

## **CHAPTER 14 FIELDWORK**

After studying this chapter, students should be able to:

- • define field work and enumerate its various types.
- • identify the objectives of field projects.
- • describe the various geographic activities that takes place in the during fieldwork.
- • describe and enumerate the importance of fieldwork and problems associated with it.
- • describe how to organize fieldwork.

### **14.1 Fieldwork**

Fieldwork can be defined as a set of exercises carried out on the field (a geographical area) for the purpose of acquiring practical experience in addition to the basic instructions received in the classroom on important aspects of geography as a course or subject. The purpose of fieldwork is to provide students with firsthand knowledge of some important geographical concepts taught in the classroom through the conduct of some investigations and exercises. The driving force behind every fieldwork in geography is the desire for knowledge and the urge to find out more about what has been taught and observed in the classroom. In its strict sense, fieldwork is directed at studying geographical areas close to students' immediate environment and trying to provide practical solutions to some problems identified in the course of classroom instruction that require an in-depth practical approach. Fieldwork over the

years have come to be regarded as an integral aspect in the study of Geography which seeks to expose students to the specific issues involved in the study of a locality. Hence, fieldwork in Geography is usually targeted at achieving the following objectives:

- (i) identification and description of geographical phenomena such as matter or events that may be distributed within a given environment;
- (ii) conduct of detailed investigation into the nature and characteristics of specific geographical concepts and ideas;
- (iii) assessment and evaluation of data collected on the field in order to establish some basic facts and results;
- (iv) provision of a solid premise where reasoned conclusions can be drawn from results obtained from fieldwork that will further enrich the deeper understanding of phenomena investigated on the field; and
- (v) development and guided application of the techniques and procedures adopted in geographical fieldwork which can be further used in the classroom.

## **14.2 Types of Fieldwork**

In recent times, fieldwork has been categorised into three areas, namely:

- (a) Field Excursion
- (b) Field study or field Trip
- (c) Field Research

Field excursion refers to a visit or trip to a locality, institution, organizations or places of geographic interest. Often times, it takes place within a day and is mainly for acquiring more knowledge and sight-seeing. This takes place at the secondary school level.

A field study or field trip is more intensive than field excursion as it involves a trip or visit to a geographic area different from the locality of

the participating students and often last more than a day. It involves an intensive study of several geographic phenomena in both physical and cultural environments, the taking of measurements and the preparation of a report covering the various activities undertaken during the field trip.

A field research is more advanced and comprehensive than field excursion and field trip. It involves the identification of specific problems having a geographical dimension which will now serve as the basis for conducting a detailed research exercise. Problems such as flooding, migration, trade, residential location, housing, etc constitute potential sources of research interest for which field researches are undertaken. In recent times, fieldwork at the secondary school level has been largely limited to field excursions and field trips. Field excursions are short trips while field trip or field study is a practice where students are taken to permanent field centres to study specific geographical patterns and processes. Any site chosen is expected to offer opportunities for students to study some features that were taught in geography classes.

### **14.3 Objectives of Field Excursions and Trips**

As mentioned earlier, field excursion and field trips are conducted at the secondary school level. Such activities have the following objectives:

- (i) This is to enable and equip students with the ability and skills to see and think about geographical phenomena and features taught in the classroom. Field excursion and trips should afford students opportunities to see, observe and think about features they come in contact in the localities visited.
- (ii) This is to enable students acquire detailed knowledge about aspects of the geography of the area visited whether in the locality or outside it. It should present students with new knowledge and experience about places where students are taken to. With this they

are better placed to appreciate things that occur within localities other than their own that they are used to.

- (iii) This is to afford students with the opportunity of identifying and solving problems for a detailed geographical study. It is ideal that a field trip should be initiated with the purpose of making students to identify basic problems occurring within a locality and with the knowledge acquired in the classroom, profer useful solutions to them.

With these in mind, geographical trips in forms of excursions and field study should be planned in such a way that students are able to attain the stated objectives within the time frame schedule and thus increase their knowledge about their localities.

#### **14.4 Activities During Field Excursions and Trips**

Fieldwork, be it in the form of excursions and trips, should not be turned to a jamboree or mere sight-seeing. For it to be effective and result – oriented, there is the need to plan and specify the activities that will be undertaken during the period for which it is slated. Field excursions should be executed just for its sake. In essence, the following activities should serve as the focus of any field excursion or trip:

- (i) A detailed map-reading, analysis and delineation of the immediate locality chosen for the study, so as to define the scope and coverage of the programme.
- (ii) Collection, examination and detailed description of sample obtained from the locality such as soil samples, rock pieces, market products, etc.
- (iii) Choosing of sample populations within the locality out of a given or unknown total population for the purpose of analysis and drawing conclusions.

- (iv) Taking simple measurement using methods such as counting, pacing, eye estimation, simple equipments in order to establish some facts on the field.
- (v) Constructing and administering instruments of collecting data such as questionnaires.
- (vi) Data sketching, recording and tabulation of data in simple tables matrices and data entries.
- (vii) Analysis of data collected through the use of graphical illustrations.
- (viii) Quantitative and qualitative assessment of geographical features and phenomena observed on the field.
- (ix) Preparation of reports, covering the various activities that took place during the field trip.
- (x) Assessment of the report on the completed field trip, by identifying problems associated with the execution of the trip and improving on it for subsequent trips.

#### **14.5 Specific Geographical Studies and Preliminary Practices Undertaken During Field trips**

Within the scope of Geography at the secondary school level, the following studies or exercises can be carried out during field trips:

- (a) Weather observation which can be undertaken where there is a good weather station such that data generated can be computed, plotted and analysed.
- (b) A detailed study of land use patterns in a particular area. The essence of this study is to identify, record, classify, map and analyze the uses of land within a locality. With this, students can now proceed to explain the patterns of land use observed, whether in rural or urban settings.

- (c) A comprehensive study of the traffic volume in a particular place through close observation of the traffic flow by counting the number of vehicles, the time period used in some specific localities. The data obtained can be plotted in the form of bar graphs for easy comprehension and analysis.
- (d) A study of agricultural processes in a farm, crop cultivation, raising of livestock, etc. This will involve the identification of the types of crops being cultivated, the method of cultivation, harvesting and storage. In the area of animal husbandry, the animals must be identified, methods of raising animals noted including the feeding pattern and sources of labour for maintaining farming activities. In all, a detailed farm study should try and cover all aspects of farming in a particular place.
- (e) A study of rivers in a locality can also be undertaken and aspects such as river speed, the various features that can be found along its course, such as meanders, flood plain, etc. Such a study can be better enhanced by using some simple instruments such as topographic map, camera, river gauges, camera, surveyor's chain, etc, to obtain detailed measurements.
- (f) In a field trip, soil samples can also be studied even though a detailed study can only be undertaken in a soil laboratory. However, soil study can be undertaken by emphasizing on simple aspects of soils such as texture, appearance, moisture content.
- (g) Industries within a locality can also be studied by analyzing the type and distribution of industries in a particular place or conducting a study of a particular industry, their workers, production process, etc.

## **14.6 Importance of Field Trip and Excursions**

The issue of field trips and excursions cannot be overemphasized when the teaching of Geography at secondary school level is being discussed as its importance and relevance cannot be ignored. Fieldwork in form of field trips and excursions are relevant for the following reasons:

1. It makes students to develop mastery in Geography as they are better equipped to acquire both theoretical and applied (practical) knowledge that will make them capable of managing and developing their immediate environment.
2. It provides opportunities for teachers to improve and develop their teaching skills as they have better avenues for exposing students to more practical aspects of Geography where they are able to acquire more experience on the various fields of geography.
3. It provides greater avenue for illustrating individual lectures and lessons taught in the class as students are made to think and see clearly some of the things taught by enhancing with skills needed to improve their study of Geography.
4. Fieldwork provides opportunities to test hypotheses and propositions generated in the class as students are able to collect, test and analyse data collected in the field to either support or reject those hypothesis.
5. Fieldwork presents students with opportunities to practise the various geographical techniques and skills acquired under the classroom setting.
6. It prepares students with necessary skills and abilities to tackle future problems they may encounter after completing their studies, and are employed to contribute their quota for the development of their various communities.
7. It allows for better and deeper interaction between students, teachers and their immediate environment where they are better placed to

appreciate and have more intimate relationship on how to develop and manage the environment effectively.

### **Problems Associated with the Organization and Implementation of Fieldwork**

Good as the objectives and intents of fieldwork are, yet they may not be achieved if some problems associated with its planning are not overcome as they are capable of making the programme worthless. The problems are fundamental and ought to be addressed for the gains of fieldwork to be realized and sustained. They include:

- 1. The choice of geographical areas and places to visit:** This is a fundamental problem as a wrong choice will not allow the objectives to be achieved. A good choice of places to visit must possess basic geographic phenomena and attributes already taught in the class and it is best that every caution be taken in ensuring a proper choice.
- 2. The instruments and tools to be used during the field trip exercise:** This is important in that without these instruments, it may be difficult to undertake the field trip as necessary measurements might not be taken and enough data cannot be generated and analysed in order to arrive at logical conclusions.
- 3. The activities to be undertaken during the entire field trip exercise:** It could be challenging for the teacher to decide which activity to undertake, their scope and content. Where there are no activities to be undertaken then the purpose of the field trip is already defeated and if it takes place at all, it will amount to mere sight-seeing or at best a jamboree.
- 4. Transportation and accommodation issues:** These constitute yet another challenge that must be taken care of for field trip to be

successful as they are necessary impetus needed to accomplish each field trip. Students ought to be moved around during the trip likewise they must be well accommodated for them to concentrate fully on the trip. Where this is absent, the field tip may not take off. Hence, it is an issue that must be resolved before the commencement of the exercise.

5. **Official permission:** Official permission often times is not obtained on time for students to visit some places stated for the field trip. The protocols and procedures that ought to be followed may be so complex such that permission is not easily given or is not obtained at all. This will no doubt affect visit to places like industries, official establishments, tourist centres etc. all of which constitute places of interest in field trips. Inability to visit appropriate places is bound to affect the content and success of planned field trips.
6. **Inadequate Funding:** Inadequate funding is another major problem that may affect the planning and administration of field trips. Often times most secondary schools may not be able to adequately fund this project because of huge cost that may be incurred on aspects such as transport, accommodation, planning, etc, hence it is often made optional wherein only students who can it afford are able to go while those who cannot it afford may not go thereby denying them the opportunity of enhancing their knowledge of Geography.

In summary, these are some major problems that usually affect the planning and effective implementation of field trips at the secondary school level. Through adequate planning and prudent use of available resources the problems can be addressed, making it possible for students to embark on regular field trips.

## **14.7 Organization of Field Trips and Excursion**

The organization of field trips will involve many activities and preparations. These activities can be divided into two, namely:

- (a) Internal preparations
  - (b) Reconnaissance or Pilot surveys
- (a) Internal preparations are those things that ought to be done before the school embark on the trip. These involve several activities such as:
- (i) Planning and selection of activities to be carried out during the trip. This is usually done by the teacher based on the school's curricula and the level of instructions given in the geography class. Such activities have been dealt with earlier on in this chapter.
  - (ii) Choice of places to visit, the institutions and agencies that are to be visited and how to secure official permission for the trip.
  - (iii) Preparation on the choice of transportation facilities that will be used to convey students and making arrangements as to where the students will be accommodated for the period of the trip.
- (B) Reconnaissance surveys and visits are the first set of visits that the organizers of the field trip especially the teachers normally pay to the proposed places that have been slated for the trip. The essence of the survey is to have a firsthand knowledge of the area or locality, the specific geographic phenomena to be observed and also to seek official permission from the organization that are to be visited during the field trip. Through the survey, the organizers get familiar with the places and the institutions to be visited and how they can prepare the students for the trip.

Having concluded the basic activities, the next stage is to plan the strategies to be adopted in executing the various activities on the field. The following stages are often followed in planning these activities:

- (i) identifying and defining the basic problem to be tackled during the field trip by stating the problem and defining its scope. In doing this, a plan will be drawn on the types of information needed in solving the problem and how it will be gathered. Problems chosen must be feasible, relevant, appropriate and accomplishable. They should also be sufficiently comprehensive.
- (ii) Stating the hypotheses. Here hypotheses are necessary as they serve as an educated guess which is often advanced as a possible reason for or a solution to the stated problem. For instance, a hypothesis may be stated thus: “the distance travelled to work in a village decreases from the villages centre”. Hypothesis should be seen as a way of unraveling a problem developed for a field trip. However, it should be appreciated that it is not in all cases that they should be devised, other field projects can be successfully executed without the need to test hypotheses.
- (iii) Adequate preparation for data collection which involves deciding on the nature, sources, volume and the matter information are recorded or the type of data to be collected on the field. Issues relating to the type of instrument to be used for data collection, how to measure variables using the various instruments and how to administer instruments on people during the course of the trip are to be addressed at this stage.
- (iv) Adequate attention must also be paid to how to analyse the data that will be collected during the field trip. Here decisions will be made on the tabulation of tabulate data; transfer of such data into a master sheet which is the basic raw material for subsequent analysis; how

to summarize the data using relevant statistical techniques such as frequency counts, descriptive statistic (mean, median and mode, standard deviations), etc. The statistical technique to be used will largely be determined by the nature of the problem and the hypotheses to be tested.

- (v) The mode of presenting final results of the field trip is also given attention. It is necessary that all materials obtained from the field trip be put together in a logical sequence such it that will be suitable to the satisfaction of the organizers. The report that will emanate from such trips will reveal the final results of the trip especially to those who never had the opportunity to participate in it. Such report should provide a detailed account of how the trip was conducted, the activities that took place and the findings made. Such reports should be written in simple, lucid and clear language for easy comprehension by its readers.
- (vi) Selection of appropriate materials for the fieldwork that will aid the collection of data and its subsequent analysis. It is ideal that the materials and equipment needed should be predetermined before the commencement of the field trip as it will allow for easy executing of tasks assigned to participants.

#### **14.8 Principles Guiding the Conduct of Field Trips**

For an effective field trip, the following principles could serve as guidelines, namely:

1. Field trips should as a matter of priority be confined to the immediate locality of students in order to allow them work adequately and have detailed interaction with available geographic phenomena.

2. Field notes should be well taken care of and records of every investigation, measurements should be properly recorded. Such notes should be kept free from dirt, water and other stains.
3. Observations should be taken regularly, accurately and in a precise manner. Such should be entered in a way that it can be easily transferred to coding sheets for analysis and be open to further verification.
4. Methods for data collection, recording and analysis must be well specified and known to the students. This will help prevent the occurrence of errors due to wrong data entry and reduce the need to verify the authencity of information contained in the field notes.
5. Large scale maps should be made available for field trips and where they are not available, small scale maps should be improvised for the students' use. Other instruments such as hand lens, simple surveying instruments, should be acquired for this purpose.

## **Summary**

Fieldwork is an aspect of Geography that involves direct interaction with the immediate environment.

It is very useful in the study of Geography as it enables students to observe a variety of phenomena on the Earth's surface and by that built on their experience about their localities.

Field trips contribute avenues for taking accurate and precise measurements about geographical phenomena, their distribution and attributes.

Field trips should be planned with adequate consideration of several factors such as transportation, accommodation, data collection, choice of localities to visit.

Necessary equipment should be procured and used in taking measurements during field trips.

Field trips should be organized on a regular basis to enhance students with necessary skills on how to relate with their immediate environment.

A project report should emerge out of every field trip where a detailed account of proceedings and measurements taken are accurately reflected.

Fieldwork in secondary school geography should be made up of excursions and trips to places of geographic interest.

Problems affecting the administration of field work include inadequate funding, delay in receiving official permission for visits, logistics, accommodation, etc.

## **Revision Questions**

### **Objectives**

1. Fieldwork in geography consist of all but one of the following
  - A. field research
  - B. pilot test
  - C. field trip
  - D. field excursions
2. Fieldwork involves the study and observation of
  - A. statistical records
  - B. geographic phenomena
  - C. planetary bodies

- D. educational institutions
3. Fieldwork should be organized
- A. rarely
  - B. occasionally
  - C. everyday
  - D. regularly
4. Emphasis in geographical fieldwork should be
- A. pleasure trips oriented
  - B. confined to the classroom
  - C. carried out within an immediate locality
  - D. foreign place-oriented
5. In a field trip, \_\_\_\_\_ map should be used
- A. outdated.
  - B. large scale.
  - C. medium scale.
  - D. small scale.
6. When planning a field trip, the least considered factor is
- A. official permission to visit.
  - B. logistics.
  - C. funds.
  - D. love of adventure.
7. Field trips should be based on all but one of the following
- A. official permission .
  - B. student's bias.
  - C. parental approval.
  - D. school involvement.
8. Field notes should contain all but one of the following
- A. direct measurements.
  - B. records of important phenomena encountered.

- C. sketch maps.
  - D. student addresses.
9. In a river study, the major area of interest is
- A. relief patterns.
  - B. cultural features.
  - C. soil samples.
  - D. drainage patterns.
10. Soil samples are taken to the \_\_\_\_\_ for a detailed study.
- A. classroom.
  - B. map room.
  - C. laboratory.
  - D. school library.

### ***Answers***

1. B    2. B    3. D    4. C    5. B    6. D    7. B    8. D    9. D 10.  
C

### ***Essay***

- 1a. Describe the equipment to be used and the procedures to be followed in carrying out a river study within your locality.
  - b. Suggest three fundamental problems affecting the planning and execution of field trips.
- 2a. Suggest five critical issues that should be addressed when organizing field work.
- b. Give three reasons why fieldwork is important to the study of Geography.
- 3a. List the major equipments that are essential to the conduct of field trip.

- b. Suggest three ways by which these equipments be best kept for use in fieldwork exercises.
- 4a. Give three reasons why fieldworks are not held regularly as they ought to.
- b. Suggest two reasons why reconnaissance surveys are essential to the execution of fieldtrips.
- 5a. Identify three factors that aid effective implementation of fieldwork.
- b. Suggest three principles that should guide the conduct of a field trip.