left-most pile representing

most valuable needs or objectives and the right-most pile representing least valuable needs or objectives, and the number in each pile set as follows:

4 6 10 12 16 12 10 6 4

- Collect the cards as sorted by the person and assign ranks to the cards in each pile (for example, a value of “1” to cards in the left-most pile and “10” to cards in the right-most pile).
- Calculate desired statistics on resultant data.

8.9.5 Data Analysis

Evaluation data may be analyzed manually using tally sheet method or through computer software such as SPSS, Marital, Ethnography etc.

9.10 Evaluation reporting

After conducting an evaluation, it is often desirable to document it in the form of a report. An evaluation report needs to be concise, non-technical, easy to read and understand. It is always good to prepare an outline of the report to work with. It does not mean to chalk out a detailed outline and may not necessarily be in written form. But to have a sketch in mind is always useful and helpful to work in order and avoid repetition and guard against omissions. An evaluation written report be organized as followed:

9.10.1 Title

All evaluation reports bear a title. Normally, a separate title page is set-up followed by the report. The name of author or the agency conducting evaluation is also mentioned on the title page.

9.10.2 Table of contents

It can be omitted if the report is short. Lengthy reports need a table of contents. It helps to locate the chapters or sections in which the reader may be more interested.