

# **Women's Experiences in Disaster: A Case of Koshi Flood 2008 in Nepal**

*What is a disaster? When is a disaster a disaster?*



## **Submitted by**

**Smriti Thapa**

**Master of Development and Rural Innovation**

**Rural Development Sociology (RDS- 80430)**

**Wageningen University, the Netherlands**

**840111-827-100**

## **Supervisors**

**Professor Leontine E. Visser**

**Asst. Professor Jeroen Warner**

**July 2012**



## **Acknowledgements**

I sincerely thank the Netherlands Fellowship Programme (NUFFIC) for awarding me the scholarship in pursuing the master's degree study in Wageningen University. I would like to express my gratitude to the institutions and people who helped me directly or indirectly during the entire research project.

I am obliged to my thesis supervisors Professor Dr. Leontine E. Visser and Assistant Professor Jeroen Warner, Social Science Department, Wageningen University for their guidance and immense support while conducting this study. They allowed me to search for the knowledge generation, innovative ideas and methodology for this study in which I was interested in. Their inputs have provoked new thoughts and stimulated new insights within me towards sociological issues. This contributed to what I have had extreme enthusiasm to carry out the study.

My heartfelt thanks go to the participants of this research, key informants for their valuable time, support and in accomplishing this study in field. "A cup of tea" offered to me a few times by participants were the reflection of bolstering our relationship. I am grateful to them for their trust, wishes and kind co-operation while conducting household survey, interviews, focus group discussions, interactions are highly appreciated.

My earnest appreciation goes to my family, especially my husband- Sushil Thapa- for his love, understanding, patience and truly supporting me from a distance. Equal gratitude goes to my parents for their support in prayer.

Once again, thank you all!

Smriti Thapa

Wageningen, July 2012

## **Abstract**

The concept of disaster has its series of evolution questioning what is a disaster? and when is a disaster a disaster? The paper aims to contribute to our understanding of displaced women's agency in disaster and the concept of disaster from women's perspective by exploring the crisis and opportunities of the aftermath of the Koshi flood disaster 2008 in wards number 7 and 8 of Sripur VDC, Sunsari district, Nepal. This explanatory and exploratory research uses both the qualitative and quantitative research methods. The study explains women's stories as qualitative data analyzed from ten in-depth interviews, six key informants interviews, two focus group discussions complemented by quantitative data obtained from sixty household survey. After three years of flood, study shows that displaced women constitute their agency using their knowledge, skills, groups and networks and coping practices to combat crisis-effects in response and recovery phases of disaster but to a particular group the opportunities increased after the event. Hence, it is concluded that women were not simply "passive victims" in disaster so their actions should be recognized and disaster is not necessarily a crisis to all the members of disaster-displaced community.

**Keywords:** Disaster, women's agency, Koshi flood 2008, Nepal

## Table of Contents

|  |           |
|--|-----------|
| <b>Acknowledgements .....</b>                                | <b>i</b>  |
| <b>Abstract.....</b>   | <b>ii</b> |
| <b>Acronyms .....</b>  | <b>vi</b> |
| <br>   |           |
| <b>Chapter I: Introduction.....</b>                          | <b>1</b>  |
| 1.1 What and why this study? .....                           | 1         |
| 1.2 Research problem, objective and research questions ..... | 3         |
| 1.3 Country profile and overview of the research area .....  | 4         |
| 1.3.1 Overview of country: Nepal .....                       | 4         |
| 1.3.2 A brief note on Sunsari District .....                 | 11        |
| 1.3.3 A brief note on Sripur VDC.....                        | 13        |
| 1.4 Structure of the thesis .....                            | 14        |
| <br>   |           |
| <b>Chapter II: The Research Project.....</b>                 | <b>16</b> |
| 2.1 Conceptual framework .....                               | 16        |
| 2.2 Research methodology .....                               | 18        |
| 2.2.1 Research area .....                                    | 20        |
| 2.2.2 Unit of analysis .....                                 | 21        |
| 2.2.3 Data generation .....                                  | 21        |
| 2.2.4 Data analysis and presentation.....                    | 23        |
| 2.2.5 Constrains and limitations of the study .....          | 24        |
| <br>   |           |
| <b>Chapter III: Women’s Agency in Disaster .....</b>         | <b>26</b> |
| 3.1 What is a disaster? When is a disaster a disaster?.....  | 26        |
| 3.2 Women’s agency .....                                     | 28        |
| 3.3 Women’s agency in disaster.....                          | 34        |
| <br>   |           |
| <b>Chapter IV: Findings.....</b>                             | <b>39</b> |
| 4.1 Household characteristics.....                           | 39        |
| 4.1.1 Ethnicity .....  | 39        |

|   |           |
|---|-----------|
| 4.1.2 Age and education.....  | 40        |
| 4.1.3 Family composition and marital status.....  | 41        |
| 4.1.4 Occupation.....   | 42        |
| 4.2 Women’s agency in response and recovery phases .....                                    | 43        |
| 4.2.1 Roles and responsibilities of displaced women in family .....                         | 43        |
| 4.2.2 Roles and responsibilities of displaced women in society.....                         | 46        |
| 4.2.3 Use of knowledge and skills .....   | 47        |
| 4.3 Women’s groups and networks .....   | 49        |
| 4.3.1 Women’s participation and social organization.....                                    | 49        |
| 4.3.2 Group formation and networking.....   | 50        |
| 4.4 Women’s coping strategies to overcome difficulties in response and recovery phases..... | 52        |
| 4.4.1 Challenges faced by displaced women.....  | 52        |
| 4.4.2 Coping and adaptive strategies .....  | 54        |
| 4.5 Gaps in response and recovery operations by stakeholders .....                          | 55        |
| 4.5.1 Support provided to the displaced women.....  | 55        |
| 4.5.2 Response and recovery activities from women’s perspective .....                       | 56        |
| <br>  |           |
| <b>Chapter V: Discussion .....</b>  | <b>59</b> |
| <br>  |           |
| <b>Chapter VI: Conclusion and Recommendations .....</b>                                     | <b>64</b> |
| 5.1 Conclusion.....   | 64        |
| 5.2 Recommendations to government and stakeholders .....                                    | 67        |
| <br>  |           |
| <b>References.....</b>  | <b>71</b> |
| <br>  |           |
| <b>Annexes .....</b>  | <b>86</b> |

## **List of Tables**

|   |    |
|---|----|
| Table 1.1 Populations by sex, households, average household size and area in square kilometers comparing Nepal, Eastern Development Region and Sunsari District. .... | 12 |
| Table 4.1 Displaced female ward number and religion (N=60) .....  | 40 |
| Table 4.2 Age and education of respondents (N=60) .....   | 40 |
| Table 4.3 Family composition and marital status (N=60) .....  | 41 |
| Table 4.4 Displaced female household heads and ethnicity (N=60) .....   | 44 |

## **List of Figures**

|  |    |
|--|----|
| Figure 1.1 Map of Nepal showing the Research Area .....  | 7  |
| Figure 1.2 Organization Chart: Nepal Disaster Management under the Natural Calamity (Relief) Act of 1982 ..... | 9  |
| Figure 2.1 Map of Sripur VDC in Sunsari district.....  | 20 |
| Figure 4.1 Occupation source: Research by author, 2012 .....   | 43 |

## Acronyms

|        |   |
|--------|---|
| CBS    | Central Bureau of Statistics                                    |
| CDO    | Chief District Officer  |
| DAO    | District Administration Office                                  |
| DDC    | District Development Committee                                  |
| DDR    | Disaster Risk Reduction   |
| DDRC   | Disaster Risk Reduction Committee                               |
| DMH    | Department of Meteorology and Hydrology                         |
| DFID   | Department of International Aid                                 |
| DPNET  | Disaster Preparedness Network                                   |
| FGD    | Focus Group Discussion  |
| HDI    | Human Development Index   |
| GoN    | Government of Nepal   |
| GEM    | Gender Empowerment Measure                                      |
| GLOF   | Glacier Lake Outburst Floods                                    |
| KIS    | Key Informant Survey  |
| LSGA   | Local Self Governance Act                                       |
| MoHA   | Ministry of Home Affairs  |
| NSCA   | National Sample Census of Agriculture                           |
| NCRA   | Natural Calamity Relief Act                                     |
| NPC    | National Planning Commission of Nepal                           |
| NPR    | Nepalese Rupees   |
| NSDRMN | National Strategy for Disaster Risk Management in Nepal         |
| SPSS   | Statistical Package for Social Science                          |
| UNDP   | United Nations Development Program                              |
| UNICEF | United Nations International Children's Emergency Fund          |
| UNOCHA | United Nations Office for the Coordination Humanitarian Affairs |
| VDC    | Village Development Committee                                   |

## Chapter I: Introduction

### 1.1 What and why this study?

This thesis makes an effort to elucidate women's agency in disaster by examining women's actions and experiences in the Koshi flood disaster 2008. The research focuses in documenting the stories of flood displaced *women in disaster*<sup>1</sup> and their experiences in response and recovery phases. The key components of the research are the exploration of women's agency and their initiatives, engagements in formal and informal networks and their coping strategies to overcome challenges in response and recovery phases. Relating to these three main components, analyzing gaps in response and recovery operations by government and stakeholders<sup>2</sup> from women's perspective is the essential part to understand women's agency in the Koshi flood disaster. The research area is wards<sup>3</sup> number 7 and 8 of Sripur Village Development Committee (VDC) in Sunsari district, situated in the Eastern Development Region of Nepal (see map 1).

Nepal is one of the disaster prone countries of the world. Nepal has diverse climatic zones and variations which aid in the generation of natural hazards and disasters. Nepal faces serious threats from disasters, which occur with appalling regularity—over 900 every year on average (GoN, 2009: 15). Due to the rugged and fragile geophysical structure, complex geology, variable climatic conditions, Nepal suffers from various types of natural hazards and water induced disasters such as soil erosion, landslides, debris flow and flood.

On 18<sup>th</sup> August 2008, the Koshi River erupted from its eastern embankment of Sunsari district engraving human casualties, destruction of houses, infrastructures, livestock loss and washing away the farmlands. A total of 56,751 people from 7,995 families were displaced (Baral, 2009).

---

<sup>1</sup> (*Women in disaster*) refers to the displaced women's experiences in response and recovery phases of Koshi flood disaster 2008 in Nepal. The response phase refers to the time during the disaster and the stay in camp and recovery phase refers after the displaced women were relocated in their village.

<sup>2</sup> The term stakeholder denotes NGOs, INGOs, local organizations, CBOs and other civil society organizations.

<sup>3</sup> In Nepal, VDC is the local administrative part of the district administration office in districts. Each district has several VDCs and each VDC is divided into nine wards.

Sripur VDC was one of the most affected VDCs among four most affected VDCs. Thousands of hectares of land were swept away by the flood. Besides the cultivated farm land, natural plantation and vegetation were also damaged by the flood. The households in wards number 7 and 8 of Sripur VDC lost their houses, assets and farmlands which inscribed great difficulties and challenges to flood displaced people.

Within the disaster-affected community, certain groups are seen to have subjected to more pronounced effects than others (Tapsell et al., 2002). The Koshi flood had differential impacts on displaced men and women. Women's exposure to risk and vulnerability during disaster is often heightened due to the influence of gender (Fothergill, 1996). Koshi flood disaster had several impacts on displaced women as they were particularly affected by flood, both physically and psychologically. However, women constitute their own capacity to withstand themselves and they have the capacity to resist the effects of disaster (Bankoff et al., 2004). Women take actions in protecting and supporting their family members and displaced community in response and recovery phases.

Generally, in the context of Nepalese society, the everyday and immediate responsibilities of parenting, caring for dependents, feeding, cooking is primarily considered as women's work. Women are even more encumbered with these responsibilities in times of disaster because the male members of the family are engaged in other activities. Women exhibit specific and vital roles in the response and recovery phases but there is little evidence are least available that their experience and skills are in fact recognized. It means women's instrumental and proactive work during and after disaster is less self-evident (Enarson and Morrow, 1998). The role of women and women's groups in disaster is important to study to recognize the women's roles, actions and activities. Thus, women's actions, activities, their access and control over the support mechanisms received, formation of groups and coping practices are vital in this study to examine and explore women's agency in disaster.

The National Strategy for Disaster Risk Management (NSDRM) 2008 mentions about making special arrangements for rescue and relief of children, women, the elderly and people with disabilities (GoN, 2008). However, women's agency has not been recognized in the document

and there is a lack of mechanisms which prioritizes multiple roles and responsibilities of women in disaster. At this point, the exploration of women's agency in response and recovery phases is crucial because disaster displaced women are not only passive victims but they are autonomous actors (Bankoff et al., 2004; Enarson and Morrow, 1998). Hence, this research provides an understanding of women's agency; their actions, experiences, knowledge and skills in response and recovery phases of disaster.

## **1.2 Research problem, objective and research questions**

The research problem, objective and questions aim to contribute the better understanding of women's agency in the Koshi flood disaster 2008. In the response and recovery phases of Koshi disaster, flood-displaced women were referred to as the "vulnerable group" who require special attention, support and support mechanisms by government, disaster-displaced community itself and stakeholders in the national policy and organizational reports. However, women are autonomous actors, their individual and collective agency in disaster is yet to be researched and recognized. Therefore, the research objective was to analyze women's agency in response and recovery phases of Koshi flood disaster from women's perspective. Based on the research objectives, the research questions put forward here emphasize women's agency in practice and their experiences, networks, coping strategies and gaps in response and recovery mechanisms from women's perspective. The major proposal (see section 1.1) and research questions did not need to be changed after the field work. The research questions are:

1. What agency/ initiatives did women show in disaster?
2. What were the roles of women's groups/ networks in disaster response and recovery phases?
3. What were the major difficulties felt by women and how did they deal with the situation?
4. What were the women's reflections about response and recovery activities? What were/ are the gaps in policy and government, private and civil society interventions?

## 1.3 Country profile and overview of the research area

### 1.3.1 Overview of country: Nepal

Nepal, the land of Mount Everest and birth place of Lord Buddha, is a small land locked. It occupies 0.03% and 0.3% of the total land area of world and Asia respectively. Situated in South Asia, it is bordered by India to the East, West and South and China to the North. It lies within the sub-tropical region to the mountainous region at 26° 22' to 30° 27' N latitudes and 80° 4' to 88° 12' E longitudes with an altitude that ranges from 90 to 8,848 meters above mean sea level. Nepal has the land area of 1, 47,181 square kilometers. The country stretches from east to west with mean a length of 885 kilometers and widens from north to south with the mean breadth of 193 kilometers. It turned to a Federal Republic of Nepal in 2063-64 B.S.

Nepal has three distinct ecological regions, namely mountain, hill and *terai*<sup>4</sup>. Mountains lie between the altitude of 4,877 and 8,848 meters and hills between the altitude from 610 to 4876 meters covering 35 per cent and 42 per cent of the total land area respectively. The *terai* region lies below the elevation of 610 meters and covers 23 per cent of the total land area. The hill region is located in between the mountain and *terai* regions. This region has a fertile valley and basins such as Kathmandu, the capital city of the country. *terai* is in the southern region of the country and has low flat land as well as dense forest (CBS, 2006). The mountain and hill regions have about 52 per cent of the total population and *terai* region contains nearly 48 per cent of the population in 2001 (GoN, 2011).

Administratively, the country is divided into 5 development regions, namely the Eastern, Central, Western, Mid-western and Far western development regions. These regions are in turn divided into 75 administrative districts in three ecological regions. The mountain region constitutes 16 districts, 39 districts in the middle comprise the hill region and 20 districts compose the *terai* region (CBS, 2007). In each district, there are local administrative units. The Local Self-Governance Act (LSGA) 1999 defines the “local body” meaning Village Development

---

<sup>4</sup> Terai is flat land of the country; it is in southern part of Nepal.

Committee (VDC), Municipality and District Development Committee (DDC) (GoN, 1999). Each VDC is comprised of 9 wards. The number of wards in a Municipality ranges from 10 to 35. Currently, there are 3915 VDCs and 58 Municipalities in the country. The VDCs are usually the rural areas whereas municipalities are urban areas of the country.

The population of Nepal as of the census day, June 22, 2011, stands at 26.6 million. Total addition in the population of Nepal during last ten years is recorded as 3.45 million with an average annual growth of 1.40 per cent and the sex ratio is estimated to be 94.41 (males per hundred females) in the current census (CBS, 2011a\*<sup>5</sup>). The size of the household in Nepal has decreased from 5.44 in 2001 to 4.7 in 2011. Kathmandu district has the lowest household size of 3.71 whereas in some *terai* districts such as Rautahat, Bara, Kapilbastu, the household size remains still more than 6 (CBS, 2011a\*). The urban population is 14.2 per cent of the total population of Nepal (CBS, 2002).

Nepal is a multiethnic, multilingual, multi-religious and multicultural country. The last census 2001 revealed that there are 92 languages being spoken in Nepal whereas 101 caste and ethnic groups residing in a uniquely harmonized Nepalese society. Nepali stands as the official language of the country. About half of the population is reported to have Nepali as their mother tongue while about 20 per cent speaks Maithili or Bhojpuri as mother tongue. There were recorded eight different religions, viz., Hindu, Buddhism, Islam, Kirat, Jain, Christian, Sikh and Bahai respectively by their dominance in the last census 2001 (CBS, 2010).

According to the Population Census, 2001, population by religion comprises of Hindu 80.62 per cent, Buddhists 10.74 per cent, Islam 4.20 per cent, Kirat 3.60 per cent, Christian 0.45 per cent and others 0.39 per cent. Similarly, population by caste/ethnic groups consists of *Chhetri* 15.80 per cent, *Brahmin* 12.74 per cent, *Janajati* 25.02 per cent (*Magar* 7.14 per cent, *Tamang* 5.64 per cent, *Newar* 5.48 per cent, *Rai* 2.79 per cent, *Gurung* 2.39 per cent, *Limbu* 1.58 per cent), indigenous groups (*Tharu*) 6.75 per cent, untouchable caste 10.7 per cent (*Kami* 3.94 per cent, *Damai/Doli* 1.72 per cent, *Sarki* 1.40 per cent, *Teli* 1.34 per cent, *Chamar+Harijan+Ram* 1.19

---

<sup>5</sup> \* Preliminary Results of National Population Census 2011.

per cent, *Koiri* 1.11 per cent), Muslim 4.27 per cent, *Yadhav* 3.94 per cent, *Thakuri* 1.47 per cent and others 19.31 per cent (CBS 2007).

Nepal is one of the least developed countries in the world. Nepal ranks 157th in the Human Development Index-2011 Rankings (UNDP, 2011) and 86th in the Gender Empowerment Measure (UNDP, 2007). Most women are engaged in family enterprise and households working for longer hours than men but have much lower opportunity for employment, limited access to resources and possess limited property rights (GoN, 2011). The per capita nominal GDP is USD 642 – the estimated GDP for fiscal year 2010-11 is 3.47 per cent and more than one third of the GDP is derived from agriculture (CBS, 2011d).

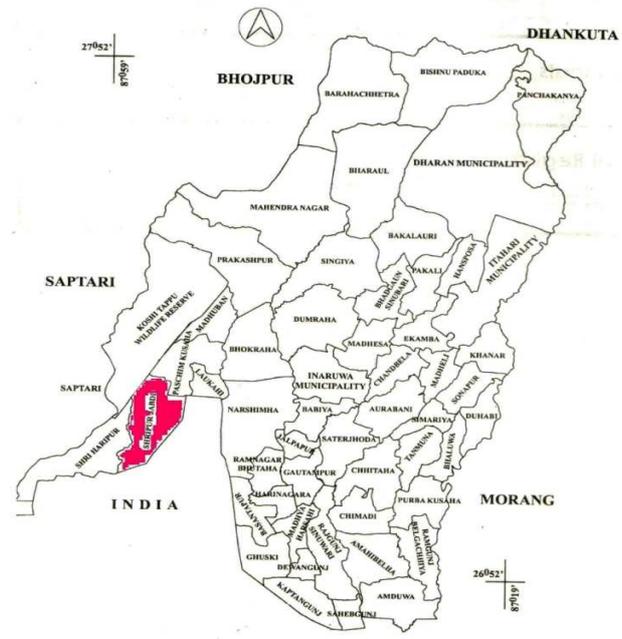
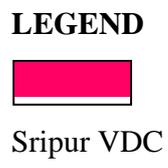
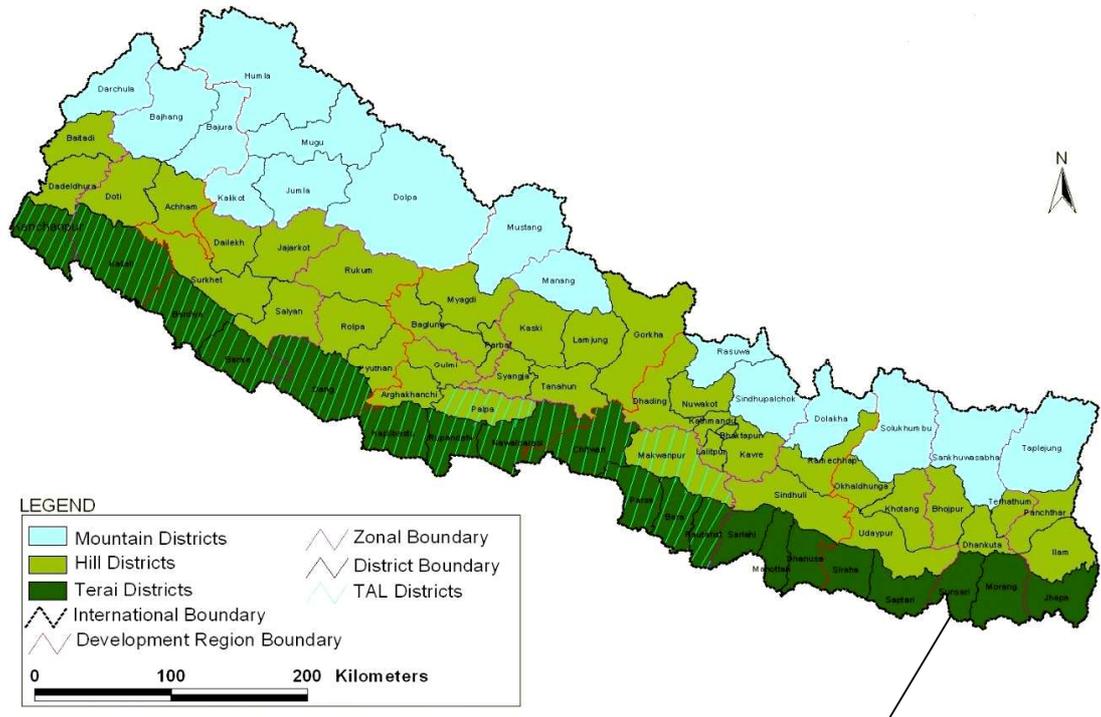
Agriculture is the mainstay of Nepalese economy. The agriculture sector occupies about 35% share of GDP in 2009/10. The National Sample Census of Agriculture (NSCA) 2001/02 shows about 79% household operate agriculture holdings<sup>6</sup> which accounts about 82% of total population of Nepal (CBS, 2010). Number of poor estimated for the year 2003/04 stands at 7.5 million against 8.5 million in 1995/96 (GoN, 2011: 51). The literacy<sup>7</sup> rate among the population of 6 years or older in Nepal is 54 per cent with a male literacy rate of 65 and female literacy rate of 43 (GoN, 2011). In Nepal, 26.6 per cent of the household is female-headed<sup>8</sup> household, half of them aged between 30-40 years by age groups. The highest proportion of female-headed household is in western rural hills whereas the *terai* has the lowest proportion, although it has been steadily increasing over the years (CBS, 2011b). Similarly, the per cent of female headed agricultural household head is highest in hills which constitute 28.6 per cent. In the mountains and *terai* it is 22.3 and 23.2 per cent respectively (CBS, 2011c).

---

<sup>6</sup> An agricultural holding is defined as an economic unit of agricultural production under a single management comprising all livestock and all land used wholly or partly for agricultural production purposes. Generally, an agricultural holding is equivalent to a farm household in Nepal.

<sup>7</sup> The definition of literacy was redefined since the 1991 population census and it incorporated the ability to read and write with understanding and to perform simple arithmetic calculations (CBS, 1995).

<sup>8</sup> The female household head is the person in the household acknowledged as head by other members. The head has the primary authority and responsibility for household affairs.



**Figure 1.1** Map of Nepal showing the Research Area

### *Disaster Scenario in the country*

Nepal, predominantly mountainous and hilly country, has a monsoon climate, where 80-85 per cent of the total precipitation of the overall average of around 1700 mm per annum occurs from June to September and is drained through its 6000 rivers including 4 main Himalayan river system (GoN, 2001: IX). During the monsoon season, the country is highly susceptible to water-induced disasters such as floods, landslides, flash flood, debris flows, slope failures and Glacier Lake Outburst Floods (GLOF). Due to these geo-physical conditions, Nepal is prone to various types of natural disasters.

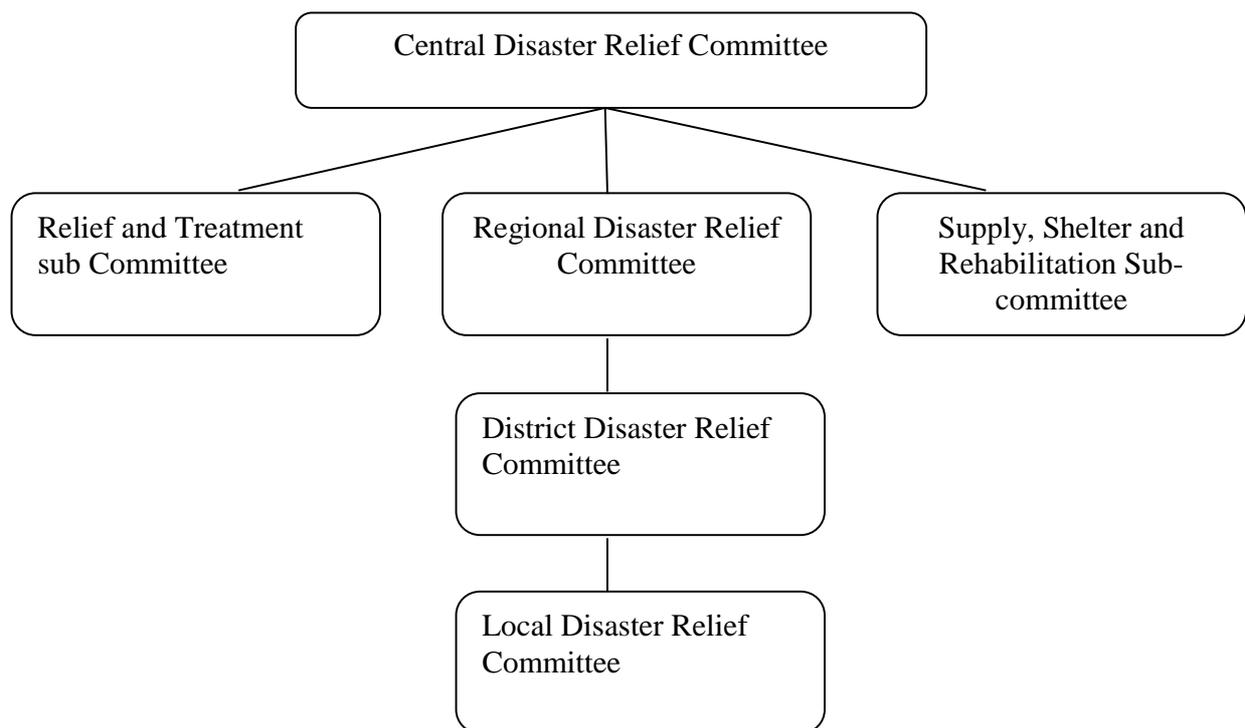
The frequent and regular occurring of natural hazards and disasters places Nepal as a disaster zone. By global standards, Nepal ranked 23rd in the world in terms of the total natural hazard-related deaths in two decades from 1988 to 2007 with total number of deaths reaching above 7,000 (GoN, 2009). Out of 75 districts, 64 districts are prone to disasters of some type and 49 districts are prone to floods and/or landslides (UNOHCA, 2008). The country's social context-the population vulnerability, low level development and organizational dysfunction has intensified the impacts of disaster and these factors have hindered coping with the natural disasters in Nepal (GoN, 2009).

The Ministry of Home Affairs (MoHA) has the key role as the focal agency in disaster management in Nepal. The main functions of Ministry are formulation of policies, their implementation, disaster preparedness and mitigation and lead role in emergency relief work, data collection and dissemination, and collection and distribution of funds and resources (GoN, 2001). There is the national framework in all seventy-five districts of the country. The Chief District Officer (CDO) has the main role as the crisis manager in districts. In each district, there is the Disaster Risk Reduction Committee (DDRC) for the immediate response at the local level. The institutionalized Disaster Risk Reduction (DRR) in Nepal began in 1992 after the promulgation of Natural Calamity Relief Act (NCRA) by government of Nepal. There are the national, district and local-level networks working in response and recovery phases of disaster. The related acts and regulations formulated so far for disaster management are:

- Natural Calamity Relief Act 1982 (Amended in 1982 & 1992)
- Water Resources Act 1992
- National Action Plan on Disaster reduction 1996
- Local Self-Governance Act (LSGA, 1999)
- National Water Resource Strategy, 2002
- National Water Plan, 2005
- Water Induced Disaster Management Policy 2006
- Three-year Interim Plan (2007-2010 )

***Organizational Structure of Natural Disaster Management in Nepal***

Natural Calamity Relief Act (NCRA) 1982 has the provision to constitute the following organizational structure to carry out disaster management in the country.



**Figure 1.2** Organization Chart: Nepal Disaster Management under the Natural Calamity (Relief) Act of 1982

### ***The 2008 Koshi Flood***

The Koshi Basin is the largest river basin of Nepal. It originates from the Tibetan Plateau of the Koshi enters Bihar (the Northern most State of India) and finally ends at the confluence of Ganges, flowing from Nepal. It may be the only river in the world which has horizontally changed its course as much as 120 km in the last 250 years (Baral, 2009: 9). The Koshi river has the total length of 729 kilometres, width up to 11 and 18 kilometres in Nepal and India respectively, catchment area 60,400 square kilometers and average annual flow 1590 cubic meter per second (Baral, 2009). On 18<sup>th</sup> August 2008, Koshi River breached its embankment creating havoc in the downstream area of Nepal and India ensuing in the loss of thousands of lives, livelihoods, properties and widespread human displacement. It damaged about 5,000 hectares of agricultural land and to a total of 17 kilometres along different stretches of the East-West Highway (GoN, 2009).

#### **BOX: 1** Disaster scenario of the Koshi flood 2008 in Nepal

- About 107,200 people of 8 VDCs (4 completely, 4 partially) in Sunsari district were affected.
- The total human death toll is 8.
- The national highway was damaged at several places by the flood.
- Displaced people were kept in 28 different temporary shelter camps.
- 56751 displaced people of 7995 families were taken to the temporary shelters.
- Domestic animals 55000 affected, 20000 displaced.
- 14571 Domestic animals were killed [Small size 3270 (Chickens, Ducks), 111301 (Cows, Buffalos).
- 5500 people were rescued within three days of disaster.
- 3 Helicopters, 10 rafting boats, 3 ordinary boats, and 4 elephants mobilized for rescue and distribution of relief materials.
- Many people suffered from different type of disease like cholera, diarrhea, pneumonia, eye conjunctivitis, fever etc.

Source: Baral, 2009

government managed to rescue displaced people from the initial risk by relocating them in 28 temporary camps with some utmost important amenities. The basic services such as safe drinking

Water, food, blankets, bathing space, toilet, child-care center, psycho social counseling, and nutrition to children, medical treatment and security at night were provided to them. As reported by UN OCHA (2008), 264 pregnant women and 157 lactating mothers were the part of supplementary nutrition and feeding program. Thus intervention of different stakeholders was witnessed in Sripur VDC and in other flood-affected areas. Newspapers, radio and television highlighted the news at the national and international level.

Later in 2009, government of Nepal provided 50,000 NPR<sup>9</sup> to each household and compensation of land was given according to red, yellow and green zones<sup>10</sup> as the relief package to return home and formally closed the camps. Red, yellow and green zones land owners received compensation of NPR 2 lakhs, 1 lakh and 50,000 per bigha<sup>11</sup>. Along with the compensation package, NPR 20,000 was provided for buying materials to rebuild their house and NPR 2000 for buying food to each household. With this money, most of the displaced households have rebuilt their houses and shifted from temporary camps to their original area, though the land area was totally filled with soil and debris materials. Because of complete destruction, some of them could not go back to their original area and migrated to city. Government and civil society organizations have been supporting the displaced families and trying to relocate them by providing them support services, income generation trainings and small scale entrepreneurship in recovery phase.

### **1.3.2 A brief note on Sunsari District**

The study was conducted in Sunsari district of Nepal. The district lies between 26<sup>0</sup> 23' to 26<sup>0</sup> 55' Northern Latitude and 87<sup>0</sup> 05' to 87<sup>0</sup> 16' Eastern Longitude. Total area of the district is 1275 square kilometres and is situated from 152 to 1420 meters above mean sea level. The district is

---

<sup>9</sup> The exchange rate at the time of fieldwork for EUR 1 was about NPR 100.

<sup>10</sup> Red, yellow and green zones are the flooded land which is completely damaged, partially affected and water filled area respectively.

<sup>11</sup> 1 bigha is equivalent to 0.66 ha. Conversions are: 1.5 bigha=1 ha; 1 bigha=20 kaththa; 1 ha=30 kaththa.

bordered by hilly district of Dhankuta to the North, by Morang district to the East, by Bhojpur and Saptari districts to the West and the plains of India towards the Southern part. There are 49 Village Development Committees (VDCs) and 3 Municipalities. The district has population of 751125 with the annual growth rate of 1.83 per cent and average household size of 4.51 (CBS, 2011).

**Table 1.1** Populations by sex, households, average household size and area in square kilometers comparing Nepal, Eastern Development Region and Sunsari District.

| Area                    | Households | Average<br>HH size | Population |          |          | Area In<br>Sq. Km. | Pop.<br>Density<br>per Sq.<br>Km. |
|-------------------------|------------|--------------------|------------|----------|----------|--------------------|-----------------------------------|
|                         |            |                    | Total      | Male     | Female   |                    |                                   |
| Nepal                   | 4253220    | 5.44               | 23151423   | 11563921 | 11587502 | 147181             | 157                               |
| Eastern<br>Dev.<br>Reg. | 1012968    | 5.28               | 5344476    | 2670622  | 2673854  | 28456              | 188                               |
| Sunsari                 | 120295     | 5.20               | 625633     | 315530   | 315530   | 1257               | 498                               |

Source: CBS, 2010

Sunsari district has tropical with a good deal of humidity in its atmosphere which is comparatively hotter in summer and moderately cold in winter. Depending on the season and altitude of various regions, the district has air temperatures ranging from 19.5<sup>0</sup>C to 29.5<sup>0</sup>C- average temperature = 23<sup>0</sup>C (DHM, 2009). The annual rainfall in the district is 1905.6 mm, predominantly during the monsoon season starting from May to July (DMH, 2009).

For the most part the district lies in the *terai* and has a total land area of 1, 27,076 hectares, of which 63 % (81,269 hectares) comprises agricultural land. The district is characterised by its fertile plain lands and is one of the richest district of Nepal from agricultural viewpoint. Rice followed by wheat, maize and millet are the major food crops grown in the district. Similarly, oil

seed, sugarcane, potato and tobacco are the major cash crops while lentil, grass pea, black gram, pigeon pea and chick pea are the major pulses grown by majority of farmers. Chicken followed by cattle, goats, buffaloes, pigs play a significant role in the household economy. Labour wage for male and female is different in the district. For example, in agriculture-related works a male gets NPR 100/day while a female receives only NPR 80/day. Similarly, in case of non-agricultural labour market, a male gets NPR 125/day while a female receives only NPR 100/day (CBS, 2001).

### **1.3.3 A brief note on Sripur VDC**

Sripur VDC lies in the lower western part of Sunsari district and have total land area of 2,256 hectares. The VDC has a population of 12,937 (male = 6,679 and female = 6,258) with an average family size of 6.8 (CBS, 2001). The VDC is further divided into nine wards. During the disaster, different wards of the VDC were affected differently. For example, wards number 8 and 9 were severely affected (red zone). Wards number 4 and 7 were moderately affected (yellow zone) while wards number 3 and 5 were less affected (green zone). The study was conducted at wards number 7 and 8. Wards number 7 and 8 have 372 (household size = 7.4) and 336 (household size = 7.8) households respectively with mixed religion of Hindu and Muslim. Hindu religion has different caste groups mainly, *Brahmin*, *Chhetri* and *Dalit*. Both the Hindu and Muslim people are referred to as “Madhesi” as they are originally from *terai* region. A total of 33.3 per cent of the people in the Sripur VDC are literate - 24 per cent of the males and 9.3 per cent of the females (CBS, 2001).

The east-west highway of Nepal passes through this VDC. Since the VDC is adjoining to the Koshi River, most of the lands were furnished with irrigation facilities hence rice was the major crop grown by all farmers. With the breakage of Koshi embankment, all the irrigation canals were permanently damaged and fertile farm land was submerged by soil and water. In the severely affected wards number 8 and 9, the river deposited up to 5 feet layers of soil while land in moderately affected wards were covered by one to three feet layers of soil. All the crops in the field, many livestock and household properties including stored food grains, utensils, clothes, and other logistic materials were either swept way or buried deep under the soil. Since water

stagnated there for couple of months, most of the trees dried and consequently, the land area, especially in ward number 8 converted into the desert like condition. However, it has been reported that in the less affected areas of wards number 4 and 7, the river just deposited a few centimetres of turbid water which dried within a few days making the farm land more fertile and productive.

When people returned back to their place, Sripur VDC, after a few months to a year of camp life, they re-built the damaged houses using the compensation provided by the government. The houses are the huts which are made up of bamboo, mud and straws. During the field work, some people were found trying to reclaim the land by removing soil and adding clay soil brought from the other village. Hence, a small kitchen garden with fairly developed plants was observed in some houses. People also have started planting some fruit trees like banana and mango around their vicinity. For the purpose of fishery, some ponds were built in both wards 7 and 8 with the support received from international donor agencies such as WFP and UNICEF, but most of them were having poor water holding capacity due to the domination of sandy clay.

Health care facilities are not available in both wards. There is a domination of Muslim community in ward number 8, so children study in a Muslim school called *Madarasha*. People buy and sell their products at the local market and hat-bazaar. For communication, there is no communication centre but most of the people use cell phones and some of them also have access to land-line phones.

#### **1.4 Structure of the thesis**

This first chapter has provided an overview about what the research is about and why this study was necessary. The background of the research, the necessity of this study in Nepal, research problem, objective and questions are explained in this chapter. The country profile gives the overview of the research context and area. The details about Sunsari district and Sripur Village Development Committee and structure of the thesis are provided in this chapter.

Chapter two incorporates the conceptual framework of the research highlighting the concepts and theories used and how these concepts and indicators support in the analysis. The research method, how were they used and an explanation why these research methods were used in the field study is the major component of this section. Following the methodology, data collection, processing and presentation, ethical issues, limitations and challenges are also mentioned.

Chapter three firstly presents the analysis of the literatures on disaster and women's agency. It reviews definitions and concepts of disaster. This part deals with the theories and concepts about women's agency and women's agency in disaster. It explores women's actions, their interactions, social networking, social organization, social capital and their coping strategies for which many literature reviews have been important secondary sources in the research.

Chapter four presents the findings and discusses the analysis of the data. This section develops the interpretation and reflection of the main concepts and objective of research. It underscores results on women's socio-economic status, their agency. It highlights the central importance of women's networking, groups and social organization. This chapter opens the critical analysis of documenting women's agency in disaster.

Chapter five draws the picture of the national and international scenario of women's agency in disaster in line with this research. This is based on a scholarly investigation on women's agency, women's networks, and their coping practices and gaps in response and recovery mechanisms from women's perspective. Along with the concept of women's agency in disaster, this chapter discusses about the findings in the field by comparing it with other researches in similar arena.

Chapter six concludes the research findings on women's agency in response and recovery phases of disaster and provide recommendation as the way forward. It develops the interpretation and reflection of the main concept and the data obtained from the field in the form of recommendation. The recommendation part highlights the ways forward for recognizing women's agency in disaster by relevant stakeholders.

## Chapter II: The Research Project

*“Why are you taking our information? Why should we give our information to you? You take our information but we don’t get anything.”*

Question asked by a respondent, Sripur VDC-ward number 8, 17<sup>th</sup> December, 2011.

This chapter focuses on the research context of the study. The section explains the research methodology and research set up in the disaster-displaced community. The disaster-displaced community refers to the Koshi-flood displaced people of wards number 7 and 8 of Sripur VDC. The conceptual framework, data generation, data analysis, data presentations and limitations and challenges of the study are mentioned in this chapter.

### 2.1 Conceptual framework

The conceptual framework provides the research idea through which the research problem is explored in this study. The concepts, different indicators of these concepts and specific variables to measure these indicators are the major components of this section. Along with this, the relationship between the different variables and its analysis constitute the conceptual framework of the study which is explained based on the research questions.

An important approach in this study is agency. The research is focused on women’s agency in disaster, so the displaced women’s actions and initiatives are identified to investigate women’s agency. In the research, women’s agency refers to women’s capacity to act, choices, actions, activities and decision-making with regard to their role and involvement in response and recovery phases. Pollack (2000) refers to women’s active attempts to resist and cope as women’s agency. Their agency in these different settings can be revealed by their activities and constraint they experience and how they react to it. Gender and development theorists emphasize their self-protective actions as women’s agency before, during and after the disaster.

The application of actor oriented approach identifies the central role played by human action and consciousness (Long, 2001). The agency and actor-oriented approach underscores how women manage to respond despite the system failure at the time of crisis and how they, as social actors act out differently in the disaster-displaced community or simply adapted within the existed system? The indicators for women's agency are displaced women's activities, their roles in family and society, knowledge and skills they used and their responses in response and recovery phases of disaster. To measure these indicators, variables were set in the form of questions such as what work they did/do as the family member and in society, what did they do to overcome disaster impacts, how they performed, what practices they used. Thus, this approach focused on women as social actors actively participating in processing their knowledge, skills, practices and coping strategies in disaster phase. Because, along with monitoring the continuous flows of their activities, actors also routinely monitor physical and social aspect in which they move (Giddens 1984, p: 5).

In responding to crisis, people make use of familiar practices and networks differently in different conditions. These conditions and social relations are dynamic (Frerks et al., 1999), because the social cohesion is disturbed and new networks are formed. When the formal structures are destroyed, the female-dominated informal structure becomes more visible (Enarson and Morrow, 1998). So, women's networks and informal leadership are integral resources to understanding the role of women's groups and networks in response and recovery phases.

Women's groups and network is studied by analysing their participation, social organization, social capital, group formation and networking. The type of work women did and how they supported each other, organising and networking among themselves in response and recovery phases were examined. In the recovery phase, women were back in their village with family, so women's participation in rebuilding houses was the questions needed to be considered.

Raymond (2004) has mentioned that coordination and responsibility are the two core elements of social organization. Displaced women coordinate different activities of supporting each other in the process of rescue and recovery by interacting through formal and informal networks. These

interactions, negotiations and social struggles result in different patterns of social organization which take place between the several kinds of actors (Long, 2001). Women take responsibility for their family, relatives and neighbor by caring, nurturing and protecting them. The important elements to analyse women's social organization is how displaced women were socially organized in camps and after returning to their original places. To understand about this, participant's narration on how they were living now, how displaced women supported each other and how they have reorganized themselves to construct their living in response and recovery phases were important.

According to the DFID Livelihood Framework (1999), social capital refers to people's trust and mutual relationships and interconnectedness among them. Hence, in the research social capital is analysed in regards to women's trust, their mutual relationships among the disaster affected women population and their joint actions to combat the effect of disaster. Women's capacity for resilience and motivation is analysed by inquiring about women's joint action in the camps such as taking care of pregnant women, securing young girls from abuse and helping organizations in distributing support materials uniformly and transparently and in what way they were involved as being the 'insider' in the disaster-displaced community. In this context, women's individual and joint ability to act was revealed by listening to women about their difficulties and what coping strategies and how did they carried out to struggle against those difficulties.

The gaps in response and recovery operations by stakeholders from women's perspective are crucial to investigate what women think about disaster, how they perceive it and their explanations about the interventions made by stakeholders in disaster phase. The types of support given to women, its transparency in distribution and insights of women about what they need, what and how it would have been good for them to receive it in response and recovery phases by government and civil society was analysed from women's perspective of disaster.

## **2.2 Research methodology**

This study is both explanatory and exploratory. The Koshi flood disaster-displaced women population in wards number 7 and 8 of Sripur VDC is the research unit. The study aimed at the

explanation of women's stories by themselves in response and recovery phases. The study explored displaced women's actions and activities in disaster, women's associations with formal and informal networks, coping strategies and gaps in relief operation by government and stakeholders. Different kinds of data- both qualitative and quantitative- require different analytical methods but analysis is always the same thing: the search for patterns in data and for ideas to help explain why those patterns are there in the first place (Bernard, 2000: xxi). The key thing is that data are systematic- contains information on same matters whether they are quantitative i.e. coded and numerical or qualitative, i.e. interviews, extracts from filed notes and observations (Vaus, 2001).

In terms of quantitative method, a household survey was done with sixty women respondents of displaced households to investigate the socio-economic and heterogeneous characteristics of the disaster displaced women population in wards number 7 and 8 of Sripur VDC. In both the wards, women differed according to their age classes, social status, marital status and household roles. The concept of heterogeneity was important here in terms of religion, caste, social and economic status because women are not a homogenous group despite of their same sexual identity. So, the household survey exposed the different household categories in social, economic and demographic status of displaced women's household in the disaster-displaced community.

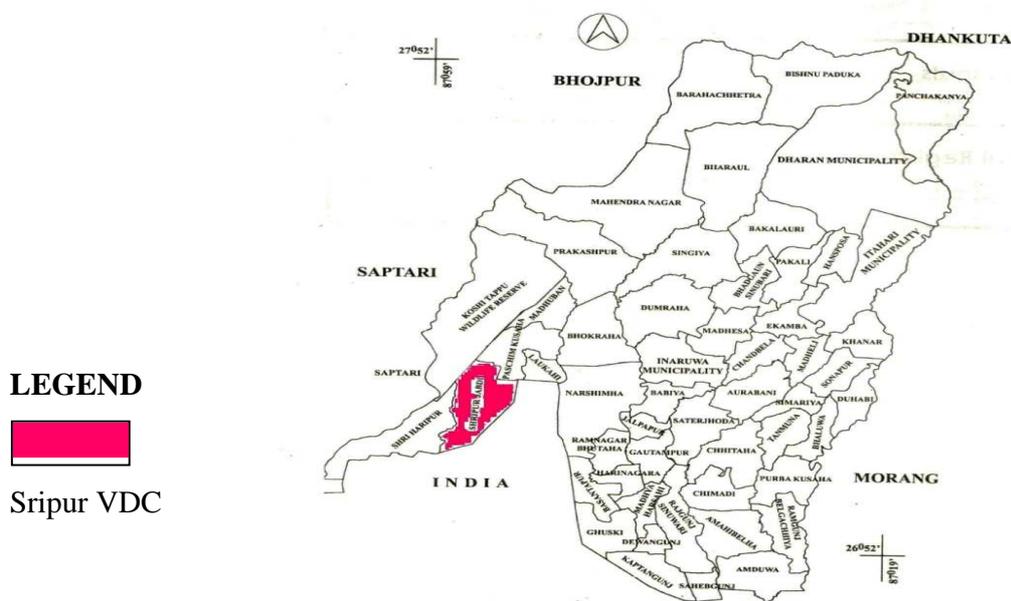
In regards to qualitative method, along with understanding women's agency through research, understanding women's agency from their own perspective was very important. Some surveys have included the women category as a demographic variable which provides only the basic information on gender differences but women's experiences and perspective in the disaster has not been mentioned (Fothergill, 1996). The depth of explanations and perceptions can be reached by hearing and listening to what the women themselves have to say (Parr, 1998). So, the qualitative method facilitates to know how women define their agency and what they called as women's agency. Qualitative and ethnographic research that pursues a feminist research agenda that focuses on gender inequality in disaster will add to the explanatory in-depth to the quantitative survey approach frequently followed (Bolin et al., 1998).

The indicators and variables of both the quantitative and qualitative data were set in the study. Qualitative method is more accurate in terms of validity and quantitative method offers better reliability (Scrimshaw, 1990). Thus the qualitative and quantitative approach complements each other.

At the beginning of my field work, I went to the Inarwa, headquarter of Sunsari district and met the key informant to get a general idea of the research area, women’s status and information about people living there because I was unfamiliar with the research site. Then after getting the idea, I directed myself to the research area- starting with the introduction of myself and my research in meetings and living with new people in new context for about two months- early December 2011 to early February 2012, “the research begins”.

### 2.2.1 Research area

This study was concentrated in wards number 7 and 8 of Sripur VDC of Sunsari district which was highly affected VDC by the Koshi flood disaster (See map 1.1; section 1.3.3 for detailed information).



**Figure 2.1** Map of Sripur VDC in Sunsari district

### **2.2.2 Unit of analysis**

The unit of analysis was different because the research enfolded quantitative and qualitative methods. For the quantitative data collection, household was the unit of analysis and for the qualitative data collection, Koshi flood-displaced women in wards number 7 and 8 of the Sripur VDC and representatives of different organizations as social actors were the unit of analysis. The operational definition of social actors is their agency, actions and initiatives in response and recovery phases of the Koshi flood disaster 2008.

### **2.2.3 Data generation**

#### ***Household survey***

The sample size for the household survey was sixty (60). Disaster-displaced households from wards number 7 and 8 in Sripur VDC were selected with the help of stratified random sampling method. In stratified random sampling, the population is divided into various subgroups and then a simple random sampling is done within each subgroup (O’Leary, 2004). A pre-structured questionnaire was developed first in English and then translated into the Nepali language before administering it to the respondents. Questions were designed to obtain the information about socio-economic, demographic and household characteristics of respondents.

#### ***Interviews***

Spradley (1979: 5) says, “*Culture is learnt through inference made from what people say, the way people act, and the artifacts people use*” (Spradley in Southwold, 2002).

*In-depth interviews:* In –depth interviews of respondents were the major instruments used for gathering information to understand women’s story of entire flood experiences and what events had meaning to them from their own perspective. An open-ended questionnaire was used as an instrument to document their narrations. The in-depth interviewees were selected among 60 household survey respondents so that different category was picked after knowing their demographic and socio-economic status. Ten in-depth interviews (including different categories of women- Hindu and Muslim women in wards number 7 and 8, poor and rich families, lower

and higher caste, female-headed households, women having different occupation, women of different age and marital status) were conducted. The site selection for interviews was according to the convenience of participants because sometimes women hesitated to share or even if they shared information, it was limited in front of their in-laws and male members of family.

*Key informants interviews:* The information about the key informants was obtained from snowball sampling. The snowball sampling process involves building a sample through referrals (O’Leary, 2004). Six key informant interviews were carried out using semi-structured questionnaires with key informants representing government and non-governmental organizations, local organizations and women networks. Both female and male key informants were interviewed to track whether their voices differed in women’s issues, but no such differences were noted. Their knowledge and experience was essential to trace the information about specific displaced women categories and their experiences-what they say about disaster-displaced community. Hammersley and Atkinson (2007) write that even the ‘gate keepers’: termed as key informants here have their judgements about the society and place. This point was considered while conducting the research.

### ***Focus group discussions***

Focus group discussion (FGD) with disaster-displaced women was carried out in each ward to obtain information on their actions, coping strategies and experiences in response and recovery phases. Women from different age classes, social status, marital status and household head status were the participants to share their experiences. In addition, I had informal and formal interactions with displaced women in both wards to gain more in-depth understanding and clarity on research objective.

### ***Observations***

The observational method provides data on phenomena (such as behavior) as well as people’s accounts of those phenomena (Green and Thorogood, 2009). Observation in the field was an important source of data collection in this research because it records the feature of everyday life of participants and about the situation and context in which they are living. Observation data on what was seen in the field were recorded as key field notes.

### *Secondary source of data*

An intensive and extensive desk study of various literatures, documents, reports, case studies was done and information was obtained from concerned organizations (MoHA, DAO, DPNet-Nepal, local NGOs) to support the study as a secondary source of information.

### **2.2.4 Data analysis and presentation**

The quantitative and qualitative data collected were analysed by different methods and integrated in analysis and presented in chapter four- Findings. The household survey as quantitative data in the form of household survey were fed into the Statistical Package for Social Sciences (SPSS) software and tables, cross tabulations, chart and percentages were generated accordingly. The qualitative data were organized and presented in narrations and statements given by respondents and key informants. The in-depth interviews, key-informant interviews and FGDs were transcribed and based on narrations, observations and field notes the analysis was made.

Coding the data was important for four reasons: a) respondent's confidentiality, b) to analyse which part of narrative story is attached to certain meaning, c) feeding variables of quantitative data into SPSS software and d) matching the data of same meaning generated by quantitative and qualitative methods. Hence, data coding was done using alphabetic, numeric and symbolic codes.

In order to increase the internal validity, triangulation of information, sources and methods is necessary (Vaus, 2001). In this case, for consistent data generation, different approaches were followed namely, a) communicating and clarifying purpose of the study mentioning that this was just for an academic purpose and was not linked with any direct incentives or benefits to the participants, b) having a local translator so that women limit their exaggeration, c) verifying collected information through group discussions i.e. FGD with respondents in each ward, d) receiving information from key informants and e) observations in the field.

### **2.2.5 Constrains and limitations of the study**

Initially, approaching the field was a challenging task because I was a stranger to that society and everyone had the impression of me as an NGO worker who was there to list their names and provide support. So first, I introduced myself and after hearing from them, I started to explain them about the purpose of study. So, it took a bit time to gain their trust and confidence.

Living there and experiencing the everyday lives of people was a challenging learning process. Research might be influenced by the researcher and those researched due to self-fulfilling prophecies. During the entire field work, dressing the outfit which fits in the community was fine but it was difficult to adapt the food and living habit. Because of the 3 to 5 feet layers of soil on the land, the drinking water pumped from tube wells was sandy which affected my digestive system. Also, there was no provision of toilets, so it was difficult to go for open defecation in bushes and behind trees. Looking out for the bushes area while passing by the displaced households for surveys and interviews in the field was one of the most unforgettable moments I have had in my life.

Another was the language barrier: the people in the research area are “Madhesi” community and I was not able to communicate in their Maithili language. Though I had a female translator to translate, I had the feeling that I could have directly asked more, probed more while asking if I had known the language. Because a few seconds and minutes of time taken between mine and my translator’s communication might have influenced the speaker’s concentration and topic in their mind.

The ethical issues depends on the context and situation in which research is carried out which has been termed as ethical situationism by Hammerley and Atkinson (2007). The field settings differ according to nationality, region and culture. Although I am from the same country, my ethnicity, and language differed from those in the disaster-displaced community, which might have hindered in understanding each other’s communication more clearly. Also, I was in the field after

three years of flood disaster, and responding the questions of flood might have saddened the respondents because they had to recall the situation when they had suffered.

In a position of “liberal relativist”, researchers should follow their own (professional) conscience in deciding what to research and how to do it as ethical standards are differently constructed across different settings (Green and Thorogood, 2009: 55). So, I position myself as the “liberal relativist”. Here, I want to link my position with the quote at the start of this chapter, because I was an outsider to the disaster-displaced community, they asked me questions about my work. Though their question “what will we get” made me feel that they had expected support, I shared that I was a student and was there to conduct my academic research and had no direct incentives to offer. These “what and why” questions from participants during field study provoked me to think and reflect about my research and its objective at the end of each day.

## **Chapter III: Women's Agency in Disaster**

This chapter focuses on women's agency in disaster i.e. women's agency in response and recovery phases of disaster and the implications of agency of disaster displaced women in their family and disaster-displaced community. This section investigates the theoretical linkages of women's agency with an actor- oriented approach, social organization and social capital in disaster. The chapter focuses on the perception of disaster, its effect on women and theories supporting women's agency to combat the effects of disaster. Linking the theories and studies of women's agency in disaster by scholars with the quantitative and qualitative data of displaced women's actions, abilities and aims, the theoretical framework is explained.

### **3.1 What is a disaster? When is a disaster a disaster?**

Several major efforts have been made to define and conceptualize the term "disaster" (Quarantelli, 1995: 43). To conduct research in disaster, the researcher should acquire the knowledge and understanding on the concept of disaster. While discussing the definition of disaster, it is essential to know what caused disaster, what are its effects and what are the important dimensions of the event depending on the perspective of different actors involved (Quarantelli, 1995). As noted by Krimgold, "a disaster is a crisis situation that outstrips the capacity of a society to cope with it" (Krimgold in Anderson and Woodrow, 1993: 44).

Natural disaster refers to disasters of certain magnitude caused by natural forces which affects the whole population (Wiest et al., 1994). According to the Natural Calamity Relief Act 1982, 'natural calamity' means flood and similar other natural disaster and 'disaster area' means the area declared as the disaster area by the publishing Nepal Gazette (GoN, 1982: 1). For disaster management, National Action Plan 1996 has four sections: (a) disaster preparedness, (b) disaster response, (c) disaster reconstruction and rehabilitation, and (d) disaster mitigation (GoN, 1996). As reviewed in Natural Calamity Relief Act 1982 and National Action Plan 1996, the definition of disaster is mentioned in terms of natural calamity, its planning and mitigation. However, these have not incorporated the recognition of human agency at the event. Also, the meaning of

disaster and when a disaster is called a disaster is found lacking. In reality anyone has the right to propose a definition of disaster, and the definition proposed depends on the purposes or interests of the definer. It is a social and political construction, so that when two very similar events happen, one may be declared a disaster while the other does not. For Andrew Maskrey, it may be that 'a new script for a new play' is needed (Maskrey in Enarson, 1998: 168). Disaster events are mediated by human agency and choice, so that 'natural disasters' strictly speaking do not exist. Bankoff et al., (2004) and Durand (2007) mention about the dynamics of vulnerability emphasizing on the role played by the human agency and social relations defying the vulnerability.

Buckle (2005) notes that government develops "mandated" definitions of disaster to determine the boundaries of emergency management and response (Buckle in Perry, 2006: 2). As mentioned in chapter one, immediately after the breakage of the Koshi flood, the government called for the attention of national and international community to support the state and displaced people in response and recovery phases naming it a historical disaster. The Koshi flood was defined as a disaster because it ensued in human casualties, displaced thousands of people, massive loss of houses, household properties, infrastructures and farm lands. This caused a crisis with which the flood-affected displaced community was unable to cope.

Similarly, Smith (1996: 203) proposed that disaster signals the failure of a society to adapt successfully to certain features of its natural and socially constructed environment in a sustainable fashion. After analysing the definition of disaster given by different scholars, Perry (2006) concludes that the meaning of disaster needs to be conceptualized considering the fundamental of social phenomena or events associated with natural and technological processes. The fundamental of social phenomena here refers to the feature of disaster within the context of social change. Perry emphasizes the social phenomena focusing on the people's vulnerability is socially constructed. This social construction of vulnerability after the event leads to the change in disaster-displaced community in terms of social, political and economic aspects. So, in this study, the social phenomenon of the Koshi flood disaster is explored. As the research unit in this research was the flood-displaced women in wards number 7 and 8 of Sripur VDC, disaster in relation to its material and social implications to displaced women was studied.

Fritz points out four core properties of disasters, disasters are (a) events that can be designated in time and space, which have (b) impacts on (c) social units (Kreps, 1984: 311). The National Water Plan 2005 states that Nepal is vulnerable to water-induced disasters due to its geo-climatic condition (GoN, 2005). Here, I assume that the definition of disaster varies according to what and why it caused and what happened to who in a particular time and space. The residential village and farming area at the research site is considered as the space. The change in this space after the disaster, its causes and consequences to the displaced women due to the changed space is also a point to understand the different dimensions of disaster. So, in this study, how and what had changed in the temporal space and time of the displaced women was investigated.

Keeping in mind the different views and proponents of disaster, Quarantelli et al., 1995 suggests researchers to focus on the examination of the social behaviour that appears which is the core of the disaster. Disasters are viewed as the result of interaction between the physical agent and the vulnerability of a society, its infrastructure, economy and environment determined by human behaviours than simply a physical occurrence (Birkmann, 2006). He points the understanding of natural disaster to “un-natural disasters”, and further writes instead of focusing on natural hazards, the identification, assessment and ranking of various vulnerabilities is needed for promoting disaster resilience society. Referring to this, the social behaviour, interactions of displaced women in disaster are investigated in this study. Kreps (1984) adds to this that though there are numerous confusions about what is disaster; it is the effect to human community of the disaster that is mostly referred to by the authors. This study likewise focused on the displaced women and the flood affecting them, as mentioned in chapter one.

### **3.2 Women’s agency**

Agency refers to the socio-culturally mediated capacity to act (Ahearn, 2001: 112). Before this provisional definition of agency, Ahern (2001) highlights the language of social action as the starting point for the definition of agency. Different social actions in society are interpreted differently by scholars, so the term agency and its conceptions differ from society to society. Archer (2003) states that agency is the representation of plurality as *agents* share the same life chances in the society as all the agents occupying different positions in society’s distributions of

scarce resources. In contrast, *actors* represent singularity deriving their identity from the subjects who choose their role to be in the society (Archer, 2003). This study investigated both the role of individual displaced woman and group actions of women in disaster-displaced community by analysing how their actions were construed.

Ortner (2001 and 2006) has stated the relationship of agency and power, proposing various types of agency i.e. agency of power, including domination, resistance and agency of intensions which is people's projects, purposes, desires to formulate and act in the world. Her point here is agency and social power are relatively strong and are very closely linked. Ortner (2001) writes about traditional Tswana society, with its traditional division of labour assigned to women doing all the agricultural work. However, they were labelled as subordinate by their society though they had the main role in agriculture work. In resistance to their so called "inferior role", these women sang the provocative song and dance demonstrating and making explicit accusations through it. This had a significant role of transforming agency of resistance to women's power. This shows that the idea of agency encompasses several dimensions and power structure of society.

Sewell (1992) elucidates that human agency and structure presumes each other. People's actions are shaped by the structures and in turn structures are shaped by people's action, this duality has been mentioned by Giddens in his "theory of structuration". According to him, "both the medium and the outcome of the practices constitute social systems" (Giddens 1981: 27). The notion of agency varies according to people's practice, as sensed by this study too. Ortner (2006) mentions the historical and cultural construction of agency. She mentions that different domains of social life shape agency and hence human have agency but varies in different times and spaces. In practice, there are social influences on agency, although human actions are central, they are related to social structures that shape them (Ahearn, 2001). In this study, it is investigated that how flood-displaced women and community exhibit their agency. Hence, the idea of agency differs- how people perceive agency, their understanding and reflection on it.

The active concept of agency portrays people as conscious decision makers (Greenhalgh, 1995). Carter (1995: 65) sees agency as "reflexively monitored flows of conduct in the direction of calculation in the broad utilization and sense of balancing means at the ends". Giddens (1984: 5

and 6) defines agency as the reflexive monitoring action of individuals in everyday life and involves the conduct not just of individuals but also of others.

Based on this scholarly investigation discussed in above paragraphs, I draw the conclusion that agency has been defined as the capacity to act and react in a social context. But research on agency from an actor-oriented perspective is needed to clarify, where and whose capacity is at stake. The enactment of actions is agency and those who enact the actions are actors. As these actors enact in a particular space within social context and situations (McGee, n. d.), they are social actors. Social actors are defined as the persons who act and have the capacity to perform certain actions in the society (Long, 2001). Long argues that human agency assigns to the individual actor the “*capacity to process social experience and to devise ways of coping with life, even under the most extreme forms of coercion*” (Long, 2001: 16). The social actors act according to their own consciousness but are influenced by socio-cultural contexts in which they are living.

The notion of agency refers to how social actors constitute their living in different social contexts. Their knowledge and skills are crucial for social actors to act. Long (1992) lights the knowledgeability and capacity of social actors. He assumes that “social actors are not simply seen as disembodied social categories (based on class or some other classificatory criteria) or passive recipients of intervention, but active participants who process information and strategize in their dealings with various local actors as well as with outside institutions and personnel” (Long, 1992: 21). In this research, social actors as research units are the flood-displaced women in disaster-displaced community.

In many such theories of agency, an agent who has agency has been defined as the source of planful actions (Morris et al., 2001; Taylor, 1985). In different theorization of agency and actions, agency presupposes internal states of an actor such as intent, belief and desire (Bratman, 1991) and actions are the functions of the motive and intensions which is intent, belief and desire (Wellman 1990; Bratman, 1992; Ortnor, 1991). So, agency resides within individuals as their property assigning responsibilities for consequences of actions (Markus and Kitayama, 2003). However, there are external aspects of agency; individuals perform certain action to overcome

constraints because they themselves are constrained by these constraints (Markus and Kitayama, 2003). Women as individuals cast their own actions performing functions and activities in response to their society and environment. In this study, the research unit is the women who have desires, wants and motives to act. Though they encounter constraints i.e. societal and environmental constraints, they overcome or try to overcome those constraints with their knowledge and skills they have as social actors.

Giddens has mentioned the individual and collective agency by methodological explanation. He points out that social institutions function as the result of actions of human individuals. This reflects there is the collective bound of individuals which result in institutions through 'collectives'. Here, he refers individual as human organism and society consists of individuals (Giddens, 1979). Following these lively discussions by different authors about human agency, I emphasize here the women's agency and their groups and networks.

Pollack (2000) analyses the relationship between individual and society and how society has framed the individual's agency. Women's autonomous and self-determining capacity as women's agency has impact on women's empowerment too. Giddens (1984) mentions in his "structuration theory" that human agency is shaped by structure. Although the patriarchal social structure in our case shapes women's agency as analysed by Giddens in his "structuration theory", women have used their agency to battle against this structure demanding change, thus actively structuring new social and power relationships. The patriarchal social structure refers to the women's role mentioned as subordinate in family and society which restricts women to be an independent autonomous actor. Many scholars have defined human agency as their autonomous act but explanation of man's agency and women's agency might be different in realities. Women's identity are gendered in patriarchal culture which encumber women acting as self-functioning agents yet women exercise their skills (Meyers, 2002).

Hence, the structure and women's agency lead to structuration of social patterns i.e. women's role and work is moulded by social traits. As Pollack (2000) writes that in the process of obtaining empowerment, women act and advocate social change resisting to domination. Importantly, she notices that there is the dichotomy of understanding women's agency or

women's experiences of victimization. "One of the difficulties with conceptualizing victimization and women's responses to it, is that within Western liberal thought the concept of victim and the concept of agent are seen as mutually exclusive" (Mahoney, 1994:64; Abrams, 1995: 363 cited in Pollack, 2000).

Following the above two paragraphs, that there is incompatibility of women's agency and their victimization. This study investigates both the women's agency in dealing with/living with disaster and what was the impact of disaster to them, their feeling of victimization. I shall argue that to combat victimization, women have to be active agents. And to be the active agents, they need to understand what are the underlying causes and factors for women's victimization. So, they have to be/become knowledgeable "social actors". Women have the capacity to combat against victimization only by knowing about victimization and having a feeling of being victimized. Now, here the perception of victimization depends on different aspects and in this research, women are regarded as a vulnerable group and easy subjects to violence. This violence against women in disaster is the major focus of women's agency in disaster. It is evident that women act against violence by using different practices and survival strategies. So, these two concepts of women's agency and victimization complement each other.

Cannon (1994) representing the "structural"-school of disaster analysis argues that since hazards affect different people differently within society, disasters cannot be labelled as "natural" because the social-economic system generates unequal exposure to risks. This analysis of disaster can be compared with this study topic referring to flood impacts on society making few groups of people more prone to hazards. This fits in my research and what Enarson (1998) mentions that "women" are particularly vulnerable to disaster impacts. However, I also see them as active disaster responders.

Jeffery (1998) suggests that the question is not about women as victims or agents, but actually, it is crucial to understand what form of agency women constitute despite their subordination role assigned to them by the gendered structure of society. Women's agency, how women position themselves in diverse social arena's in specific ways is investigated in this study.

Society is continually constructed and performed by active social beings (Strum and Latour, 1991). They remark that society is defined by actors themselves and also for others in different practical ways. The actors use their knowledge to perform in the society. Long (1992) draws on the idea that actor strategizes mentioning as “actor strategy” for solving specific problems. “Actor strategy” refers to the way social groups use their available power resources, or their knowledge and capability, to resolve their particular problems (Brown and Rosendo, 2000: 212). Actors have motives for intervening by including strategic objectives based on their interest (Few, 2002). From this, it is clear that, as women are social actors, they have their own strategy and coping practices in disaster. Women’s strategy in disaster and how they strategize to solve their problems is studied in this study. Their strategy includes the individual as well as the collective performance in response and recovery phases of disaster.

A few authors add a social or community dimension to empowerment, claiming that individuals are empowered through sharing experiences, raising consciousness, collective action and advocacy (Browne, 1995: 359). Taking this as the reference, in this research, women’s agency in disaster has been explored in terms of social organization and social capital. Interactions empower them as they have their active agency to carry out their roles, responsibilities and functions in disaster displaced community. In times of disaster, women response to the hazards individually and working together with their family and society because they get support and give support to them. Women as groups of women are viewed as agents of change. Women share their experiences, views and ideas amongst themselves (Eduards, 1994).

A natural disaster is a type of social crisis which is the “realistic laboratory” for studying social phenomena and relationships and this phase could be the merit to social scientist which cannot be found in stable times (Fritz, 1961). People’s active involvement in response and recovery phases with the stakeholders is visible in the disaster as Kreps (1984) mentions that disaster studies address basic questions of social organization, adaptive capacity and survival. Hence, focusing on the displaced women, their social, capacities and abilities to survive and sustain are the main elements of the study.

### **3.3 Women's agency in disaster**

Women's efforts in disaster are relatively invisible despite their central roles in families and disaster displaced communities (Enarson and Morrow, 1998). To study women's agency in disaster, many research projects are undertaken by examining women's agency and their engagement in disaster. Like in other research, this study of the Koshi flood disaster 2008 examines displaced women's actions, roles and responsibilities in response and recovery phases: their multiple agencies in wards number 7 and 8 of Sripur VDC and their associations with the disaster-displaced community.

In this study, women's response to crisis has been analysed in three different parts because women make use of familiar practices and networks differently in disrupt conditions. Firstly, study of women's individual actions and activities were essential to understand women's agency in disaster. Then as the second part, women's engagements in formal and informal networks, associations with organizations and stakeholders while seeking support and coordination with displaced community were examined. Immediately after the disaster, women were exposed to new environments in which they were subjected to different difficulties and violence against women. To overcome these difficulties and deal with it, the coping strategies of women were investigated as the third component of this study. Lastly, women's agency in these three parts of the study was analysed by linking it with the gaps in the support mechanisms and response and recovery operations provided by the government and stakeholders.

Primarily, the actions and activities of women in response and recovery phases of disaster were scrutinized. Fothergill (1999) argues that women's lives can be better understood at the phase when there is disruption of the social order. She emphasizes that this will be the opportunity to learn how women construct their new roles by examining the nature of women's role in disaster. Along the same line, this research investigates women's work, roles and lives in disaster focusing on their performances and how they manage to make their living at hard times. Although women have been characterized as a vulnerable group by most researchers, there is increasing evidence of women's role as active survivors combating with the effects of disaster and taking new roles in the community rather than passive victims (Bankoff et al., 2004;

Fordham, 1998; Enarson and Morrow, 1998; Fothergill, 1999; Saito and Murosaki, 2012; Yonder et al., 2005).

Immediately after the disaster, women's roles are more clearly visible because they are not only restricted in the domestic sphere but they are exposed in the public domain. Women's activity in rescuing themselves, family members, and neighbours, taking care of family members, supporting neighbours, managing food and space in temporary accommodation and rebuilding homes in the recovery phase which provided them with multiple roles. Their responsibilities included food production, reproduction and maintenance of the domestic group through community management (Wiest et al., 1994).

Bari (1998) describes women's creativity in organizing grassroots groups focusing on the immediate needs in Pakistan. She writes about how women shared the joint responsibility with their husbands in rebuilding their homes and saving and loan payment procedure which was an important step to control their own lives in crisis. Cox (1998) mentions women's effort in managing the crisis and how women coped in bushfire in Australia. She writes managing crisis by women's insider knowledge could identify less visible and necessary needs of local residents. Hence, this study analyses women's role and manageability in the Koshi flood disaster.

Secondly, it can be pointed out that women's agency tend to create solidarity groups as the agency of disaster-displaced women create solidarity group as they are sexually segregated as "women" in the society (Baumel, 1999; Meyers, 2000; Enarson and Morrow, 1998). In the study about the women's agency and survival strategy during holocaust, Baumel (1999) concludes that the group often provides its members the feeling of security and belonging specifically in crisis which is the natural requirement of a human's well-being. Milroy and Wismer (1994) propose in their paper a new conceptual framework for understanding women's "community work" as the third sphere to have full understanding about women's lives. In responding to adversities, women's networks, informal leadership and networking are integral resources.

Raymond (2004) has mentioned that coordination and responsibility are the two elements of social organization. Women coordinate different activities of supporting each other by

interacting through formal and informal networks. These interactions, negotiations and social struggles results different patterns of social organization which take place between the several kinds of actors (Long, 2001). Women take responsibility of their family, relatives and neighbours by supporting each other and exchanging materials in times of need. There are common patterns in the material conditions of women's everyday lives, including domestic and reproductive labour, care-giving and family support, and vulnerability to sexual and domestic violence. These commonalities afford women a unique angle of vision when natural and technological disasters impact human communities (Enarson and Fordham, 2001: 43). The DFID Livelihood Framework (1999) hinges on social capital which refers to trust, connectedness and mutual relationships among the members in the society. Women bond in formal and informal groups in managing activities against the disaster and motivation would depict how knowledge, skills, experiences of women helped each other and in what way women were involved.

Thirdly, the study focuses on the coping strategies adopted by women to survive from the effects of disaster. To analyse the coping strategies, knowledge and skills they use, it is equally important to highlight women subjected to more difficulties and the reason behind it and how and why women are more subjected to difficulties. Fothergill (1996) points that several studies have disclosed that in disaster situations, women are more at risk because they are in the assisting, protecting and nurturing role in family. She elaborates that this role of women as the family care givers contributes to their exposure in disaster. The crowded place in the temporary accommodation, inadequacies of food and daily requirements are the major challenges faced by women. But as mentioned by Fordham (1998) in her case studies of North Muirton, Scotland, despite the inadequacies, there is informal sharing and understanding of rules among women using the laundry facilities. Women have their own practices and coping strategies in this challenging context which is the imperative part of investigation in this study.

Women are differently affected by the flood as their socio-economic status varies (Bari, 1998). In this study, different categories and the effects of the disaster on them have been examined. Here arises the issue of homogeneity and heterogeneity. Because, in terms of sexual identity, women are a homogenous group (Enarson and Morrow, 1998), but within this homogenous group, there is heterogeneity regarding difference in religion, ethnicity, caste and household. In

many cases, the experiences of women are found to be different depending on whether they are low caste and female-head of household.

Hossain and Huda (1995) concludes in their study of problems of female household heads in Bangladesh that female headed household experience vulnerability because they are unable to access employment opportunities and their assets due to their gender position. This case can be linked with my study where there were probabilities for female household heads facing difficulties in approaching for support services from stakeholders and claiming compensation to the governments. Gartaula et al., (2011) mentions that *de-facto* female household heads have more decision making power and autonomy than women living with their in-laws. Therefore, taking into account the vulnerability of women household heads in gendered society, their agency in the decision-making process is one of the important parts of analysis.

The Koshi flood disaster had affected women in different social and economic aspects in response and recovery phases. Intersecting with these social and economic aspects, hazardous social conditions are created which places different groups of women differently in disaster (Blaikie et al., 1994). As mentioned in chapter one, women of wards number 7 and 8 of Sripur VDC belong to different religious, ethnic, caste and household categories and these social differences were analysed. Thus, in this research, women's agency in disaster has been referred to as women's capacity to act, choice, practice, coping with adversities and decision-making with regard to their role in the family and in a disaster-displaced community.

Finally, to provide a holistic picture, it is important to analyse the government's action and policy related to women in disaster together with the gaps in response and recovery operation by the government and stakeholders.

From a different angle, an investigation of response and recovery operations by different organizations is important because the heterogeneity of displaced people reflects multiple realities. The diversity of the displaced population should be taken into consideration while carrying out disaster relief operations. The nature of organizations is such that their resources are limited to specifically defined goals (Heffron, 1977: 114). He points at the difficulties associated

with organizational support mechanisms and natural disaster in which some disaster victims benefit more than others. Hence, in this study displaced women's and key informant's reflection about the transparency of response and recovery operations were analysed.

In addressing women's needs in disaster, it is common to view women and girls as special having needs (Bankoff et al., 2004). The National Strategy for Disaster Risk Management has also emphasized women as a vulnerable group along with children, people with disability and low caste people in times of disaster (GoN, 2008). The Local Self Governance Act, an act made to provide for local self-governance has the main role to facilitate disaster management at local level. However, it does not mention any relation of women and disaster management (GoN, 1999). It is essential to move from the notion of women's needs to women's rights (Enarson and Fordham, 2002).

The major objective of the Water Induced Disaster Management Policy Nepal was to mitigate the loss to property and life and define role of institution at various levels (GoN, 2006). Similarly, the Three-year Interim Plan also has emphasizes on policy formulation, strengthening institutional mechanisms (GoN, 2007). The Tenth Five-year Plan mentioned the setup of the strategy of transparent rescue and relief operation to achieve its objectives to contribute substantially in the management of disaster (GoN, n. d.). Therefore, the roles of institutions, coordination among stakeholders and provision of support services to reach each household and individual were investigated through analysis of the narratives of both the respondents and key informants in this study.

## Chapter IV: Findings

In this chapter, I will focus on women's agency, their roles and responsibilities, knowledge and skills; social interaction in groups and networks and co-management. At the start, some quantitative data are presented about the households and individuals.

### 4.1 Household characteristics

In this research, the displaced women households from wards number 7 and 8 of Sripur VDC, Sunsari district were the respondents. The total number of household in Sripur VDC is 2,466 and the female population is 8,165 (out of 16,880 total populations). The average household size of Sripur is 6.84 (CBS, 2010). In each ward, there are about 250 to 300 households. Ward number 7 is the moderately affected ward i.e. yellow zone and ward number 8 is the highly affected one i.e. red zone as described in chapter one (DAO, 2009). Therefore, both these wards were covered to compare displaced households (N=60) in the yellow and red zones, and to discover the differences.

#### 4.1.1 Ethnicity

In this study, there were 33 respondents from ward number 7 and 27 respondents from ward number 8 as research unit. A purposed selection on religious affinity was made, so half of them followed the Hindu and Muslim religion i.e. thirty respondents followed Hindu religion and the other thirty were Muslim. Both Hindu and Muslim respondents were covered in ward 7 whereas in ward 8 respondents were only Muslim. Among the 30 respondents of Hindu community, *Yadav (Brahmin*<sup>12</sup>) were 18 and others were 9 including 3 *dalits*<sup>13</sup> (see table 4.1).

---

<sup>12</sup> Brahmin is the dominant caste in Hindu religion. In context to Nepal, this caste has been defined as the higher caste having the high profile.

<sup>13</sup> Dalit is the term which denotes the lowest caste/ untouchable caste groups as low profile people.

**Table 4.1** Displaced female ward number and religion (N=60)

| Ward number   | Religion |         |             |       | Total |
|---------------|----------|---------|-------------|-------|-------|
|               | Muslim   | Hindu   |             |       |       |
|               |          | Brahmin | Other caste | Dalit |       |
| Ward number 7 | 3        | 18      | 9           | 3     | 33    |
| Ward number 8 | 27       | 0       | 0           | 0     | 27    |
| Total         | 30       | 18      | 9           | 3     | 60    |

Source: Research by author, 2012

#### 4.1.2 Age and education

Thirty two (53.4%) respondents were of the age between 26 and 45 years and 18 (30%) were elderly women aged between 46 to 65 years depicting adult group, the maximum displaced women group in study. Yet, 13.3 per cent aged between 18 to 25 years were young girls. Thirty of them aged 18 to 45 years are illiterate (see table 4.2).

**Table 4.2** Age and education of respondents (N=60)

| Age            | Education  |                |         |           |                  | Total |
|----------------|------------|----------------|---------|-----------|------------------|-------|
|                | Illiterate | Adult literacy | Primary | Secondary | Higher secondary |       |
| 18 to 25 years | 5          | 0              | 0       | 2         | 1                | 8     |
| 26 to 35 years | 12         | 1              | 0       | 1         | 2                | 16    |
| 36 to 45 years | 13         | 0              | 0       | 3         | 0                | 16    |
| 46 to 55 years | 8          | 0              | 0       | 0         | 0                | 8     |
| 56 to 65 years | 9          | 0              | 1       | 0         | 0                | 10    |
| 65 and above   | 2          | 0              | 0       | 0         | 0                | 2     |
| Total          | 49         | 1              | 1       | 6         | 3                | 60    |

Source: Research by author, 2012.

Secondly, 49 (81.7%) respondents were illiterate and only 11 (18.3%) could read and write. The literate group includes secondary education (10%), higher secondary education (4.9%) and 1.7 per cent primary education and 1.7 per cent adult literacy. Sunsari district is ranked in twenty-ninth position among seventy-five districts of Nepal on the literacy rate of population aged between 15-24 years (CBS, 2010). Still, the literacy percentage of women is low; which could be an indicator that in Nepalese society, girls' education is given less priority. This result for the research site Sripur VDC is in line with the socio-economic indicators of South Asia, which presents a considerably higher female illiterate rate than male (Ariyabandu, 2000).

#### 4.1.3 Family composition and marital status

The family composition<sup>14</sup> of the respondents is classified as nuclear, joint and extended family. Twenty nine (48.3%) respondents were in a nuclear family, 27 (45%) in joint family and 4 (6.7%) in extended family (see table 4.3).

**Table 2.3** Family composition and marital status (N=60)

| Family Composition | Marital status |         |           |        | Total |
|--------------------|----------------|---------|-----------|--------|-------|
|                    | Unmarried      | Married | Separated | Single |       |
| Nuclear            | 1              | 26      | 1         | 1      | 29    |
| Joint              | 0              | 24      | 0         | 3      | 27    |
| Extended           | 0              | 04      | 0         | 0      | 04    |
| Total              | 1              | 54      | 1         | 4      | 60    |

Source: Research by author, 2012

It was found that 48.3 per cent of the respondents have six to ten members in their family and 33.3 per cent had eleven and above. The displaced women have additional responsibilities

<sup>14</sup> Family composition: The nuclear family consists of parents and children i.e. family group consisting of the single parent family. Joint family consists of parents, children and in-laws. Extended family includes in one household near relatives in addition to a nuclear family.

because they take care of all family members being a daughter, wife, mother, daughter-in-law and household head in the above mentioned different families. As narrated by participants, family members supported each other and collaboration was helpful. Though, sudden exposure in a new environment put more responsibilities to women as they are the manager of household chores, care givers and feeders in the family. So, in disaster response and recovery efforts, family roles constitute an important risk factor (Solomon, 1993). It was already three years after the flood; the respondents were also asked during the field survey whether their family was structured differently at the time of the flood. They shared that it was similar as they had now despite new born babies and elder member's death.

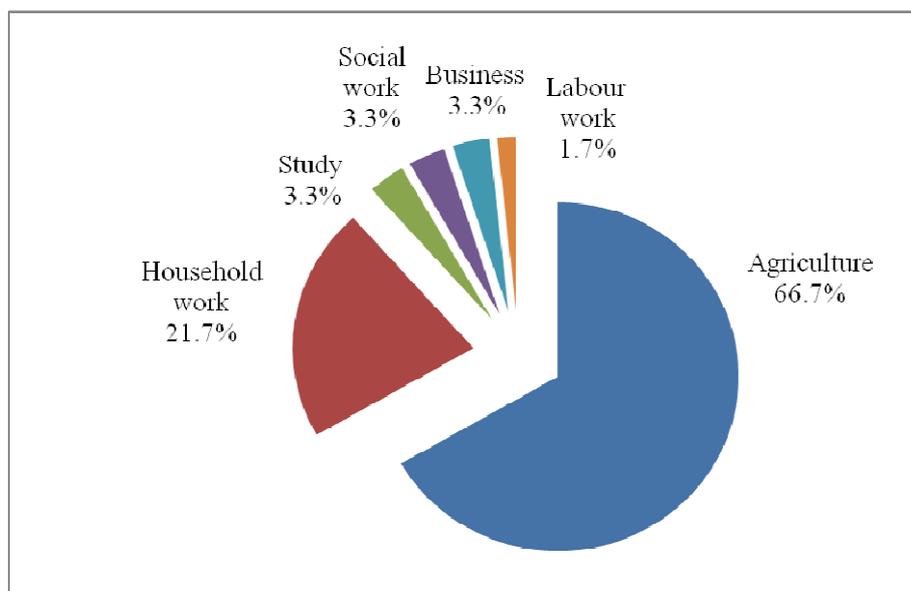
#### **4.1.4 Occupation**

Forty (66.7%) respondents were engaged in agriculture (either in their own land or as laborer); their major occupation being similar to the national average 65 per cent population in agriculture (CBS, 2011). According to the data\*\*<sup>15</sup> collected before the Koshi flood disaster 2008, 67, 981 hectares land is cultivated and 22,765 people are the land owners in Sunsari district (CBS, 2011). Both wards 7 and 8 are farming areas and most of the respondents shared during their interviews that the flood washed away their farm land where they used to cultivate rice, wheat and sugarcane which was their major livelihood source.

Thirteen (21.7%) women support their family as home makers and in farming because they are indirectly connected with their family farming, doing different tasks such as transplanting rice and threshing rice and wheat. Six respondents were involved in business, social work and as students and the remaining one is labor worker. Since respondents have to do all the farm activities by themselves, they said they have confidence in the various skills and knowledge of farming (see figure 4.1).

---

<sup>15</sup> This is pre-flood data; the land cannot be accessed now.



**Figure 3.1** Occupation source: Research by author, 2012

Women are more likely to have a low-status occupation or engaged in the informal economy varying according to time, which is likely to disappear outright after the disaster (Morrow, 1999). In the same vein, 66.7 per cent of the women in this research were engaged in farming before the flood but in the recovery phase, the displaced women did not have any work if they had no family with farm land. So, they were limited within house doing household chores. The loss of farm land affected the occupation of the respondents and their family. Enarson and Morrow (1997) also argue that in post-disaster phase, women are left with few job opportunities.

## **4.2 Women’s agency in response and recovery phases**

### **4.2.1 Roles and responsibilities of displaced women in family**

The displaced women had important roles in their family. In the cross tabulation of the displaced female household heads and their ethnicity, out of 60, only 9 (15%) women were a household head. Among them, 5 respondents were Muslim and 4 were Hindu. This shows that in wards number 7 and 8 of Stripur VDC, whether a household head is female does not depend on religious

affiliation. Rather than religion, it depends on family structure, marital status, male out migration and responsibilities they perform (see table 4.4).

**Table 4.4** Displaced female household heads and ethnicity (N=60)

| Household categories | Religion |         |             |       | Total |
|----------------------|----------|---------|-------------|-------|-------|
|                      | Muslim   | Hindu   |             |       |       |
|                      |          | Brahmin | Other caste | Dalit |       |
| De-facto             | 2        | 0       | 0           | 1     | 3     |
| De jure              | 2        | 0       | 0           | 0     | 2     |
| Widow                | 1        | 1       | 1           | 0     | 3     |
| Separated            | 0        | 0       | 1           | 0     | 1     |
| Not household head   | 25       | 17      | 7           | 2     | 51    |
| Total                | 30       | 18      | 9           | 3     | 60    |

Source: Research by author, 2012

Female household heads are 3 (5%) de-facto<sup>16</sup> household heads, 2 (3.3%) de-jure<sup>17</sup> household heads, 3 (5%) single women household heads and 1 (1.7%) separated household head. The husbands of de-facto female household heads have migrated to the city for work. Since they lost all their properties, their husband started working in the city to earn for their family. As they shared to me, their husbands had gone to city area for work and came to visit their family occasionally. This finding is in line with Kanaiapani (2000). The de-facto female household heads have greater responsibility taking new roles in households and disaster-displaced community (idem) and they make decisions about household more often than the women who are living with their in-laws (Gartaula, 2011). A single women household head shared with me:

<sup>16</sup> De facto household head refers to that head of a household who is temporarily taking care of the household i.e. acting as a head in absence of the actual head of the household (Hossain and Huda, 1995).

<sup>17</sup> De jure household head is considered to be the permanent head of a particular household (Hossain and Huda, 1995).

*“I manage home on my own; I do all the addition on how to maintain the livelihood of my family.”*

The husbands of two de-jure female household heads work in the mosque and do not take any responsibility at home. So, these two women have taken the responsibility of taking care of their family. (SKI, Sripur-ward number 8, 20 December 2011)

As shared by the displaced women, they spend most of their time on maintaining and doing household work. The traditional division of labour in each household is such that men would go outside in the public arena and women would be confined within the domestic sphere (Fordham and Ketteridge, 1998). Though women in the household survey and interviews said that they do nothing, the probing questions about their engagements in daily life and the field observation revealed that women have a major role in managing home, feeding the family and support in rebuilding/ repairing of the house. This highlights how women define work, how their cultural mindset prohibits them calling it work, as only hard cash earning is seen as (real) work, which is generally done by men in the research area. Here, women explain agency in terms of socio-economic aspect which is the cultural construction of agency.

Women provide care and support to elderly, people with disability and children in their family and neighbours lessening the work of support providers because needful categories are more dependent on women members of their family than the authority (Fordham and Ketteridge, 1998). This is a very important role of women, as all the respondents shared during field work that they took care of their family members in both response and recovery phases.

Women were found as active family members, 71.7 per cent explained that their family benefitted by their work. Six (10%) respondents solved the problems of resource deficiency by themselves in the recovery phase and 10 per cent decided to take support from different stakeholders in the camp and aftermath the flood. Though this number is apparently small as compared to the social and cultural context of Sripur VDC, it depicts the changing roles of women in the family. In addition, 23.3% per cent respondents supported family financially by

earning money as a labourer in the recovery phase. Their earnings were used for paying loan, building home and spending on children's education.

#### **4.2.2 Roles and responsibilities of displaced women in society**

Twelve (20%) respondents worked as volunteers in the recovery phase. These volunteers had various works such as cooking for pregnant women, feeding *litho* (flour prepared by grinding food grains and legumes) to the infants, awareness rising on reproductive health and sanitation in the camps. Among these 12 women, ten had problems working as the volunteer because firstly they also had to look after their family and secondly support materials were inadequate for displaced families. But they tried their best and managed the resources that were available. The daily work of women in times of disaster was to manage their best to feed people, reducing their vulnerability to disaster (Bhatt, 1995).

Human agency is the important element for the existence of social systems (Giddens, 1984). The work done by women in times of disaster is the contribution to social activities and to society. Women have been working and engaged in various household and social activities before and more after the disaster. Unlike men, who are regarded as the household head, but women had the sole responsibility of taking care of her household but are labelled as subordinate to men. A respondent in her in-depth interview said:

*“My sister-in-law was pregnant so she needed support to take her children out of home at the time of flood. Her husband was in another city for earning so she had no one to support her. I rescued my and her children and carried away them to the safe place. We were directed to the temporary camps. I took care of six children of two families and went to the safe place. In the camp too, I supported her for getting food and took care of her health. Later she gave birth to a son and both are healthy now.”* (SKI, Sripur-ward number 8, 20 December 2011)

Respondent RKI also supported pregnant women, she said:

*“I made food and litho for feeding pregnant women and infants in the camp. I took them to support organizations and health clinic.”* (RKI, Sripur-ward number 8, 24 December 2011)

Among the displaced women, 35 (58.3%) shared that they asked for loan from their relatives and maternal family to rebuild their house immediately after the flood. There is the strong tie of daughters to their maternal home in context to Nepalese society. Daughters get support from matrilineal family members in times of need. Whenever there is need for support in daughter's in-laws home, her parents support her and her in-laws family with what they can do because they want their daughter to live good family life as shared by respondents. Also, to solve problems, some women borrowed food grains from their neighbours and relatives.

#### **4.2.3 Use of knowledge and skills**

Women in the rural areas generally gain knowledge and skills through their own experiences. Listening to women gives the opportunities to know about their aspirations (Sinha and Sinha, 2007). Documenting the real experiences of women at the ground, this study unmasks the knowledge and skills of flood displaced women in Sripur VDC. In response and recovery phases, women's actions and activities played significant role in each family. For instance, women worked alone and with male members of the family to support their children and family members. Women shared with me that they were always supportive (not complaining) to feed their family when there was the lack of proper space, food, cooking stove and other utensils.

As reported by the key informant working at District Administration Office, Sunsari, DAO had given the early warning notice about the possible breakage of the Koshi embankment to residents of Sripur VDC. Also the District Police Office had sent police team to the village to disseminate early warning message. But at that time most of the people were engaged in work, some were working in farm and some were out of home so they could not share the information effectively to each individual or family. For example, respondents shared that only 26 (43.3%) of them were at home when the flood was there. When people who were out of home heard the message they came to the house but it was already too late to take their belongings out. They just could save the lives of themselves, children and elderly people.

Forty four (73.3%) respondents gave the information to neighbours and relatives when they knew that flood was there. Soon after, the information was disseminated throughout the village. So, women had the vital role of sharing information to the neighbours especially via women to women informal network in the village. One of the respondents said:

*“It was raining very heavily and I was preparing food for my family. I got the information about the breakage of the Koshi dam from the neighbor women. Then I left cooking and started to pack jewelry and money and left home with my children. Unfortunately, I could not save other property.”* (FKI, Sripur-ward number 8, 25 December 2011)

Women in the community provide emotional support to each other and assistance to infants. Disaster adds extra burdens to women because women as being the chief homemaker they have the major responsibility for domestic task, caring and nursing their children and elderly family members (Penning et al., 2000). Women at the camps were engaged in preparation of food, taking care of children, sharing information about facilities available and reporting disputes and violence related cases to the police. A key informant said:

*“During my one year stay in the camp, I gave information to the displaced women in the camp about the available facilities, support services provided by the organizations and women human rights. But I was unable to provide material support from my side because I too had miserable condition and I had to think about my family too. Even these days they come to my place and ask me about the support. I also support them with what I can.”* (SKI, Sripur-ward number 8, 20 December 2011)

In the recovery phase, women gave information to pregnant women about the local clinics and health posts. A displaced woman said:

*“I got training from the paralegal committee (community-based community supported by UNICEF). And I did mediation when there were conflicts in the village. I utilized all the skills learned from the training. The disputing parties agreed with me, now I believe they listen to me.”* (RYI, Sripur-ward number 7, 15 January 2012)

### **4.3 Women's groups and networks**

#### **4.3.1 Women's participation and social organization**

The answers to research question 2 are as follows. Immediately after hearing about the breakage of Koshi embankment, during this rescue phase, women worked alone as well as with male members of the family and helped neighbours to get out of flood. Twenty per cent of them had minor injuries as well. Women withstood the flood with a high degree of struggle. However, only 16 (26.7%) of them could carry money, livestock and jewellery away with them. Seven of them rescued their neighbours. At first, affected people managed everything by themselves, only after few days they started receiving support from different stakeholders. This depicts that there was a strong participation and coordination among people. A key informant said:

*“First the affected people tried to manage the things in association with neighbors. Only after ten to fifteen days there was the availability of government support. They did not provide any support immediately. The village people and private organizations supported the displaced people immediately after the flood.”* (SKI, Sripur-ward number 8, 20 December 2011)

These findings raise the intriguing point that women collectively worked in their family and society to meet their basic needs when they were confronted with extreme hardships. This pressure might have contributed to assist one another with the feeling of “togetherness” at adversities. Likewise, Neal and Phillips (1990) and Enarson and Morrow (1998) proclaim that women can take the leadership and members in emergent groups in solving the problems by using the friendship networks because they see disaster as the threat to home and community. Raymond (2004) mentions that coordination and responsibility are the two elements of social organization. The social organization of the flood displaced women in response and recovery phases is analyzed because it is vital to examine women's responsibilities and coordination in women's groups and networks.

Women's groups are not the homogenous categories because they belong to different caste. The research covers the Muslim and Hindu (*Brahmin* and *dalit* caste groups) religion. Caste and social class make differences in society and while working in response and recovery phases. However, hearing the voices of women, it was revealed that as it was a crisis and everyone was suffering so the line of caste discrimination was not distinctly visible. Therefore, with what I heard from the participants, I interpret that there was the sense of responsibility and coordination among disaster displaced people across religious and caste divides. Women played a crucial role to support their family members and neighbors no matter in which caste group they belong. A respondent working as social worker said:

*“We, the group of twenty five women refused to live in the tents with other men because we had our young daughters with us and we wanted to protect them from the possibility of abuses and molestation. When Chief District Officer (CDO) came there, all men could not speak but in a group we spoke to him about our issue. He immediately asked his staff to allocate separate space for women where we demanded.”* (SMK, Sripur-ward number 7, 4 January 2012)

If women do not use their agency in collaboration with others, individual women might ameliorate their own situation, but systemic gender inequalities will be untouched (Jeffrey et al., 1998). Scrutinizing this statement, caste diversity and inequality at the research site might have benefited higher caste women as they get the response sooner as the wife or daughter-in-law of the higher caste family. But the important finding as women narrated in their story was that in response phase (in camps), the displaced women both higher and low caste were in the same group as “flood affected survivors”. They narrated that the discrimination and divide between higher and low caste was not visible at the response phase (stay in camps) because all of them faced common difficulties which might have masked and dealt with it by supporting each other. But in the recovery phase, when they were relocated the discrimination and divide was visible as evident by the sharing of interviews and FGD in ward number 7.

#### **4.3.2 Group formation and networking**

In times of disaster, women supported each other using their social networks for finding alternatives for problems and providing care for affected ones (Kawachi and Berkman, 2000;

Kaniasty and Norris, 1995) despite the heterogeneity in terms of ethnicity, caste and class. Likewise Enarson and Morrow (1998) show in their research of Hurricane Andrew 1992 that women's network played crucial role in the disaster response coalition after the disaster and they tend to work outside formal disaster organizations. In the process of helping each other, an informal group was formed among the women. A respondent shared:

*“A group of Nepali people helped me with food and materials. We would have died if the Nepali people had not taken care of me because no one was there to take care of my family. I do not want to speak lie, they did a lot to me, and they were good people.”* (SKI, Sripur-ward number 8, 20 December 2011)

The term “Nepali” here represents people from hilly origin such as *Brahmin-Chhetri*. The people originally from *terai* are called “Madhesi” who have been residing at the research site (see section 1.3.3). In the response phase, people of different ethnicity and caste were together and supporting each other which fostered cross-community (Nepali-Madhesi) collaborations. As mentioned by Leonard, at the event inter group interactions play a role in further bolstering existing boundaries (Leonard, 2008). The event acted as the ground for creating a new space for interactions and cohesion among “Nepali” and “Madhesi” ultimately reflecting a good impression of each other.

The young girls felt safe when they were affiliated with a group and network. Women informed and referred each other to join the group where they could work together. A respondent exclaimed:

*“I felt better when I joined the women's group. I was suggested by my neighbor, Ms. Gyanu Khatiwada to join the group.”* (RYI, Sripur-ward number 7, 15 January 2012)

Women were guided by women social worker because they assist the organizations working with the affected group by addressing their relief needs in response phase (Zakour, 1996). The key informant from DAO said:

*“The women’s group (informal) had monitored in their camps. They were advocating to the relevant stakeholders for support. Also, women worked as volunteers and tried to make the situation better. Few women worked as facilitators at the donor agency and provided services to the displaced community.” (BMK, DAO, 27<sup>th</sup> January 2012)*

After the flood, women bonded in different formal and informal groups. The stories and household survey revealed that women were coming out from their domestic sphere and joining the social group and networks. This was the first time for most women associating with the group which happened after the disaster. During the FGDs, they added on each other’s story. This shows that displaced women were well known to each other and they also knew each other’s story which was possible only through living and organizing together.

#### **4.4 Women’s coping strategies to overcome difficulties in response and recovery phases**

##### **4.4.1 Challenges faced by displaced women**

Answering research question 3, we found that women faced numerous challenges due to cultural, social and economic factors in a developing country like Nepal. The destruction is heavy in developing countries and affected people are forty times more likely to be affected due to disaster (Richman, 1993). After the flood, in the recovery phase, all respondents reported that they faced the problems mainly related to food, accommodation and health.

Thirteen (21.7%) women decided themselves to go to the safe place after the flood but for 47 (78.3%) it was decided by their husbands and male members of the family. The safe places were open areas, schools and community buildings. This place was just like a transit point for the quick rescue of the displaced people, and then they were transferred to the camps provided by government within few days to weeks. The capacity of the government to provide emergency assistance are limited sometimes because it takes series of process and conditions to get aid from donor agencies (Paul, 2011). This happened in this case too, it took several days to take response operation decisions and actions for seven party alliance government of Nepal to reach to the

ground with the consensus on supports. This delayed response added in the difficulties faced by women.

All women shared that they had problems during their stay in camps. These problems were violence against women, disputes, congested place, sickness, lack of food, water along with mental tension. Different camps had different provisions so only 20 (33.3%) were provided with separate toilet and bathroom facilities for females. Similarly, only 5 (91.7%) respondents reported about separate sleeping place for female. This gave rise to the problem because women never had experience of sleeping in the same place with male members of the family. The gendered structure of society prohibits women to do so culturally, developing a sensation of hesitation and awkwardness even if it is in times of difficulties. The gender relation and gender discrimination exists in the Nepalese society because men and women are not seen as socially equal categories in Nepal (Buchy and Subba, 2003). A respondent said:

*“Women cannot earn money on their own because in-laws do not allow them to work outside home or village. Even if the in-laws allow them, the villagers question the in-laws why they are sending their daughter-in-law outside.”* (RYI, Stripur-ward number 7, 15 January 2012)

Some respondents who were mother-in-laws were found positive to send their daughter-in-laws outside for work but the fear of backbite from the society restricted them to do so. This caused women to be economically dependent to their husbands, male members of the family and in-laws. This denotes a strong tie of people to the society’s gendered understanding that women should be restricted within household premises and they could work only if they are allowed by male members and in-laws in the family. The patriarchal culture in Nepalese society prefers keeping women in a low profile and discourages gender equality (Segal, 1999). A key informant said:

*“We collected funds (donations), food grains and clothes for women and children from neighboring community. The problem was severe in case of pregnant women. For example, at the time of delivery, people used to carry the pregnant women on their back from village to the*

*highway and then shifted in the ox-driven cart to reach the health clinics.” (MMK, Sripur-ward number 8, 25 December 2011)*

#### **4.4.2 Coping and adaptive strategies**

The majority of the respondents (85%) reported that they were together with family members in the camp. Living together is extremely helpful to utilize family support and build own strength at the time of disaster (Hollifield, 2008). As the first coping strategy, women asked for help from others and supported to each other. During their stay in camp, 23.3% and 41.7% reported the cases of gender based violence and disputes respectively. To solve these problems of violence and conflict, 13.3% asked others for support, 11.7% gave counselling service to the victims and 3.3% supported the victim to file the case to the police office. They also tried to solve the problems by taking a role of mediator as shared by them.

Among the respondents, 31.7% returned home after one to five months and 68.3 per cent returned after six to twelve months of disaster. After returning to the original place, 80% women managed to rebuild their house themselves with family efforts and government compensation. Only 30 per cent women received training from government private organizations. These trainings were mainly focused on vegetable farming, livestock rising, knitting, handicrafts and mediation. Presumably, only 11.7 per cent participants could utilize training skills into practice. A key informant working with an NGO shared that in the recovery phase capacity building trainings are important for displaced women which helps them to participate in income generation activities. He said:

*“My organization has given training to women on making bamboo handicrafts. Women sell their products at the local market for NPR 200-300 per piece. They asked me for further trainings on knitting and tailoring but for this purpose we cannot afford the cost of machine. One machine cost NPR 4,000 to 5,000 in the nearby city. They could get their wage from tailoring but there is no machine.” (MMK, Sripur-ward number 8, 25 December 2011)*

The Three-years Interim Plan of Nepal (2007-2010), envisions a long term plan to promote self-employment at rural areas by mobilizing skills, capital and technology of the domestic entrepreneurs and to increase access of the economically deprived women (GoN, 2007). The National Strategy for Disaster Risk Management in Nepal (NSDRMN) 2008 also mentions about the expansion of saving credit cooperatives and financial institutions to create more livelihood options, opportunities and choices as one of the strategy of disaster risk management in livelihood protection sector. It further highlights the exploration and expansion of livelihood insurance schemes and promotion of on-farm or off-farm enterprises to create employment and income opportunities (GoN, 2008). However, the implementation of these strategies is not found visible and effective in the field as said by the participants and key informants. In my observation, I found that almost all women were doing only the household chores but not engaged in any job or income generating activities. Government believes that compensation would be the remedy for disaster loss but the fact is there is the need of income generation activities and employment opportunities to the affected population as shared by informants and respondents.

#### **4.5 Gaps in response and recovery operations by stakeholders**

##### **4.5.1 Support provided to the displaced women**

Concerning research question 4, 96.7 per cent of the respondents reported that they got compensation from government in the form of money and materials. However, only 43.3 per cent told me that they were satisfied with the amount and type of compensation they received, remaining people shared that they got very less than what they lost. They further exclaimed that the government should provide various livelihood opportunities for them. Bhatti (2003) argues that the dissatisfaction is on the inadequacy of post- recovery schemes and income generation activities is the major gap in institutional arrangement that neglected the livelihood option and emergency measures option. Also, during the stay in the camp, availability of services was sufficient to 29 (48.3%) respondents only.

Immediately after the flood, 96.7% per cent respondents recounted about the organizations working with the displaced people and 20 per cent of them went to them for asking support. These organizations provided medical support, food and clothing to affected people but 11.7 per cent respondents said they did not get it and 16.7% participants noted that there was no transparency in distribution of relief materials. This shows that women were quite aware about transparency system. Women said:

*“The support was given to only those people who can speak so, it was not transparent.”* (FGD, Sripur-ward number 8, 25 December 2011)

*“There should be the provision of job and training to the displaced people apart from only the government compensation. We want to work.”* (FGD, Sripur-ward number 7, 15 January 2012)

This is quite remarkable that despite the higher illiteracy rate of women and their limitations within domestic domain as depicted by research, 95% of them have the knowledge and information about the organizations and their implemented programs in their wards.

In the questions about support mechanisms in recovery phases, displaced women mainly focused on the provision of irrigation facilities with soil reclamation, vocational trainings and jobs opportunities at local level. Though the government and private sectors made an immense effort to support the Koshi flood displaced women through various programmes and projects, as narrated by women and key informants and what I observed in the field there was the lack of clear planning, implementation, short and long term strategy by government and stakeholders in sustainable recovery process.

#### **4.5.2 Response and recovery activities from women’s perspective**

The observations, narrations and experiences of participants show that Koshi flood has changed their life in social and economic aspects. Despite the difficulties endured by displaced women, 76.7 per cent shared that they do not feel they are in the similar social and economic status as

before the event. The leadership, perspective of education to girls/ women and women's work has notably changed. The key informant working in DAO said:

*“Young girls are now interested to work with organizations. When some of the educated girls got working opportunities after the flood, they came to know that education is needed for getting work in organizations. After flood, local women got exposed to the people from different community with whom they had never interacted before. For example, in the camp, they learnt importance of toilet, reproductive health, and sanitation and the habit of using soap before eating and after defecation. When people from the camp returned to their village, it was difficult for them to go for open defecation. So, they started making toilets. Now, there is significant change in sanitation behavior among women. Those who got the job opportunities moved forward now in their social and economic status.”* (BMK, DAO, 27<sup>th</sup> January 2012)

During the FGD at ward 7, women narrated that their life style had changed after the flood. Women who always used to live within household and village premises have come out now in the search of alternative livelihood opportunities. They further shared, earlier women were busy with their own domestic works but after flood, they got to know different scenario in the camps, what happens in the society, importance of social networking, how to work in the community and more importantly, they learned about girls' education, reproductive health and women rights. A woman shared:

*“Yes, we shared foods, fire woods, bedding materials etc. with each other. We had formed the new women committee of Koshi flood-displaced women in Sripur- ward number 7. First the organization did not take care of women group, we again and again raised our voice then they started to listen to us and provided support. They gave us materials which we distributed to displaced women uniformly.”* (FGD, Sripur-ward number 7, 15 January 2012)

The Koshi flood affected the different groups of people differently living at the same space. Even within the same space, social, political and economic system influence people differently because there are particular characteristics of different groups of people, as a result, some avoid disaster some not (Cannon, 1994; Bankoff et al., 2004). A key respondent said:

*“Now the higher caste people are in more problems compared to dalit because on one hand they lost their major property, the land and on the other hand they think that they belong to the higher caste group and should not work as a laborer together with those dalit people who used to work once for them as their laborers.”* (RSK, Inarwa, 27<sup>th</sup> January 2012)

The key informant mentioned above lines for the reason that after the loss of properties and farmland both rich and poor people of the displaced society fall into the same category of “displaced” people. The critical point here is higher caste people faced other social and economic problems after the event, although they received the larger compensation from government which was based on land ownership in red, yellow and green zones as mentioned in chapter two. The *dalit* people used to work as the laborers in their farm who were dominated for years as poor laborers mentioned by them. Now, the situation is both the higher and lower caste people have to search for labor work to feed their family but the notion of “higher caste” prohibits the higher caste people to work together with their previous laborers “*low caste*”. This has been one of the important finding on the heterogeneity of the displaced people in the research area.

On the flip side, NGOs intervention in the village is another crucial factor. As shared by women in the FGD, most of the NGOs selected *dalits* as their target group because they had their mandate of organizations and provided series of services only to them. Because of this support, *dalit* community both men and women got more resources including materials for construction of toilets and training on knitting and sewing. Some of them also got rickshaw, chickens and goats to sustain their livelihood. This challenged the culture of higher caste and lower caste in the displaced society. The concept of economic power remains central to disaster vulnerability but it broadened to include the cultural power to determine agendas (Wisner et al., 1993). A woman said:

*“Dalits say that the Koshi flood should come again and again and this is the justice for dalit community because the so called ‘higher caste’ people have dominated them from years. Now they say they are equal to Yadav (higher caste) and even in better situation than higher caste displaced people.”* (FGD, Sripur-ward number 7, 15 January 2012)

## Chapter V: Discussion

The research marks women's agency as the vital reality of the displaced women in response and recovery phases of Koshi flood disaster. Their individual and group actions and activities are remarkable. They certainly perform as social actors (Long, 2001): as the person who acts and has the capacity to perform certain actions in the society. In fact, evidence has been presented that women in this case also have unique roles in response and recovery phases in the aftermath of the disaster (Wisner and Luce, 1993). The growing interdependence of human functions is exercised by their collective agency fostering group motivation during adversity (Bandura, 2000). In development research and practice, the actor-oriented analysis and issues related to conceptualization of agency and process related to social change have now moved center stage (Long, 2001: 2). Hence, this study portrays women's agency, their participation, social organization, social capital and new dynamics of disaster linking these with their explanation of a disaster and when a disaster is a disaster.

The definition of disaster has been questioned and with time it has been evolving (Quarantelli, 1985). Disaster creates the moments of opportunities and crisis (Enarson and Morrow, 1998), so the interpretation of disaster differs; the mostly visible one is considerable harm to people and the physical environment (Kreps, 1984). The Koshi flood affected the households of wards number 7 and 8 of Sripur VDC in many aspects namely social and economic. The maximum households lost their houses, properties and farmlands and they explained that disaster had several negative consequences and was a "real disaster: washed away homes, properties and farmlands" to them. The reason why I termed here the "real disaster" is that this research explores that to a certain group, Koshi flood disaster created the moments of opportunities. Hence, this questions; what is disaster? and when is disaster a disaster?

The vulnerability is not homogenous in "communities" (Wisner, 2006; Ariyabandu, 2000) and there was the variation of religion, ethnicity, caste and household in the research site. Despite this variation, the research result of a particular group contradicts to what Bolin (2007) pointed out that women's marginal and subordinate status lead to increasing vulnerability of women. In

case with dalit community, in-depth interviews, key-informant interviews, FGDs and field observation witnessed that they benefitted and were in better position than other higher caste groups as discussed below.

Firstly, the cultural notion of “higher caste” restricted higher caste people to work as a laborer with “low caste” people who were once their laborers. Though, the higher caste people survived the disaster, this was the very difficult situation for them because they wanted to work and earn their livelihood but “doing the work their laborer used to do” raised the question to their status as mentioned by displaced women and men and key informants. So, they stayed behind waiting to find “their good work” and this deprived them from fulfilling their daily requirements. Secondly, organizations working with *dalit* provided *dalit* people more opportunities such as trainings and materials to cope with disaster effects than other higher caste people because they had their mandate of “dalit” as their target group. This resulted to what and why dalits say “Koshi flood should come again and again” (see section 4.5.2).

Hence, further research is needed in disaster field about heterogeneity and vulnerability. In most of the case, though these two concepts are directly proportional as evident in many researches but there exists dichotomy too. The concept of vulnerability in disaster due to “lower caste” group contradicts in this study because in the aftermath of the disaster, new dynamics were seen in the disaster-displaced community. The intensity of the effect of disaster to different group was different i.e. positive and negative consequences. Therefore, while focusing on vulnerability in disaster, in what respect a particular group is vulnerable and why they are vulnerable are crucial to examine.

Central to the finding of the research is the disaster-displaced women have their task of taking care of their family members and children and feeding them in response and recovery phases as reported by the respondents in response phase and seen in field in recovery phase. Most of them admitted that they were the source of information of flood warning, receiving support services and approaching local organizations. This is in line with Yonder and her team who documented that women’s groups are capable in gathering local information and in monitoring the programs implemented by government, allocating fair distribution of resources, which is impossible for

outsiders (Yonder et al., 2007). To displaced households, the primary means of livelihood was agriculture, animal husbandry and labor work, but now livelihood opportunities are limited. Due to the risk of flood and need for livelihood sources, a number of people have started migrating to city. This adds to the research by ICIMOD in the Hindu Kush Himalaya Region presenting the fact that the effect of water hazards induces the probability of increased migrant households (ICIMOD, n.d.).

Concentrating women in disaster, women should not be regarded as homogenous group (Fordham, 1998). This research investigated the different needs of displaced women having varied socio-economic and ethnic characteristics. One of the socio-economic characteristic was being a female household head which did not depend on either Hindu or Muslim religious affiliation in the research site rather it depended on women maintaining household, their marital status and husband absenteeism. Like the study in Bangladesh on problems of women headed households, women household heads felt difficulties in accessing support and services (Hossain and Huda, 1995). This study too adds that widowed, de facto and de jure female household heads had difficulties in seeking support from government and stakeholders. Likewise, Rashid (2000) has stated in her research findings of 1998 flood in Dhaka city that female household heads were more vulnerable. As the participants of this research suggested and Wilson and Yemaiel (1998) pointed out, further research is needed to dig out the operation process by more diverse emergency response organizations ensuring inclusiveness of all disaster affected community depending on household, social class and ethnicity.

The heterogeneity is masked by the single category 'women' (Fordham, 1998) and women's exposure to risk and vulnerability in disaster is often heightened due to the influence of gender (Fothergill, 1996). The research finding stands with what Fordham and Fothergill has mentioned. The difficulties faced by displaced women were lack of food, resources, separate sleeping place in camp, sickness, violence against women, problems with reproductive health and sanitation etc. All of a sudden, they were exposed to a new situation outside home and village premises deprived of daily requirements. However, as they narrated their experiences they struggled and are still struggling to cope with the crisis.

Women's groups and networks provide the best opportunity to react to the effects of disaster because women are predominantly homogeneous in terms of their sexual identity (Enarson and Morrow, 1998). Displaced women were engaged in informal groups and worked as the volunteers in formal group set by different organizations in their disaster relief operation. They have been taking new roles of emerging groups and doing voluntary work (Fordham, 1998). Therefore, the trust, bonding, social norms and participation and networks have acknowledged the social capital of displaced women to combat with disaster effects in the case study presented by Yuko Nakagawa and Rajib Shaw (2004). People have interconnected actions; their interconnectedness is an important element of social capital (DFID, 1999). The immediate supportive social environment is individual's family, friends and formal social service organizations and mobilising community groups (McEntire, 2007). Further, the National Strategy for Disaster Risk Management has stated that there should be the involvement of women groups, marginalised community and other stakeholders in one coordinated platform (GoN, 2008). Thus, importance of women's groups and networks in disaster investigated by research is aligned with the national policy and research by scholars on this issue.

The coping strategies are the escape from the flood location and societal coping linking with the local networks, institutions and self organization in women groups (Warner et al., 2002). Women responded to flood warnings, shared this information with neighbours and villagers and flee away to the safe place even when their husbands were not at home, contradictory to what Kundzewicz et al., (2002) stresses that response to flood warning is gender dependant in some countries. In recovery phase, they were actively engaged in supporting family and society and rebuilding their household infrastructures working together with family members. The indicators of this coping capacity are time, place, type, strength and the economic damage done in disaster which is extended by interactions across multiple options (Yohe and Tol, 2002). Therefore, these indicators have been the challenging factors for women in their adaptive strategies. Strikingly, despite these challenges, women narrated their active engagements in rebuilding their house and bringing up their children and family.

McMillen and Fisher (1998) suggest both the positive and negative outcomes need to be considered by social worker researchers for accurate description of psychosocial functioning of individual who experience negative events. The participants and key informants themselves rightly stated that their lives have changed, women's capacity to act has strengthened. Women leadership, closeness and association in women groups are noted now. There is an increasing awareness on girls' education, sanitation, women's reproductive health. In the study of women's participation in disaster relief and recovery phase, the case studies indicate women's non-traditional skills; information sharing and active leadership are important for rebuilding communities in post disaster phase (Yonder et al., 2005; Dasgupta et al., 2010). This study too suggests that women's action, knowledge and skills were helpful in recovery phase.

The Natural Disaster Relief Act 1982 mentions about provision of supply, shelter and rehabilitation sub-committee in times of disaster, but there is the need to establish a permanent committee for response and recovering planning (GoN, 1982). For this committee, the coordination of all the stakeholders is very necessary. The discourse of vulnerability classifies some area of region of the globe more vulnerable than others (Bankoff, 2001) in spatial aspect. Within this frame again, discourse on gender and women highlights women are more vulnerable than others in disaster rendering women in particular space unsafe. In fact, all the people were affected by flood, seemingly treating everyone fairly is very important in order to achieve equity (Gooden et al., 2009). Therefore, redefining and researching vulnerability in terms of gender and different displaced group is important than rendering technical.

## Chapter VI: Conclusion and Recommendations

This chapter presents the conclusions of the research which recounts women's agency in Koshi flood disaster 2008 in Nepal. The conclusions are drawn sequentially answering the research question on women's agency, difficulties and challenges faced by them, women's groups and networks linking it with response and recovery operations undertaken by government and stakeholders from women's perspective.

### 5.1 Conclusion

The Koshi flood resulted in the different scenario than a simple water flood. This scenario was changes aftermath of the flood in terms of social and economic aspects. The crisis to most of the displaced women and opportunity to a particular group of displaced women were evident as the major consequences brought by the flood.

Starting with the explanation of disaster by respondents, key informants and field interaction with disaster-displaced community, this research concludes that Koshi flood 2008 was the "real disaster: washed away homes, properties and farmlands" for almost all the displaced people but to a particular group this event benefitted because of the increased opportunities to them in response and recovery phases which was witnessed as the new dynamics of the aftermath of the disaster. The impacts of disaster conceptualize the disaster affected ones as "victims", within this seemingly homogenous group differences perseveres (Fordham, 1999). In the research site, there were new emerging issues of higher caste and lower caste people. Contradictory to the research by many authors that lower caste groups are hit by disaster more severely (Wisner, 2006; Bolin, 2007), the result showed higher caste people were in difficult situation than the *dalit* people because the notion of "higher caste" denied them doing a labour work. Also, it was found that organizations reached only to the particular group of people due to their mandate. Multiple supports received by some people and some completely left behind also depicted lack of coordination among the supporting organizations. Therefore, it was concluded that what is a disaster and when is disaster a disaster depends to what people have gone through it: was it a crisis or an opportunity?

Primarily, the flood washed away homes, properties and assets from the research area. Displaced women were severely affected; they lost shelter, clothes and access to land for food production. Although marked as having subordination role in the family, they were the manager of the household; cooking, feeding children and doing household chores as explained and observed in the field. The recognition of displaced women's role and responsibility is crucial here. The cultural construction of agency among women that only male earning hard cash does work, revealed that they themselves define their household activities was not the work for them. Their major work was the household work along with agriculture and animal husbandry. Some of them also worked as a wage labourer or as a custom of *parma*<sup>18</sup>. But, now the farm land has been washed out. Their narration clearly shows the economic as well as emotional value of their contribution to their family in times of disaster.

Results show that women's voices were the important source of information for the community people during the flood and short term rescuing. Most of the displaced women received information about the Koshi dam breakage from women neighbours and then they together immediately figured out where to abscond. The sharing of activities performed by women in camps depicted that they were actively engaged for safeguarding their children and elderly meanwhile supporting male member of family emotionally. The informal network of women in camps motivated them to take stand against violence against women and other disputes. Their common understanding, mutual support to each other, taking care of family members and more importantly, aptitude in maintaining social harmony in camp was notable. Therefore, it was concluded that women constitute their agency, roles and responsibilities and abilities to perform in times of disaster.

Almost all displaced women narrated that they felt that they were not in their original social and economic status, even at the time of the research, *three years after*. Despite of compensation received from the government, they were not satisfied with it because they lost more than what they got. They were further expecting employment opportunities at local level and reclamation of

---

<sup>18</sup> In Nepalese society, agricultural works are performed in turn by exchanging labour for which the close relatives or like minded friends or groups work together in their agricultural fields so that works are efficiently done on time and in group.

their land which is covered with 3 to 5 feet layers of soil. Views and voices of women are worth noting as their agency who demanded employment opportunities and income generation activities from government and stakeholders. The jobs demanded by women include knitting, making bamboo handicraft materials and micro-enterprise such as small scale businesses. As most of them are illiterate, they were looking for alternative livelihood opportunities but physical work.

In many respects, the effect of disaster on women is greater and different than those on men emphasizing on the developing countries (Fordham, 1998). Though, women's groups are predominantly homogenous in terms of sexual identity for organizing them together (Enarson and Morrow, 1998), they have varying characteristics and significant differences within the group of women (Dasgupta, 2010). In the study, participated women belonged to different religions i.e. Muslim and Hindu, different caste groups, household category and economic status whose needs were significantly different. However, they were treated by the government and private sectors as a single group of "disaster affected women". The female household heads explained the intricacy they had to deal with of not having represented by male voice of their household. They were often ignored and underestimated because of the absence of male voice. There is an almost entirely male representation of household heads at the village institution level (Hossain and Huda, 1995) and support distributing organizations left female headed households in an excluded situation.

Though women were subjected to difficulties, pain, increased burden of responsibilities as they expressed, the flood allowed women to come out of the family and exhibit the wide range of their skills and knowledge, which eventually inspired them to benefit from their knowledge, leadership and networking skills, which had never happened before.

At the central level, the strategy implemented by government underlies in policy aspect of the research. The Nepal Disaster Report (2009) highlights that government needs to address the challenges and gaps in its capacity of managing the disaster event in terms of identifying the risks, damage in response and recovery phases. However, there are limitations that the Natural Calamity Relief Act (NCRA) 1982 does not state the roles and responsibilities of stakeholders

working on disaster management (GoN, 2009). This study indicates the same because among the throng of organizations and affected population, the support materials were not distributed transparently and uniformly as described by the respondents and key informants. Therefore, emergency management is beyond implementing emergency activities and response (Gooden et al., 2009), the coordination of stakeholders throughout the response and recovery phases of disaster covering varied population is essential.

The important finding is apart from the effects of the disaster to the affected women, there is a remarkable change in the behaviour of girls and women brought about by the Koshi flood support dynamics. As key informants drew attention that though women have undergone severe challenges it is worth noting that women's leadership is in the limelight. They were exposed to the outside world with the different experiences of working with men and other affected community and organizations. They could raise their voice and shared experiences without hesitation to stakeholders which is quite intriguing as earlier being only limited within domestic sphere. Their demand for the working environment and opportunity of employment signifies their capacity to act.

In the present scenario, households are searching for the alternatives to escape from the lack of resources and unemployment. The males are out-migrating from the village to the city area for wage labour and small scale business. Also, a few respondents reported the compensation has been utilized as the source for sending their sons abroad. Due to the lack of alternative livelihood opportunities, there is increased probability of becoming migrant households (ICIMOD, n. d.). This was also in case of research area where people do not want to live as they have lost everything and wanted to be safe from the possible risk of disaster in future. Hence, the government and relevant stakeholders have the key mission here to solve these complexities of migration or re-integration of displaced households.

## **5.2 Recommendations to government and stakeholders**

The recommendations generated in this study through field study, explanations of respondents and key informants from women's perceptions draws the attention of government and

stakeholders (NGOs, INGOs and civil society organizations) working in disaster and relief operation in response and recovery phases at three different levels (local, district and national).

The study reveals that disaster displaced women's roles and responsibilities to their family and society is either masked or under reported because of missing research on women's agency in disaster in Nepal. In report and literatures about disaster in Nepal, "women" have been mentioned but merely as a victim and simply a group of people who requires protection from the state and society along with their children. In sights of complex and diverse disaster management works in Nepal, there is the need of amendment in disaster policy which should clearly state women's capacity, knowledge and skills to combat disaster and its consequences.

The recent draft Policy on Disaster Management formulated by the Ministry of Home Affairs mentions "*During all the three phases of disaster management such as preparedness, response and recovery, special priority shall be given but not limited to the special need population such as children, women, senior citizens, differently abled and underprivileged groups*", however this lacks the recognition of women's work and agency. Women's agency, their ability to make effective and efficient actions benefitting their family and society is yet to be recognized by the government and stakeholders. Displaced women worked in their family and society as the active member by participating actively in response and recovery operations. So in addition to recognizing their agency, government and stakeholders should support women but through right based approach rather than making welfare work, so that the affected women can feel their ownership in the disaster response and reintegration process. Women's agency in disaster needs to be identified keeping in point the social, political and economic aspect aligning it with the cultural construction of agency, which articulates only hard cash earning is work and this is mostly done by men. Their access to and control over resources, decision making power, approaching to the support mechanisms and vital roles in the society needs to be explored. The programmes should be instigated by local, district and national level authorities to enrich women's knowledge and skills income generating activities in the recovery phase. This would contribute women to strengthen their social participation and increased access to economic opportunities.

The existing coping practices adopted by displaced women need to be identified as how they cope up with the women violence, abuses, disputes and utilizing the support materials. These coping practices should be analyzed in both the response and recovery phases because the needs of women were found different in these phases. Women's engagement with the family and displaced community during and after flood is very important to study. To make women able to combat the disaster situation, the government should implement programmes at three levels namely community level, district level and national level to reach each disaster-affected households and to achieve the interactive response and recovery operations integrating government, stakeholders and disaster affected people. When households are reached, most of the women members of households are inclusive leading to women's interaction with the society, stakeholders and government. Knowing the potential types of risk and difficulties to displaced women, focus area should be identified and activities and programs implemented accordingly. Because "being a woman", they are subjected to violence, abuses and reproductive health problems even seriously in times of disaster.

Women's formal and informal networks and groups are the fortes of the displaced women as evident from the study. This connection of compatible women's group, apart from heterogeneity of women as mentioned in above paragraph, strongly supports each other in response and recovery phases. At the local level, village women are the source of information about the support services, which needs to be highlighted. At the district level, there should be a strong coordination among organizations working with disasters and those who have provision of services for the disaster affected women with systematic database. The network of organizations and representatives of women's formal and informal networks and groups in the village should be brought to the common platform where they can act together.

With regards to the reintegration of affected women, the programme implementation is authorized by the Ministry of Home Affairs in coordination with concerned agencies. Though the government distributed compensation, there has been various resource constraints and organizational gaps (Poudyal, 2010) such as transparency, uniform distribution and reaching service to each family. The even flow of resource and rendering technical solutions implemented by organizations had given rise to the crisis among the Koshi flood-displaced community where

the rehabilitation costs has been made but not of the people's choice. Henceforth, it is crucial to understand the actual needs and demands of displaced people on the ground so that only necessary and useful actions are carried out.

In line with the policy, the planning and practice needs to be synchronized. For this, a common platform needs to be created which is socially organized and inclusive of men and women with various religion, ethnicity, caste and household categories. This space representing the coordination of disaster affected men and women, women working with disaster and organization working for women in disaster can together create a mutual understanding of being connected to each other regardless to the sex, caste, ethnicity and religion.

In the recovery phase, based on the findings, both short term and long term strategies are required to benefit displaced women. Need assessment, resource identification and provision of capacity building training and income generating activities are crucial. Therefore, government must be accountable to reformulate the policy on disaster management which represents women not only as a "group of disaster affected people" but the main social actor providing essential supports to their family and disaster affected community in times of disaster.

## References

Archer, M. S. (2003). *Structure, Agency and the Internal Conversation*. United Kingdom: Cambridge University Press.

Ahearn, L. M. (2001). Language and agency. *Annual Reviews of Anthropology*, 30: 109-137.

Anderson, M. B. and Woodrow, P. J. (1992). Reducing vulnerability to drought and famine: developmental approaches to relief. *Disasters*, 15 (1): 43- 54.

Ariyabandum, M. M. (2000). *Impact of Hazards on Women and Children Situation in South Asia*. Paper presented at Laboratory for Social and Behavior Research "Reaching Women and Children in Disasters," Florida International University.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9: 75.

Bankoff, G., Frerks, G. and Hilhorst, D. (2004). *Mapping Vulnerability: Disasters, Development and People*. United Kingdom: Earthscan.

Bankoff, G. (2001). Rendering the world unsafe: 'vulnerability' as western discourse. *Disasters*, 25(1), 19-35.

Bari, F. (1998). Gender, disaster and empowerment: a case study from Pakistan. In E. Enarson and H. B. Morrow (Eds.), *The Gendered Terrain of Disaster through Women's Eyes* (pp. 125-132). Florida, United States of America: International Hurricane Centre.

Baumel, J. T. (1999). Women's agency and survival strategies during the Holocaust. *Women's Studies International Forum*, 22 (3): 329–347.

Bernard, H. R. (2000). *Social Research Methods: Qualitative and Quantitative Approaches*. London, Sage Publications.

Bhatti, A. (2003). *Disaster Risk Reduction in South Asia*. New Delhi: Prentice Hall of India Private limited.

Bhatt, E. (1995). Women and development alternatives: micro and small scale enterprises in India. In L. Dignard and J. Havet (Eds), *Women in Micro- and Small-Scale Enterprise Development* (pp. 85-100). USA: Westview Press.

Blaikie, P., B. Wisner., T. Cannon. and I. Davis. (1994). *At Risk: Natural Hazards, People's Vulnerability and Disasters*. London: Routledge Publication.

Bolin, B. (2007). Race, class, ethnicity and disaster vulnerability. In H. Rodriguez, E. L. Quarantelli and R. R. Dynes (Eds.), *Handbook of Disaster Research* (pp. 113-129). New York: Springer.

Bolin, R., Jackson, M. and Crist, A. (1998). Gender inequality, vulnerability, and disaster: issues in theory and research. In E. Enarson and H. B. Morrow (Eds.), *The Gendered Terrain of Disaster through Women's Eyes* (pp. 27-44). Florida, United States of America: International Hurricane Centre.

Bratman, M. E. (1992). Planning and the stability of intention. *Mind and Machines*, 2 (1): 1-16.

Browne, C. (1995). Empowerment in social work practice with older women. *Social Work*, 40 (3): 358-364.

Brown, K. and Rosendo, S. (2000). Environmentalists, rubber tappers and empowerment: the politics and economics of extractive reserves. *Development Change*, 31(1): 201-227.

Brikmann, J. (2006). Measuring vulnerability to promote disaster-resilient societies: conceptual frameworks and definitions. In (Ed.), J. Brikmann, *Measuring Vulnerability to Natural Hazards* (pp. 9-54). New Delhi, India: United Nations University Press.

Buchy, M. and Subba, S. (2003). Why is community forest a social and gender blind technology? *Gender, Technology and Development*, 7 (3): 313-332.

Cannon, T. (1994). Vulnerability analysis and the explanation of natural disasters. *Disaster, Development and Environment*, pp. 13-30.

Carter, A. T. (1995). Agency and fertility: for ethnography of practice. In S. Greenhalgh (Ed.), *Situating Fertility Anthropology and Demography Inquiry* (pp. 55-86). New York: Cambridge University Press.

CBS. (2011a). *Preliminary Results of National Population Census 2011*. Kathmandu, Nepal. Central Bureau of Statistics, Government of Nepal.

CBS. (2011b). *National Living Standard Survey 2010/2011: Statistical report volume I*. Kathmandu, Nepal. Central Bureau of Statistics, Government of Nepal.

CBS. (2011c). *National Living Standard Survey 2010/2011: Statistical report volume II*. Kathmandu, Nepal. Central Bureau of Statistics, Government of Nepal.

CBS (2011d) *GDP: Text and tables, 2011*. Kathmandu, Nepal: Central Bureau of Statistics

CBS. (2010). *Statistical Pocket Book Nepal 2010*. Kathmandu, Nepal: Central Bureau of Statistics, Government of Nepal.

CBS (2007). *Statistical Information of Nepal*. Kathmandu, Nepal: Central Bureau of Statistics, Government of Nepal.

CBS. (2006). *Monograph Agriculture Census Nepal, 2001/02*. Kathmandu, Nepal: Central Bureau of Statistics, Government of Nepal.

CBS. (2002). *Miscellaneous Publication Sheets 2001 census data*. Kathmandu, Nepal: Central Bureau of Statistics, Government of Nepal.

CBS. (2001). Demographic Information of Sunsari district. Inaruwa, Sunsari: National Planning Commission Secretariat, Government of Nepal.

Cox, H. (1998). Women in bushfire territory. In E. Enarson and H. B. Morrow (Eds.), *The Gendered Terrain of Disaster through Women's Eyes* (pp. 133-142). Florida, United States of America: International Hurricane Centre.

DAO. (2009). *Annual Report on Koshi flood*. District Administration Office, Sunsari: Government of Nepal.

Dasgupta, S., Siriner, S and De, S. (2010). *Women's Encounter with Disaster*. United Kingdom: Frontpage Publication.

DFID. (1999). *Sustainable Livelihood Guidance Sheets*. London: Department for International Development.

DMH. (2009). *Data base of Department of Meteorology and Hydrology*, Kathmandu, Nepal: Ministry of Environment, Government of Nepal.

Durand, F. (2007). Urbanization and flood vulnerability in the peri-urban interface of Mexico City. *Disasters*, 31(4): 477-494.

Eduards, M. L. (1994). Women agency and collective action. *Women's Studies International Forum*, 17 (213): 181-186.

Enarson, E and Fordham, M. (2002). From women's need to women's right in disasters. *Environmental Hazards*, 3 (3): 133-136.

Enarson, E. and Fordham, M (2001). Lines that divide, ties that bind: race, class, and gender in women's flood recovery in the US and UK. *Australian Journal of Emergency Management*, 15 (4): 43-52.

Enarson, E. (1998). Through women's eyes: a gendered research agenda for disaster social science. *Disasters*, 22 (2): 157-173.

Enarson, E. and Morrow, B. H. (1998). Women will rebuild Miami: a case study of feminist response to disaster. In E. Enarson and H. B. Morrow (Eds.), *The Gendered Terrain of Disaster through Women's Eyes* (pp. 185-200). Florida, United States of America: International Hurricane Centre.

Enarson, E. and Morrow, B. H. (1997). A gendered perspective: the voices of women. In W.G. Peacock, B.H. Morrow and H. Gladwin (Eds.), *Hurricane Andrew: Ethnicity, Gender, and the Sociology of Disasters* (pp. 116-127). New York: Routledge Publications.

Few, R. (2002). Researching actor power: analysing mechanisms of interaction in negotiation over space. *Area*, 34(1): 29-38.

Fothergill, A. (1999). Women's role in a disaster. *Applied Behavioral Science Review*, 7(2): 125-143.

Fritz, C. (1961). Disaster. In R. K. Merton and R. A. Nesbit (Eds.), *Contemporary Social Problems* (pp. 651-694). New York: Harcourt, Brace and World.

Fordham, M. H. (1999). The intersection of gender and social class in disaster: balancing resilience and vulnerability. *International Journal of Mass Emergencies and Disasters*, 17:15-36.

Fordham, M. H. (1998). Making women visible in disaster: problematizing the private domain. *Disasters*, 22(2): 126-143.

Fordham, M. H. and Ketteridge, A. (1998). Men must work and women must weep: examining gender stereotypes in disaster. In E. Enarson and H. B. Morrow (Eds.), *The Gendered Terrain of Disaster through Women's Eyes* (pp. 81-94). Florida, United States of America: International Hurricane Centre.

Fordham, M. H. and Ketteridge, A. (1995). *Flood Disasters: Dividing the Community*. Middlesex University Flood Hazard Research Centre.

Fothergill, A. (1996). The neglect of gender in disaster work: an overview of the literature. *International Journal of Mass Emergencies and Disasters*, 14(1): 33-56.

Gartaula, H. N., Visser, L. and Niehof, A. (2011). Socio-cultural dispositions and wellbeing of the women left behind: a case of migrant households in Nepal. *Social Indicators Research*, 78(2).

Gartaula, H. N. (2011). *The Other Side of Migration in Rural Nepal: Sociocultural Transformation and the Women Left Behind*. PhD Thesis, Wageningen University and Research Centre.

Giddens, A. (1979). *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. California: University of California Press.

Giddens, A. (1981). A contemporary critique of historical materialism. *Power, Property and the State*, 1.

Giddens, A. (1994). *The Constitution of Society: Outline of the Theory of Structuration*. California, USA: University of California Press.

GoN. (2011). *Disaster Management Policy* (draft). Kathmandu, Nepal: Ministry of Home Affairs. Government of Nepal.

GoN. (2011). *National Population Report 2011*. Kathmandu, Nepal: Ministry of Health and Population, Government of Nepal.

GoN. (2009). *Nepal Disaster Report*. Ministry of Home Affairs, Government of Nepal, Kathmandu.

GoN. (2008). *National Strategy for Disaster Risk Management 2008*. Kathmandu, Nepal: Ministry of Home Affairs: Government of Nepal.

GoN. (2007). *Three Years Interim Plan of Nepal (2007-2010)*. Kathmandu, Nepal: National Planning Commission, Government of Nepal.

GoN. (2006). *Water Induced Disaster Management Policy 2006*, Nepal: National Planning Commission, Government of Nepal.

GoN. (2005). *National Water Plan 2005*. Kathmandu, Nepal: Government of Nepal.

GoN. (n.d.). *Tenth Five-year Plan (2002-2007)*. Kathmandu, Nepal: Government of Nepal.

GoN. (2001). *Mitigation and Management of Floods in Nepal*. Kathmandu, Nepal: Ministry of Home Affairs, Government of Nepal.

GoN. (1999). *Local Self Governance Act 2055 (1999)*. Kathmandu, Nepal: Government of Nepal.

GoN. (1996). *National Action Plan 1996*. Kathmandu, Nepal: National Planning Commission, Government of Nepal.

- GoN. (1982). *Natural Calamity Relief Act 1982*. Kathmandu, Nepal: Government of Nepal.
- Gooden, S., Jones, D., Martin, K. J. and Boyd, M. (2009). Social equity in local emergency management planning. *State and Local Government Review*, 41 (1): 1-12.
- Green, J. and Thorogood, N. (2009). *Qualitative Methods for Health Research*. London: Sage Publications.
- Greenhalgh, S. (1995). *Anthropology Theorizes Reproduction: Integrating practice, Political Economy and Feminist Perspectives*. New York: University Cambridge Press.
- Hammersley, M. and Atkinson, P. (2007). *Ethnography: Principles in Practice*. New York: Routledge Publications.
- Heffron, E. (1997). Interagency relationships and conflict in disaster: the Wilkes-Barre experience. *Mass Emergencies*, 2: 111-119.
- Hollifield, M. (2008). Symptoms and coping in Sri Lanka 20-21 months after the 2004 tsunami. *The British Journal of Psychiatry*, 192: 39-44.
- Hossain, N and Huda, S. (1995). *Problems of the Women Headed Households*. The BRAC-ICDDR, B Joint Research Project, Working Paper Number 9. Dhaka, Bangladesh.
- ICIMOD. (n.d.), *Labour Migration as the Response Strategy to Water Hazards in Hindu Kush-Himalayas*. Nepal: ICIMOD.
- Jeffery, P. (1998). Agency, activism and agendas. In P. Jeffery and A. Basu (Eds), *Appropriating Gender: Women's Activism and Politicized Religion in South Asia* (pp. 221-224). United States of America: Routledge Publications.

Kanaiaupuni, S. M. (2000). *Sustaining Families and Communities: Non Migrant Women and Mexico-U.S. Migration Processes*. CDE Working Paper No. 2000 (13).

Kaniasty, K. and Norris, F. (1995). In search of altruistic community: patterns of social support mobilization following hurricane Hugo. *American Journal of Community Psychology*, 23: 447-477.

Kant, I. (2008). *The Fundamental Principles of the Metaphysic of Morals* (T. K. Abbott, Trans.). New York: Cosimo Publications.

Kreps, G. A. (1984). Sociological inquiry and disaster research. *Annual Review of Sociology*, 10: 309-330.

Kawachi, I. and Berkman, L. (2000). Social ties and mental health. *Journal of Urban Health*, 78: 458-467.

Kundzewicz, Z. W., Budhakooncharoen, S., Bronstert, A., Hoff, H., Lettenmaier, D., Menzel, L. and Schulze, R. (2002). Coping with variability and change: floods and droughts. *Natural Resources Forum*, 26 (4): 263-274.

Leonard, M. (2008). Building, bolstering and bridging boundaries: teenagers negotiations of interface areas in Belfast. *Journal of Ethnic and Migration Studies*, 34 (3): 471-489.

Long, N. (2001). *Development Sociology: Actor Perspective*. London: Routledge Publications.

Long, N. (1992). From paradigm lost to paradigm regained? The case for an actor-oriented sociology of development. In N. Long and A. Long (Eds.), *Battlefields of knowledge: the interlocking of theory and practice in social research and development* (pp. 16-43). London: Routledge Publications.

Markas, H. R. and Kitayama, S. (2003). Model of agency: sociocultural diversity in the construction of action. In V. Murphy-Berman and J. J. Berman (Eds.), *Cross-Cultural Differences in Perspectives on the Self* (pp. 1-58). United States of America: University of Nebraska Press.

Marshall, V. W. (2000). *Agency, Structure, and the Life Course in the Era of Reflexive Modernization*. Presented in a symposium on "The Life Course in the 21st Century", American Sociological Association Meetings. Washington DC.

McEntire, D. A. (2007). *Disciplines, Disasters, and Emergency Management: The Convergence and Divergence of Concept, Issues and Trends from the Research Literature*. USA: Charles C Thomas Publisher.

McGee, R. (n. d.). *Unpacking Policy: Actors, Knowledge and Spaces*.

McMillen, J. C. and Fisher, R. H. (1998). The perceived benefit scales: measuring perceived positive life changes after negative events. *Social Work Research*. 22 (3): 173-187.

Meyers, D. T. (2002). *Gender in the Mirror: Cultural Imagery and Women's Agency*. New York: Oxford University Press.

Milroy, B. M. and Wismer, S. (1994). Communities, work and public/private sphere models. *Gender, Place, and Culture*, 1(1): 71-90.

Morris, M. W., Menon, T. and Ames, D. R. (2001). Culturally conferred conceptions of agency: a key to social perception of persons, groups, and other actors. *Personality and Social Psychology Review*, 5(2): 169-182.

Morrow, B. H. (1999). Identifying and mapping community vulnerability. *Disasters*, 23(1): 1-18.

Nakagawa, Y. and Shaw, R. (2004). Social capital: a missing link to disaster recovery. *International Journal of Mass Emergencies and Disasters*, 22(1): 5-34.

Neal, D. and Phillips, B. (1990). Female-dominated local social movement organizations in disaster-threat situations. In G. West and R. Blumberg (Eds.), *Women and Social Protest* (pp. 243-256). New York: Oxford University Press.

O'Leary, Z. (2004). *The Essential Guide to Doing Research*. Sage Publications.

Ortner, S. B. (2006). *Anthropology and Social Theory: Culture, Power, and the Acting Subject*. United States of America: Duke University Press.

Ortner, S. B. (2001). Specifying agency the comaroffs and their critics. *International Journal of Postcolonial Studies*, 3(1): 76-84.

Ortner, S. B. (1997). The fate of "culture": Geertz and beyond. *Representations*, 59.

Parr, J. (1998). Theoretical voices and women own voices: the stories of mature women students. In R. Edwards and J. Ribbens (Eds.) *Feminist Dilemmas in Qualitative Research: Public Knowledge and Private Lives*, (pp. 87-102). London: Sage Publications.

Paul, B. K. (2011). *Environment Hazards and Disasters: Context, Perspective and Management*, Oxford: Blackwell Publications.

Penning-Rowsell, E.C., Tunstall, S. M., Tapsell, S. M. and Parker D. J. (2000). The benefits of flood warning: real but exclusive and politically significant. *Water and Environment Journal*, 14: 7-14.

Perry, R. W. (2006). What is a disaster? In H. Rodriguez, E. L. Quanrantelli and R. R. Dynes (Eds.), *Handbook of Disaster Research* (pp. 1-15). United States of America: Springer Science.

Pollack, S. (2000). Reconceptualising women's agency and empowerment: challenges to self-esteem discourse and women's lawbreaking, *Women & Criminal Justice*, 12(1): 75-89.

Quarantelli, E. L. (1985). What is disaster? The need for clarification in definition and conceptualization in research. In B. Sower (Ed.), *Disaster and Mental Health Selected Contemporary Perspectives* (pp. 41-73). Washington DC: U.S Government Printing Office.

Quarantelli, E. L., Lagadec, P. and Boin, A. (2006). A heuristic approach to future disasters and crises: new, old and in-between types. In H. Rodriguez, E. L. Quarantelli and R. R. Dynes (Eds), *Handbook of Disaster Research* (pp. 16-41). United States of America: Springer Science.

Rashid, S. F. (2000). The urban poor in Dhaka city: their struggles and coping strategies during the floods of 1998. *Disasters*, 24(3): 240–253.

Raymond, F. (2004). *Elements of Social Organization*. United Kingdom: Routledge Publications.

Richman, N. (1993). After the flood. *American Journal of Public Health*, 83 (11): 1522-1524.

Saito, Y. and Murasaki, Y. (2012). A Study on women's participation in disaster risk reduction in Nepal: a case study for training women for safer homes. *Japan Social Innovation Journal*, 2 (1): 18-25.

Segal, U. (1999). Family violence: a focus on India. *Aggression and Violent Behaviour*, 4 (2): 213–231.

Sinha, U. and Singh, R. (2007). *Women Empowerment and Family Management in Tribal Region*. New Delhi, India: Concept Publishing Company.

Sewell, H. S. (1992). A theory of structure: duality, agency and transformation. *American Journal of Sociology*, 98(1): 1-29.

Scrimshaw, S. (1990). Combining quantitative and qualitative methods in the study of intra-household resources allocation. In B.L. Rogers and N.P. Schlossman (Eds.), *Intra-household resource allocation: issues and methods for development policy and planning papers prepared for the workshop on methods of measuring intra-household resource allocation*. Tokyo: United Nations University Press.

Southwold - Llewellyn, S. (2002). *Methods and techniques of field research*. Available on reader for Methods, Techniques and Data Analysis of Field Research. The Netherlands: Wageningen University.

Smith, A. O. (1996). Anthropological research on hazards and disasters. *Annual Review Anthropology*, 25: 303-328.

Solomon, S. D., Bravo, M., Rubio-Stipec, M. and Canino, G. (1993). Effect of family role on response to disaster. *Journal of Traumatic Stress*, 6 (2): 255-269.

Strum, S. S. and Latour, B. (1991). Redefining the social link from baboons to humans. In G. A. Schubert and R. D. Masters (Eds.), *Primate Politics* (pp. 73-86). United States of America.

Tapsell, S. M., Penning-Rowsell, E. C., Tunstall, S. M. and Wilson, T. L. (2002). Vulnerability to flooding: health and social dimensions. *Philosophical transactions of the Royal Society*, 360: 1511-1525.

Taylor, C. (1985). *Human Agency and Language*. Cambridge, United Kingdom: Cambridge University Press.

UNDP. (2011). *Human Development Report 2011*. New York, USA: United Nations Development Program.

UNDP. (2007). *Human Development Report 2007/2008*. New York, USA: United Nations Development Program.

UNOHCA (2008): *Key Findings Nepal Needs Analysis Framework*. Kathmandu, Nepal: United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

UNDP. (2007). *Gender Empowerment Measure*. Retrieved from [http://hdr.undp.org/en/media/HDR\\_20072008\\_GEM.pdf](http://hdr.undp.org/en/media/HDR_20072008_GEM.pdf). Accessed: 04.03. 2012.

Vaus, D. (2001). *Research Designs in Social Research*. Washington DC: Sage Publications.

Warner, J., Waalewijn, P. and Hilhorst, D. (2002). *Public Participation in Disaster-Prone Watersheds. Time for Multi-Stakeholder Platforms?* Paper for the Water and Climate Dialogue Disaster Studies Irrigation and Water Management Group. The Netherlands: Wageningen University.

Wellman, H. M. (1990). *The Child's Theory of Mind*. Cambridge, MIT Press.

Wiest, R. E., Mocellin, J. S. P. and Motsisi, D. T. (1994). *The Needs of Women in Disasters and Emergencies*. Disaster Management Training Programme. Manitoba.

Wilson, J. and Oyola-Yemaiel, A. (1998). *Emergent Coordinated Groups and Women's Response Roles in the Central Florida Tornado Disaster*. Florida International University.

Wisner, B. (2006). Self-assessment of coping capacity: participatory, proactive and qualitative engagement of communities in their own risk management. In J. Birkmann (Ed.), *Measuring Vulnerability to Natural Hazards* (pp. 316-328). New Delhi, India: United Nations University Press.

Wisner, B. and Luce H. R. (1993). Disaster vulnerability: scale, power and daily life. *Geo Journal*, 30: 127-140.

Yohe, G and Tol, R. S. J. (2002). Indicators for social and economic coping capacity-moving toward a working definition of adaptive capacity. *Global Environmental Change*, 12: 25-40.

Yonder, A., Akcar, S. and Gopalan, P. (2005). *Women's Participation in Disaster Relief and Recovery*. New York, USA: The Population Council.

Zakour, M. J. (1996). Disaster research in social work. *Journal of Social Service Research*, 1: 7-25.

## Annexes

### Annex A

#### Women’s Experiences in Disaster: A Case of Koshi flood 2008 in Nepal

##### Household Questionnaire

This format has been prepared as the household questionnaire for the research on “*Women’s Experiences in Disaster: A case of Koshi flood 2008 in Nepal*”. This is solely for the academic purpose to fulfill the partial requirements of the Master’s Degree in Wageningen University, the Netherlands. The targeted respondents of this research are disaster- displaced women in wards number 7 and 8 of Sripur Village Development Committee (VDC), Sunsari District, Nepal.

#### I. Background information

|    |  |   |
|----|--|---|
| 1. | Name:  | Age:  |
| 2. | Nationality:                                   |   |
| 3. | <u>Current address:</u>                        |   |
|    | 1. VDC/Mp:                                     | 2. Ward:  |
|    |  | 3. Settlement:  |
|    | <u>Address before flood:</u>                   |   |
|    | 2. VDC/Mp:                                     | 2. Ward:  |
|    |  | 3. Settlement:  |
| 4. | Ethnicity:                                     | Religion:   |
| 5. | Education:                                     |   |
| 6. | Family type:                                   | 1. Nuclear                      2. Joint                      3. Extended |
| 7. | Marital Status:                                |   |
|    | 1. Unmarried                                   | 2. Married  |
|    | 3. Separated                                   | 4. Single   |
|    | 5. Other (please specify).....                 |   |
| 8. | Number of family members at the time of flood: |   |

|     |  |   |
|-----|--|---|
|     | 1. Adult female.....<br>3. Children ( $\leq 18$ years).....<br>5. Total.....   | 2. Adult male.....<br>4. Breast feeding children..... |
| 9.  | Were you the household head at the time of flood?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>Are you now?<br><input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| 10. | What is your major occupation?<br>1. Agriculture                      2. Business                      3. Homemaker<br>4. Microenterprise                      5. Student                      6. Other (please<br>specify)..... |   |

## II. Agency and initiative

|     | <b>Before and during flood</b>   |
|-----|--|
| 11. | Did you have prior information about the flood?<br><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't remember<br>If yes, from whom?<br>1. Radio/ TV              2. Neighbors/ family              3. Others (please<br>specify).....  |
| 12. | What did you do when you heard information about the flood?<br>a. Informed others?<br><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't remember<br>b. If yes, to whom did you share the information?<br>1. Family              2. Neighbor              3. Relatives    4. Others (please<br>specify).....<br>c. Personal preparations: |
| 13. | Where were you at the time of flood?<br>1. Home              2. Neighbors/ Relative's house              3. Field              4. Local market<br>5. Others (please specify).....  |
| 14. | What were you doing at the time of flood?  |

|              |  |              |       |        |  |        |  |        |  |
|--------------|--|--------------|-------|--------|--|--------|--|--------|--|
| 15.          | <p>What did you see when flood was approaching to your home/ neighborhood?<br/>Please mention chronologically.</p> <p>1.....</p> <p>2.....</p> <p>3.....</p>   |              |       |        |  |        |  |        |  |
| 16.          | <p>What did you do then? Please mention chronologically.</p> <p>1.....</p> <p>2.....</p> <p>3.....</p>   |              |       |        |  |        |  |        |  |
| 17.          | <p>Who decided what to do immediately?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Who decided?</td> <td style="width: 40%;">What?</td> </tr> <tr> <td>1.....</td> <td></td> </tr> <tr> <td>2.....</td> <td></td> </tr> <tr> <td>3.....</td> <td></td> </tr> </table> | Who decided? | What? | 1..... |  | 2..... |  | 3..... |  |
| Who decided? | What?  |              |       |        |  |        |  |        |  |
| 1.....       |  |              |       |        |  |        |  |        |  |
| 2.....       |  |              |       |        |  |        |  |        |  |
| 3.....       |  |              |       |        |  |        |  |        |  |
| 18.          | <p>Was your decision acknowledged by your family members?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No      <input type="checkbox"/> Don't remember</p>  |              |       |        |  |        |  |        |  |
| 19.          | <p>Did anything happen to you?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, what happened?</p> <p>1. Minor injury      2. Faint      3. Fracture      4. Others (please specify).....</p>   |              |       |        |  |        |  |        |  |
| 20.          | <p>Who rescued you?</p> <p>1. Myself      2. Family member      3. Relatives      4. Neighbors</p> <p>5. Others (please specify).....</p>  |              |       |        |  |        |  |        |  |
| 21.          | <p>Who rescued the children, livestock and elderly members of your family?</p> <p>1. Myself      2. Family member      3. Relatives      4. Neighbors</p> <p>5. Others (please specify).....</p>   |              |       |        |  |        |  |        |  |
| 22.          | <p>Did you work with male members?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No      <input type="checkbox"/> Don't remember</p>   |              |       |        |  |        |  |        |  |
| 23.          | <p>Did the flood affect your family?</p>   |              |       |        |  |        |  |        |  |

|                    |  |
|--------------------|--|
|                    | <input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, what?<br>1. Loss of family members      2. Loss of relative      3. Loss of Food/Grains      4. Loss of farmland<br>5. Livestock loss      6. House washed away      7. Others (please specify).....     |
| 24.                | Could you protect your assets?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, what?<br>1. Money    2. Livestock    3. Food/Grains    4. Jewelry    5. All    6. Others (please specify)  |
| 25.                | Did you support your neighbors?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>What type of support did you give?<br>1. Human rescue<br>2. Child care<br>3. Animal rescue<br>4. Support to pregnant women and old people<br>5. Others (please specify).....  |
| <b>After flood</b> |  |
| 26.                | Did you find any safe place to go immediately after the flood?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, what was the place? .....  |
| 27.                | Who decided to go in that safe place?<br>1. You                      2. Husband                      3. Male member in the family                      4. Elderly male<br>5. Elderly female                      6. You                      7. Others (please specify)..... |
| 28.                | How long did you spend in that safe place before going to the camp?  |
| 29.                | Was there anyone to support you?   |

|     |   |
|-----|---|
|     | <input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, who it was?   |
| 30. | Where were you taken for the safe shelter (camp)?<br>1. School      2. Community building      3. Open space      4. Others (please specify).....   |
| 31. | When you were taken to the camp what was happening there?<br>1. Crowded      2. Injured people      3. People screaming and crying      4. Others (please specify)  |
| 32. | Did you find your family members/ relatives there?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, were you allowed you to stay with your family?<br><input type="checkbox"/> Yes <input type="checkbox"/> No  |
| 33. | What facilities were there?<br>1. Counseling      2. Health care      3. Food      4. Sleeping place      5. Safe drinking water<br>6. Toilet      7. Bathing space      8. Others (please specify).....  |
| 34. | Were there separate place for women?<br>1. Toilet <input type="checkbox"/> Yes <input type="checkbox"/> No<br>2. Sleeping place <input type="checkbox"/> Yes <input type="checkbox"/> No<br>3. Toilet <input type="checkbox"/> Yes <input type="checkbox"/> No<br>4. Bathing space <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 35. | How was the first day? Please explain in brief.   |
| 36. | What were your major activities there?  |
| 37. | Did you feel any problems in the camp?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, what it was?  |
| 38. | Did you take initiatives to solve/ manage those problems?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, how?   |

| 39.                                | <p>Were there any cases of gender-based violence recorded in the camp?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If yes, please explain in brief.</p>   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
|------------------------------------|---|------|-----------------|---------|-------|---------|-------|------------|-------|---------------|-------|------------------------------------|-------|--------------------------|--|
| 40.                                | <p>Were there any cases of disputes recorded in the camp?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If yes, please explain in brief.</p>  |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 41.                                | <p>What activities you/ other women did against these violence/ disputes?</p>   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 42.                                | <p>How was the situation in camp changed gradually after a week or fortnight?</p>   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 43.                                | <p>What type of support did you receive in the camp?</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Type</th> <th style="text-align: right;">Amount/ Numbers</th> </tr> </thead> <tbody> <tr> <td>1. Food</td> <td style="text-align: right;">.....</td> </tr> <tr> <td>2. Cash</td> <td style="text-align: right;">.....</td> </tr> <tr> <td>3. Clothes</td> <td style="text-align: right;">.....</td> </tr> <tr> <td>4. Counseling</td> <td style="text-align: right;">.....</td> </tr> <tr> <td>5. Medical/ Health care facilities</td> <td style="text-align: right;">.....</td> </tr> <tr> <td>6. Others (specify).....</td> <td></td> </tr> </tbody> </table> | Type | Amount/ Numbers | 1. Food | ..... | 2. Cash | ..... | 3. Clothes | ..... | 4. Counseling | ..... | 5. Medical/ Health care facilities | ..... | 6. Others (specify)..... |  |
| Type                               | Amount/ Numbers   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 1. Food                            | .....   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 2. Cash                            | .....   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 3. Clothes                         | .....   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 4. Counseling                      | .....   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 5. Medical/ Health care facilities | .....   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 6. Others (specify).....           |   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 44.                                | <p>Was it individual or family wise support?</p> <p>1. Individual            2. Family wise</p>   |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 45.                                | <p>Was the support adequate for you/ your family?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If not, how did you manage then?</p>  |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 46.                                | <p>Do you think that distribution of support/ materials was fair and transparent?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If not, why?</p>  |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |
| 47.                                | <p>What could be the better way of distribution in your opinion?</p>  |      |                 |         |       |         |       |            |       |               |       |                                    |       |                          |  |



|     |   |
|-----|---|
|     | <p>1.....</p> <p>2.....</p> <p>3.....</p>   |
| 56. | <p>If not, who managed?</p> <p>1. Husband    2. Male member in the family    3. Elderly male    4. Elderly female</p> <p>5. Others (please specify).....</p>  |
| 57. | <p>Did you make decision from whom to ask support?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If not, who decided?</p> <p>1. Husband            2. Male member in the family            3. Elderly male            4. Elderly female</p> <p>5. Others (please specify).....</p>  |
| 58. | <p>Did you approach any groups/ private organizations/UN agencies/ government organization for support?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If yes, whom did you approach?</p> <p>1. Women group</p> <p>2. Private organizations (INGOs / NGOs / CBOs)</p> <p>3. UN agencies</p> <p>4. Government organization</p> <p>5. Others (please specify).....</p> <p>If not, who approached?</p> <p>1. Husband            2. Male member in the family            3. Elderly male            4. Elderly female</p> <p>5. Others (please specify).....</p> |
| 59. | <p>Did you make decision how to use the support received after the flood?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If not, who decided?</p>  |

|     |   |
|-----|---|
|     | <p>1. Husband      2. Male member in the family      3. Elderly male      4. Elderly female</p> <p>5. Others (please specify).....</p>  |
| 60. | <p>Did your family benefit from your work/ role?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, how?</p>   |
| 61. | <p>Did displaced families benefit from your work/ role?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, how?</p>  |
| 62. | <p>Did you work/ volunteer with women's group/ private organizations during flood?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes please explain in brief.</p>  |
| 63. | <p>Were there any factors which hindered your participation?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, what were the major factors?</p> <p>1. Household chores      2. Not allowed to work outside home      3. Health problem</p> <p>4. Gender Discrimination      5. Others (please specify).....</p> <p>If yes, why?</p> |
| 64. | <p>Did your work increased or decreased after the flood?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>   |
|     | <p><b>Compensation</b></p>  |
| 65. | <p>Did you get any compensation for your loss?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, from whom? And what?</p> <p>1.....</p>   |

|     |   |
|-----|---|
|     | 2.....<br>3.....  |
| 66. | Are you satisfied with these compensations?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If not, why? |

**III. Women’s groups/Private Organizations (INGOs/ NGOs/ CBOs)/ Government Organization**

| <b>Women’s groups</b> |  |
|-----------------------|--|
| 67.                   | Were there any group in the village?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>If yes, what type of group?<br>1. Women                      2. Farmer                      3. Dalit                      4. Others (please specify)<br><u>Major functions</u> |
| 68.                   | Who informed you about the group?<br>1. Friend                      2. Neighbor                      3. Women’s group<br>4. Organization                      5. Relative                      6. Others (please specify).....   |
| 69.                   | Were you also a member of that group?<br><input type="checkbox"/> yes <input type="checkbox"/> no<br>If yes, which position .....  |
| 70.                   | Did you ask for support to the group?<br><input type="checkbox"/> yes <input type="checkbox"/> no<br>If yes, what did you ask for?<br>1. Loan                      2. Counselling                      3. Information on others source of supports                      4. Medical |

|  |   |      |                |       |  |       |  |       |  |       |  |
|--|---|------|----------------|-------|--|-------|--|-------|--|-------|--|
|  | <p>5. Health care      6. Food      7. Others (please specify).....</p> <p>If not, why?</p>   |      |                |       |  |       |  |       |  |       |  |
| 71.  | <p>Did you get any support from the group?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, what supports did you get?</p> <p>1. Loan      2. Counselling      3. Information on others source of supports      4. Medical</p> <p>5. Health care      6. Food      7. Others (please specify).....</p> |      |                |       |  |       |  |       |  |       |  |
| 72.  | <p>Are there new groups formed after the flood?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>If yes, what type?</p> <p>1. Disaster management      2. Women      3. Mixed      4. Others (please specify)</p> <p><u>Functions</u></p>  |      |                |       |  |       |  |       |  |       |  |
| 73.  | <p>Have you ever made decision in the group?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>   |      |                |       |  |       |  |       |  |       |  |
| <b>Stakeholders (INGOs/ NGOs/ CBOs/ UN agencies)</b> |   |      |                |       |  |       |  |       |  |       |  |
| 74.  | <p>Were there any organizations active in your village before flood?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>   |      |                |       |  |       |  |       |  |       |  |
| 75.  | <p>If yes, do you know their name?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Name</td> <td style="width: 40%;">Major function</td> </tr> <tr> <td>.....</td> <td></td> </tr> <tr> <td>.....</td> <td></td> </tr> <tr> <td>.....</td> <td></td> </tr> <tr> <td>.....</td> <td></td> </tr> </table>          | Name | Major function | ..... |  | ..... |  | ..... |  | ..... |  |
| Name   | Major function  |      |                |       |  |       |  |       |  |       |  |
| .....  |   |      |                |       |  |       |  |       |  |       |  |
| .....  |   |      |                |       |  |       |  |       |  |       |  |
| .....  |   |      |                |       |  |       |  |       |  |       |  |
| .....  |   |      |                |       |  |       |  |       |  |       |  |
| 76.  | <p>Did you ask for support to that organization?</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>   |      |                |       |  |       |  |       |  |       |  |

|                                |   |      |                |       |       |       |       |
|--------------------------------|---|------|----------------|-------|-------|-------|-------|
|                                | <p>If yes, what did you ask for?</p> <p>1. Loan            2. Counselling    3. Information on others source of supports    4. Medical</p> <p>5. Health care    6. Food            7. Others (please specify).....</p> <p>If not, why?</p>  |      |                |       |       |       |       |
| 77.                            | <p>Did you get any support from the organization?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p> <p>If yes, what supports did you get?</p> <p>1. Loan            2. Counselling    3. Information on others source of supports    4. Medical</p> <p>5. Health care    6. Food            7. Others (please specify).....</p>              |      |                |       |       |       |       |
| <b>Government Organization</b> |   |      |                |       |       |       |       |
| 78.                            | <p>Were there any government unit/ organizations in the village?</p> <p><input type="checkbox"/> Yes            <input type="checkbox"/> No</p>   |      |                |       |       |       |       |
| 79.                            | <p>Do you know their name?</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Name</td> <td style="width: 40%;">Major function</td> </tr> <tr> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> </tr> </table>   | Name | Major function | ..... | ..... | ..... | ..... |
| Name                           | Major function  |      |                |       |       |       |       |
| .....                          | .....   |      |                |       |       |       |       |
| .....                          | .....   |      |                |       |       |       |       |
| 80.                            | <p>Did you ask for support to the organization?</p> <p><input type="checkbox"/> yes            <input type="checkbox"/> no</p> <p>If yes, what did you ask for?</p> <p>1. Loan            2. Counselling    3. Information on others source of supports    4. Medical</p> <p>5. Health care    6. Food            7. Others (please specify).....</p> <p>If not, why?</p> |      |                |       |       |       |       |

|     |  |
|-----|--|
| 81. | <p>Did you get any support from the organization?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p> <p>If yes, what supports did you get?</p> <p>1. Loan                      2. Counselling                      3. Information on others source of supports</p> <p>4. Medical</p> <p>5. Health care                      6. Food                      7. Others (please specify).....</p> |
|-----|--|

**V. Recovery**

|     |   |
|-----|---|
| 82. | After how long did you return to the current place?   |
| 83. | <p>Did you rebuild your house yourself?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p> <p>If yes, when did you reestablish this house?</p>  |
| 84. | If not, who helped you?   |
| 85. | <p>Did you get support from other people/ organization/ group to rebuild your house?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p> <p>If yes, from whom?</p> <p>1. Women's group                      2. Organization                      3. Government                      4. CBOs</p> <p>5. Others (please specify).....</p> |
| 86. | <p>How did you manage?</p> <p>1. Taking loan                      2. Borrowing cash from relatives                      3. Support from organizations</p> <p>4. Personal savings                      5. Selling livestock                      6. Selling jewelry</p> <p>7. Others (please specify).....</p>   |
| 87. | <p>Did you support others in the recovery phase?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p>   |



|     |   |
|-----|---|
| 94. | <p>What were the major factors that hindered your participation in recovery phase?</p> <p>1. Household chores                      2. Not allowed to work outside home      3. Health problem</p> <p>4. Others (please specify).....</p>    |
| 95. | <p>How the daily life of women changed by flood?</p> <p>Before flood – daily routine .....</p> <p>Now - daily routine .....</p>   |
| 96. | <p>Now do you feel that you are in your original status?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p> <p>If not why?</p>  |
| 97. | <p>Have you been planning with neighbours, organizations/ women groups for the flood management in future?</p> <p><input type="checkbox"/> Yes                      <input type="checkbox"/> No</p> <p>If yes, what are those planning?</p> |
| 98. | <p>What are your expectations/ suggestions to the women group/ private organizations/ government organizations?</p>   |
| 99. | <p>Do you have anything to say more?</p>  |

## **Annex B**

### **In-depth interview questions**

#### ***Background***

1. Please share your and your family background information including name, ethnicity, age, marital status, place, family name, number of family members, type of household etc.

#### ***Response***

1. Please go back to the flood situation in 2008. Can you please tell the story in detail?
2. How did you try to save your life, your family and your property?
3. Do you remember whom did you support and who supported you mostly?
4. How did you reach to the camp?
5. Would you please explain the life in camp?
6. What roles and responsibility had you taken to support your family from the day of flood to the camp?

#### ***Recovery***

1. Please share about what happened when the flood situation was normal.
2. Please mention if you received any compensation of your property.
3. When you decided to relocate to this place and rebuild the house?
4. How this house was rebuilt?
5. What roles and responsibility have you taken to support your family from the day of flood to the relocation in the village?

#### ***Difficulties and supports***

##### **Major difficulties felt and coping strategies**

1. What were the difficulties faced by you and your family after the flood?

2. Please tell in detail about the impacts of flood to you and your family.
3. How did you deal with those difficulties? Please explain your coping strategies.

Support form groups/ organizations

1. Please mention the types of supports and supporting organizations (including local groups if any) that you received just after flood.
2. How these support changed your life? Please explain.
3. How do you evaluate the quantity, quality and timing of these supports?
4. Were the effects of disaster to you and your family recovered?

## **Annex C**

### **Semi- structured questionnaire for Key Informant Interviews (KII)**

*Note: The following are the guiding semi-structured questions to collect information related to the subject matter.*

1. What initiative did you/ your organization take to support the flood-displaced women in wards number 7 and 8 of Sripur VDC?

Immediately after the flood:

In the camp:

In the recovery phase:

2. How do you evaluate the different supports provided by the organizations? What was adequate and what was lacking?

3. Did displaced women ask you for support? If yes, what type of support were they anticipating?

Immediately after the flood:

In the camp:

In the recovery phase:

4. What were the major difficulties of displaced women that you noticed?

5. How do you evaluate the role of displaced women to recover their livelihoods?

## **Annex D**

### **FGD Checklist**

#### **The Purpose**

The purpose of the Focus Group Discussion (FGD) is to conduct an in-depth discussion about women's activities, their perceptions, experiences and actions in response and recovery phases.

#### **Participants in FGD**

The FGD included 6-10 participants (flood displaced women) in a group. FGD was at wards number 7 and 8 of Sripur VDC, Sunsari.

#### **The Process**

The FGD was conducted in a safe, secured and confidential space. Respondents would feel comfortable to express their thoughts and feelings without disgrace and keeping the survivor's consent so that the entire group would feel heard and valued.

#### **Questions**

Before entering into main discussion, some time was spent for rapport building, making clear the study purpose and objective of research, assuring confidentiality of the information and individual identity if they wish. Respondents were encouraged to speak and share their experiences.

6. What type of work are you engaged with?
7. What were the impacts to you and your family due to the flood?
8. How did you act during and after the flood?
9. As women, how did you feel the life in camp?
10. What were your coping strategies?
11. What type of support did you receive?
12. How did people in the village support each other?

13. How did you support your family to rebuild your house?
14. How the flood changed the daily life of women?
15. How your skills and knowledge changed after the flood?
16. What were your experiences regarding the support mechanism?
17. What should be done for better response and recovery operations in the flood?