The Impact of Flooding in Bihar, India on Women: A Qualitative Study

Madhuri Indian Institute of Technology Kharagpur, India

Abstract

The impact of the recent (2013) ravaging flood has caused large-scale devastation in Bihar, India. The destruction has impacted the whole community but the pre-existing climate of discrimination against women in society has intersected with the devastation caused by flooding and increased its impact on women in many ways. The pre-existing misogyny, gender role learning, and accordingly the formation of gender identity that has accustomed women to accept discrimination without an iota of objection, increases in the relief and rehabilitation period after a disaster. The objectives of the study are (1) to find out the problems faced by women in aftermath of a flood or other disaster; (2) to explore whether women's vulnerability differs in terms of age and caste, and (3) to access the impact of flooding on income, on women-headed households, and on education, health, and violence against women. The study was carried out by employing the focus group discussion method in the Purnia and Katihar districts of Bihar, India. The results show that women lack information about flood warnings and have less access to relief material. In addition, access to income sources is also low, mobility is restricted, and caretaking responsibility creates an additional burden on women, a burden which differs in terms of age and caste. Women's health also tends to deteriorate and they are dishonored both within and outside the home. The relief providing agencies are unaware of the manifold problems women face after a flood; hence they do not feel the necessity to provide any special assistance during the relief or rehabilitation periods. It is hoped that the findings of this study will increase aid agencies' awareness of these problems. In addition, this study will conclude by making some specific recommendations for actions that relief agencies can take to focus on the special needs and problems of women and ensure their participation in the rehabilitation period.

Key words -

misogyny, discrimination, vulnerability, relief, rehabilitation

Introduction

Vulnerability can be defined as the lack of capacity of an individual or group to anticipate, cope with, resist, and recover from the impact of natural or human-made disasters. The impact of a disaster is same, but uneven exposure and incongruent opportunities create differences in vulnerability. The notably disadvantageous positions of some groups like women and members of lower castes¹ continue in practice and custom in a precarious condition during and after disasters like droughts and floods. Flooding is most severe in the northern regions of India, i.e., West Bengal, Assam, Odisha, and Bihar. Bihar is one of the most flood-affected states in India. 19 out of 38 districts are periodically ravaged by floodwater, which damage and destroy the livelihood of households. The northeast part of Bihar often suffers the grim effects of surging and rampaging floodwater. According to the report of the newspaper Times of India (July 17, 2013), "the season's first wave of floods, which took within its sweep all the seven districts across Purnia and Kosi divisions in north-east Bihar, has so far claimed 42 lives, including 18 in Purnia, and 14 in Katihar." Furthermore, "with the surging water of the Ganga leaving many areas under Kursela and Barari blocks of Katihar district completely inundated, the flood situation across the district took a turn for the worse on Friday "(Times of India, August 31, 2013).

The physical effect of flooding is similar for the whole community, but due to lower social position, discrimination, restriction, and socio-cultural values certain groups within the same community are more susceptible to being harmed. Vulnerability is unequally distributed across castes, racial and ethnic groups, and genders, with gender referring to "socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis" (Health Canada, 2000). Gender discrimination against women and the role and responsibility ascribed to them by the value system of the

¹ The caste system is based on ascribed status and divided on the basis of occupation (which is segmental and hierarchical) such as high-ranking of 1) the Brahmins (priests and scholars), and 2) the Kshatryas (landowners, rulers and warriors); middle-ranking of 3) Vaisyas (commoners and merchants); and very low-ranking or "Untouchable" of 4) Sudras (craftsmen, servants, and laborers). Members of higher-ranking castes, on the whole, tend to be more prosperous than members of lower-ranking castes. Many lower-caste people live in conditions of great poverty and social disadvantage.

society are in effect during relief and rehabilitation periods also. However, during rehabilitation, the emergency situation is not seen through a gender perspective. The submissive role of women and their suffering is exacerbated, and this issue, which needs the special care and attention of the government and voluntary agencies, is totally ignored by these relief providers.

Review of Literature

In relief and rehabilitation, the vulnerability of the household plays an important role. A household's vulnerability is a blend of external and internal factors. External factors are distress caused by the disaster and internal factors involve the ability of households to cope with such disaster or the ability to recover after the event (Chambers, 1989). Social vulnerability relates to differences in gender, age, social position, and income within social structure that determine the ability to cope with adverse impact (Cutter, Boruff, & Shirley, 2003). According to the structural paradigm (Bolin, 1998), pre-existing inequality within a social structure exacerbates the impact of the disaster during the time of relief and rehabilitation period and increases the susceptibility of socially excluded groups to disaster (Jackson, 2003). Women among the socially excluded groups are considered to be the "vulnerable within the vulnerable" (Ariyabandu & Foenseka, 2006). Gender differences in the society create differences between men and women in their roles, identity, and responsibility. Women are subjugated in the prescription of role and responsibility in comparison to men. Gender inequality, which is embedded in the historical structure of a society, and discrimination, which is in the heart and mind of a society, are enhanced after a disaster. According to WHO (2002), "there is a pattern of gender differentiation and exclusion at all levels of the disaster process, i.e., exposure to risk, risk perception, preparedness, response, physical impact, psychological impact, recovery and reconstruction."

Exclusion means inequality and results in women's being restricted in participating on equal terms with their male counterparts not only in the family but also in all spheres of the social order. Women lack access to power, and have inadequate social participation (Edwards, 2001) because they belong to a group that is subjugated, dispossessed, and segregated within its own community. According to gender polarization theory, dominance of their male counterparts in decision-making and limitation of women's roles according to the whims of male heads of households combined with lack of access to shelter after a disaster all increase women's dependency on men (Bem, 1983; Ikeda, 1995, p. 188). The low social status of women is predetermined from birth and the attitude towards and perception of women is ingrained in society to form gender appropriate behavior (social learning theory) and cultural or religious restrictions add further exclusions (gender schema theory) (Bem, 1983; Dimitrijevic, 2008) as women develop gender identity (psychoanalytic theory) by gender socialization (Horowitz, 1985; Meerman, 2005). The unrelenting inequality against women in society before a disaster is also retained in the aftermath of the disaster.

A disaster impacts women differently according to their ages (elderly, infants, and children) (Mehta, 2007). Difference in age determines variation in responsibility to re-establish livelihood after disaster. Elderly women have a heightened exposure to risk due to health difficulties and limitation in mobility. Negative impact on the physical and mental health of elderly women is enhanced during a crisis. However, due to their roles as family earners and caregivers, middle-aged women bear the burden of the house. The cumulative effect of unpaid caretaking roles, part-time employment, and debarment from relief benefits all enhance the problems faced by middle aged or young women. This socio-economic pattern leads to the relatively higher disaster mortality rates of females compared to those of men; for example, the 1991 cyclone in Bangladesh killed 138,000 people, many of whom were women older than 40 years (Bern et al., 1993). In the Indian Ocean, the 2004 tsunami in Sri Lanka killed 91 percent of adults in the affected areas, the majority of whom were women (Abeysekera, 2006).

Women-headed households are particularly vulnerable to disasters. The term "woman-headed household" refers to a unit of residence or domestic consumption where the lead responsibility as bread earner is on women, while a male-headed household is one in which the lead responsible person is male (Lynn & Chant, 1989). The responsibility for and contribution to the households income also gives the bread earner power in decision-making, according to Sen's (1987, 1990) cooperative household model. The impact of disaster varies between male and women-headed households. The term "woman-headed household" encompasses those households where women work for the economic subsistence of the household and are re-

sponsible for its domestic arrangement (Chant, 1997). Woman-headed households have the dual burden of both doing the household chores and working outside to earn wages. In the aftermath of disasters, women-headed household lag behind others in economic productivity (Delaney & Shrader, 2000). Women-maintained households are in a disadvantaged position during both the disaster and the recovery period. They are often excluded from relief programs that regard men as the head of households, a form of exclusion that is hardly ever taken into consideration.

Not only are woman-headed households discriminated against, but the hierarchy of caste, tribe, ethnicity, residence (i.e. rural or urban), or economic status also play important roles in women's subjugation (Lewis & Lockheed, 2007). According to Dube (1996, 1997) and Chakravarti (2003), women's subordination and vulnerability in India is grounded in Hindu caste practices and patriarchal kinship practice, both of which put women at a highly disadvantaged position in their everyday lives. In the time of disaster, this subordinate position increases the likelihood of women's vulnerability to disaster, according to feminist theory and disaster sociologists (Cannon, 2002). However, there is a dearth of studies on women's vulnerability based on caste after disasters. In India, the relationships among caste, class, and gender have a mutual impact on society (Chakravarti, 2003). They are intertwined and interlinked to create and reinforce inequality (Sen, 2005). Dalit women have also emerged as one of the most vulnerable groups in a disaster (NAOW, 2006). During a disaster, gendered identity intersects with other cultural identities to compound the negative impact on lower caste women. For example, even after a disaster caste purity is considered important and thus lower caste women are denied access to basic human rights.

Moreover, women not only suffer caste-based discrimination and prejudice but also experience inequality in accessing proper health, hygiene, and sanitation facilities. Health is a serious concern for the whole community after disaster. However, disaster poses greater risks to women due to biological or social restrictions (Wisner, Blaikie, Cannon, & Davis, 1994, p. 133). Scarcities of food and nutrition become extreme during a disaster. Water, sanitation, and health challenges put an extra burden on women (Patt, Angie & Pablo, 2007). During the 1998 flood in Bangladesh there was an increase in rashes and urinary tract infections in adolescent girls because they were not able to properly wash and dry their menstrual rags

(WHO, 2002). Adverse health outcomes include early pregnancy loss, premature delivery, stillbirths, delivery-related complications, and infertility. These problems are acute and enduring (UNHCR, 1999), but government and non-government organizations have not focused on the specific needs of women after a disaster.

In addition, inequality in income is also one of the areas in which women face acute discrimination. The Economic Commission for Latin America and the Caribbean (ECLAC, 2003) emphasizes that a consequence of disaster is the decapitalization of women. The day-to-day roles and behavior of women in society proceed according to gender role expectations (Alpern, 1993; Snyder, 1994) and the influence of seclusion *or purdah* custom² that restricts women's mobility and participation outside the household further exacerbates their vulnerability. A disaster further impacts women through a loss of productive employment outside the home (domestic, industrial, or commercial), a loss of household production and income including that of the backyard economy and of small businesses run by women from their homes, and other economic damage resulting from outstanding debts or loans (Wiest, Mocellin, & Motsisi, 1994).

Moreover, violence adds further woes to the problems women face in precarious situations. In the report for the United Nation Development Programme (UNDP), Wiest, Mocellin and Motsisi (1994) states that girls are more vulnerable to sexual violence in a post-disaster situation and in temporary refugee camps. Economic hardships, frustrations, and struggles to replace housing, jobs, and possessions bring increased tensions and stress to relationships, sometimes leading to conflict and domestic violence (Enarson, 1999a, 1999b). Social dislocation and the resultant loss of traditional community support and protection mechanisms increase women's vulnerability to violence (Ariyabandu, 2003). Men frequently vent their anger, frustration, stress, and depression through domestic violence and alcohol consumption. Disaster relief efforts often fail to give attention to the basic needs of women, which further jeopardizes their lives and safety.

² Purdah custom refers to the veiling and seclusion of women. In India, especially in rural areas, Hindu women follow the rule of veiling the body and avoiding public appearance, and this not only affects their position in the family but also their access to power and the control of vital resources in a male-dominated society. Restriction and restraint for women in every aspect of life is the basic essential of purdah.

Women do not understand their rights and are not able to ask for their needs to be met due to illiteracy and ignorance during the relief and rehabilitation period. Three-fifths of the 115 million children worldwide that do not go to school are girls (Lara, 2012). After a disaster or other stressful impact, many girls are forced to drop out of school to help with households chores or to save money (All India Disaster Mitigation Institute, 2005). Hence, the poor education of women has led to their marginal participation in community planning which has consequently minimized their involvement during the relief and rehabilitation period after disaster.

The literature does not emphasize all the different types of problems women face after a flood or other disaster. The problems that women faced are not always directly caused by the disaster but stem from practices and perceptions already embedded in the society: the disaster stimulates the prevailing inequality and increases it manifold. In addition, the relief providing agencies are unaware of the problems and needs of women during and after disaster. As a result these agencies have not considered it essential to take any special measures or to implement any specific programs to fulfil the requirements of women after a disaster. Therefore, it is important to bring this issue into consideration. To highlight the condition of women during a crisis the following objectives have been formulated.

The objectives of the study are (1) to find out the problems faced by women in the aftermath of a flood; (2) to explore whether vulnerability differs in terms of age and caste, and (3), to access the impact of a flood on women's income, on woman-headed households, on women's education and health, and on violence against women.

Methodology

Sample Area

The study was conducted in the severely flood-affected areas of the Purnia and Katihar districts of Bihar to access the true condition of women after the flood. The study is descriptive cum explanatory in nature. The qualitative method was selected to get an in-depth understanding of the decision-making processes and other factors of human behavior by examining a focused sample. A focus group discussion method was used to uncover women's experiences and explore the extent to which pre-existing patterns of discrimination might have enhanced their difficulties after the disaster. The focus group method was applied because it "encourages a range of responses which provide a greater understanding of the attitudes, behavior, opinions or perceptions of participants on the research issues" (Hennink, 2007, p. 6). It is a research tool that gives participants an opportunity to define what is relevant and important to understand in their experience (Liamputtong, 2010). It is an ideal approach for examining the stories, experiences, points of view, beliefs, needs, and concerns of individuals (Kitzinger, 2005, p. 57) and thus was particularly useful in exploring the condition of women after the flood. According to Wilkinson (2004, p. 271), a focus group is an informal discussion method which "[involves] more than one participant per data collection session." The group is focused because "it involves some kind of collective activity" (Kitzinger, 2005, p. 56). In this study, each focus group comprised 8-10 women. The researcher met with around 150 women survivors of different ages, castes, and income levels for focus group discussions. In-depth individual interviews were also carried out with 10 women survivors who were heads of their households (either widows or women who had been deserted by their husbands) five each from the Purnia and Katihar districts of Bihar.

In order to explore the problems faced by women after flood, members of the group were selected from different localities to make the sample representative. Persons selected for the group either volunteered or were identified by the researcher. In order to understand each person's situation thoroughly, the focus group discussion was carried out in an informal manner. Before the focus group discussions were actually held, the researcher met the women and explained about the purpose of discussion. They were encouraged to express their opinions frankly without any fear or prejudice. Members were informed about the purpose of the study and the value of their views in understanding the problem so that they could feel free to share their problems. Initially, women were very reluctant and did not agree to engage in the discussion due to their bitter experiences regarding the government's approach to their plight during flooding. The women very hesitatingly agreed to take part in the discussion when the researcher promised to conceal their identities by not disclosing the names or addresses of the participants.

As the participants of the study were illiterate and were unable to read or sign informed consent forms, oral consent was taken from them. Their

oral consent was audio-recorded and this recording was witnessed for further confirmation. In addition, a literate witness also signed on behalf of the participants after the participant has given oral consent. The researcher also ensured that witness was not part of the research team and asked participants to choose their own witness. The agreement of participants who were illiterate was indicated by including their thumb print on the form. After that, the place, time, and dates were decided as suggested by the women. Discussions were carried out in an amicable environment and were recorded on audiotape. Before the actual discussions began, the members were requested to speak in turn and express their opinion without hesitation one by one. Respondents were comfortable discussing in their regional dialect (Angika), which was later on transcribed and translated into English by a language specialist, who worked from the audiotape of the conversations. These translations are presented verbatim. Initially, women hesitated to share their problems, but as the discussion continued, they eventually started feeling more comfortable in sharing their views. Tea with biscuits was provided for adult members and toffee for young children. All the members were then requested to ensure everyone's participation. Members were asked to listen to the question carefully and give their opinion about the situation carefully. The following questions were placed before them for discussion.

- What problems do women face in a situation like flooding?
- · Do you feel that the devastation after a flood and the difficulties people face in dealing with the situation vary due to differences in age, caste, income, education, and whether a person is head of a house-
- In your opinion, did the critical situation created by the flood cause women to suffer from bad health, poor hygiene, and lack of sanitation?
- · Do you think that living in a shelter home or temporary house is unsafe and aggravates problems like "eve-teasing" (public sexual harassment) and other kinds of violence?

Results

The members were asked to speak one after another so that each member had an equal and fair chance to share and give her opinion about the problems she faced. The first request was to give an opinion on the major problem they faced after disaster. (Names of the respondents is pseudonym.)

Inclu Devi (Age: 62): "To repay our sin God has given us birth in female sex. From morning until night, my life rotates around children, husband and family. My work start in wee hour from household chores, cooking food, taking care of children and elderly parent to working in farm, fetching wood and fuel to cook, and carry water from well. The sudden occurrence of flood had devastated the base of livelihood. I had no knowledge about flood warning. I came to know from neighborhood when havoc spread in whole village that flood water crawling inside village and soon grasp entire village. We were paranoid but cannot move without my husband permission as he was not in the house at that time when there was monger of flood devastation. I did not know what to do and I cannot decide where to move without my husband."

Sugna Yadav (Age: 49): "It is very difficult for us to live in shelter home. The main problem we face in the tents or temporary house were of safety and security. Children and elderly constant demand of food, water, and medicine need to be fulfilled. My husband did not return home after he left for getting relief fund for family. However, he hardly cares for the family, he use that money for his alcohol. I do not have proper knowledge about where the relief material being distributed. The relief provider thought that as my husband has taken the relief material so they will not redistribute the relief to the same family. Nevertheless, my husband need alcohol more than food, my children were surviving with minimum food. If I go out for work, whatever I kept in the tent for family like money or food were stolen by others. The main problem was to get food and water for family, in the due course we face different type of harassment and above all the deteriorating health condition adds further despair to the problem."

Most of the women in the flood prone area did not receive or have

knowledge of any flood warning. People were leaving to go to a safer place, but if the male member of the family was at work, it was very difficult for women to make a decision to move to another place in his absence. Male members decided what to leave at home and what to carry at the time of displacement. Permission of a male member was needed for mobility and displacement to safer place. The majority of women lacked knowledge of the distribution of relief funds and material. Even if they received relief funds, the male member would first spend it on alcohol. In the crisis, the whole responsibility of caring for the family - to get water for the children and elderly and otherwise look after them - was on the female. The women lost their income source as water inundated their farms for an extended period. They could not go far for work, as they had to take care of their families. Living in a tent in unsafe conditions subjected them to several kinds of verbal and physical harassment. Taking the overall responsibility caused their own health conditions to deteriorate.

The second issue for discussion before the group was the devastation after flood and its impact on income, education, and head of households, which differed according to age and caste. Older women had more or less similar opinions regarding the critical situation that they faced after flood. Some of the respondent's answers are quoted in their own words so that readers may have a clearer view of their conditions.

Munni Devi (Age: 56): "Flood causes several health problems. I am not so physically strong as a result I cannot travel or move to other destination to earn livelihood or work. The problem of impure water creates headache and stomach pain. I cannot also help my family and become a burden to them. I have a small vegetable yard but due to flood crisis, I lost all my earnings."

Renu Singh (Age: 45): "As the flood water stays for long and did not recede for two to three months we lost our entire income source. Male member of the households migrates to other place in search of work as wage labour. I carry-out all the matter related to household. It is very difficult for us to recover from any type of crisis either it is flood or drought. I have no knowledge about the help and recovery provided by government. I have to look after my children, do household chores, and also work for earning."

Rema Pasi (Age: 42): 'I belong to a poor family. We survive by working in others field as wage labour. Flood creates an extra burden on us by engulfing the entire region and consequently we lost our daily income. Male member moves to other place for earning but women have to live in the house to look after children. We do not have any earning to support our family but depend on the remittance we get, which is not enough for survival. However, as we are unskilled and in our region, there is no scope of getting any work and it is not possible for us to move to other place. This makes life difficult for us."

Household structure in rural Indian society is generally male-headed because men are usually the bread-earners and have dominance over the access to resources and decision-making. Nevertheless, due to the flood, there was increase in distress migration and the male heads of households migrated to other area for work since the land was submerged under water for three to four months. The male members moved to other areas for work, but the women had to stay back and look after home, children, and older people. The absence of the male makes the women the head of the family. This becomes a dual burden for women. For a woman-headed household, it is difficult for the woman to bear the burden of family, such as caring for children and elderly and doing the household chores, and at the same time work for income. During and after the devastation, women were the first to lose their income. Lower class women who worked as wage earner in the field, or grew vegetables or sold forest products lost all their income. These women were excluded from the list of beneficiaries prepared by the panchayats, as the local patriarchal communities did not recognize women as heads of households. The dual burden shouldered by women in the aftermath of a disaster in balancing and sustaining their family is barely mentioned in existing studies, so it is hoped that this research may raise awareness of the problem.

Champa Pasi (Age: 37): "We belong to lower caste section of society. We are poor and deprived, and flood attach additional burden by ruining

everything. As we belong to inferior caste and live in lower region, the flood problem is more acute for us. In this precarious situation, it is very hard for us to survive. We cannot use river water as it is on the flow and contaminated. The water from community well is least available as the upper caste people fetch the water first. We live by providing services to upper caste in this critical situation also and it is very hard for us to earn. We cannot take shelter next to upper caste but instead have to live separately."

Kamini Devi (Age: 47): "The flood has created worst situation for us. The surging flood water inundates the whole area and now we live in nastiest condition. We have to share shelter with other caste. Due to social restriction and purdah (seclusion) system, it is very difficult for us to manage everything. We take help from relatives and friends but cannot go outside for work outside home and earn money."

It was also very difficult for upper caste women to work outside due to the purdah (seclusion) system. Social custom regarding the higher position of their family in the caste system restrain them from doing it. However, lower caste women work hard to survive and face more discrimination in getting water and food in comparison to upper caste women. Lower caste women can work alongside their male counterparts, but upper caste women do not work outside the house due to purdah. For upper caste women to live in a relief camp and share shelter with others presents its own difficulties.

Jhunmun Yadav (Age: 8): "I study in lower primary school. Due to flood, my parents work hard to survive and feed the children. Both of my parents are working and I have one elder and two younger brothers and sisters. There is no one to look after them and to do household chores when my parent left for work, that's why I have left school and stay in house to help and support my family."

Girls are socialized to look after their siblings in the aftermath of a flood. Parents expect girl children to look after other children. After the devastation of flood, when people's livelihoods were crippled, a girl had to sacrifice her childhood for the sake of her family. She was expected to help her parents to recover from the situation by sharing their burden. During or after a disaster, many girls drop out of school to reduce household expenses by saving on school fees or to assist in the household with tasks such as fetching water, or as a result of pregnancy and early marriage.

The third issue that was raised for discussion in the group was the impact of the flood on the health and hygiene care of women.

Rekha Yadav (Age: 16): "Due to flood, we were displaced and had to leave our house intents. In that case, my sister and I face several problems, especially during our menstruation days; there were no health and hygiene facilities. We live in small tent where toilet services were not available. We face the problem of eve-teasing and harassment because our parent left us alone in house and there was no security. To support my family I have to do household chores and look after younger siblings."

The younger women have their own problems related to health, hygiene, and safety. The women living in relief camp survive on minimum food, water, and basic amenities. The lack of health and hygiene facilities makes them prone to several diseases, especially during menstruation. Lack of proper health facilities and burden of caring for their households has a bad effect on their health.

Utpala Das (Age: 27): "I gave birth to a baby boy two day before the flood water creates havoc in the region. The floodwater devastated all our belongings, we do not have anything to eat, and even water is contaminated. I, with my family move to upper region but still the problem persist and in that condition also I have to fetch water from other place."

Nutritional deficiencies, infections due to unhygienic toilet facilities, and lack of proper care during menstruation are common problems for women. The lack of food and the burden of caring for the family made them ill and weak. For the pregnant and lactating mothers, especially from lower sections of society, the devastation of the flood quadrupled their problems.

The fourth issue which was raised concerned the kinds of verbal, sexual harassment or domestic violence that women have to face after a flood. Problems like eve-teasing and sexual harassment are common in relief camps, especially for lower caste women. In shelter homes or relief camps there is no safety. The young girls who are left behind by their parents in their homes often become victims of this criminal behavior.

Mera Paswan (Age: 34): 'Both me and my husband works in other's farms as wage labour because water inundate our field. Whatever I earn, I spend it on my family needs. However, my husband did not care for the family. He is an alcoholic and has habit of ganja (cannabis), which he consumes daily. In addition, when I ask for money he beats sometime me and children. I maintain balance in my family but daily this beating and violence made me weak. In this insecure situation also, I have to work for the survival of the family."

Kiran Chaubey (Age: 36): "I belong to female sex and have to face the problem wherever I will go. Flood destroyed our home we leave in temporary home, which is not safe. We hardly come to know about the relief provided by government and non-government agencies. We did not know what scheme and fund government provide. I came to know about some fund, which government provides but my husband spends it on alcohol. The relief which we get is very little in quantity and of poor quality and are not sufficient for my family."

The poor and destitute women were rarely aware of relief funds and were barred from entering their names in the list of victims of the flood. The women are socialized as caregivers and spend all the relief funds and material for their families, while the male members habitually uses the funds to feed their addictions (alcohol or cannabis), even during the crisis. Relief providing agencies also consider women to be less aware and alert about the funds. Women living in shelter homes feel unsafe and insecure and face sexual and physical harassment. Life in a tent is most unsafe for them. The precarious condition of having to provide necessities for their

families make them prone to this type of harassment. They are victims of stress and trauma not only outside but within the family, and this is aggravated by flooding. The frustrated husbands beat their wives either because they feel stress at being incapable of providing for their families or because they habitually use alcohol or *ganja* (cannabis).

Discussion

Floodwater creates terror in the whole community. Evacuation to a safer place is crucial for safety. But women, being submissive and dependent on male family members, wait for the men to decide where to evacuate for survival. They are also less aware of the distribution of relief material. Men's addiction to alcohol or *ganja* (cannabis) further increases women's problems. Men sell the relief material or spend the funds on their addictions without thinking about their family responsibility.

Furthermore, flooding ruins the income source of the community. Male out-migration after a flood adds to women's responsibilities to provide for the family. These responsibilities, combined with their caretaking duties, form a dual burden for them. Heads of woman-headed households find it very difficult to manage both family and work. Woman-headed household are not listed among the beneficiaries of relief funds or material since women are not considered to be heads of households.

Caste also plays an important role in the problems faced by both upper and lower class women. The *purdah* (seclusion) system restricts the upper caste women from work for their survival. The upper caste, to maintain their purity and avoid pollution, is not willing to share facilities with or live beside the lower caste, while the lower caste women face discrimination in maintaining their living.

In addition to caste, age is also an important factor contributing to women's problems. In a disaster situation, older women become a burden to their families because they need to be provided for and often suffer from poor health, while middle aged women bear the responsibility for taking care of the family. The younger girls often drop out of school and become engaged in taking care of younger siblings.

Women need special care and proper hygiene during menstruation, but during a crisis the situation becomes worse for them, especially for pregnant women. Temporary settlement in tents and shelter houses increases the problem of women's safety and security. They face problems like eve-teasing and harassment. The stress and trauma in the aftermath of flood increases frustration among men, and violence and wife beating often takes place inside the house.

Conclusion

Although the whole community is identically exposed to disaster, the pre-existing discrimination against women renders them the "vulnerable within the vulnerable." The vulnerability of women differs in terms of age and caste. Lower caste women are harder hit by a disaster than upper caste.

In the aftermath of a flood, women face problems of health, hygiene, sanitation, and violence. Elderly women face health problem and mental stress due to limitations in mobility in the disrupted conditions. Young women faces difficulties in life cycle related to their care taking role. Women face serious problems due to the scarcity of basic needs at the time of disaster. The crisis after flood also decreases the participation of women in education. Social dislocation and loss of protection mechanisms increase the incidence of violence against women.

A flood ravages the income sources of women and creates problem for woman-headed households. Male out-migration increases the workload of women. Flooding increases the economic dependency of women and decreases their sources of income. Woman-headed households usually have slower returns to economic activity after a disaster.

Therefore, the notable discrimination which has long prevailed in the social practices of Indian society greatly multiplies the problems caused by flooding and makes women far more susceptible and vulnerable, a situation which urgently demands the attention of government and non-government aid providers.

It is important for the relief providers to understand the role and participation of women in the society and take special measures according to their needs. In rehabilitation of the washed away villages, the opinion of the women of the affected households should be seriously considered so that they do not suffer from feelings of neglect and deprivation. The rescue and livelihood activities may be made further effective by involving all stakeholders, including women, at all levels of its operation as a matter of policy. The relief provider must ensure proper distribution of relief materials to both men and women, but should also take steps to prevent relief materials from falling into the wrong hands, be they government officials and panchayats, NGOs, or middle men alike. In order to establish effective control over the situation and taking into consideration the traditionally submissive role of women, an office at the site(s) of flooding, staffed by women officials, should be established so that women can interact without hesitation and feel free to share their problems and so that the office can support women in re-establishing their life. Women's health, income, and education should be given special attention, and immediate action must be taken against any kind of violence against women.

To address the flood challenges effectively, there is a need not only for a reactive approach but also for proactive policy measures with a special focus on women. The problems of women related to income, health, education, harassment, and violence can be addressed by an awareness campaign, and women should be educated as to how they should conduct and organize themselves at the time of a flood. A tailor-made program in view of women's requirements will only be effective through the proper participation and involvement of women in rescue and recovery operations, with women as full partners and beneficiaries in the healing of society after a disaster.

References

- Abeysekera, S. (2006). Tsunami aftermath, violations of women's human rights Sri Lanka. Colombo: Asia Pacific Forum on Women, Law and Development.
- All India Disaster Mitigation Institute. (2005, October 12). *Tsunami, gender, and recovery* (Special Issue for International Day for Disaster Risk Reduction). Southasia-disasters.net.
- Alpern, S. (1993). In the beginning: A history of women in management. In E. A. Fagenson (Ed.), Women in management: Trends, issues, and challenges in managerial diversity (pp. 19-51). Newbury Park, CA: Sage.
- Ariyabandu, M. (2003). Women: The risk managers in natural disasters. 'Voice of Women': A Sri Lanka Journal for Women's Liberation, 6(1). Retrieved June 7, 2013, from http://www.ssri.hawaii.edu/research/GDWwebsite/pdf/Ariyabandu.pdf
- Ariyabandu, M. M., & Foenseka, D. (2006). Do disasters discriminate? In D. Nivaran (Ed.), *South Asia network for disaster mitigation: Tackling the tides and tremors* (pp. 23-40). Islamabad: South Asia Disaster Report 2005.
- Bern, C, Sniezek, J., Mathbor, G. M., Siddiqi, M. S., Ronsmans, C., Chowdhury, A. M., Choudhury, A. M., Islam, K., Bennish, M., & Noji, E. (1993). Risk factors for mortality in the Bangladesh cyclone of 1991. Bull World Health Organization, 71(1), 73-78.
- Bem, S. L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society. *Signs*, 8(4), 598-616.
- Bolin, R. (1998). The Northridge earthquake: Vulnerability and disaster. London: Routledge. Chakravarti, U. (2003). Gendering caste: Through a feminist lens. Calcutta: Street.
- Chambers, R. (1989). Vulnerability, coping and policy. IDS Bulletin, 20(2), 1-7.
- Chant, S. (1997). Women Headed household: Diversity and dynamics in the developing world. London: Macmillan.
- Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84(2), 242-261.
- Delaney, P., & Shrader, E. (2000). Gender and post-disaster reconstruction: The case of Hurricane Mitch in Honduras and Nicaragua (Report prepared for the World Bank). Retrieved May 25, 2013, from www.anglia.ac.uk/geography/gdn
- Dimitrijevic, A. (2008). Definition, foundation and meaning of illness: Locating Georg Groddeck in the history of medicine. *The American Journal of Psychoanalysis*, 68(2), 139-147.
- Dube, L. (1996). Caste and women. In M. N. Srinivas (Ed. & Intro.), Caste: Its twentieth

- century avatar (pp.1-27). New Delhi: Penguin Books.
- Dube, L. (1997). Women and kinship: Comparative perspectives on gender in South and South-East Asia. Tokyo: UNU Press.
- ECLAC. (2003). Handbook for estimating the socio-economic and environmental effects of disasters. UN Economic Commission for Latin America and the Caribbean, IBRD, The World Bank.
- Edwards, B. (2001). Helen: Portrait of a prime minister. Auckland: Exisle Publishing.
- Enarson, E. (1999a). Violence against women in disasters: A study of domestic violence programs in the US and Canada. Violence Against Women, 5(7), 742-768.
- Enarson, E. (1999b). Women, work, and family in the 1997 Red River Valley Flood: Ten lessons learned. Unpublished report.
- Health Canada. (2000). Health Canada's gender-based analysis policy. Ottawa: Minister of Public Works and Government Services Canada.
- Hennink, M. M. (2007). International focus group research: A handbook for the health and social sciences. Cambridge: Cambridge University Press.
- Horowitz, D. (1985). Ethnic groups in conflict. Berkeley: University of California.
- Ikeda, K. (1995). Gender differences in human loss and vulnerability in natural disasters: A case study from Bangladesh. Indian Journal of Gender Studies, 2(2), 171-193.
- Jackson, S. (2003). Freeze/ Thaw: Aid, intervention, uncertainty, and violence in the Kivus, Eastern DR Congo. Paper presented at the 102nd annual meetings of the American Anthropological Society, Chicago, IL.
- Kitzinger, J. (2005). Focus group research: Using group dynamics to explore perceptions, experiences and understandings. In I. Holloway (Ed.), Qualitative research in health care maiden head (pp. 56-60). Open University Press, ISBN 0-335-21293-x
- Lara, S. (2012). Gender makes the difference: Millennium development goals. IUCN-The World Conservation Union. Retrieved April 10, 2013, from https://portals.iucn.org/union/sites/union/files/doc/gender_makes_the_difference_millennium_development_goals.pdf
- Lewis, M. A., & Lockheed, M. E. (2007). Exclusion, gender and schooling: Case studies from the developing world. Washington, DC: Centre for Global Development.
- Liamputtong, P. (2010). Performing qualitative cross-cultural research. Cambridge: Cambridge University Press.
- Lynn, B., & Chant, S. (1989). Women in the third world: Gender issues in rural and urban areas. New Brunswick: Rutgers University Press.
- Meerman, J. (2005). Oppressed people: Economic mobility of the socially exclude. The Journal of Socio-Economics, 34(4), 542-567.
- Mehta, M. (2007). Gender matters-Lessons for disaster risk reduction in South Asia.

- Kathmandu: ICIMOD.
- National Alliance of Women (NAOW). (2006). India second NGO report on CEDAW. Retrieved July 16, 2013, from http://www.iwrawap.org/resources/pdf/India%20S hadow%20report.pdf
- Patt, A., Angie, D., & Pablo, S. (2007). Gender and climate change vulnerability: What's the problem what's the solution?. Paper presented at the International Women Leaders Global Security Summit, New York.
- Sen, A. K. (1987). Gender and cooperative conflicts (Working Paper No.18). Helsinki: World Institute for Development Economics Research.
- Sen, A. K. (1990). Gender and cooperative conflicts. In I. Tinker (Ed.), Persistent inequalities: Women and world development (pp.123-49). New York: Oxford University Press.
- Sen, A. K. (2005). The argumentative Indian. Oxford: Oxford Clarendon Press.
- Snyder, N. (1994). Career women in perspective: The Wichita sample. In C. Konek, & S. Kitch (Eds.), Women and careers: Issues and challenges (pp.1-18). Newbury Park, CA: Sage.
- Times of India. (2013, July 17). Bihar floods claim 11 more, toll reaches 38. Retrieved February 20, 2014, from http://timesofindia.indiatimes.com/india/Bihar-floodsclaim-11-more-toll-reaches-38/articleshow/21112428.cms
- Times of India. (2013, August 31). Flood situation worsens in Katihar. Retrieved February 13, 2014, from http://timesofindia.indiatimes.com/city/patna/Flood-situation-worsens-in-Katihar/articleshow/22176433.cms
- United Nations High Commissioner for Refugees (UNHCR). (1999). Reproductive health in refugee situations: An inter-agency field manual (Chapter 2 & 4). Retrieved June 13, 2013, from http://www.unhcr.org/3bc6ed6fa.html
- Wiest, R. E., Mocellin, J., & Motsisi, D. T. (1994). The needs of women in disasters and emergencies (Research Paper No. 2, 2nd ed.). Winnipeg, Manitoba: The University of Manitoba.
- Wilkinson, S. (2004). Focus groups: A feminist method. In S. N. Hesse-Biber & M. L. Yaiser (Eds.), Feminist perspectives on social research (pp. 271-295). New York: Oxford University Press.
- Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (1994). At risk: Natural hazards, people's vulnerability, and disasters (2nd ed.). London: Routledge.
- World Health Organization (WHO). (2002). Gender and health in disasters. Geneva: WHO. Retrieved August 4, 2013, from www.who.int=gender=other_health=en= genderdisasters.pdf

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Biographical Note: Madhuri has done her Ph.D. from Department of Humanities and Social Sciences at Indian Institute of Technology Kharagpur, West Bengal, India. Her academic interests include gender and disaster, vulnerability and resilience, research methodology, and emergency management.

E-mail: madhuriptp09@gmail.com