

## WOMEN'S VULNERABILITY TO NATURAL HAZARDS ON RIVERINE ISLANDS IN NORTHERN BANGLADESH

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**Abstract:** There are millions of people, particularly poor and landless, who reside on riverine islands in the rivers of Bangladesh. The riverine islands are locally called *chars* or *char-lands*, which are recurrently exposed to floods and riverbank erosion. Hazards leave inhabitants of *char-lands* in precarious conditions such as landless, homeless and jobless. This article presents different aspects of women's vulnerability to natural hazards. In the gendered division of labour, women find that they are with the burden of responsibilities during and post-hazard contexts. Moreover, they have little access to and control over material resources such as land. Those who do not have access to education have limited choice to fight against hazard-induced vulnerability. In most cases, teenage girls are forced to get married and engaged in household works. These structural factors play key roles in making women more vulnerable than men. However, those women who have access to education and tangible resources show their ability to reduce vulnerability.

### 1. Introduction

In the afternoon of a day during the flooding season, I was on a boat that headed to the mainland from my study river island village, named Onishchit (pseudonym). The boat was full of passengers, most of them looked angry since the boatman took too much time to start the boat. The boatman repeatedly informed the passengers that a woman had requested him to wait for her; she needed to move her household stuff from the island village as riverbank erosion damaged her house. The woman arrived at the boat with her household stuff—a wooden bed, a wooden box, a cow and several bundles of firewood. Two men helped her carrying the stuff toward the boat. The woman looked exhausted as she worked

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for hours sorting out and moving the stuff. Loading the stuff on the boat required her to come into the river water at her waist height. Her *saree* (a long dress worn by South Asian women) was wet by the river water. Most of the passengers were male who angrily observed her while she had to walk into the water with that heavy household stuff toward the boat. A male passenger angrily shouted toward her: ‘quick, quick, you have made us late.’

After putting all the stuff on the boat, she attempted to get on the boat. Getting on the boat put her in an embarrassing situation as she had to manage her wet *saree* in front of the male passengers of the boat. Moreover, it is usually difficult for a woman to get on the boat without stairs. As she was not offered the boat stairs, she needed to do somewhat aerobic—firmly holding an edge of the boat and climbing into it by placing full body weight on both hands. No one stepped forward by giving them a hand to assist her in getting on the boat. Many people were staring at her. Finally, she got on the boat. In the context of *char* villages, this is one of many cases of women who are responsible for taking care of household stuff during hazards while male members go outside for looking for work opportunities (e.g., in-migration). In addition to the evacuation process, women are thought to be doing the lion’s share of parenting. For example, Peek and Fothergill (2008), studying the challenges of parenting in the aftermath of Hurricane Katrina in the United States, show that mothers played a key role in keeping safe their children.

In disaster studies, lots of literature have long been focusing on the ways in which discrimination, injustice, unfairness and inequality are socially and culturally distributed on the basis of differences between men and women (Enarson and Morrow 1997, 1998; Hoffman 1999; Enarson, Fothergill and Peek 2007). Women’s experiences of disaster vulnerability cannot be understood by taking prevailing gender roles as taken for granted. Women’s vulnerability is not a discrete entity but produced through historical and cultural processes in social relations (Enarson 1998). In the gendered division of labour, women find that they are with the burden of responsibilities during and post-disaster contexts.

Showing ethnographic evidence from Onishchit *Char* (river island), located in the Brahmaputra River in Gaibandha District of Bangladesh, the objective of this paper is to illustrate how the structural social relations put women in multidimensional disaster vulnerability.<sup>1</sup> Bangladesh is in the Bengal delta formed by the Ganges, the Brahmaputra and the Meghna rivers. In the rainy season (June-September), the rivers of Bangladesh receive huge rainwater and inundate the floodplains such as *chars* or *char*-lands. *Char*-lands are geographically in remote areas and economically cheap and more fertile than the mainland. Having no better options, many impoverished people reside in uncertain *char* villages with low income and precarious livelihoods (Zaman 1999; Samanta and Lahiri-Dutt 2005; Hossain 2018). The study interviewed several woman-headed households to understand their history of displacement and strategies of livelihood. In addition to the

dialogues (interviews and informal discussions), the ethnographic observation tool helped the study to collect valuable data on *char* women's struggles. The following sections elucidate *char* women's experience of disaster vulnerability.

## 2. Family, Household and Gender

In the historical process, women had become an inferior class. In contrast, men had become a superior class, who control their patrilineal family line and have been at the apex of the patriarchal structure (Engels 1972). 'The universality of female subordination' exists in every kind of social and economic structure (Ortner 1972, 5). Gender relations in households and communities are shaped by both patriarchy and Islamic beliefs in the rural context of Bangladesh. Kotalová's (1996) account of womanhood in a Muslim peasant community in rural Bangladesh shows how a patriarchal society, coupled with Islamic beliefs shapes gender identity. A woman is transferable—her sense of belonging travels from her father's house to her husband's house (Kotalová 1996).

Like the other rural settings, *char* men play the role of household head as they own and control over land, which is the main natural resource for securing a livelihood. Female members are supposed to take care of children, cooking, cleaning and feeding livestock—cattle and goat. In addition to the family economy, men have always been culturally and socially in charge of making decisions about when and where to move during hazards. Patriarchal ideology and social norms distributed the division of labour between men and women into outside and inside, respectively. For example, a rich farmer named Zahir and his three sons built their houses on the same compound so that they can stick together as well as utilise their agricultural plots in a group, which is considered as a useful and effective way of reducing hazard-induced vulnerability. In fact, residing in the same area with members of the same lineage is traditionally considered an important way of keeping regular interaction with kin groups in rural Bangladesh (Bertocci 1972; Jahangir 1979). Zahir's youngest son named Salam has built a house on the mainland—they call it their second home—so that they all can move there during severe floods. They send their cattle and other portable belongings to their mainland house during floods and come back to the *char* village when the floodwater recedes. Moving cattle to the second home means moving women as they are responsible for taking care of them—this responsibility requires women staying at home to take care of children, older family members and livestock.

However, the inside-outside dichotomy has been seen as flexible for poor women and women-headed households. The poor women have been seen working as day labourers in agriculture. During the season of corn harvesting, women are hired for separating the corn seeds from the corn stem and for drying the corn seeds and packing them into plastic sacks—these kinds of jobs are categorised as easier and for women. The women labourers

are paid at BDT 100 to 150 (less than \$2) per day, which is roughly half of the wage for male labourers. In rural Bangladeshi societies, women day labourers are symbolically seen as their husbands' inability to keeping them home. It is culturally and socially constructed that only poor households' female members go outside for earning.

One day, I observed that a group of labourers was uncovering the corn stem. Most of the labourers were women. I approached them for seeking their permission for taking some photos of their work. One of the women told me not to take their pictures. She shared a story: a char woman's picture had been taken by a journalist, and later it was published in a calendar. Her husband came across the picture. Then, the husband beat her wife, because the picture showed that her wife worked as a day labourer for others, and it was publicly known. This case represents the social and cultural construction of masculine power and male ego.

The norm of purity and pollution is interlinked with the gender roles in Muslim societies in rural Bangladesh (Blanchet 1984). Women's menstruation and childbirth are linked with pollution, and that is why their mobility is restricted during these biological conditions—for example, not taking a bath in ponds (Blanchet 1984). Women's observing purdah connects to the notion of purity or auspiciousness and disobeying it connects to pollution or misfortune. Maintaining purdah keeps women working inside the home and household works such as cleaning, washing, husking paddy, growing garden vegetables and taking care of children and older family members. Disobeying purdah and going outside connects women with pollution—breaking the social order. Studying women's experiences of the 1988 flood, Shaw (1992) argues that women, particularly poor and destitute, are subject to observing purdah which makes floods burdensome for them. Maintaining purdah restricts their mobility outside, keeping them attached to the household works. In this way, their everyday lives are restricted and constrained; they have little scope to practice agency. However, in emergency situations (e.g., severe floods, displacement or unavailable of agricultural labours), women are socially acceptable to work outside such as assisting husbands in agricultural activities.

Disaster anthropologist Hoffman was one of the survivors of the Oakland firestorm.<sup>2</sup> She observed that traditional gender roles reappeared in the aftermath of the firestorm—women were supposed to do 'small' tasks and men were responsible for 'big' duties (Hoffman 1999). Most men eagerly involved themselves in activities required going outside such as attending the meeting, hiring crews and driving. In contrast, women remain in the private world, involved themselves in taking care of babies, making phone calls and waiting for deliveries. It is women who remained home and had to deal with salespersons and real estate agents. As a response to the firestorm disaster, Hoffman and other disaster victims, particularly women, formed a group. They used to discuss their experiences of disaster losses and potential strategies for recovery. Hoffman (1999) observed that insurance

adjusters put little attention to women. Moreover, they treated women as if they did not understand insurance policies and claimed illogical benefits. When insurance institutions took a longer period of time than they expected, women victims were seen as 'greedy whiners and undeserving receivers of pots of gold' (Hoffman 1999, 185).

In the context of the studied *char*, bankers go to the debtors' houses to remind them to return the money. Most of the debtors are males. It is quite difficult for bankers to see the male debtors at their homes as they usually work in agricultural fields and some frequently move to cities to earn during floods—when they do not have to earn opportunities there. It is women who receive a warning from bankers on behalf of their husbands if they are defaulter on returning loans. Some men intentionally hide and let their wives face bankers since it is believed that male bankers would not use strong words with women. To increase economic resilience for flood victims, a few non-governmental organisations (NGOs) implement income-generating programs such as micro-credits and raising livestock. Although women receive loans in their names, male members (husbands) took control of it—making decisions on how to utilize the credit and to invest the profit. Usually, they invest the credit in running small grocery shops and raise cattle. Ultimately, the patriarchal social structure and cultural norms make men the primary director of these resources.

Hazards reveal the 'normal' or ongoing social and economic structures that are the key responsible for causing women more vulnerable. As Enarson and Morrow (1998, 5) argue, 'Economic, racial/ethnic, and large stratification make some women needier than others before, during, and after disasters, both among and within cultures.' Enarson and Morrow's (1997) study on Hurricane Andrew finds that many women experienced male violence during the post-disaster construction period.<sup>3</sup> They observe that women's invisible domestic works (cleaning, washing, cooking, taking care of babies and old persons) increased in the wake of the hurricane. *Char* women experience the same. For example, Ambia, a *char* woman, shares her experience:

We [women] do all the stuff in household and agriculture. During cultivation, we dig out weeds, collect green leaves and grasses for cattle, wash the cattle, clean the house, take care of kids and assist day labourers in the field for harvesting. But the men think that we do less than them. Today, my husband is grazing the cattle. But when the cows come back home, the rest of the things are supposed to be done by me. Who will wash the cows? Who will tie up and take them to the cow's room? Who will give them water? It is I who take care of all these things.

### **3. Women-Headed Households**

Poor women do not have substantial resources (land, savings). The patriarchal social system makes the ways in which their security is subject to men. Hazards leave widowed and

impoverished women-headed households in acute vulnerability. They deserve disaster relief but the process of receiving it requires a strong connection with the local government in rural Bangladesh (Islam, Walkerden and Amati 2017). The social safety net programs of Bangladesh have been effective ways to mitigate the effects of disasters in the rural areas; however, they have long been facing age-old problems including corruption, leakage, nepotism and complex bureaucracy (Maniruzzaman 2009; Masud-All-Kamal and Saha 2014).

Receiving public supports is not a straightforward way, rather it requires entering the pragmatic process that is composed of nepotism and partiality. *Char* women find pursuing public supports is more difficult than men do since most of the actors involved in the process of public supports are male such as elected representatives to the local government, politically influential and local headmen. Moreover, patriarchal ideology, male dominance and purdah culture give women little opportunity to maintain socialisation with men in the society. Therefore, women are socially discouraged to negotiate with influential male actors, who play central roles in providing emergency supports (food, short-term employment opportunity, house materials, cash or subsidiary). The study finds that several widows, who have no access to disaster relief, are at the mercy of neighbours and relatives for living. Even, they go to the mainland to beg for money and food, hiding their own identities.

Salma, in her early thirties, lost her husband. The sudden death of her husband left Salma, two teenage sons, a little daughter and her widow mother-in-law in abject poverty. Her husband was the sole earner of the family. She went to the local government office to know if she or her mother-in-law is eligible to receive supports from the social safety net programs. She was asked for a bribe by a clerk of the office. Moreover, an elected representative, who represents her village, to the local government demanded the same. After that, she left hope of receiving any aids or emergency supports from the local government. In addition to poverty, riverbank erosion left her displaced and homeless twice in the last five years. Coupled with poverty, disaster vulnerability made her sons stopped going to school. The elder son has migrated to Dhaka, working in a rickshaw garage. The younger son assists her mother in grazing cattle. Her mother-in-law takes care of Salma's little daughter.

After losing her husband, Salma started to work as a day labourer in agriculture. She went through physical and mental stress for supporting the members of her household. Lahiri-Dutt and Samanta (2004; 2013) documented that, in their works on *char* dwellers in southern West Bengal, India, many Bangladeshi women, who are illegal immigrants, do not have access to social connections and state supports. For them, selling their physical labour is the main way of living. The hardship of Salma's household started to decrease when she received cattle from a local NGO. It can be stated that NGOs' income-generating

programs significantly changed women's social and economic conditions in *char* villages (Chowdhury 2008; Islam and Hossain 2014). Salma sends her younger son to sell milk and home-grown vegetables (eggplants, bottle gourds) to the local market located at Balashi *Ghat* (boat terminal). It is quite difficult for her and the teenage son to raise cattle, because raising cattle requires collecting grass, producing fodder and purchasing veterinary medicines. Compared to other women in her neighbourhood, she must go to the mainland market to buy necessities for them as well as for cattle. It is not surprising that Salma's agency—frequent movement between the mainland and *chars*, her economic independence and her boldness—is criticised by many men in her neighbourhood. Although NGOs' development initiatives have played a great role in empowering women in rural Bangladesh, patriarchal ideology firmly prevails in every sphere of the social, political and economic structures. Floods make women unemployed for a longer time than men, and women who work outside face social stress such as verbal abuse (Azad, Hossain and Nasreen 2013).

Another woman named Jamila, in her early fifties is a third-generation flood victim. Like other male members of *char* families, her husband occasionally used to migrate to Dhaka during floods for better economic opportunities, and he used to come back to his family. In one season, her husband had migrated to Dhaka but never came back. She happened to know that her husband had remarried and started a new life in a slum in Dhaka. Jamila said, 'I went to Dhaka to meet him, but he had moved to somewhere else so that I could not trace him. Since then, I had left the hope to see him again and I tried to take care of my children.' Since then, she has been leading her household. Now, her household consists of her son, the son's wife, daughter, the daughter's husband and two grandchildren. She cannot remember how many times she had to shift her house on different *chars*. She recalls that she has resettled in four *char* villages in the last decade. As Baqee (1998, 183) wrote that *char* women are 'engaged along with their families in a constant struggle for existence in a harsh and unfriendly environment, they are, at times left alone to bear the brunt of the rigorous of *char* life.' Mental strength is the key tool for poor women to live in such hazardous floodplains (Pulla and Das 2015).

Once Jamila's household moved to the embankment at Balashi boat terminal and stayed there for nearly a month. They moved back to Onishchit when the floodwater had declined. They had to spend all their savings, aggregated by her son and son-in-law, and they had to borrow money from a moneylender for reconstructing livelihood and house. Jamila said: 'Flood is a big problem for us. We could not properly finish assembling our house after disassembling it because floods again make us disassemble the house.' Jamila is considered the head of the household as she is the most senior member, but she remains a dependent mother who is associated with domestic works. By contrast, two men (son and son-in-law) play central roles in making decisions on moving during floods and necessary

plans relating to the households' resilience, and they are associated with public lives. So, the headship connotes the presence of males in households and their central roles (Lewis 1993). Jamila is dependent on them. It is her son who is entitled to own and control over her husband's land and socially responsible for utilising the household's resources in the absence of his father.

#### 4. Child Marriage

Kamal and Colleagues (2014) find in their survey that more than 75% of marriages were child marriage among women aged 20–49 in Bangladesh. The trend has started decreasing but the pace is sluggish. Malé and Wodon's (2016) study shows that almost six in ten girls (59.4%) marry before the age of eighteen in the age group of 18-22. Researchers find various factors behind early marriage: women and their husbands' illiteracy, women's unemployment, remote residence and religion (e.g., Kamal et al. 2015). In the context of remote *char* societies, the practices of child marriage do not seem to be declined. They know that arranging a marriage for a girl below eighteen is a punishable act, but hazard-induced displacement, insecurity and poverty weakens the sense of obeying the law against child marriage. Along with three primary school teachers, I have attempted to convince a girl's parents not to force the girl to get married. The girl's name is Arifa, aged 13. Her father told us 'We, the parents, could not afford to take care of our daughter... You know that Islam never said to wait until 18 years old for a girl to be get married... It's Allah who sets everything.' No women, including Arifa's mother and aunts, who were listening to our conversation, raised their voice for Arifa. Such violation of rights is hardly reported to the police station by the inhabitants of island villages (e.g., Paul and Islam 2015). The practice of early child marriage exists as the social system is dominated by patriarchy; it ultimately weakens women's rights (Huda 2006).

Displacement affects education, for both male and female students in *char* villages. For example, several families moved to one of the neighbouring *chars* of Onishchit when riverbank erosion submerged their houses into the river. They have come back after six months to Onishchit to resettle again to live with their kin groups. In the meantime, the children of the displaced families missed the final exam called Primary Education Completion (PEC)— a 5-years cycle exam. Those students will have to take admission into Class V again and then they will be allowed to sit for the exam. In this way, children's education is interrupted, and they become frustrated. For example, Shapna, a primary school student, is taller and older than all her classmates. She feels shy because children at her age go to high school, but she reads in Class III. Her mother told me that they had to move *char* to *char* due to riverbank erosion and floods. She moved five times in her married life to date. When they move from one *char* to another, her daughter had to leave school in



the middle of the academic year. In new *char*, she had to wait to get admission into a new class at the beginning of a year. It happened twice. Shapna lost two years of her education life due to displacement.

Girls, particularly of landless and poor families, lost education opportunities due to the remoteness of *char* and poverty. Moreover, there are no high schools in Onishchit and other neighbouring island villages. Most of the children who had completed their primary education on the island lost interest in going to high school on the mainland because going to the mainland requires regular boat fares and long walks on a lonely deserted land. *Char* kids, who enrolled at mainland schools, frequently miss class and exams as they have a long walk before getting on and after off the boat. It affects kids' promotion to a higher grade; it annoys the poor parents and discourages them to send their children to mainland schools. The poor parents put their daughters off when they saw that sending them to high school on the mainland was quite difficult, expensive, insecure and unaffordable. Hazards exacerbate the behaviours of the reluctant to education for girls and there is also a risk for little kids on a boat journey. The financial problem is reduced at early child marriage. In contrast, sons are encouraged to complete at least the primary school education since they are considered potential household heads and earning members. An educated son is thought of as an investment that will raise the amount of dowry (Hartmann and Boyce 2013; Rozario 1992).

The fear of displacement and poverty influence *char* families, particularly poor and landless families, to arrange an early marriage for girls. Those households that possess or afford houses on the mainland expect a higher amount of dowry from the brides' families. Possessing a house in a hazard-free environment is thought of as great quality for a potential groom as such. A *char* woman, below twenty and mother of three children, shared the story of her early marriage: 'I was a little child. I could not even manage the clothing on my body. My parents had arranged my marriage with an unknown man living on the *bir* [stable mainland]. I had no idea about marriage.'

Apart from hazards and poverty, fear of high dowry, the remoteness of *char* villages, verbal abuse, insecurity and the custom of early marriage endanger the lives of young girls. The culture of dowry and social stigma attaching to unmarried adult girls are pervasive on Onishchit. The poor parents force their little daughters to get married as soon as possible because they know they will have to pay a large dowry for arranging a marriage for an adult daughter. Financial and social pressures make parents arrange an early marriage for girls in rural Bangladesh (Field and Ambrus 2008). Marriage is also considered a way of reducing household poverty. Many poor parents intentionally let their sons get married as soon as possible because it brings dowry in the form of cash, agricultural land or livestock. Moreover, the *char* parents see that women, who completed primary education in *char* villages, found

no jobs in government or private sectors, and therefore education for girls does not make any difference. Only those who migrated to Dhaka or other cities have a career in private sectors such as readymade garments factories.

There are many stories of girls who have been sexually assaulted while they walked on the deserted sandy *chars* toward the schools. Aisha, a college student, shared a story: a group of young boys sexually molested a girl while she was going to school on her own. The girl had to bear the stigma, as the parents of the girl could not find an eligible bridegroom because of the social stigma, and the girl ended up getting married to a deaf-mute man. It is not surprising that women experience violence and abuse due to dowry demand (Naved and Persson 2010). Thus, women's subordination continues, helped along by poverty, patriarchy and the physical characteristics of the char environment.

It is noticeable that education has made a difference in char women's life. The study finds three women who think that education has played the central in changing their social and economic conditions—they are now capable of leaving the hardship of *char* life. They all completed higher secondary education and involved themselves in earning. Hanufa, one of them, has joined as a field-level health worker for Brac, an international development organisation, based in Bangladesh. Her income economically strengthens her family. Her job works as insurance while her family is displaced due to floods and riverbank erosion. Her household members including her husband and in-laws feel proud of her as she is educated, and on top of everything she serves the community by providing information regarding women's reproductive health. Two of the educated women teach at separate primary schools set up by two different development organisations. They have also enrolled at a college on the mainland, hoping to get a government job after graduation.

## **5. Women, Land and Income**

The inferior position of women can be seen in the de facto of owning and controlling land. Patriarchal ideology and Islamic Sharia Law of inheritance have produced a great gender imbalance in the ownership of land. The inheritance rules predominantly shape the social structure of rural Bangladesh (Jansen 1986). Family assets are distributed among the next generation unevenly: men inherit more than women do. For example, a daughter's share is equal to half of her brother's share. In addition to the inheritance law, women are socially discouraged to claim their share of the land but encouraged to leave it to brothers' responsibility. For example, sisters are suggested to sell their share of land to their brothers at a lower price than at the market price since it is the brothers who are socially responsible for taking care of their parents. However, selling the land to the natal family may lose kinship ties with parents, brothers and brothers' children. White (1992, 131), based on her

study of Kumirpur village in North-western Bangladesh, calls it 'a straight trade-off ... between material and social capital.' In my study, I find no *char* woman owns land in her name. Hazara, a *char* woman, says:

Recently, my husband has updated his land document. I have expected that he would include my name in the document as a partial owner of our family's land. But he has made the document in his name... My father died a few years ago. I expected my brothers give me my share of my father's land. They cultivate the land but gives me no share of the crops they produce every season. It depends on my brothers' wish whether I will receive my share of my parental land or not. If I claim now, they might be angry. I shall wait for the green signal from my brothers. If they do not give me land, I have nothing to do but feel sad.

A different picture can be found in the rural context of the mainland. Arens (2014), in her, restudy of Jhagrapur village in Bangladesh, finds that one-third of women own and control over inherited land. The recent social transformation made it women owning land. In Jhagrapur, the literacy rate of women has increased, and many women socially and economically have been empowered through microfinance programs. Embracing structure-agency integration, Arens (2014) finds various factors including class background, education, gender roles and post-marital residence play key roles to own land in their own name. However, women's agency of owning and controlling land in their own name is complex and the factors 'all can play a role and can be conflicting with each other' (Arens 2014, 161).

Recently, Char Livelihood Programs (CLP) has involved *char* women in income-generating activities such as cattle raising and small business. The program has economically and socially empowered women as well as their households. The study finds some *char* women who have actively engaged in the project and made a difference in their household economy. For example, Asma, a *char* woman, is considered an exemplary participant in her neighbourhood. The CLP gave her a heifer a few years ago. Before that, her household had no cows. She and her husband used to work as day labourers. Her heifer gave birth to three calves. Now, she has been raising eight cows. She and her husband take care of the cattle, and they do not need to work for others like in the past. Every year she and her husband sell a cow or bull and earns a good profit, that is invested in renting plots of agriculture. Asma has been considered as the catalyst of changing her household's social and economic conditions. So, entitlement to tangible resources plays an important role to reduce gendered vulnerability and poverty. It does not necessarily imply that Asma was an inactive or passive receiver. Rather, women 'beneficiaries' have invested their hope, time, ideas and labour. Moreover, interacting with such an external project required the women negotiating with the traditional patriarchal structure of society.

## 6. Conclusion

By and large, little access to social and economic resources makes women more vulnerable to natural hazards. Those women who are widows or abandoned by husbands face difficulties for survival as they have little access to tangible resources and education. They find becoming self-reliant appears as a question to the prevailing patriarchal ideology and social norms that typically influence women staying inside (home) and doing household works. By contrast, men are thought of for doing outside works such as utilising land resources and making decisions on where to move, when they are displaced by disasters. For poor women, social security programs including emergency public supports remain inaccessible. *Char*-lands' uncertain sustainability, poverty and age-old ignorance about women's rights have been determinants of girls' early marriage. To avoid higher dowry, verbal abuse and insecurity, female children are forced to get married in their teens. The article proposes that access to education and income opportunities are significant ways to combat the women's disaster vulnerability in the context of hazardous island villages.

Engaging in education and employment provides choices and agency of mobility. Illiterate women have limited choice. In most cases, they are forced to get married and confine their mobilities in *char* villages. It can be said that policies, in relation to reducing women's vulnerability to hazards, can stress the ways that ensure women's right to education. Policies can stress women's entitlement to the property as it is a viable way to increase women's resilience. NGOs' income-generating programs for *char* dwellers have proved that women are able to manage both household activities as well as raising cattle (income generation). In the context of uncertain riverine islands, animal resources are considered as insurance providing economic support during disasters. So, it is important to make the ways in which women can effectively exercise their agency in economic spheres. Women's economic empowerment plays effective role in reducing vulnerability as well as strengthening their households' economic condition.

## Notes

1. This article is prepared based on data used in my unpublished Ph.D. thesis titled 'Between Uncertainty and Hope: Disaster, Displacement, and Livelihoods on Onishchit *Char* in Bangladesh', which was submitted to the Department of Anthropology at Maynooth University, Ireland, and awarded a doctorate degree in 2019. This paper has not been published anywhere.
2. On October 20, 1991, Oakland and Berkeley, California, the United States, witnessed a ferocious firestorm that killed twenty-five people and destroyed more than three thousand homes. The firestorm left many people homeless.
3. Andrew Hurricane badly hit the Bahamas, southern Florida, and south-central Louisiana in U. S. in 1992.

## References

- Arens, Jenneke. (2014). *Women, land and power in Bangladesh: Jhagrapur revisited*. Dhaka: The University Press Limited.
- Azad, Abul K., Khondoker M. Hossain and Mahbuba Nasreen. (2013). Flood-induced vulnerabilities and problems encountered by women in northern Bangladesh. *International Journal of Disaster Risk Science* 4, 190-199.
- Baqee, Abdul. (1998). *Peopling in the land of Allah jaane: Power, peopling and environment: The case of char-lands of Bangladesh*. Dhaka: The University Press Limited.
- Bertocci, Peter. J. (1972). Community structure and social rank in two villages in Bangladesh. *Contribution to Indian Sociology* 6(1): 28-52.
- Blanchet, Thérèse. (1984). *Meanings and rituals of birth in rural Bangladesh: Women, pollution, and marginality*. Dhaka: The University Press Limited.
- Chowdhury, Nusrat Jahan. (2008). A journey towards development: The impact of local NGO programmes on women living in the char lands of Bangladesh. *Development in Practice* 18(1): 117-124.
- Enarson, Elaine and Betty Hearn Morrow. (1997). A gendered perspective: The voices of women. In Walter Gillis Peacock, Betty Hearn Morrow and Hugh Gladwin, eds., *Hurricane Andrew: Ethnicity, gender and the sociology of disasters*, 116–140. London: Routledge.
- Enarson, Elaine. (1998). Through women's eyes: A gendered research agenda for disaster social science. *Disasters* 22(2): 157-173.
- Enarson, Elaine and Betty Hearn Morrow., eds. (1998). *The gendered terrain of disaster: Through women's eyes*. Westport: Praeger.
- Enarson, Elaine, Alice Fothergill and Lori Peek. (2007). Gender and disaster: Foundations and directions. In Havidán Rodríguez, Enrico L. Quarantelli and Russell R. Dynes, eds., *Handbook of disaster research*, 130-146. New York: Springer.
- Engels, Friedrich. (1972). *The origin of the family, private property and the state: Introduction by Tristram Hunt*. New York: Penguin Classics.
- Field, Erica and Attila Ambrus. (2008). Early marriage, age of menarche, and female schooling attainment in Bangladesh. *Journal of Political Economy* 116(5): 881-930.
- Hartmann, Betsy and James K. Boyce. (2013). *A Quiet Violence: View from a Bangladesh village*. London: Zed Books.
- Hoffman, Susanna M. (1999). The regensis of traditional gender patterns in the wake of disaster. In Anthony Oliver-Smith and Susanna M. Hoffman, eds., *The angry earth: Disaster in anthropological perspective*, 173-191. New York: Routledge.
- Hossain, Mohammad Altaf. (2018). Climatic hazards and inhabitants of char in Bangladesh. *Nrvijnana Patrika (Journal of Anthropology)* 23: 89-102.
- Huda, Shahnaz. (2006). Dowry in Bangladesh: Compromizing women's rights. *South Asia Research* 26 (3): 249-268.

- Islam, Rabiul, Greg Walkerden and Marco Amati. (2017). Households' experience of local government during recovery from cyclones in coastal Bangladesh: Resilience, equity, and corruption. *Natural Hazards* 85(1): 361-378.
- Islam, M. Rezaul and Delwar Hossain. (2014). Island char resources mobilization (ICRM): Changes of livelihoods of vulnerable people in Bangladesh. *Social Indicators Research* 117(3): 1033-1054.
- Jahangir, Burhanuddin Khan. (1979). Differentiation, polarisation, and confrontation in rural Bangladesh. Dhaka: Centre for Social Studies.
- Jansen, Eirik G. (1986). *Rural Bangladesh: Competition for scarce resources*. Dhaka: The University Press Limited.
- Kamal, S.M. Mostafa, Che Hashim Hassan, Gazi Mahabubul Alam and Yang Ying. (2015). Child marriage in Bangladesh: Trends and determinants. *Journal of Biosocial Science* 47(1): 120-139.
- Kotalová, Jitka. (1996). Belonging to others: Cultural construction of womenhood in a village in Bangladesh. Dhaka: The University Press Limited.
- Lahiri-Dutt, Kuntala and Gopa Samanta. (2004). Fleeting land, fleeting people: Bangladeshi women in a char land environment in lower Bengal, India. *Asian and Pacific Migration Journal* 13(4): 475-495.
- Lahiri-Dutt, Kuntala and Gopa Samanta. (2013). *Dancing with the river: People and life on the chars of South Asia*. New Haven: Yale University Press.
- Lewis, David J. (1993). Going it alone: Female-headed households, rights and resources in rural Bangladesh. *The European Journal of Development Research* 5(2): 23-42.
- Malé, Chata and Quentin Wodon. (2016). Basic profile of child marriage in Bangladesh: Health, nutrition and population knowledge brief. Washington: The World Bank. <http://documents.worldbank.org/curated/en/642481468194960409/Basic-profile-of-child-marriage-in-Bangladesh> (accessed August 10, 2020).
- Maniruzzaman, M. (2009). *Management of selected social safety net programmes in the vulnerable charlands of Bangladesh*. Center for Agriresearch and Sustainable Environment & Entrepreneurship Development and Cinishpur Dipsikha Mohila Somiti, Dhaka. [http://fpmu.gov.bd/agridrupal/sites/default/files/CF\\_1\\_of\\_07\\_Final\\_report\\_-\\_Approved\\_2.pdf](http://fpmu.gov.bd/agridrupal/sites/default/files/CF_1_of_07_Final_report_-_Approved_2.pdf) (accessed July 25, 2020).
- Masud All Kamal, Md. and Choyon Kumar Saha. (2014). Targeting social policy and poverty reduction: The case of social safety nets in Bangladesh. *Poverty & Public Policy* 6(2): 195-211.
- Naved, Ruchira Tabassum and Lars Ake Persson. (2010). Dowry and spousal physical violence against women in Bangladesh. *Journal of Family Issues* 31(6): 830-856.
- Ortner, Sherry. B. (1972). Is female to male as nature is to culture? *Feminist Studies* 1(2): 5-31.
- Paul, Shankor and M. Rezaul Islam. (2015). Ultra-poor char people's rights to development and accessibility to public services: A case of Bangladesh. *Habitat International* 48, 113-121.
- Peek, Lori and Alice Fothergill. (2008). Displacement, gender, and the challenges of parenting after Hurricane Katrina. *NWSA Journal* 20(3): 69-105.
- Pulla, Venkat and Tulshi Kumar Das. (2015). Coping and resilience: Women headed households in Bangladesh floods. *International Journal of Social Work and Human Services Practice* 3(5): 169-175.

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- Rozario, Santi. (1992). *Purity and communal boundaries: Women and social change in a Bangladeshi village*. London: Zed Books.
- Samanta, Gopa and Kuntala Lahiri-Dutta. (2005). *Uncertain livelihoods: Survival strategies of women and men in charland environments in India*. The Australian National University, Canberra. <http://hdl.handle.net/1885/144075> (accessed July 25, 2020).
- Shaw, Rosalind. (1992). 'Nature', 'culture' and disasters: Floods and gender in Bangladesh. In Elisabeth Croll and David Parkin, eds., *Bush base: Forest farm: Culture, environment and development*, 200-217. London: Routledge.
- White, Sarah C. (1992). *Arguing with the crocodile: Gender and Class in Bangladesh*. Dhaka: The University Press Limited.
- Zaman, Mohammad Q. (1999). Vulnerability, disaster, and survival in Bangladesh: Three case studies. In Anthony Oliver-Smith and Susanna M. Hoffman, eds., *The angry earth: Disaster in anthropological perspective*, 192-212. New York: Routledge.