

Role and Importance of Field Study in Geographical Research

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ABSTRACT

Geography as an integrating discipline and as a science of spatial attributes has undergone changes in its approach. Basically, geography is considered as an empirical science and most of the data used by geographers are, therefore, empirical. The most common sources of data in geography, therefore, are field studies. The relief data is obtained through various types of surveys. There are several techniques of field study and surveying which provide information such as location and altitude of various places and their space relations. Information obtained through these studies is presented in the form of maps—topographical, geological and other types of maps.

1. Introduction

The history of geography is basically the history of interactions between nature and society, or society and nature. Human perception of the environment has always played a major part not only in human history generally, but also in the daily struggle between individuals and the environments within which they live. Therefore, as the social scientists, geographers always perform the task to study the total environment. They seek to understand the processes that form physical and cultural environments, and the interplay among these two. Geography is as much a social science as it is a physical science and hence, it is impossible to separate the two. The physical environment is affected by the cultural environment, and the cultural environment is shaped by the physical environment. Geographers thus study such topics like culture, population and trade, locally, regionally, nationally and globally—all of which are a fundamental part of the social studies. The earlier geographers were descriptive geographers. Later, geography came to be developed as an analytical science. Today the discipline is not only concerned with descriptions but also with analysis as well as prediction. So, field surveys are very relevant and concerned with the study of location, altitude and space relations of various places as well as various other types of information in geographical studies. The term 'Field' means 'any portion on the earth's surface' and the word 'Survey' means the 'presentation or preparation of report through definite observation' and, therefore, etymologically the terms 'Field Survey' or 'Field Work' or 'Field Study' are used to describe the analysis and description about the area over the earth's surface on a definite subject matter. The information collected in this manner is used for producing detailed maps of the area studied. In other words, it is the collection and gathering of information at the local level by conducting primary surveys. The primary surveys are also called field surveys. They are essential components of geographic enquiry. It is a basic procedure to understand the earth as a home of mankind which is carried out through observation, sketching, measurement, interviews etc.

Practically, 'field study' is an inseparable part of the discipline geography, because it is very necessary to acquire

practical knowledge simultaneously with bookish knowledge. Not only that the geographers prepare the 'Field Report' based on the field survey where they put forward immense importance upon the relationship between man with the terrestrial environment. Therefore, Friedrich Ratzel aptly remarked his famous quotation regarding the exercise of geography—"I travelled, I sketched, I described". He truly realized that the exercise of geography should not be limited only within the classroom teaching and there must be a place of intense importance of travelling and observation regarding its materialistic applicability.

2. Data base and methodology

It is a debatable matter whether field study itself a method for research study or not. However, primary data base has the prime importance in continuing research on social science and field study provides the primary data for research in geographical studies. Researchers without adequate background, often neglect the preparatory study necessary before any field study can be conducted. One must decide precisely the nature and type of data needed, the procedure of gathering the data, the format of the data and the analytical tools to be utilized for the data analysis (Misra, 1989). Hence, a well-planned and definite schedule as well as questionnaire can play an effective role between interviewer and respondents to get the optimum level of accurate and valid information. Establishment of a relationship of confidence is required between these two which is not one-sided. Therefore, the interview is a most widely used method of gathering information in the field. Audio-video recordings, photographs, sketches have the immense importance in the field visits especially for geographical studies. Listening is another important part for the interviewer who does not air his own opinions; he must maintain control over the conversation; he should be straightforward and frank; allow enough time to the interviewee, but doesn't dawdle. His target should be one question at a time and get the full answer. Recording of all data at the earliest is the other crucial method to fulfil the goal. A graceful close of interview session from the side of interviewer is needed. Finally, the collected data have to be assessed, analyzed, tabulated, interpreted and presented through suitable

statistical and cartographic techniques as well as appropriate photographs.

3. Field study:

The observation and survey about the physical and cultural elements of a particular area and the analytical process of those surveyed data and information through which it can be established the reciprocal relationship between the physical and cultural environments of that area. This process involved to prepare or present a report is called field report. In other words, a field study gives a scope to share the experiences of the geographical research and even to discover a set of geographical facts hitherto inexperienced. To a geographer, therefore, field study is of utmost importance. If we have not the practical knowledge, we shall be unable to

explain all the aspects of geography in a proper sense. Field study is, therefore, a medium of acquiring practical knowledge from the field. Through a 'micro-level study' of a definite area, we can properly understand and know that region. With the help of such acquired knowledge, we can easily identify the obstacles which are actually responsible for the improper development or backwardness in that area and also it may be helpful to make an excellent scientific plan to overcome those obstacles for the overall development of that area. This is the main objective of field study in geography.

4. Basic principles and procedures of field study:

Before doing the field study, some definite principles should be taken to proceed. For example—

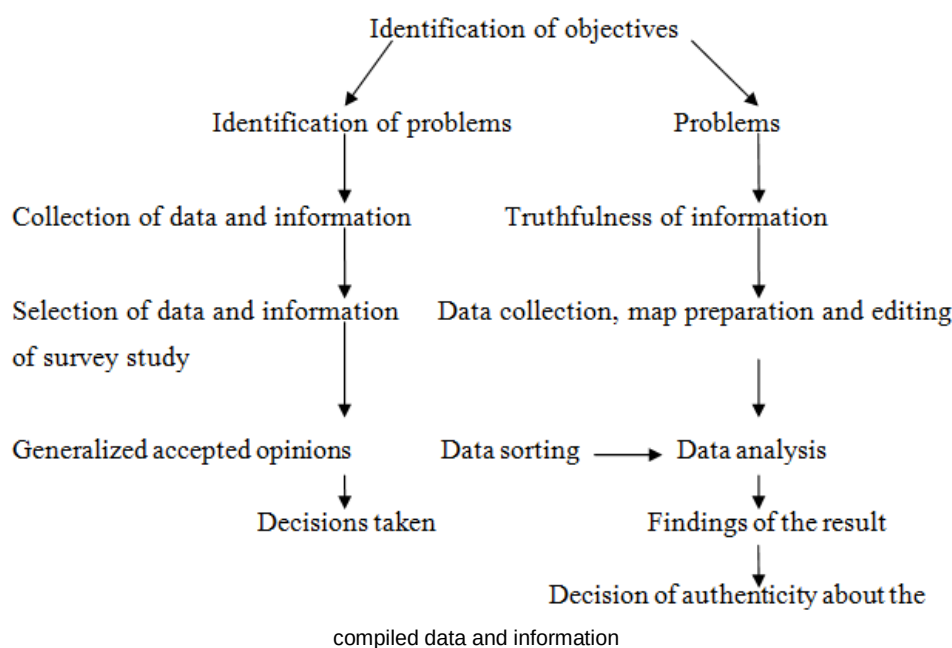


Figure 1 Basic principles of field survey.

5. Necessity of field study in geography:

The following reasons may point out that why field study is so much necessary in geographical research—

- Geography is a field science, thus, a geographical enquiry always needed to be supplemented through well-planned field surveys.
- These surveys enhance our understanding about patterns of spatial distributions, their associations and relationships at the local level.
- Further, the field surveys facilitate the collection of local level information that is not available through secondary sources.
- Field surveys are required so that the problem under investigation is studied in depth as per the pre-defined objectives.
- It helps in comprehending the situation and process in totality and at the place of their occurrence.
- This also helps to know the characteristics as well as nature and the interrelationship between the elements of physical, economic and social environments of a particular area.

- It is very essential to take a plan before the physical as well as socio-economic development of an area which may be achieved through field study.

6. Stratification of field study:

Several techniques have to be adopted by the researcher during the time of gathering information in the field. Basically, the field techniques adopted for research study on any branch of geography can be stratified into the following heads—

A. Preliminary procedure: Before starting the research study, it is very important to take a preliminary preparation for understanding the subject matter of that research clearly. For this purpose, the researcher should follow the following steps viz.—

- Statement of objectives
- Search for documentary materials
- Selection of base map or aerial photographs
- The reconnaissance
- The formulation of field plan
- Recording of direct field observations
- Field planning

B. Mapping on base map or on aerial photographs: The geographers primarily collect the base map or an aerial photograph to draw the map of the research area and also present the collected data and information upon it. As the scale of the base map increases, the size of the map decreases. And as the extent of the homogeneous regions reduces, it restricts the universality. The scale of the area map of the study region depends upon the amount of space on a flat sheet of paper to present the symbolic fashion that it is properly visible as well as readable to everybody. However, the techniques for preparing map of the research area are furnished below—

- i. Mapping of base map
- ii. Mapping on air photograph
- iii. Mapping of single phenomenon
- iv. Mapping association of phenomena
- v. Mapping phenomena of spatial interchange

C. Observation: It is very essential to develop correlation between the derived reasons and their consequences which are achieved during data collection, formation of meaningful regional class and through direct contact with the subject matters of the area to be studied at the time of geographical observation of any region. In case of geographical research, most of the analytical studies and the whole presentation of results are expressed through various symbolic fashions like words, numbers, shades, colour, line etc. A geographer faces so many facts and subject matters during field study. He studies directly with those subject matters. He only changes the symbols during field survey and also understands the meaning as well as limitations of the symbols used by him. The researcher should keep in mind the following steps during his field observation—

- i. Direct observation
- ii. Enquiry or investigation
- iii. Types of investigation—

a) According to source: Primary investigation which can be derived through direct personal observation, indirect verbal investigation, prepared schedule questionnaire survey by the enumerator, mail questionnaire, direct observation by enumerator, information through local information centres and newspapers etc. while secondary investigation can be derived through various reports and publications by government departments, government commissions or committees, municipalities or zillaparishad, several periodicals, published studies by different international agencies, reports from various research institutes etc.

b) According to methodology of data collection: Census and sampling.

c) According to nature of investigation: Direct measurable investigation and indirect indeterminable investigation.

- iv. Participation observation

D. Note taking: This is very tough to memorize elaborative data and information as well as observed matters during field

survey and, therefore, it demands a quick record of those data and observed matters in written form during the time of observation. It needs the steps mentioned below—

- i. Notes as primary recording techniques
- ii. Notes as adjunct to field mapping
- iii. Sketching maps and field diagrams
- iv. Photographs as recording device

E. Interview: In research language, the negotiable interaction or conversation performed between interviewer and interviewee for a definite purpose is called interview. During this interview, researcher can opt a specific extent of sampling method instead of interviewing each individual of the study area. Generally, following two techniques are taken into account during interview session—

- i. Interview by informal conversation
- ii. Interview by questionnaire
- iii. Interview by schedule
- iv. Spatial sampling survey

F. Aptitude: A potential geographer should possess some qualities. He never burdened by prejudice and he should not be strongly confined with a pre-determined concept. If so, the outcomes of the research may be biased. Not only that, he must adjust himself with any kind of environment. He has to study under any adverse situation. He must have that skill to study actively among those people having different manners and customs which is not similar with his customs and manners. Such mixed elements are called geographical aptitude which destroys the mental qualities as well as physical strength for enduring exertion during the field study.

7. Stages of field survey for geographical research:

The whole procedure of field survey for geographical research may be divided into the following three categories viz.—

I. Pre-field stage: It has the following sub-steps—

- a) *Defining the problem:* First the problem to be studied is defined precisely by statements indicating the nature of the problem. The problem is the title and sub-title of the topic of the survey.
- b) *Objectives:* Aims and purposes of the survey are outlined and in accordance to these, suitable tools regarding acquisition of data and methods of analysis will be chosen. A well-planned schedule has to be prepared to fulfil the goal. Selection of sample size is another important part.
- c) *Scope:* Scope of survey is the geographical area studied, time period of enquiry and if required themes of studies to be covered are defined.

II. Field Stage: Various types of tools and techniques are required to collect information in the field. These include—

- a) *Recorded and published data:* They are collected from government agencies and these provide base information about the problem.
- b) *Field observation:* It is very necessary to find the characteristics and associations of geographic

phenomena. Sketching and photography are also helpful tools.

- c) *Site measurement*: Some of the field surveys demand site measurement of objects and events. It involves use of appropriate equipment.
- d) *Personal interview*: In all field surveys, this is a must needed tool to gather information about social issues through recording the experiences and knowledge of each individual through pre-determined schedule.

III. Post-field Stage: This includes the following sub-steps—

- a) *Compilation and computation*: Information collected is organized for their meaningful interpretation and analysis to achieve the set objectives. Notes, field sketches, photographs, case studies etc. are first organized according to sub-themes of the study. Similarly, questionnaire and schedule based information are tabulated on the spreadsheet.
- b) *Statistical and cartographic applications*: Maps and diagrams are used for giving visual impressions of variations in the phenomena.

- c) *Presentations*: The field study report is prepared in concise form and it contains all the details of the procedures followed, methods, tools and techniques employed. At the end of the report, the summary of the investigation is provided.

8. Conclusion

There is no denying that field study plays a significant role in the modern geographical research. Concluding part is the last but not least chapter for the preparation of a field report. The field study report should contain both summary and conclusions. These are not the same thing. A summary is a brief narration of the entire report including the major findings which should give the reader an overall picture of the study. The researcher should then draw out the significant conclusions and implications of the findings. A conclusion is thus a deduction based on the findings. Sometimes, the researcher also proposes some recommendations which are in the form of suggested course of action for the development of the study area.

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