Women and Floods in Bangladesh

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This paper examines the consequences of a flood disaster on rural women in northern Bangladesh. Based on fieldwork, it is argued that floods affect rural women more adversely than rural men. Floods destroy the household resources underlying the economic well-being of rural women. Researchers and authorities in charge of rehabilitation have not paid enough attention to the uneven impact of flood disasters on gender groups. Women are rarely involved in the decision-making process regarding disaster response. The lack of participation of women in particular and the local community in general in the planning and execution of counterdisaster plans ensure that such issues are not noticed. Bureaucratic disaster respondents to be short-sighted in scope and fail to link disaster response and rehabilitation with development activities. Various nongovernmental organizations (NGOs) operating in the rural Bangladesh seem to have closer ties with the local community and a better understanding of the linkage between rehabilitation and development. However, because of the limited scope of their operations and constraints of resources, the influence of these NGOs are not sustainable. The rural women cope on their own. The status quo ante is achieved, a continuation of impoverished existence which makes them vulnerable to the next flooding or other such disasters. Successful counterdisaster strategies need to take gender dimension into account and link crisis response and rehabilitation strategies to development initiatives. This would entail participation of women in counterdisaster plans and ensuring the economic well-being of rural women.

Bangladesh is one of the most disaster-prone countries in the world. Both natural and manmade disasters create development opportunities for this country trapping an estimated 60 percent of her 120 million people in poverty and leaving them vulnerable to future disaster risks. Of various types of natural hazards that include cyclone generated coastal floods, bank erosion, tropical cyclones and droughts, riverine floods are the most regular. Apart from the most devastating floods of 1988, catastrophic floods have

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occurred six times since 1954 (Haque and Zaman 1993, p. 93). River flooding is not an unmixed blessing. Normal flooding leaves a rich deposit of silt which nourishes the farmland. However, severe flooding, judged by the magnitude of the flow, leaves a trail of devastation. River flooding is not, however, an equal opportunity disaster. Its impact is uneven both in terms of class and gender lines. The terribly inadequate infrastructure, impoverished housing and living conditions are major factors that are shared unequally according to social status and that mediate the consequences of floods.

The impact of floods or other natural disasters on women is an underexplored area. It is surprising especially since an extensive literature has emerged on the relationship between women and development (Boxer 1970; Jahan and Papneek 1979, Jahan 1989) and women and the environment (Shiva 1988; Mies and Shiva 1993). Although sociologists of disasters (Bates and Peacock 1992) have paid attention to the impact of disasters on household levels, consequences for women have not been addressed specifically.

Following a brief discussion on research design and methodology, this paper discusses (a) the physical and socioeconomic characteristics of the village under study; (b) disaster experience and preparedness by the community; (c) effects of flood disasters; and (d) the response to and the coping strategies of the community, especially of the women. The paper concludes with policy recommendations for those engaged in flood response and development.

Research Design and Methodology

This is a case study of a flood disaster in rural Bangladesh and its differential gender impacts. While all case studies are inherently limited, the larger implications here revolve around a set of basic issues common to Third World disasters: (1) the fragility and vulnerability of women's economic activities, especially in rural areas; (2) women's response, recovery, and coping mechanisms; and (3) unequal access to assistance and the social and cultural norms which perpetuate and may even deepen that inequality.

The fieldwork was conducted with the help of four male and an equal number of female interviewers. Data were collected with the use of a three-part questionnaire. The first part was used in the intensive interviews conducted with village leaders, most of whom were men. These interviews were conducted by the male interviewers. The second part of the questionnaire was used to collect data from the heads of the households. While male
Interviewers interviewed the male heads of households, female interviewers were engaged to interview female heads of households. Female members of the household were interviewed with the third part of the questionnaire. In matching the gender of the interviewer with that of the respondent we were only conforming to the local cultural norms. Discussions were also held with some of the relief workers and organizers of various NGOs who have knowledge of disaster impact on rural society.

In the study village, household level information was collected on existing socioeconomic conditions such as income, education, religion, occupation, condition of housing, family structure, family size and age composition of the family members. Information on the availability of flood shelters was gathered. Data on disaster coping strategies of women were also collected. However, no systematic data on mortality or epidemiological patterns were collected. Information on women’s access to relief and rehabilitation, their visit to relief centers, and incorporation of women in postdisaster development activities, if any, was not recorded.

The Context of the Study

Although a casual observer of Bangladesh may emphasize the homogeneity of the country, there are substantial ecological and social structural differences. Fieldwork for this paper was done in Phalia Dighar, a village in the northern part of the country which is subject to periodic river flooding. The village shares common features with other villages in the northern region of the country but is quite different from those of in the south.

Administratively, Bangladesh is divided into four divisions: Dhaka, Rajshahi, Chattagong, and Khulna. Each division is divided into an unequal number of districts—totaling 64—that are further divided into upazillas or subdistricts. These upazillas are comprised of unions which in turn are composed of mauzas or villages. Villages in Bangladesh, however, have no juridical existence in so far administrative demarcation is concerned; yet the village constitutes an important social unit and cultural space.

The village Phalia Dighar in the union of Kamaler Para of the upazilla Shaghat (or Sughat) in the district of Gaibandha sandwiched between two rivers; the Katakhali on the west and Bengali on the south. These two rivers have been a major source of woe for the people of Phalia Dighar. In the major flood of 1988 about half of the village was destroyed. Soil erosion, a major problem for the people in Bangladesh who inhabit the banks of the rivers, is also the fate of the people of this village. However, recently, a three-mile-long islet surfaced in the vicinity of the village separated by a narrow stream of water. As per the existing rules (the Khasland Act of 1987)
the land mass was distributed to those villagers who lost their land to the river in 1988. The fairness of the distribution, however, is not known. In many such distributions the poor peasants are usually left out by a nexus of the rich and powerful in the village in collusion with the local administrators.

In both infrastructural as well as socioeconomic characteristics the village is typical of this region. It has an area of 4.17 square kilometers with a population of 3,312 (1,595 males and 1,717 females). The difference in sex ratio is also typical of Bangladeshi villages and is suggestive of gender specific (male) migration. The village has 638 households. The adult literacy rate of the village stood at 18.7 percent. There are three primary schools in the village, two of which are government and one private. Between the two government primary schools there are 375 students of which 225 were males and 150 were females. Of the total of eight teachers in these two schools, six were male and two were female. The private primary school had 97 students (56 male and 41 female) with four male teachers. There is also a Dakhil Madrasah (Junior Islamic Religious School) in the village with a total of 122 students and 11 teachers (10 male and 1 female). Since there is no high school in the vicinity, the pupils of this village commute to Kachua, a union to attend high school. Ninety-five percent of the villagers are Muslim while the rest are Hindu. There are six mosques in the village.

The total land area of the village is 1,033 acres of which 670 acres are arable, 115 acres lie fallow, and 248 acres are used by individual households. About 100 acres of the arable land are subjected to one crop farming, 370 acres to double crop, and the rest 200 acres to triple crop farming. In other words, agriculture in this village was intensive. The food crops produced in the village include rice, wheat, and mustard. The occupation distribution (see table 1) of the village is also typical of Bangladeshi villages in the northern part of the country.

Table 1. Main Occupation of the Heads of the Household

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land-owning agriculturists</td>
<td>197</td>
</tr>
<tr>
<td>Agricultural workers (non owners)</td>
<td>216</td>
</tr>
<tr>
<td>Fishing</td>
<td>107</td>
</tr>
<tr>
<td>Petty trading</td>
<td>63</td>
</tr>
<tr>
<td>Local professionals (services)</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total number of households</strong></td>
<td>638</td>
</tr>
</tbody>
</table>
The majority of the land-owning agriculturists belong to the category of small peasants with landholding below 10 bighas (or little over 3.3 acres) of farmland. Of the 216 agricultural workers, there is a mixture of those who work in others’ land as wage laborers and those who work as sharecroppers. Those in local professions include both services as teachers, and employees of the local government. The majority of the villagers can be classified as poor even by the local standards. The village leaders and elders were asked to classify the villagers according to well-being. According to them, 65 percent were very poor; 25 percent were neither poor nor rich or moderately well off; five percent were well off and only two percent could be regarded as rich.

The majority of the women in our sample were not “working women” in the sense of having a paid job outside the household. However, they contributed to the household income by raising poultry, goats, and cattle. Many also have vegetable gardens. In most cases women who went outside the perimeter of their household did so in order to find firewood and water. A number of women reported that they accompany their children to schools. The religious and cultural values in the village still prohibit outdoor activities of women, but economic necessities are rapidly eroding these values. The impact of values regarding sex segregation is not uniform across classes. The grip of the cultural norms on poor women is less restrictive.

Disaster Experience

The village suffered flooding over three consecutive years: 1988, 1989, and 1990. Heavy rainfall accompanied the 1988 flood—the most devastating—ultimately causing failure of the river banks. The failure sent a deluge of water into vital crop lands, damaging the Aman crop (the principal rice crop in Bangladesh). The subsequent years of flooding made recovery from this 1988 impact even more prolonged and complicated. The most recent floods at the time of interviews took place in October 1992. Psychologically, it is expected that most of the respondents recounted their experiences based on memory of the 1992 flood.

The two most common sources of flood warnings for the villagers were radio and word of mouth from the neighbors. Of the 40 female respondents, 22 heard the warning on the radio, and 18 heard it from neighbors. There was not a single television set or telephone in the village. There were a little over 100 radio receivers. These Chinese-made radio sets sold under the brand name of “Jewel Flower” were priced between Tk.180 and Tk.200 (about US $5) which were affordable to the local people.
The typical reaction of the villagers to flood warnings included putting extra earth to raise the platform or foundation of their mud houses. Some women recounted how fearful they became and reported "praying a lot." A common practice was to place their household essentials on a higher and safer place. Twenty-four of the 40 respondents did that. Half of the respondents used extra earth to raise the courtyard and the house in order to keep the flood water away. A small number of respondents (8 people) moved their children, the cattle and the chickens to an elevated ground. Only four respondents left home to take shelter on elevated ground.

Although there was advance warning broadcast over the radio, the villagers could not do much except to wait for the impact. There was no evacuation plan in place. Indeed, the idea of evacuation was almost alien to the villagers. For ages they have lived with floods and when the situation becomes critical they have sought shelter on the high grounds in the village. The embankment usually provided high ground for the villagers, but the recent floods had even submerged this high ground (eight feet above village level). In retrospect, the embankment gave them a false sense of security. Because of lack of proper and clear advance warning, the villagers were unprepared for the calamity. They knew the flood was coming but they did not know, nor could they anticipate, the magnitude of the damage the rising water could cause. They were not at all prepared to see the embankment—their shelter—submerge.

The Effects of Disaster

Floods and cyclones, the two most common natural disasters in Bangladesh, affect all groups of the population irrespective of class and gender, yet certain class and gender differences are discernible. For example, the rich households often have bricked or semibricked houses which are not swept away by the floods or cyclone. Hence, the loss of lives and assets among the rich is minimal. In Phulia Dighar there were 16 such houses. The rich also avoided living in the disaster-prone areas. Their economic condition can also withstand the losses caused by the floods. But for the poor, who constitute the majority, it is a different story. Floods sweep away the food crop and other resources, thus reinforcing the grinding poverty prevalent in the majority of affected villages. The poor, landless peasants and the fishing communities suffered the greatest losses.

While the uneven impact of disasters along class lines is very obvious, the unevenness relative to gender is often very subtle. It is not easy to determine the unevenness of flood impact along gender lines because most studies, as well as administrators in charge of relief distribution, take the
household as their unit. From the point of relief administration, there is
certain merit to it. Floods affect the households and the families who
comprise these households. In the distribution of relief the needs of the
household as a whole are often taken into account.

Gender variation is often noticed in the mortality statistics. Deaths come
not so much from the floods, but the diseases that follow. After the 1992
floods, according to our respondents, government and nongovernmental
agencies distributed medicines and water purifying tablets which helped
contain the outbreaks of epidemics such as cholera. This is an instance of
utilization of knowledge acquired from the previous floods. Epidemics have
been identified as threats following floods, and authorities know that action
must be taken. Yet such water borne diseases as diarrhea and dysentery are
still common.

The flood of 1992 submerged the entire village. The rich, the poor, males,
females and children were all forced out of their marooned houses in search
of shelters. Apart from the embankment, the shelter of previous years, itself
under a foot of water now, some inhabitants took shelter at the railway
station some miles away from the village. Some villagers took shelter on
the roof top of their houses, if the structure was solid enough. Some
innovative families made platforms out of their wooden beds which they
tied to trees to avoid being swept away. Some villagers put themselves, their
food grain, and in some cases their cattle, on a makeshift raft made of banana
leaves.

The villagers not only lost their houses to the floods, most of them lost
their rice and other crops, cattle, chickens and ducks, fishes in the pond and
their fruit and vegetable gardens. Loss of cattle and poultry affected the
women directly, because livestock provided an important part of household
resources under the control of women. These losses had a direct impact on
the economic well-being of women.

Disaster Response in Phalia Dighar

The rail link to the nearest town, Gairbandah, was disrupted, isolating the
village from the reach of relief distribution. The village is not connected by
any bus route, because the area has no roads, and while the embankment
often doubled as a road, it was under a foot of water. Boats were the only
means of transportation linking the village to nearby villages and towns.
But few households had boats. In normal circumstances this was not a
problem because the people in the village are not very mobile. Thus, Phalia
Dighar remained isolated from nearby towns, exacerbating the difficulties
of relief distribution. Even the news of flooding could not be communicated
to the nearby town since there was no telecommunication link with the village. An employee of the nongovernmental organization (NGO), 
Nijera Kori, had no other option but to walk to Kachua, a nearby village where he was stranded for two days before he could hire a boat to go to Bogra. He brought with him some relief goods for the villagers. Nijera Kori was the first organization to mount a relief operation in the village.

Many of the women (28 out of 40) in our sample left home to collect firewood, water, and to graze cattle (or goats). All the activities under the control of women have important benefits for the household economy. A small number of women (12 out of 40) that we interviewed left homes only to visit their relatives and in most cases they were accompanied by the male members of their family. It is surprising, then, that the majority of women in our sample did not go to the relief centers which were set up in the aftermath of the floods. The relief center in Phulia Dighar was on the average only one and a half kilometers away from most of the households. The explanation that cultural values are the only factors that restrict the movement of women seems to be weak. Not that the cultural norms are irrelevant but the poor women of Phulia Dighar acted on the basis of rational calculations. They weighed the benefits of going to the relief centers against the possible loss of economic activities that they could render to their own households or to a neighbor’s and found that they were better off not going to the relief centers, since the amount of relief they could get was minimal.

The amount of relief materials, especially food, was highly inadequate. In one estimate only about 10 percent of the villagers received food assistance. Women were disadvantaged as recipients of relief as most of them (28 out of 40 in our sample) did not even go to the relief center. The 12 who did visit centers had mixed experiences. One of them had to make four trips before she could get three kilograms of rice. Some of them, however, managed to get five kilograms of rice. One respondent said that after two trips without getting any food, she decided against returning to the relief center. It is not surprising, therefore, that many women did not even bother to try. It also reflected an absence of trust in the institutions and practices of the government. Those women who went had to carry their children. One reason for taking children along was to impress upon the distributors of relief their additional food needs for their families. Women were not represented among the personnel involved in the distribution of relief goods.

Other factors that disadvantaged women in the administration of relief included the absence of food deliveries to women and families who were
unable to leave their homes to come to the relief centers. The inadequacy of relief and the delay in its distribution are realities of rural Bangladesh, but the negative perception of relief administration is important to bear in mind. Although most of the distributors of relief were men, there was a separate queue for the women. This was in keeping with the Islam-influenced social norms which forbid women to interact with nonkin male members of the community. Cultural norms alone, however, did not disadvantage women in accessing relief. There was the issue of shame too. For both men and women, going to a relief center was considered a shameful act. It was only when circumstances became desperate that people turned up at the relief centers. But in the gender hierarchy, women (more than men) were expected to go to the relief centers. The village women were caught in a double bind. The cultural norms discouraged, if not proscribed completely, their visitation to the relief centers, yet they had little choice (hunger being the alternative); when some family representative had to go, the lower status of the woman dictated that she be it. The people of the village in general showed reluctance to accept charity, especially those who had some education. Of our 40 respondents, only 12 visited relief centers and they were the ones who had no formal schooling.

### Recovery and Self-reliance

In so far as the immediate impact of the flood was concerned, there was very little variation due to gender differences. However, in terms of long-term impact, i.e., self-reliance and economic standing, women were more disadvantaged. Although disaster affected the employment situation of both men and women, the latter had to face the additional loss of household resources. It took longer for women to regain self-reliance than men in the aftermath of floods. The adverse effects of disasters on the employment opportunities of women were supported by other studies as well (Adnan 1991, pp. 65–66). The causes of the vulnerability of women to disasters are rooted in the organization of the rural society. The gender inequality in rural Bangladesh becomes pronounced in the aftermath of disasters. Although at the macrolevel both men and women suffer in the event of a flood, female members in their role of managers of the household face the brunt of the calamity.

What one observer wrote on the disadvantages of women under the domination of culture in Bangladesh some time ago still captures the situation rather well: “In a situation of poverty and scarcity women suffer most in the traditional society of Bangladesh. The sanctification of motherhood, self-sacrifice, and obedience to the husband as head of the family...
leads to women putting their own interests last always” (Sattar 1979, p. 13). Things have not changed much since the late 1970s. Women in rural Bangladesh continue to suffer in silence and their suffering increases disproportionately in times of disasters. Women in Bangladesh continue to remain—to borrow Suhrawardy’s (1992, p. 231) phrase—“statistically invisible, socially oppressed, and politically irrelevant.”

The scarcity of relief and its allocation not always based on need failed to help the rural women recover from the flood disaster. In the study village, officials in charge of relief distribution made preliminary assessment of flood impact and issued cards which entitled the cardholder to receive relief materials. Political consideration played a more important role than the need of the affected families in the selection process. The politics of patronage was pervasive. According to the respondents, the local officials of the then ruling Bangladesh Nationalist Party (BNP) preyed on the miseries of the people. Such a perception was also shared at the national level. It was widely believed that the constituencies where the opposition parties are strong received less priority in the official allocation of relief supplies.

Flood relief was nothing more than a temporary measure with little impact on the reduction of the vulnerability of the affected population. The development component in the relief and rehabilitation plan was absent. The only development work worth mentioning involved repairing the breached embankment under the scheme of Food for Work. There were not enough resources for either building new or improving existing infrastructures. Even the floodgrains (mainly wheat) allotted under the Food for Work program were very inadequate and lasted for a brief period.

Given the limited role of the government in flood relief, NGOs stepped in to organize relief activities. Nijera Kori, Bangladesh Rural Advancement Committee, CARE, and World Food Program undertook food for work programs in the months following the flood. The initial help came from the local sources, especially from the elected public officials and village leaders. The visit of important political figures such as members of parliament, ministers helped attract governmental response and helped streamline the bottlenecks of relief administration. Phulnakhara was visited by a member of Parliament and the area was declared a disaster area following a visit by the State Minister for Relief and Rehabilitation. Politicians in Bangladesh over the years have learned to manipulate and take advantage of “natural” disasters to their political advantage. Political leaders often approach these opportunities as a mechanism for recouping their political legitimacy (Khondker 1992). The leaders can project themselves—thanks to the spread of television coverage—as saviors, as friends in need.

Political
leaders and high officials compete for television time displaying their direct involvement in the relief operations.

**What Is to Be Done**

In the concluding section we would sum up the main findings of the study by recapitulating the two main points. First, women from rural Bangladesh are more disadvantaged than men in floods. Second, the official response only deals with relief to stave off starvation and disease with little attention to economic recovery of the community and especially of women on a long-term basis. Based on these findings, the following recommendations can be made which may have applicability beyond the immediate context of rural Bangladesh.

First, when linking relief and rehabilitation with development, attention should be given to economic recovery of women. This can be done by helping women regain their entitlements in the sense Sen (1981) uses the term. In the rural Bangladesh, it might simply mean supplying goats and poultry to women which will refurbish their household resources and enhance their entitlements.

Second, disaster preparedness should include both improved warning systems and construction of flood shelters for people, livestock and foodgrains. An example of linking relief plan with development strategy will be building bricked schools which will also double as flood shelters in the village.

Third, rural women should be targeted for relief distribution as well as postdisaster rehabilitation. Implementation of insurance schemes for the rural households may be useful. Such schemes can be undertaken by organizations such as Grameen Bank or BRAC, the two most important nongovernmental organizations (NGOs) in Bangladesh.

Fourth, consideration should be given to granting special preference to women in employment generating public works that are undertaken in the postdisaster period. The projects of USAID, World Food Programs (WFP), especially, Vulnerable Group Feeding Program can provide a useful model in this regard.

Fifth, an effort should be made to involve local community members, especially women, in the distribution of relief and in counterdamage planning. This could be envisaged in the broader objective of ensuring participation of women in local government. As it has been argued by other authors that presence of women in national leadership position is no guarantee that women will have access to participation at the local levels (Sobhan 1992).
Finally, efforts should be made to enhance both cooperation and coordination between governmental and nongovernmental organizations involved in any phase of disaster response. Also, the role of politics (not just public administration) needs to be examined and disaster responses should be nonpartisan. Forming multiparty disaster management committees at both national and local levels may preclude political use of relief by the ruling party.

References