Chapter-III

METHODOLOGY OF THE STUDY

3.1.0 INTRODUCTION

Methodology of a study is concerned with the plan of action of the study. Methodology of a study depicts about the process of conducting the study. Methodology provides a suitable platform to a researcher to carry out and report a research work in a meaningful and systematic manner. It drives a researcher to keep his /her research work in right track. It provides the blue print of a research work conducted by a researcher. This chapter/section of the present study includes these points for discussion:

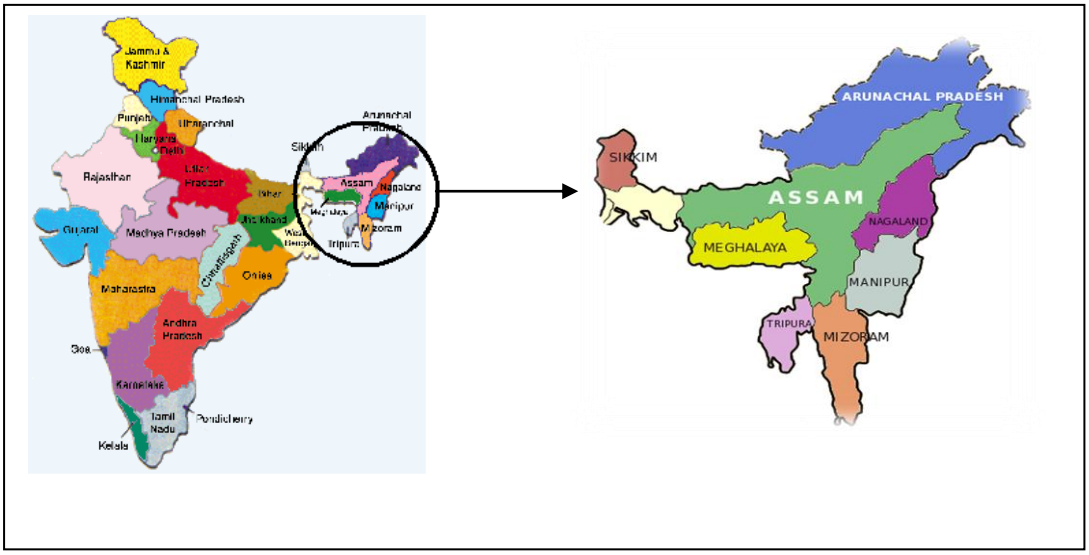
1) Area of the study
2) Sample of the study
3) Profile of the sample institutions
4) Design of the study
5) Tools used
6) Procedure for collection of data
7) Procedure for analysis of data
8) Design for analysis of data

3.2.0 AREA OF THE STUDY

Present study is conducted to know gender discrimination in educational practices of higher education institutions of north-east India. The study is conducted in socio-cultural and educational setting of north-east India. Hence the population area of the study includes all the states of north-east India i.e. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. But the sample area of the study is confined to six higher education institutions (i.e. Assam Agicultural University, Jorhat; Gauhati University, Guwahati; NIT, Silchar; Assam University, Silchar; Manipur University, Imphal; and NIT, Agartala) of north-east India.The researcher selected these six higher education institutions as the sample institutions for the study, because these six higher education institutions could provide the data as per the nature of the present study. The following map shows the position of three states of north-east India where the above mentioned six institutions are located.

Map-3.1

The Guide Map of Eight States of North-East India in India



3.3.0 SAMPLE OF THE STUDY

Though the scope / population unit of the present study covered all the higher education institutions of north-east India, the sample of the study covered six higher education institutions of north-east India. The researcher basically followed purposive sampling method for conducting the present study. While selecting the institutions for the study, the researcher selected Central government institutions as well as State government institutions (on the basis of the management of the institutions) and both professional instutions as well as non-professional institutions (on the basis of the professional base of the institutions).

Out of the six higher education institutions, 4 institutions are managed by Central government and the rest two institutions are managed by State government. Further, out of four Central government higher education institutions, two institutions are professional institutions and the rest two institutions are non-professional institutions. Further, out of two State government higher education institutions one is professional institution and the rest one is non-professional institution. The researcher has taken more number of Central government institutions in comparison to State government institutions in this study, because in north east India more number of Central government institutions are found in comparison to State government institutions. In this study, the researcher has taken equal number of

professional institutons and non- professional institutions. Out of six higher education institutions, four institutions are from Assam. One institution is from Manipur and one institution is from Tripura. Since Assam is the biggest/ largest state of north east India, so, most of the professional and non-professional higher education institutions of north east India are located in Assam. Further, in Assam large number of established/ old/ matured professional and non-professional higher education institutions are found. In all other states of north east India (except Assam) very less number professional and non-professional higher education institutions are found. Further, most of the professional higher education institutions of all other states of north east India (except Assam) are in infancy stage. Taking into consideration the nature of the present study, the researcher selected four higher education institutions from Assam one higher education institution from Manipur and one higher education institution from Tripura as the sample institutions for the present study. The details of the statewise locations of the institutions are given below.

Table-3.1

State Wise Location of the Institutions

Sl. No.	Name of the State	Name of the Institutions	Professional Base of the Institutions	Management of the Institutions
1.	Assam	Assam Agicultural University, Jorhat	Professional Institution	State Govt.
		Gauhati University, Guwahati	Non-Professional Institution	State Govt.
		NIT, Silchar	Professional Institution	Central Govt.
		Assam University, Silchar	Non-Professional Institution	Central Govt.
2.	Manipur	Manipur University, Imphal	Non-Professional Institution	Central Govt.
3.	Tripura	NIT, Agartala	Professional Institution	Central Govt.

The study included three categories of participants i.e. public relation officers/representatives of the head of the institutions, head of the departments, and students (i.e. boy students and girl students). From six institutions, six public relation

officers/ representatives of the head of the institutons (from each institution, one public relation officer/ representative of the head of the institutions) were taken as participants of the study. From six institutions, twelve departments (from each institution, two departments) were taken for selecting participants like head of the departments and students (boy students and girl students). From twelve departments, 12 head of the departments (from each department, one head of the department) and 240 students (from each department, 20 students i.e. 10 boy students and 10 girl students) were taken as participants of the study. The details of the distribution of the sample are given in the table 3.2.

Table-3.2

Distribution of the Sample

Sl. No.	Professional base of the Institutions	Management of the Institutions	Name of the Institutions	No. of Public Relation Officer/ Repersentative of the head of the Institutions	Name of the Departments	No. of Head of the Departments	No. of boy students	No. of girl students
1	Professional Higher Education Institutions	Central Government	NIT, Silchar	1	Computer Science	1	10	10
					Electronics and Communication	1	10	10
			NIT, Agartala	1	Computer Science	1	10	10
					Civil Engineering	1	10	10
		State Government	Agricultural University, Jorhat	1	Agriculture	1	10	10
					Home Science	1	10	10
2	Non-professional Higher Education Institutions	Central Government	Assam University, Silchar	1	Social Work	1	10	10
					Chemistry	1	10	10
			Manipur University, Imphal	1	Economics	1	10	10
					Chemistry	1	10	10
		State Government	Gauhati University, Guwahati	1	History	1	10	10
					Mathematics	1	10	10
Total				6		12	120	120

3.4.0 PROFILE OF THE SAMPLE INSTITUTIONS

The profile of the sample institutions is given below.

National Institute of Technology, Silchar was established in 1967. This institution runs the B.Tech., M.Tech., M.Sc., MBA, Doctoral programme etc. in the subject

areas of Civil Engineering, Mechanichal Engineering, Electrical Engineering, Electronics and Communication Engineering, Computer Sciene Engineering, Electronics and Instrumentation Engineering, Mathematics, Physics, Chemistry, English, Economics and Management etc. The public relation officer/ representative of the head of NIT, Silchar, and head of the department and 20 students (10 boy students and 10 girl students) of B.Tech Computer Science Engineering programme and head of the department and 20 students (10 boy students 10 girl students) of B.Tech. Electronics and Communication programme of NIT, Silchar constituted the participants of the study.

National Institute of Technology, Agartala was established in 1965. This institution runs the B.Tech., M.Tech., M.Sc., MCA, MBA, Doctoral programmes etc. in the subject areas of Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Communication Engineering, Electronics and Instrumentation Engineering, Mechanichal Engineering, Production Engineering, Bio Engineering, Physics, Mathematics, Chemistry etc. The public relation officer/ representative of the head of NIT, Agartala, and head of the department and 20 students (10 boy students and 10 girl students) of B.Tech. Computer Science Engineering programme and head of the department and 20 students (10 boy students 10 girl students) of B.Tech. Civil Engineering programme of NIT, Agartala, constituted the participants of the study.

Assam Agricultural University, Jorhat was established in 1969. This institution runs the B.Sc., M.Sc., Doctoral programmes etc. in the subject areas of Agricultural Biotechonology, Agricultural Economics and Farm Management, Agricultural Meteorology, Agricultural Statistics, Agricultural Engineering, Agronomy, Animal Husbandary and Dairying, Biochemistry and Agricultural Chemistry, Crop Physiology, Entomology, Extension Education, Horticulture Nematology, Plant Breeding and Genetics, Soil Science, Tea Husbandary and Technology, Child Development and Family Relation, Clothing and Textiles, Family Resource Management, Food and Nutrition etc. The public relation officer/ representative of the head of Assam Agricultural University, Jorhat, and head of the department and 20 students (10 boy students and 10 girl students) of B.Sc. Agriculture programme

and head of the department and 20 students (10 boy students 10 girl students) of B.Sc. Home Science programme of Assam Agricultural University, Jorhat constituted the participants of the study.

Assam University, Silchar was established in 1994. This institution runs M.A./M.Sc./M.Com./ M.Tech., M.Phil., Doctoral programmes etc. in the subject areas of Linguistic, Bengali, Hindi, Sanskrit, Indian comparative literature, English, Arabic, French, Economics, Commerce, Political Science, History, Sociology, Social Work, Mass Communication, Visual arts, Philosophy, Education, Physics, Chemistry, Mathematics, Computer Science, Statistics, Life Science and Bioinformatics, Microbiology, Biotechnology, Ecology and Environmental Science, Agricultural Engineering, Information Technology, Electronics and Telecommunication, Pharmaceutical Science, Earth Science, Library and Information Science, Law etc. The public relation officer/ representative of the head of Assam University, Silchar, and head of the department and 20 students (10 boy students and 10 girl students) of M.A. Social Work programme and head of the department and 20 students (10 boy students 10 girl students) of M.Sc. Chemistry programme of Assam University, Silchar constituted the participants of the study.

Manipur University, Imphal was established in 1980. This institution runs M.A./ M.Sc./ M.Com./ MCA/ MBA, M.Phil., Doctoral programmes etc. in the subject areas of English, Hindi, Linguistic, Manipuri, Economics, Education , History, Political Science, Physical Education, Mass Communication, Life Science, Biochemistry, Biotechnology, Anthropology, Earth Science, Geography, Mathematics, Chemistry, Computer Science, Physics, Statistics etc. The public relation officer/ representative of the head of Manipur University, Imphal, and head of the department and 20 students (10 boy students and 10 girl students) of M.A. Economics programme and head of the department and 20 students (10 boy students 10 girl students) of M.Sc. Chemistry programme of Manipur University, Imphal constituted the participants of the study.

Gauhati University, Guwahati was established in 1948. This institution runs M.A./ M.Sc./ M.Com./ M.Tech./ MBA, M.phil, Doctoral programmes etc. in the subject areas of Arabic, Assamese, Bengali, Mass Communication, Economics, Education,

English, Hindi, History, Library and Information Science, Philosophy, Political Science, Psychology, Sanskrit, Sociology, Anthropology, Biotechnology, Botany, Chemistry, Computer Science, Electronics and Communication Technology, Information Technology, Geography, Mathematics, Physics, Statistics, Zoology, Commerce, Law etc. The public relation officer/ representative of the head of Gauhati University, Guwahati, and head of the department and 20 students (10 boy students and 10 girl students) of M.A. History programme and head of the department and 20 students (10 boy students 10 girl students) of M.Sc. Mathematics programme of Gauhati University, Guwahati constituted the participants of the study.

3.5.0 DESIGN OF THE STUDY

Present study intended to study the gender discrimination in educational practices of higher education institutions of north-east India. The study basically falls in the area of survey research, because, in this study, researcher collected data from large source of participants (through the use of survey method) in order to know gender discrimination in educational practices in higher education institutions of north-east India. The study can also be considered under the documentary analysis research because for achieving some aspects of the study (aspects relating to first objective, second objective and last objective of the study), the participants provided data information to many extent by analyzing their institutional documents.The study also falls under both qualitative and quantitative approaches of research, because, for achieving different aspects of the study both qualitative approach and quantitative approach of data collection and data analysis are used.

3.6.0 TOOLS USED

Tools in the present study are used keeping in view the objectives of the study. In the present study, four tools have been used. Such tools are as the followings.

1. Tool–I (Information Schedule-I): Information Schedule for Studying the Status of Women Employees in Comparison to Men Employees in Higher Education Institutions (An Information Schedule for Public Relation Officers/ Representatives of the Head of the Institutions)

2. Tool-II (Information Schedule-II): Information Schedule for Studying the Status of Girls in Comparison to Boys in Higher Education Institutions (An Information Schedule for the Head of the Departments)
3. Tool-III (Interview Schedule-I): Interview Schedule for Studying the Gender Issues in Educational Practices in Higher Education Institutions (An Interview Schedule for Students)
4. Tool-IV (Interview Schedule-II): Interview Schedule for Studying the Existing Policies of the Govt. for Protection and Reservation for Women and their Inclusion and Implementation in Higher Education Institutions (An Interview Schedule for the Public Relation Officers/ Representatives of the Head of the Institutions)

The details descriptions of these tools are given below.

Tool –I (Information Schedule-I): Information schedule for studying the status of women employees in comparison to men employees in higher education institutions (An information schedule for public relation officers/ representatives of the head of the institutions)

This tool-I is an information schedule. This information schedule helped to collect data regarding the status of women employees in comparison to men employees in higher education institutions (i.e. to achieve the first objective of the study). The participants of this information schedule are the public relation officers of the institutions/ representatives of the head of the institutions. This information schedule secures the data regarding status of women employees in comparison to men employees in higher education institutions under two broad heads:

A. Administrative and the related positions

B. Academic and the related positions

Since this tool is a schedule, so, the information or data relating to this tool are collected through interview or personal interaction mode. This schedule also secures the institutional profile and personal data of the respondent. The details of the tool are given in Appendix –A.

Too-II (Information Schedule-II): Information schedule for studying the status of girls in comparison to boys in higher education institutions (An information schedule for the head of the departments)

This tool–II is also an information schedule like the first tool. This information schedule helped to collect data regarding the status of girls in comparison to boys in higher education institutions (i.e. to achieve the second objective of the study). The participants of this information schedule are head of the departments. This information schedule secures the data regarding the status of girls in comparison to boys in higher education institutions under two broad heads:

A= Enrolment to the Courses and Retention in the Courses data sheet of students of 2006, 2007, and 2008 admission batch (for four years courses) or students of 2008, 2009 and 2010 admission batch (for two years courses)

B= Completion of the Courses (Achievement) data sheet of students of 2008 admission -2012 pass out batch (for four years courses) or students of 2010 admission -2012 pass out batch (for two years courses)

Since this tool is a schedule, so, the information or data relating to this tool are collected through interview or personal interaction mode. This schedule also secures the institutional profile and personal data of the respondents. The details of the tool are given in Appendix- B.

Tool-III (Interview Schedule-I): Interview schedule for studying for gender issues in educational practices in higher education institutions (An interview schedule for students)

This tool-III is an interview schedule. This interview schedule helped to collect data regarding the gender issues in educational practices in higher education institutions (i.e. to achieve the third objective of the study). The participants of this interview schedule are students (i. e. boy students and girl students). This interview schedule secures the data regarding the gender issues under seven components in educational practices in higher education institutions:

A. Teacher behaviour

B. Curriculum

C. Institutional/ departmental activities

D. Discipline

E. Enrolment

F. Achievment

G. Providing benefits to the students.

Since this tool is an interview schedule, so, the data relating to this tool area collected through interview or personal interaction mode. This tool has been prepared and validated by adopting appropriate approach of tool preparation and validation. The researcher prepared or finalized this tool by taking necessary suggestion from the experts in the area of gender studies including her supervisor. The tool includes items relating to gender issues under seven components/areas in educational practices in higher education institutions. Each item of the tool includes three options i.e. 'Men (Boys)', 'Women (Girls)' and 'No discrimination in treatment'. A student has to support (by putting '√' mark) one of the three options. There is no fixed time limit for administration of this tool. The content/construct validity of the tool was established. This schedule also secures the institutional profile and personal data of the respondent. The details of the tool are given in Appendix –C.

Tool-IV (Interview Schedule-II) Interview schedule for studying the existing policies of the Govt. for protection and reservation for women and their inclusion and implementation in higher education institutions (An interview schedule for public relation officers/representatives of the head of the institutions)

This tool-IV is also an interview schedule like the third tool. This interview schedule helped to collect data regarding the existing policies of the govt. for protection and reservation for women and their inclusion and implementation in higher education institutions (i.e. to achieve the fourth objective of the study). The participants of this interview schedule are public relation officers/ representatives of the head of the institutions.

Since this tool is an interview schedule, so, the data relating to this tool are collected though interview or personal interaction mode. This tool has been prepared and validated by following scientific approach of validation. At first the researcher

prepared 12 tentative items for the tool. Such 12 items were thoroughly analyzed by three experts in the field of education/ gender studies. These experts gave some contructive suggestions regarding the items of the tool. Getting constructive suggestions from the experts and discussing with the supervisor, the researcher finalized the tool with 8 items. The items of the schedule are mostly fact finding type in nature. There is no fixed time limit for administration of this schedule. The content/construct validity of the tool is established. The schedule also secures institutional profile and personal data of the respondents. The details of the tool are given in Appendix –D.

3.7.0 PROCEDURE FOR COLLECTION OF DATA

For collection of data from the sample institutions, the researcher herself went to the sample institutions and there she personally administered the different tools on the target group of participants. The researcher created a very natural and friendly atmosphere when she collected data from the participants. This study is concerned with four objectives. The procedure followed for collection of data relating to all the four objectives are given below.

For achieving first objective of the study (i.e. to study the status of women employees in comparison to men employees in higher education institutions), the tool-I (Information Schedule–I) was administered on six public relation officers/ representatives of the head of the institutions of six sample institutions (i.e. one public relation officer/representative of the head of the institution of each sample institution).

For achieving second objective of the study (i.e. to study the status of girls in comparison to boys in higher education institutions), the tool-II (Information schedule –II) was administered on 12 head of the departments of 12 sample departments (i.e. one head of the department of each sample department) of six sample institutions. Tool –II was administered on head of the departments in order to collect Enrolment in the courses, Retention to the courses and Completion of the courses (Achievement) data of the students of 4 years B.Tech degrees/ programmes (in case of professional institutions) and 2 years Master degrees/ programmes (in case of non- professional institutions). Administering this tool, Enrolment in the

courses, Retention to the courses and Completion of the courses (Achievement) data of students of the three admission batches were collected from the head of the departments.

For achieving third objective of the study (i.e to study the gender issues in educational practices in higher education institutions), the tool-III (Interview Schedule –I) was administered on 240 students (i.e.120 boy students and 120 girl students) of 12 sample departments (i.e. 20 students of each sample departments) of six sample institutions. Tool-III was administered on students of 4 years B.Tech. degrees / programmes (in case of professional instituitions) and 2 years Master degrees / programmes (in case of non- professional institutions). Administering this tool, data from students of one admission batch were collected.

For achieving fourth or last objective of the study (i. e. to study the existing policies of the govt. for protection and reservation for women and their inclusion and implementation in higher education institutions), the tool- IV (Interview Schedule–II) was administered on six public relation officers/ representatives of the head of the institutions of six sample institutions (i.e. one public relation officer/ representative of the head of the institutions of each sample institution).

3.8.0 PROCEDURE FOR ANALYSIS OF DATA

The researcher followed both qualitative and quantitative methods for analysis and interpretation of data. The quantitative method like percentage was used for analysis and interpretation of data of the present study.

3.9.0 DESIGN FOR ANALYSIS OF DATA

Present study titles as “Gender discrimination in educational practices: A study of higher education institutions of north-east India”. The study is concerned with four objectives. The details of the design for the data analysis and interpretation of data relating to the different objectives of the study are given under the following points.

1. Status of women employees in comparision to men employees in higher education institutions (based on first objective).
2. Status of girls in comparison to boys in higher education institutions (based on second objective):

A= Status of girls in comparison to boys in higher education institutions in enrolment to the courses

a= Status of girls in comparison to boys in professional higher education institutions in enrolment to the courses

b= Status of girls in comparison to boys in non-professional higher education institutions in enrolment to the courses

c= Status of girls in comparison to boys in higher education institutions in enrolment to the courses.

B= Status of girls in comparison to boys in higher education institutions in retention in the courses

a= Status of girls in comparison to boys in professional higher education institutions in retention in the courses.

b= Status of girls in comparison to boys in non-professional higher education institutions in retention in the courses.

c= Status of girls in comparison to boys in higher education institutions in retention in the courses.

C= Status of girls in comparision to boys in higher education institutions in completion of the courses (Achievement)

a= Status of girls in comparison to boys in professional higher education institutions in completion of the courses (Achievement).

b= Status of girls in comparison to boys in non-professional higher education institutions in completion of the courses (Achievement).

c= Status of girls in comparison to boys in higher education institutions in completion of the courses (Achievement).

3. Gender issues in educational practices in higher education institutions (based on third objective):

A= Gender issues in educational practices in professional higher education institutions.

B= Gender issues in educational practices in non-professional higher education institutions.

C= Gender issues in educational practices in higher education institutions.

4. Existing policies of the govt. for protection and reservation for women and their inclusion and implementation in higher education institutions (based on fourth objective).