

Sources of Information

Unit 3 Contents

	Page
Unit introduction	1
Unit learning outcomes	1
Sources of information	2
Primary sources	2
Secondary sources	2
Methods of collecting primary data	5
Direct personal interviews	5
Indirect oral interviews	6
Mailed questionnaire	6
Information from correspondents	6
Methods of collecting secondary data	7
Published sources	7
Unpublished sources	8
Precautions in the use of primary data	8
Precautions in the use of secondary data	10
Choice between primary and secondary data	13
Unit summary	14
Answers to self-help questions	15

New HRD Module on Action Research

Unit 3: Sources of Information

Unit introduction

In this unit, you will learn about primary and secondary data, the main sources of information; methods of collecting primary data - direct personal interviews, indirect oral interviews, mailed questionnaire and information correspondents method; methods of collecting secondary data - published and unpublished sources. You will also learn precautions in the use of primary and secondary data and also the choice between two types of data.

Unit learning outcomes

When you have worked through this unit, you should be able to :

- distinguish between primary and secondary data
- methods of collecting primary data
- methods of collecting secondary data
- precaution to be taken in collecting primary and secondary data
- choice between primary and secondary data.

Sources of information

Once the purpose of survey has been clearly defined, the next problem is that of obtaining the necessary data from suitable sources. For example: to study the growth of steel production in UK since 1980, it is necessary to obtain the actual production figures for all years 1980 till date. There are two alternatives here:

1. Either an original investigation may be undertaken; or
2. Data gathered by some other agencies may be utilized.

Now the data may be collected from two broad sources i.e. primary source and secondary source.

Primary sources

Data collected primarily for the purpose of the given enquiry is called primary data. This can be collected by the researchers, either by themselves or through some agencies set up for the purpose, directly from the field of enquiry. It goes without saying that this type of data may be used with greater confidence, because the enquirers will themselves decide upon the coverage of the data and the definitions to be used and, as such, will have a measure of control on the reliability of the data.

Secondary sources

Secondary data are those that have already been collected by others and which are usually available

in journals, magazines or research publications. For example: Government departments collect data on diverse topics such as number of births, deaths, population, sex-ratio, number of workers and their wages as a matter of routine and as an essential basis of administration. Private agencies like banks and industrial concerns regularly compile figures on their assets and liabilities. In making use of secondary data, the enquirer has to be particularly careful about the nature of the data – their coverage, the definition on which they are based and their degree of reliability.



Self-help question 3.1

Consider the following statements about collection of data. Specify whether they are from primary sources or secondary sources. Tick mark your answer in the appropriate box.

Statements	Primary	Secondary
1. Official publications of the central, state and local Governments.	<input type="checkbox"/>	<input type="checkbox"/>
2. Self-survey about spending habits of students of a particular college.	<input type="checkbox"/>	<input type="checkbox"/>
3. Data collected about the wages of workers of a cloth mill.	<input type="checkbox"/>	<input type="checkbox"/>
4. Reports and publications of trade associations, chambers of commerce, banks, stocks exchanges and trade unions.	<input type="checkbox"/>	<input type="checkbox"/>
5. Clinical survey for 100 patients on a questionnaire by a nurse in a hospital.	<input type="checkbox"/>	<input type="checkbox"/>
6. Publications brought out by research institutes or Individual researcher.	<input type="checkbox"/>	<input type="checkbox"/>
7. Census data.	<input type="checkbox"/>	<input type="checkbox"/>
8. Infant mortality, maternal mortality rates for 1980.	<input type="checkbox"/>	<input type="checkbox"/>
9. Data collected by personal interview.	<input type="checkbox"/>	<input type="checkbox"/>
10. Information from correspondents.	<input type="checkbox"/>	<input type="checkbox"/>

Compare your answers with those provided at the end of the unit.



Activity 3.1

Can primary data be used as secondary data? Give a practical situation, if possible.



Activity 3.2

1. It is proposed to establish a factory in a suitable locality to manufacture spare parts required by the Textile Industry. How will you proceed to collect necessary data and draw a scheme?

2. The State Government proposes to enact legislation to control and abolish street begging in the city of London. Outline the main steps that you would take for planning a survey and draft a suitable schedule to collect the necessary data.

Methods of collecting primary data

Primary data may be obtained by applying any of the following methods:

I. Direct personal interviews

In this method, the investigator personally comes in contact with the persons from whom the information is to be obtained. He asks them

questions pertaining to the enquiry and collects the desired information.

II. Indirect oral interviews

Under this method, the investigator contacts third parties or witness capable of supplying the necessary information. This method is generally adopted in those cases, where the information to be obtained is of a complex nature. For example: in an enquiry regarding addiction to alcohol, people may be reluctant to supply information about their own drinking habits. It would be necessary in that case to get the desired information from liquor dealers, neighbours or friends, etc.

III. Mailed questionnaire method

In this method, a list of questions pertaining to the enquiry is prepared and sent to the various informants by post. The questionnaire contains questions and provides space for the answers, which have to be filled in by the respondents and sent back within a specified time.

IV. Information from correspondents

Under this method, the investigator appoints local agents or correspondents in different places to collect information. These correspondents collect data and transmit the information to the central office where the data is being processed. Newspaper agencies generally adopt this method.

Methods of collecting secondary data

In most of the studies the investigator finds it impractical to collect first-hand information in all related issues and as such makes use of the data collected by others. There is a vast amount of published information from which statistical studies may be made and fresh statistics are constantly in a state of production. The sources of secondary data can broadly be classified under two heads as given below.

I. Published sources

The various sources of published data are:

- (i) Reports and official publication of:
 - (a) International bodies such as the International Monetary Fund (IMF), International Financial Corporation (IFC), United Nations Organisations (UNO) and the World Health Organisation (WHO)
 - (b) Central and State Governments such as the Reports of the Planning Commission, University Grants Commission.
- (ii) Semi official publications of various local bodies such as Municipal Corporations, District Boards and Hospital Records.
- (iii) Private publications such as:
 - (a) Trade and professional bodies e.g. the Federation of Indian Chambers of

Commerce, Institute of Associated Members of Engineers and World Direct Selling Association, etc.

- (b) Financial and economic journals such as Commerce, Capital and Finance.
- (c) Annual reports of Joint Stock Companies.
- (d) Publications brought out by research institutes, independent or autonomous bodies, research scholars, etc.

It should be noted that the publications mentioned above vary with regard to the periodicity of publication. Some are published at regular intervals (yearly, monthly, weekly, etc.) whereas others are ad hoc publications i.e. with no regularity of publication.

II. Unpublished sources

There are various sources of unpublished data such as records maintained by various government and private offices. For example: record of wages of employees in a particular industry, survey records, hospital records, university records of students, etc. Such sources can also be used wherever the need arises.

Precautions in the use of primary data

While editing primary data the following considerations need attention:

- (a) *The data should be complete:* The editor should

see that each schedule and questionnaire is complete in all respects. It may happen that in spite of best efforts a few questions remain unanswered. In such questions, the editor should mark "no report" in the space provided for answers and if the questions are of vital importance then the schedule for questionnaire should be dropped.

- (b) *The data should be consistent:* While editing for consistency, the editor should see that the answers to questions are not contradictory in nature. For example: if amongst others, two questions in a questionnaire are (i) are you married? (ii) state the number of children you have, and reply to the former question is "no" and to the later is "three", there is a contradiction and it should be clarified.
- (c) *The data should be accurate:* The reliability of conclusions depends basically on the correctness of information. If the information supplied is wrong, conclusions can never be valid. If the inaccuracy is due to arithmetical errors, it can be easily detected and corrected. However, if the cause of inaccuracy is faulty information supplied, it may be difficult to verify it, e.g. information relating to income, age etc.
- (d) *The data should be homogeneous:* By homogeneity we mean the condition in which all the questions have been understood in the same sense. For example: as to the question of income, if some information is in terms of monthly income, some annual income or others weekly income, no comparison can be made. The editor

should check up that the information supplied by the various people is homogeneous and uniform.

Precautions in the use of secondary data

“Secondary data should not be accepted at their face value”. The reason is that such data may be erroneous in many respects due to bias, inadequate size of the sample, substitution, errors of definition, arithmetical errors, etc. Hence, before using such data, the investigator should consider the following aspects:

- (a) *Data must be suitable for the purpose of investigation:* The suitability of the data can be judged in the light of the nature and scope of investigation. For example: if the object of enquiry is to study the wage levels including allowances of workers and the data relate to basic wages alone, such data would not be suitable for the immediate purpose.
- (b) *Data must be adequate for the investigation:* Adequacy of the data is to be judged in the light of the requirements of the survey and the geographical area covered by the available data. For example: if our objective is to study the wage rates of the workers in sugar industry in U.K. and if the data cover only estate or province, it would not serve the purpose. The question of adequacy may also be considered in the light of the time period for which the data are available.

- (c) *The data must be reliable:* It is very difficult to find out whether the secondary data is reliable or not. The following tests may be held to determine the reliability of the data:
- i. Was the collecting agency unbiased or did it "have an-axe to grind"?
 - ii. If the enumeration was based on sample, was the sample representative?
 - iii. Were the collectors trained properly?
 - iv. Was the editing, tabulation and analysis carefully and conscientiously done?
 - v. What degree of accuracy was desired by compiler? How far was it achieved?



Self-help question 3.2

Look at the following statements and specify whether they fall under Direct Personal Interview (DPI), Indirect Oral Interview (IOI), Mailed Questionnaire (MQ) or Information from Correspondents (IFC) methods.

1. In an enquiry regarding addiction to alcoholic habits of youth, their friends, relatives or neighbours etc. are contacted.
2. The information was obtained regarding wages of workers of the Delhi Cloth Mills after contacting the workers.
3. Correspondents in different places supply information relating to events such as, accidents, riots, strikes etc. to the Head Office.
4. A request is made to a specific community through a covering letter to fill up the questionnaire and send it back within a specified time.
5. In the construction of wholesale price index numbers, regular information is obtained from correspondents appointed in different areas.

Compare your answers with those provided at the end of the unit.



Activity 3.3

Given below are few suggestions for collection of primary and secondary data. Add few more suggestions which you think are necessary.

1. Personal questions should be avoided.
2. Questions should be simple to understand.
3. Personal questions should be avoided.
4. Questions should be framed in such a way so that they can fulfill the objectives of the study.
5. Questions requiring calculations should be avoided.
6. Number of questions should be small.
7. Ambiguous questions ought to be avoided.

Choice between primary and secondary data

The investigator must decide at the outset whether he will use primary data or secondary in an investigation. The choice between the two depends on the following considerations:

- (i) Nature and scope of the enquiry
- (ii) Availability of financial resources
- (iii) Availability of time

- (iv) Degree of accuracy desired
- (v) The status of the investigator i.e. individual, corporation, government etc.

It may be pointed out that most statistical analysis rests upon secondary data. Primary data are generally used in those cases where immediate results are required and information about field of investigation is not available or secondary data do not provide adequate information.

Although, of the two sources, the primary source is more important there may be financial and time constraints and one may look for secondary source. The importance attached to the primary source is so much that some scholars have stated that the reliability of research-work can be determined only by reference to a primary source. Secondary sources serve best when they supplement, strengthen or support data already from the primary sources; otherwise there is no intrinsic value of secondary sources of the information they provide.

Unit summary

In this unit, you have covered the following main points :

- The meaning of data
- The sources of information : primary and secondary
- Various methods of collecting primary data
 - ❖ Direct personal interview
 - ❖ Indirect oral interview

- ❖ Mailed questionnaire
- ❖ Information from correspondents
- Various methods of collecting secondary data
 - ❖ Published sources : reports and official publications, semi-official publications and private publications.
 - ❖ Unpublished sources : government or private agencies.
- Precautions to be taken while using primary and secondary data.
- Key factors to make choice between primary and secondary data.

Answers to self-help questions



Self-help question 3.1

1. Secondary
2. Primary
3. Primary
4. Secondary
5. Primary
6. Secondary
7. Secondary
8. Secondary
9. Primary
10. Secondary



Self-help question 3.2

1. Indirect oral interview (IOI)
2. Direct personal interview (DPI)
3. Information from correspondents (IFC)
4. Mailed questionnaire (MQ)
5. Information from correspondents (IFC)