CHAPTER - IV
METHODOLOGY

4.1. Introduction

The methods and procedures systematically and scientifically use in a research study to solve the research problem has been referred to as methodology of the research. This term is inclusive of all the steps or techniques adopted to carry out a research with proper logic and theory. These steps or methods may differ slightly according to the need and nature of the problem under investigation. This chapter deals with the methods adopted to collect the data, the techniques use to assess and analyse the collected data with reference to the stated objectives. This section defines the attempt to describe the development of appropriate tools used for data collection, the administration of tools, sampling and organisation and the subsequent analyses of the data.

4.2. Method of the study

The present study attempts to investigate the development, the existing status and the problems of teachers as well as student of higher education in the hill areas of the state of Manipur. Therefore, it has adopted historical approach to make a brief sketch of the development of higher education in the hill areas. It also adopted the descriptive survey method to study the status of higher education and problems of the teachers and students within its parameter.

4.3. Population of the study

The present study covers all the colleges in the Hill Areas (districts) of Manipur both general higher education as well as professional higher education. According to the report of the College Development Council, Manipur University, there were 17 colleges of general higher education, a professional (Law) college and a University Campus in the hill areas. There were 7 governmental colleges and 11 privately run colleges affiliated to the Manipur University. So, altogether there are now 18 colleges and a University Campus in the hill areas of Manipur. There were altogether 18 principals, 691 teachers, non-teaching staffs and 7004 students in these colleges.

Government Colleges in the Hills Areas:

1. Churachandpur College, Churachandpur
2. Hill College, Tadubi Senapati
3. Lamka College, Churachandpur
4. Pettigrew College, Ukhrul
5. Presidency College, Motbung, Sadar Hills
6. Tamenglong College, Tamenglong
7. United College, Lambung village Chandel.
8. Indira Gandhi National Tribal University (IGNTU), Manipur Campus

Aided Colleges in the hills:

1. Don Bosco Colleges, Maram
2. Moreh College, Moreh Chandel
3. South-East Manipur College, Komlathabi Chandel.

Private Colleges in the Hill Areas:

1. Bethany Christian College Churachandpur
2. Damdei Christian College , Damdei Tooling
3. Kangui Christian College, Kangpokpi
4. LMGM Law College, Churachandpur
5. Mount Everest College, Taphou Senapati
6. Rayburn College, Churachandpur
7. Mount Pisgarh College Senapati
8. Asufii Christian College, Mao.

All the above mention colleges both governmental as well as privately run colleges are all colleges offering general traditional courses except LMGM Law College which offers professional course of Bachelor of Law. The rest of the other colleges offered courses on Arts, Science and Commerce streams.

Besides the above mentioned colleges, recently in 2009-10, a campus of the Indira Gandhi National Tribal University has been started in New Makhan, Sadar Hills

Senapati (presently, it is accommodated in the Adimjati campus, Chingmeirong Imphal), which is also included in the present study.

Table No. 4.1. District wise distribution of colleges in the Hill Areas of Manipur

Sl No	*Name of the hill district*	*No of colleges*
1	Chandel district	03
2	Churachandpur (Lamka) district	05
3	Senapati district	08
4	Tamenglong district	01
5	Ukhrul district	01
	Total	18 colleges

The population of the present study consist of all the colleges of the Hill Areas of the state of Manipur. There are 18 colleges (both general and professional) and a university Campus in the Hill Areas of Manipur. All the students, teachers and administrative staffs of all these institutions of Higher Education constitute the population of the present study. According to the records of the colleges, there are altogether 691 teachers and 11354 students in the colleges in Hill Areas according to the Annual Report 2012-13, of Manipur University.

Table No. 4.2. Population of the study

Gender	Principals	Teachers	Students
Male	17	454	6191
Female	01	237	5163
Total	18	691	11354

Source: Annual Report CDC, MU 2013

4.4. Sampling and Sample

The study population consisted of the Principals, teachers and students of higher education in hill areas of Manipur. Purposive Census Technique was adopted for the sampling of College Principals. Purposive Census Technique was used for the college principals as the researcher has taken all the Principals of the colleges. Stratified Random Sampling for the Teachers and Students were applied for selecting the sample of the study. For selecting teachers and students' sample, Stratified Random Sampling

Technique was applied as the population was too large to go for census technique. Diverse courses and streams also necessitated the stratification. It may be mentioned here that this stratification was organised based on streams, namely, Arts stream, Science stream and Commerce stream and others. Sample selection procedure has been shown in the following tables.

Table No. 4.3. Sampling and Sample of students

Sl	Stream	Sample	Total Sample
1	17 Arts stream	17 X 10	170
2	12 Science	12 X 10	120
3	5 Commerce	5 X 10	50
4	1 BCA, BSW	1 X 10	10
		Total	**350**

Table No. 4.4. Sampling of Teacher Sample including the principals

Sl	Stream	Sample	Total Sample
1	17 Arts	17 X 4	68
2	12 Science	12 X 4	48
3	5 Commerce	5 X 4	20
4	17 Principals	17 X 1	17
		Total	**153**

Therefore, the following table is the sample size of the study

Table No. 4.5. Sample of the study

Gender	Principals	Teachers	Students	Total
Total	**18**	**132**	**350**	**500**

For appropriate representation of the various parts and regions within the hill districts of Manipur, sample respondents was drawn from all colleges in the hill areas. After this stage, Stratified Sampling of respondent students and teachers of the required strength was carried out by visiting the institutions. Besides these strength, one each from the principal or administrator of the institution was purposively taken in the study.

Beside the above stated colleges, some sample of teachers, students and authority of Indira Gandhi National Tribal University, Manipur Campus was also drawn with a separate tool constructed particularly for the university campus. Since, there were only two department so far, the strength of the sample could not be raised higher. Few departments were started in the second half of the year 2013. As such analysis of the available data and subsequent interpretation is also carried out for the university campus.

4.5. Tools of the study

The tools for collecting the required data is a very important decision in research. For the present study, an exhaustive questionnaire was consider as an option for the entire required data collection. However, considering the limitations of a questionnaire in portraying the exact condition and status of the prevailing situation and atmosphere, it is decided to add an interview schedule and a personal observation of colleges. Besides, the individual colleges, the need to see the overall view of higher education in the hill areas become necessary. it is felt that interviewing and interacting with local educationists, government officials and people directly involve in higher education might be of tremendous help in understanding the situation with the institutions, the attitudes of the local inhabitants and the tribals in general. Hence, the following tools were considered appropriate for the collection of data in the present study.

a) Questionnaires: Questionnaires have been framed keeping in mind the various aspects of higher education. Questionnaires of past researchers in the study of related topics have also been critically examined and the concepts drawn from the same taking etcetera care to avoid duplication. Expert opinions have also been taken from various experts. Their suggestions and opinions were incorporated and the questionnaires were modified. Then, they were put to test in a couple of colleges.

b) Interview Schedule: An interview schedule was framed as a guideline for discussing with local educationists, government official of the Directorate of Higher education, officials of College Development Council, Manipur University, Officials of Manipur University and some selected university and college teachers whose background origin is from the hill areas of Manipur. The need for interviewing some key persons have been felt also to ascertain the overall idea of higher education in hill

areas and the impact higher education has had on the person who had successfully availed of it. Hence, Interviews Schedule have been prepared for the same.

c) Personal Observation of the situation prevalent at the colleges: First hand observations were recorded while the researcher went about the field survey and administration of Questionnaires to various colleges and institutions of higher education, meeting and interacting with different with officials, administrators, teachers and students. The college infrastructures like building, classroom, library, toilets, drinking water, fan, ventilator, power etc were the main concerns of observation. Beside the institutional infrastructures, the attitude and mentality of the persons involved were also observed by interacting with them.

4.6. Construction of Questionnaires and Interview Schedule

Questionnaires were framed keeping in mind the various aspects of Higher Education. While framing the components of the Questionnaires, various works and previous tools framed for similar studies were also consulted. The works of R. Kumar (2011), M. Mate (2010) J. Fowler Floyd Jr. (1993) J. Mate (2013), K. Singh (2006) etc. were some useful works consulted for the framing and construction of Questionnaires for the present study. Various and numerous questions were framed based on the topic of the study. These questions were divided into different section based on the different aspects of higher education. These aspects are Academic related questions, Finance related questions, and Infrastructure related questions and Administration or Management related questions. The questions were preceded by a general or personal information of the respondent and his/her affiliated institution. Different set of questions were framed separately for the principals or Administrators, teachers and students. Each set of questions separately for colleges and the lone university campus was framed.

The framed questionnaires were send to six different experts for their expert comments and necessary corrections. The questions were reviewed and modified in accordance with the suggestions of the experts and the contents were validated. The same modified set of questionnaires were then, administered in two colleges. The results were examined for reliability. In this process, the questionnaires were made ready for administration.

The questionnaire for the Principals of colleges comprises of the four aspects, namely, Academic related questions, Finance related questions, and Infrastructure related questions and Administration or Management related questions preceded by a general or personal information of the respondent and his/her affiliated institution. There are seventeen items in the general information section, thirteen questions under the Academic related aspect, eleven questions under the finance, fourteen under the Infrastructure and eighteen under the Administrative and Management related aspect.

The questionnaire for college teachers comprises of fourteen items under the general information, twenty two questions related to Academic activities, nine questions related to finance, fourteen questions related to Infrastructure and sixteen questions related to the Administration and Management.

The questionnaire for college students comprises of fourteen items in the general information, fifteen questions related to Academic activities, eight questions related to Finance, twelve questions related to Infrastructure and eleven questions related to Administration and Management.

The questionnaire for the officials of Indira Gandhi National Tribal University, Manipur Campus (IGNTU-MC) comprises of twenty items in the general information, thirteen questions related to Academic activities, eleven questions related to finance, fourteen questions related to Infrastructure and eighteen questions related to Administration and Management.

The questionnaire for the Teachers of Indira Gandhi National Tribal University, Manipur Campus (IGNTU-MC) comprises of fourteen items in the general information, twenty two questions related to Academic activities, nine questions related to finance, thirteen questions related to Infrastructure and fifteen questions related to Administration and Management.

The questionnaire for the students of Indira Gandhi National Tribal University, Manipur Campus (IGNTU-MC) comprises of fourteen items in the general information, fifteen questions related to Academic activities, eight questions related to finance, twelve questions related to Infrastructure and twelve questions related to Administration and Management.

4.7. Try-Out of the Tools

The constructed questionnaires were given to few experts for their comments and suggestions. The questionnaire was modified according to the suggestions of the experts. The modified questionnaires were then, tried out in two colleges namely Damdei Christian College and Presidency College Motbung, which are a private and government college respectively. The responses were analysed and studied to ascertain for any unnecessary data. After examination of the responses were over, the questionnaires were drafted for final administration.

4.8. Data Collection

Data were collected from both the primary and secondary sources. The primary sources includes sources like data gather through questionnaires, interview, prospectus of colleges, reports, archival records etc. Secondary sources includes sources like Books, Journals, Thesis (both published and unpublished), Dissertations (both published and unpublished) etc.

The procedure for data collection was included the following:

1. Documentary Survey
2. Administering questionnaires
3. Enrolment and achievement format
4. Observation during the field visits
5. Conducting interview

Data for the present study had been very taxing and time consuming, even as the political situations in the state of Manipur hampered free movement for the purpose. However, the cooperation of the institutions visited for the purpose was gratefully acknowledged. The kind cooperation of the librarians in the universities and other institutions, the officials at the State Archives, College Development Council, Directorate of Higher Education and the Department of Information and Public Relations were tremendously helpful in the process of data collection. Informal discussions with some academicians and Professors were also very stimulating and insightful. The required data had been collected from the following offices:

1. State Archive,

2. College Development Council, Manipur University
3. Directorate of Higher Education
4. Department of Information and Public Relations
5. Directorate of Census
6. Department of Statistics
7. Libraries visited included:
   i) Central Library, Assam University Silchar,
   ii) Central Library, Manipur University,
   iii) Central Library, North Eastern Hill University Shillong,
   iv) Central Library, Guwahati University,
   v) Central Library, Mizoram University, Aizawl,
   vi) Tribal Research Institution, Aizawl,
   vii) Tribal Research Institution, Imphal,
   viii) State Academy of Training, Takyel.
9. Colleges in hill areas of Manipur both private and government.
10. Indira Gandhi National Tribal University, Manipur Campus.

The readily available help and cooperation of some College Principals, teachers and students was indeed gratefully acknowledged. However, in some institutions much persuasion was necessary to carry out the administration of the questionnaires.

Table No. 4.6. Administration of Questionnaires

Sl. No.	Persons	Questionnaires distributed	Questionnaires returned	Questionnaires evaluated
1	Principals	18	18	18
2	Teachers	132	132	119
3	Students	350	350	350
Total		500	487	487

Questionnaires were administered to 18 principals, 132 college teachers and 350 students. Regarding the college principals, 18 questionnaires were administered to the principals each. All were returned with relevant response filled in. Despite all the questionnaires being returned, 13 teachers did not fill in the questionnaires properly and thus were discarded from the analysis. Therefore, the analysis of the teachers responses

were based on the strength of 119 teachers' response. Regarding the students all the respondents that is 350 students returned the questionnaires with appropriate responses. So, altogether, the analysis of the data was based on the 487 questionnaires returned.

Table No. 4.7. Interviews carried out

Sl. No.	Persons interviewed	No. of persons
1.	Professors	07
2.	Higher education officials	03
3.	Retired teachers	02
4.	Research Scholars	03
5.	Student Union leaders	03
6.	Social workers	02
	Total	20

As shown in table No.4.7, different persons were interviewed using the self-framed interview schedule which was not exhaustive but a guide to the interview. As was shown on the table, 7 professors of different department were interviewed, three officials from the Directorate of University and Higher Education, a couple of retired teachers, three research scholars, three leaders of students' union and two more social workers. Their opinions were heard and considered.

4.9 Analysis and Interpretation of Data

The study being descriptive, the analysis and subsequent interpretation of the data has been carried out with the help of descriptive statistics, percentage, tables and figures and charts as statistical tools. The analysis of the questionnaires were together carried out as far as possible for the principals of colleges, teachers of colleges including the teachers in Indira Gandhi National Tribal University, Regional campus Manipur (IGNTU-RCM) and students of colleges and a separate analysis was also carried out for the students of IGNTU-RCM. The collected data through questionnaires were feed and process through a software called Statistical Package for Social Sciences. The results were tabled and interpreted accordingly. Besides, some of graphical presentations were also used.

For the purpose of the study and interpretation, the present study looks at higher education in the hill areas in two perspectives. The development of higher education in hill areas has been studied in historical perspectives through available records and documents both government records as well as personal or local records including individual college histories. The second perspective looks at the present condition of higher education in the light of the theory of Student Involvement (Astin, 1999) regarding the condition or involvement of the students and teachers in their academic life and Resource Theory borrowed from the Traditional Pedagogical Theory (Astin, 1999) for the study of Infrastructures and learning resources of the institutions of higher education. The development of higher education have been studied through the number of institutions, enrolment, achievement etcetera while the status of higher education have been viewed by studying the academic, finance, infrastructure and management related aspects.