CHAPTER-II

METHODODOLOGY

The Research employs a synthesis of historical and Field Research methodology to study the Mizos in North East India. Hence, the research heavily depends on information gathered through personal interviews held at different centers of the study area.

A number of qualitative and quantitative techniques will be incorporated in the study of various aspects of population distribution. Statistical techniques and methods will be used to calculate the mean, averages, percentages and other analysis for meaningful data interpretation. The Research employs qualitative and quantitative techniques, or a combination of both. The difference between the two, as Best and Kahn (1998)\(^1\) describe, lie in the numbers. Qualitative research involves watching and asking, aims to describe events and persons in detail without the use of any numerical measuring and controlling numerically analyzable information. The strength of the qualitative research lies in its ability to quantify generalisable variables and measures factors in terms of amount, intensity or frequency. In contrast, quantitative research attempts to achieve a deeper, holistic understanding of the phenomena being studied from an emic perspective.

Selizer & Sholamy (1989)\(^2\) further divide qualitative research into ethnographic and descriptive research. Ethnographic research takes a holistic approach and typically begins with few preconceived ideas or assumptions about data. On the other hand, descriptive research begins with predetermined hypothesis and narrower scale of enquiry. Both ethnographic and descriptive research designs are concerned with discovering and describing a phenomenon in naturally occurring contexts, without experimental manipulation. Descriptive research may be carried out by means of case studies or group studies. Some of the most important methods include surveys, interviews and observation. In this present study, the research design is primarily targeted to group studies based on surveys, questionnaire, interview schedule and observation.

The present study combines both qualitative and quantitative methods of research into the descriptive paradigm as it aims to observe and describe systematically factual events and accurately present them on different mapping techniques. These systematically factual events on maps about the people are based on preconceived phenomena (i.e. migration, distribution and adaptations) through surveys, questionnaire, interview schedule and observation in the field.
2.1. Initiating Contacts:

Accessing to research sites and participants proved to be an arduous and challenging task. It was first attempted to formally obtain lists of towns, villages and individuals through personal contacts with prominent persons of the area. In this context, it was found out that going to the Mission Fields was the best option to get to know the field and the people. So, a personal contact to the Missionaries in the Mission Fields was done within the study area and located important villages, towns and individuals who knew the history and culture of the people concerned. The other documents in the form of books, souvenirs etc are also obtained from the Missionaries and individuals to get to know better the people’s past and present.

Originally it was intended to do the research by conducting a sample village survey with the help of a structure questionnaire schedule. In this regard, a pilot test of 12 villages which are in close proximity in Manipur was conducted. This proved to be not successful in terms of reliability of data and information. The major difficulty encountered was that, people were too sensitive on personal information as well as their tribes’ history and culture. This was the main reason behind where village by village survey was abandoned at an initial stage. Instead, a survey based on historical importance of the sites was adopted and contacting prominent persons involved in the field. So, as a result a careful selection of sites and individuals, though in few are selected and visited. One more problem that was the Chiefs and His Council of Ministers (Upas) are too young to deal with the issue and old people were reluctant to speak out since their sons are already in the helm of the administration. They became dependent on their sons for their survival. The reason for young chiefs and Upas was due to insurgency problems and the need to run after different governmental schemes under the central and the states.

In Mizoram, it was tried the same with improved questionnaire schedule for an easy answer during the 61st General YMA Conference held at Kolasib. Altogether five hundred questionnaire schedules were distributed to participants belonging to the eight districts of Mizoram from different backgrounds. Out of this, two hundred copies were received with improper responses from them. The responses were not reliable and unacceptable in many cases. Due to these difficulties, it was decided to sought out personal contacts and locate resourceful persons in the study area with the help of missionaries who knew the field better. In this regards, the first contact for the study was
initiating meeting with the Mission Field of different study sites. After which, villages and resourceful persons are selected, located and visited according to their convenience.

During the initial period of securing access to research sites and getting consent from participants, it was realized that participants were reluctant to actively participate to any queries. The reason being, it was time consuming and had no relevance with them in the study. Some participants even asked and enquired whether they would get economic benefit from the government out of it. However, after introducing the purpose of study, they were hesitantly ready to participate and gave some invaluable information about the people. It was one of these initial contacts that the need to broaden the scope to include even a very small and numerically insignificant tribes and sub-tribes of the people. However, obtaining and acquiring data and information were not easy as well as impossible. That was the reason; the very small and numerically insignificant tribes like Kaipeng, Rualkhums etc of the Kuki group of Tripura have to be generalized with the rest of the bigger tribes. Nevertheless, all possible steps are taken to get information on them.

2.2. Source of Data:
A field study to collect primary data is vital to the study of the trend of migration. In this regard, collections of primary data through field work, interview method and questionnaire will be done through universe and sample selection. The study will be based on the sample survey which will be conducted in hotspots of their settlement in north east India. The towns and areas selected for the field study are, Aizawl in Mizoram, Haflong in north cachar hills of Assam, Churachanpur and Chandel districts of Manipur and Hill areas of north Tripura. The database will be from both primary and secondary sources. The primary sources will be collected with the help of observation, extensive surveys and interview schedules designed for the purpose. The primary sources of data are gathered with the help of the following method;

Questionnaire:
A questionnaire is a self report instrument useful for economically and speedily obtaining data from a large number of respondents (Brown 2001). In the study of economic and social status of the youth questionnaire was used. It was used to obtain both qualitative and quantitative data. The questions used for this study targeted both, as it contained close ended sections that to be responded
by participants. The questionnaire was devised and designed to satisfy two main objectives. Firstly, it attempted to know the respondents’ economic, social and educational status. Secondly, it attempted to identify the socio-civic amenities available in the locality. The questionnaire was intended to obtain answers for the Socio-Civic Amenities available in the areas.

**Interview Schedule:**

Interviewing is one of the most powerful tools used in attempting to understand people’s point of view, beliefs and attitudes. Interviewing has many advantages over other types of data collection. It is because of its interactive nature. All the participants are selected keeping in mind the objectives of the study. The questions are devised to get maximum and accurate information on the people. Most of the questions are structured open ended questions to be answered in word or a sentence. This is purposely done to make the interview more friendly and acceptable. All the interviewees are asked the same questions in the same order. Clarification questions are used when it is necessary to probe the responses to the basic questions. The interview schedule tries to obtain information relates to Socio-Economic aspects of the community.

In this study, one to one interviewing was chosen as the primary methods of data collection for various reasons. Firstly, it provided an ideal means of exploring the beliefs of the people. Secondly, it made me to understand the exact route of the movement leading to their dispersal. Thirdly, it provided for the difference in socio-economic status of different groups vis-à-vis their respective government’s plan and policies. Fourthly, it also provided a platform to know and understand the transformation taking place in the social groups. In addition to the questions that are explicitly asked about the people, attempts were also made to know the transformations of family’s occupations and that of the social groups’. The interview schedule used for the study was conducted two times to different individuals. Besides, regular informal conversations were held often prior to the field visit. These proved to be very useful to know more about them and the culture of the people.

**Observations:**

The purpose of observation was an attempt at validating the information gathered through questionnaire, interview schedule and other data collected from secondary sources. It was also an
attempt to observe the beliefs and attitudes of the people as well as their adaptation to the environment they live. It gave an insight to their socio-cultural aspects of their life. An extensive survey was done and recorded observations in the researcher’s diary. Furthermore, a regular attention was made to the study area through newspapers, T.V. news, magazines, journals and internet. These gave an insight to the people and enable to monitor the people’s view and attitude towards socio-economic development in their respective areas.

**Secondary Source:**

The secondary data will be based from Census of India Publications, literary works, statistical handbook from government publications, periodic and journals. The population data of different areas are mainly from the publication of Census of India and the socio-economic variables are from the statistical Handbook of respective States. These secondary sourced data are used to describe, understand and explain how things are at the study sites. All available documents in the form of village records, journal and souvenirs were collected to authenticate the available data. It was also attempted to record all activities related to research from the very beginning till data analysis was completed. The secondary sourced data are tabulated, analyzed and represented by various techniques of mapping.

2.3. Data Analysis:

In this context, Cartographic techniques for preparation of thematic maps will be heavily dependent upon computer mapping. The analyzed data will be represented with computer mapping techniques using *AutoCAD 2004* and *Auto-CAD 2013* soft-ware. The interpretation of topographical sheets and satellite imageries will help us to understand the actual movement of the people with the help of computer. In short, computer mapping techniques based on the above Soft-ware will be a key to map making and interpretations in the study area. Lastly, GIS techniques is extensively used to draw maps and for interpretations.

“The clan is a true extended family.” The migration of rural people having blood relations over certain space is known as spatial diffusion of clan rural population in a region. Since, the Mizos are composed of various clan groups; it is pertinent to study their movement clan wise. This will show the real picture of their population dispersion in time and space. The causes and types of
migration can also be ascertained more effectively. There is one model which can be tested for spatial diffusion of clan groups among the Mizos of North East. This model will be tested for the diffusion of various Mizo clan groups. The model to be tested and modified to suit Clan movement of the Mizos is be based on Peterson’s classification who adopted a variety of criteria, the most important being the distinction between migration which is undertaken in order to change the way of life (innovative) and that which helps to preserve it (conservative) (Peterson, 1948). ⁶

The researcher has attempted and modified this model of clan movement by taking two ends represented by availability of food (Innovative) and the other end is represented by Conservative where different clan groups of Mizos moved in different directions in the past. In this regard, the migration selection will ascertained taking into account the movement undertaken by various clan groups for food and conservation. The modified model is as under;

![Figure 2.1: Models of Migration Selection in the Regions.](image)

“Migration waves have a location in terms of origin and destination and are, of interest to geographers”. Food is necessary for human beings. Its sufficient availability is only possible if the provision of employment is adequate. The author has devised a multiple model of clan migration, in which one end is represented by availability of food and the other by employment. Wherever the people are unemployed, they migrate to get food and employment. Forced migration takes place as
a consequence of war and administrative whims while migration by choice occurs due to drought and famine condition (Mandal, 1981).

Quantitative Data:
All the qualitative data in relation to the study are mainly from the survey conducted during the last three years. Since most of the data collected are qualitative in nature, a maximum care is taken to analyze and interpret the same. This included all open-ended responses to the questionnaire, interview schedule, field notes, researcher’s diary and document data. The procedure used for analyzing the data was to group them in tabular form. The set of data was read several times in order to the meaning of the ideas being expressed. The data was analyzed and authenticated with the available literature. The analyzed data supported by literature and the available evidences in the form of inscriptions, memorial stones, oral traditions etc are represented by appropriate maps and mapping techniques. The maps are drawn on scale with the help of AutoCad-2004 software. The superimposition maps are drawn with the help of AutoCad-2004 and Auto-Cad 2013 soft-wares.

Quantitative Data:
The quantitative data are mainly from the secondary sources and data collected during surveys and field visits. The secondary sources are from Census of India Publications and Statistical Handbooks. The data collected through surveys are from Questionnaire, interview schedule and observations. These data were tabulated and analyzed statistically to form an appropriate data source. The statistical techniques used to analyze data are mean or averages, ratio and percentages. Statistical techniques and methods will be used to calculate the mean, averages, percentages and other analysis for meaningful data interpretation. Several different measures of central tendency will be used to analyze the population data.

Mean or Averages: For calculating the mean or averages, the following formula is used.

\[ \bar{x} = \frac{(x_1 + x_2 + \cdots + x_n)}{n} \]

This formula is usually written in a slightly different manner using the Greek capitol letter, \( \Sigma \), pronounced "sigma", which means "sum of...":

\[ \bar{x} = \frac{\sum x}{n} \]
You may have noticed that the above formula refers to the sample mean. So, why have we called it a sample mean? This is because, in statistics, samples and populations have very different meanings and these differences are very important, even if, in the case of the mean, they are calculated in the same way. To acknowledge that we are calculating the population mean and not the sample mean, we use the Greek lower case letter "mu", denoted as \( \mu \):

\[
\mu = \frac{\sum x}{n}
\]

**Percentages**

When the focus is on the degree to which a population possesses a particular attribute, the measure of interest is a percentage or a proportion.

- A **percentage** is another way of expressing a proportion. A percentage is equal to the proportion times 100. In our example of the five women, the percent of the total who weigh less than 135 pounds would be 100 \((3/5)\) or 60 percent.

The density and growth of population is calculated using the following formulas;

The density of population is expressed as the number of persons per square kilometer. It can be expressed as; *Density = Total number of people of a region/Total area of the region*

The growth rate of the population is calculated by using the following formula;

\[
G = \frac{\text{absolute change}}{\text{population of the previous year multiplying by 100}}
\]

The sex-ratio in the core regions for all the districts was calculated using the following formula:

\[
\text{Sex Ratio} = \frac{P_f}{P_m} \times 1000
\]

Where, \( P_f \) = Number of females and \( P_m \) = Number of males

**2.4. Role of Remote Sensing and GIS:**

Remote sensing technologies are increasingly used to monitor landscape change in many parts of the world. While the availability of extensive and timely imagery from various satellite sensors can aid in identifying the rates and patterns of deforestation, modelling techniques can evaluate the socioeconomic and biophysical forces driving deforestation processes\(^7\).

Both qualitative and quantitative data are arranged and tabulated and represented by different mapping techniques using soft-wares of AutoCad-2004 and AutoCad 2013. The digitized map showing and depicting all qualitative and quantitative data are drawn according to scale. The scales...
of the maps are as follows; the main map showing Indian Sub-Continent, North Eastern States and the districts of the study area is drawn on different scales. The scale of the Indian Sub-Continent map is on the R.F. 1:35,000,000 and is drawn on Lambert Conical Orthomorphic Projection. The map showing the North Eastern States on the main map is drawn on the scale of R.F. 1:75,000,000 (approximately). The map showing the districts of the study area on the main map is drawn on the scale of R.F. 1:2,470,000 (1 centimetre = 24.7 kilometers).

The map of the North Eastern States of India is drawn on the scale of R.F. 1:4,000,000. The projection of the map on which it is drawn is conic projection. The map showing all the districts where a sizeable number of Mizos lived is drawn on the scale of R.F. 1:2,470,000 (1 centimeter = 24.7 kilometers). The maps showing all districts of Mizoram, southern Manipur and parts of Barak Valley is drawn on the scale of R.F. 1:1,200,000 (1 centimeter = 12 kilometers). The other two maps showing the districts of Mizoram, Tripura and parts of Barak Valley as well as map showing districts of Manipur and adjoining regions of Cachar, North Cachar and southern Nagaland are drawn on the same scale of R.F. 1:1,200,000 (1 centimeter = 12 kilometers). The map showing all the districts of the study area from Dimapur district of Nagaland to Saiha district of Mizoram and from east Meghalaya to as far as Manipur is an enlarged map from R.F. 1:4,000,000 to R.F. 1:2,000,000. It is drawn on the projection of conic projection.

Once all the data are analyzed and represented with the help of different techniques of mapping, peer debriefing was carried out as a means of trustworthiness of the analysis and interpretations. The results were further analyzed with my Supervisor many times to authenticate the findings, analysis and interpretation of data. Finally, it was placed before an expert committee of my department. After suggestions are incorporated into the study, final preparations of maps and interpretations were done extensively. However, all suggestions were not incorporated due to technical difficulties in the application of software in mapping.

**Summary:**

This chapter has presented and evaluated the research design and data collection procedures used in the study. The research design sought to investigate the socio-economic conditions of the people of various tribes. It again tried to investigate on the migration pattern leading to their dispersal in the
contiguous area. It is also meant to discern the distributional pattern in the region. The descriptions
of analysis were provided to strengthened trustworthiness and transparency. The results of the data
gathered from the survey and other sources are presented in the following chapters. The next
chapter exclusively deals with causes, types and pattern of migration. The last two chapters are
dealing with the distributions of the Mizos in North East India under various demographic attributes
and presented with table, charts, diagrams and maps. The last chapter deals with the adaptation of
the people taking into account their place of stay. This is again presented with different techniques
of diagrams and mapping.
REFERENCE:


2. Ibid – p-63

3. Ibid, p-79


5. Op cit, Pp.160 -167
