

CHAPTER III

RESEARCH METHODOLOGY

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3.1 Research Methodology:

Nations across the globe now stand committed to reducing impact of floods on communities by minimizing the loss of life and property, preventing environmental damage and socio- economic disruption caused by extreme natural events. The ultimate goal is to prevent hazards from turning into disasters.

The process of building flood resilient communities is the most significant step towards achieving the objectives. Now there is marked change in our approach towards Flood Management. We now attach topmost priority to disaster risk management instead of confining all our efforts to post – disaster emergency response. This new approach calls for proactive flood management initiative in which local communities have been assigned a key role. The Communities and their response play a vital role in minimizing the damages caused by the floods.

In the context of aforesaid brief analysis, an attempt has been made here to focus certain salient features of community based flood management in Cachar district. The people of Cachar face the flood almost every year and have developed certain coping strategies to deal with it. The main crop of the area is paddy and agriculture is the main source of economy of the District.

This study is a holistic study that seeks to cover the entire range of community based flood management activities which is adopted to deal with floods. There are a number of concerns that are either not attended or partially attended or simply touched in respect of Flood Management in general and community based flood management in particular. As such the study seeks to bridge the gap between response centric approaches to preparedness centric approach in respect of flood management. The study is comprehensive and seeks to find out each and every aspect of flood management techniques used to minimise the losses of floods. It further attempts to study the coping mechanisms used by the community and local NGOs in dealing with floods. In view of the above, the researcher has developed the following objectives of study:

3.2 Objectives of the Study:

1. To identify the coping strategies adopted by the rural community in dealing with floods and role of NGOs and Gram Panchayats.
2. To examine the knowledge of the people about the Government policy / Programmes regarding Flood management.
3. To understand the role played Non Governmental Organisations and Panchayat Raj Institutions (PRIs) in Flood Management.
4. To study the problems and constraints of Community Based Flood Management.
5. To explore the scope and relevance for Social Work Intervention.

3.3 Research Questions:

Who are more vulnerable to disasters?

Is there any relation of frequency of floods with the coping strategies?

How do they respond to the government initiated preparedness programmes?

3.4 Rationale of the Study:

Community action in flood management includes emergency operations and evacuation procedures when necessary and overall measures designed to minimise social and economic disruption, and to effect the restoration of normal community functioning as quickly as possible. The existences of community action in flood management in multi disaster prone area affect the level of flood management of the country. The area of my study which will be conducted comes under the multi-disaster prone area and flood affects the area almost every year and thus the people have developed indigenous coping strategies to deal with floods. Moreover the

researcher also attempts to find out the best practices in CBFM in other parts of Assam especially north Assam.

3.5 Scope and Importance of The Study:

Assam including Barak Valley is rich in natural resources and has a wealth of valuable flora, fauna, cultures and heritage. It has a complex socio-economic, political and cultural history. The British adopted the principle of non-interference and seclusion in matters of administration in the region. The customary rules and laws prevail till date. Assam have autonomous district councils in Karbi Anglong , Dima Hasao, Bodo etc to manage their affairs, resulting in even greater diversity of law and policy level bodies in this region.

Assam is surrounded of eastern part of the great Himalayan are comprising the whole of Arunachal Pradesh, and the eastern hill ranges comprising of the Patkai Manipur Mizoram-Arakan-Chittagong hill tracts and the Shillong-Mikir Plateau. Scenic blue hills and numerous meandering streams surround the entire region. Dominating the geography of the region is the Brahmaputra River providing the largest drainage network in the entire eastern region of the country.

In Barak Valley the river Barak is the main source of water in three districts viz. Cachar, Karimganj and Hailakandi. In Cachar the river Barak is the main river. Like other parts of Assam, Cachar is also a multi hazard prone area. Flood and cyclones affects the District almost every year and cause heavy losses to life and property. The people of the valley have their own coping mechanism to deal with disasters and as such the loss of human life due to flood is comparatively less in this part of India as compare to other parts of India. Besides flood, Cachar also comes under seismic zone V which is recognized as high risk zone as per as the occurrence of earthquake is concerned but from last 60 years it has not witnessed any major earthquake thus the level of community preparedness is not known and the scope of the study becomes widened .

There are a number of concerns that are either not attended or partially attended in respect of disaster management in general and community based disaster

management in particular. Communities across the globe now stand committed to reducing the impact of natural and man made calamities on communities by minimizing the loss of life and property, preventing environmental damage and socio-economic disruption caused by extreme natural events. Thus the importance of a study on Community Based Disaster Preparedness is very important as the communities of the region face the disasters especially floods almost every year and people are equipped to face the floods. Unlike Maharashtra and Gujrat the loss of human life is comparatively less in this region due to the indigenous coping strategies which the community people have developed to reduce the impact of flood. Thus a study on their coping strategies needs to be carried that will further widen the scope of community based disaster preparedness.

For development of the region it is important to address the issues relating to proper management of natural resources and minimizing loss of infrastructure and property due to recurring natural disasters like floods, landslides, erosions and earthquakes. The focus today has shifted from post disaster relief to disaster preparedness. The GOI-UNDP programme on Disaster Risk Management focuses on disaster preparedness and mitigation.

Due to increasing frequency of the natural disasters and their severe impact on individuals, communities, society, economy and environment in the last few years, the subject of disaster management has received greater attention in India at all levels. UNDP, USAID, IRG, WHO, UNICEF, FAO and like some other National and International Agencies has been supporting the initiatives of the central and state governments to strengthen the disaster management capacities of the communities for nearly a decade. (UNDP Report, 2003).

3.6 Methodology:

A descriptive research design has been adopted for the study.

3.7 Sampling :

The universe of the study is the flood prone villages of Cachar. A multistage stratified random sampling procedure has been adopted to select the blocks, villages and households. Six out of 15 blocks of Cachar district viz., Sonai, Palonghat, Udharband, Banskandi, Borjalenga and Katigorah are worst flood prone. Out of six worst affected blocks one block i.e Sonai Development Block is purposively selected for the study. Subsequently, from the selected block two Gram Panchayats namely Sildubi and Rangirghat GP has been randomly selected. The Gram Panchayats has been identified with the help of the indicators of proneness to floods i.e both worst affected and least affected areas of both the Gram Panchayats is being purposively studied. Out of which Rangirghat GP is close to block head quarters and Sildubi GP is remote to Sonai Block Head Quarters. Households are being selected randomly for the study representing various communities at village level. From each Gram Panchayats the disaster management committees is being studied to understand the community level initiatives taken up in the village. Three NGOs has been selected purposively to understand their role in flood management in selected Gram Panchayats. The NGOs are selected on the basis of their involvement in flood management. People responsible for the implementation of Governments policies and programmes for Disaster Management are being interviewed from each Gram Panchayats.

3.8 Methods and Tools of Data Collection:

The study is based on the primary data collected through quantitative, qualitative and participatory methods. Field survey for quantitative and qualitative data has been used. As the study is a descriptive study, field survey with structured household interview schedule has been conducted to probe into the coping strategies adopted both at household level and community level to deal with floods. Participatory Rural Appraisal (PRA) methods, focused group discussions has been used to understand the dynamics of community based flood management in Cachar.

3.9 Data Processing and Interpretation:

The data has been collected through field survey is processed and analyzed with the help of computer software especially MS-Excel. Findings of the study has been analysed through content analysis and presented through the use of different tables, graphs and charts.

3.10 Approaches and Methodology:

The researcher visited the field during the flooding time and observed the current situation through the transect walk along the Sonai river in Cachar district. During the visit, discussions were held with the various communities. Information regarding the floods in the study areas was gathered. The researcher conducted Focus Group Discussion (FGD), community meetings, observations and PRAs in the flood affected area of Rangirgaht part I, & III , Sildubi and Menipur Villages . Conducted meetings with Village Disaster Management Committee. Some key informants were also interviewed while collecting the additional information about the flood and its effect on the community. Similarly, the researcher visited offices of the Deputy Commissioner (DC), Block Development Officer(BDO), Chief Exucutive Officer, Cachar Zila Parishad, Office of the Project Director, District Rural Development Agenct(DRDA) in Cachar district. Discussions were held with the officials of these offices on the flood-affected community and on activities carried out by the various agencies on flood mitigation, relief and rehabilitation.

In order to orient the community to form organized groups for flood management activities, a model constitution of the committee was distributed and read in the community gathering.

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discussions used to understand the dynamics of community based flood management in Cachar.

3.11 Operational Definitions :

1. **CBDP/ CBDM:** Community Based Disaster Management/ Community Based Disaster Preparedness. Here it refers to the indigenously developed disaster coping strategies which the community people practices to save themselves from flood in general and other disasters in particular.
2. **CBFM:** Community Based Flood Management. Here it refers to the indigenously developed coping strategies which the community people practices to save themselves from flood.
3. **Revenue Villages/ Communities:** Here, it refers to those villages where community people practice the CBFM and Government is also trying to improve the practices in structured way.
4. **Coping Strategy:** Here, it refers to those practices which are indigenously developed by the community people to deal with floods in general and other disasters in particular.
5. **Physical vulnerability:** It relates to the physical location of people and elements at risk, buildings, infrastructure etc. and their proximity to the hazard.
6. **Socio-economic Vulnerability:** This relates to the degree to which a population is affected by the calamity in relation to the prevailing social and economic conditions. The impact of a disaster is determined by the event, its effects on people and their environment, as well as the consequential effect on human activities within a given society.
7. **Relief:** It refers to a period immediately following the occurrence of a disaster when steps are taken to meet the need of survivors with respect to shelter, water, food and medical care.

- 8. Rehabilitation:** It includes activities that are undertaken to support the victims return to normal life and re-integration into regular community functions.
- 9. Flood Mitigation:** It encompasses all activities undertaken in anticipation of the occurrence of a potentially disastrous event, including preparedness and long-term risk reduction measures. It includes scientific analysis or risk assessment, social, economic, legal and technical processes in development of suggestive measures *and administrative and political processes in application of these measures.*
- 10. Risk:** Risk is a measure of the expected losses due to a hazard event of a particular magnitude occurring in a given area over a specific time period. Risk is a function of the probability of particular occurrences and the losses each would cause. The level of risk depends upon: Nature of the Hazard, Vulnerability of the elements which are affected and economic value of those elements.
- 11. Hazards:** Hazards are defined as Phenomena that pose a threat to people, structures or economic assets and which may cause a disaster. They could be either manmade or naturally occurring in our environment.

The extent of damage from a disaster depends on:

- 1.The impact, intensity and characteristics of the phenomenon and
- 2.How people environment and infrastructure are affected by that phenomenon.

12.Vulnerability : It is defined as the extent to which a community, structure, service and geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their physical location, socioeconomic background. Vulnerability also depends upon the degree of effectiveness in implementation of Disaster Management Programmes especially during rescue, relief, rehabilitation and disaster mitigation.