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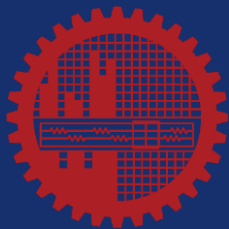
¹Affiliation not available

April 11, 2023

Gender Considerations in Flood Management: A Case Study in Bangladesh

***Fabiha Rahman,** Sonia Binte Murshed, Ahmed Hossain, Rashel Mahmud, Shampa*

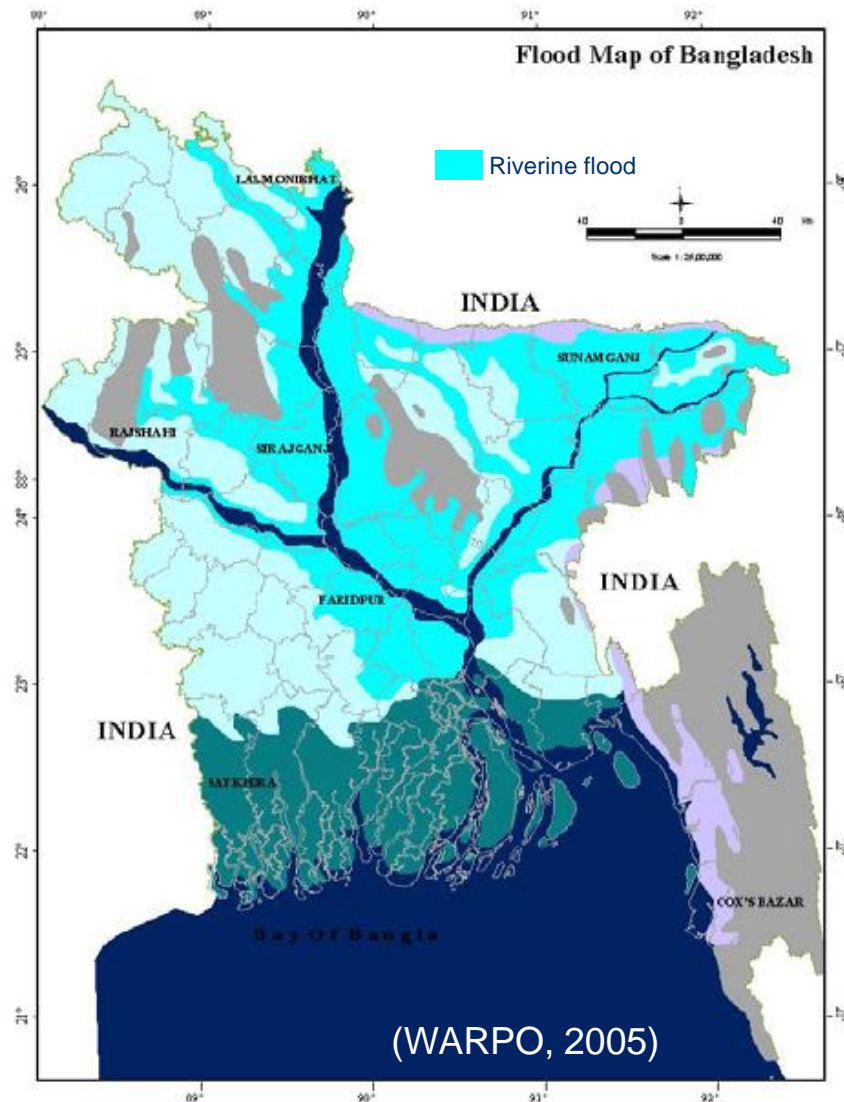
Date: 14 December 2022



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SCIENCE LEADS THE FUTURE

FLOODS IN BANGLADESH



- Sixth most flood-prone country in the world
- The geographic location, land characteristics, multiplicity of rivers, and the monsoon climate make Bangladesh highly vulnerable to flood
- 1/10th of the overall land surface severely flooded in a typical year
- The 1998 flood killed 1100+ people, left 30 million homeless, and caused property destruction and other hardships for countless more.

(Dewan, 2015; UNDP, 2004; Naz and Saqib, 2021)

WOMEN & FLOODS

- Rural women of developing nations are more vulnerable to flood
- Societal roles, inequitable rights, lack of resources- all contribute to the gender-based differences in vulnerability (Naz and Saqib, 2021)



(Zami, 2022)

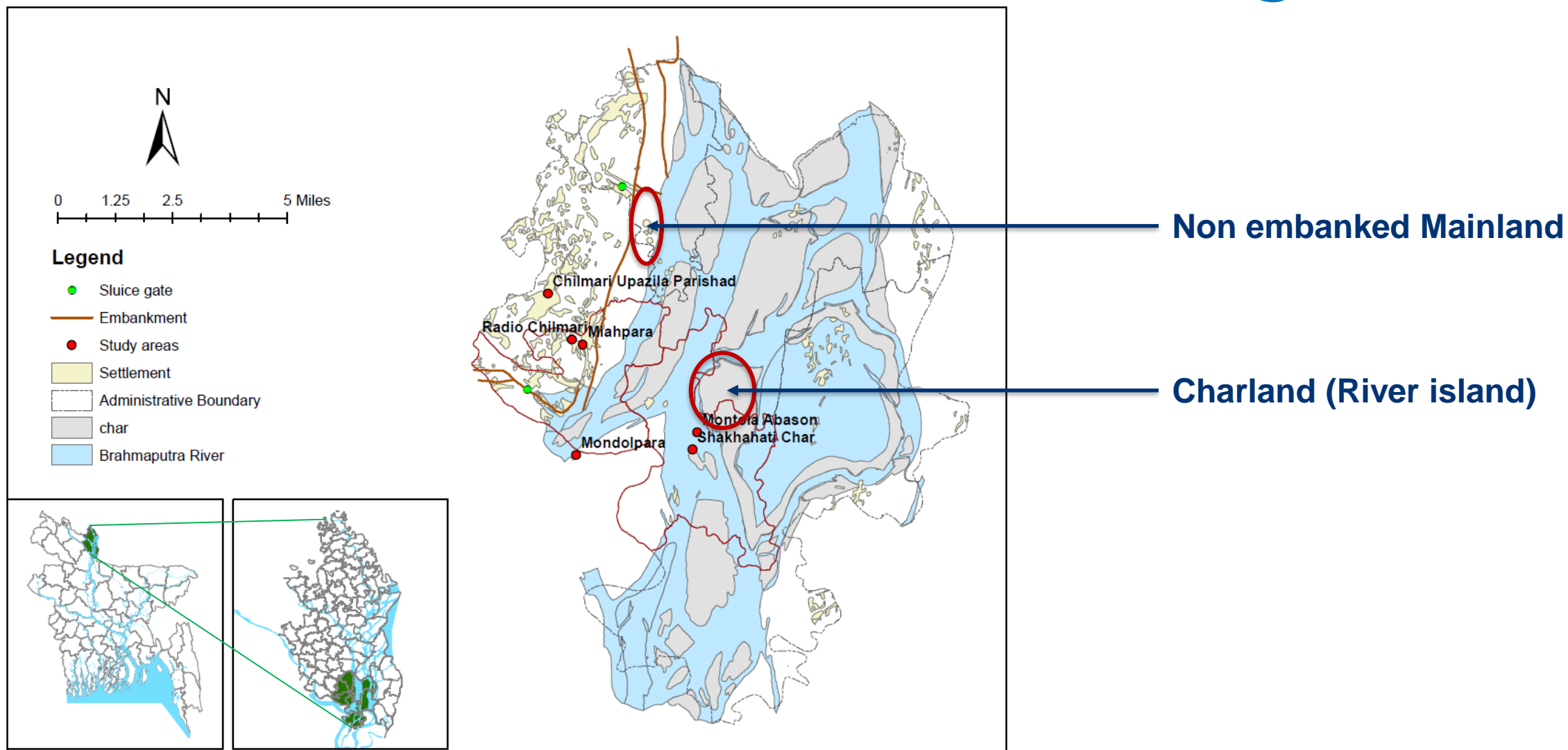


(Field survey, 2022)



(Reuters, 2000)

Study Area: Chilmari, Kurigram, Bangladesh



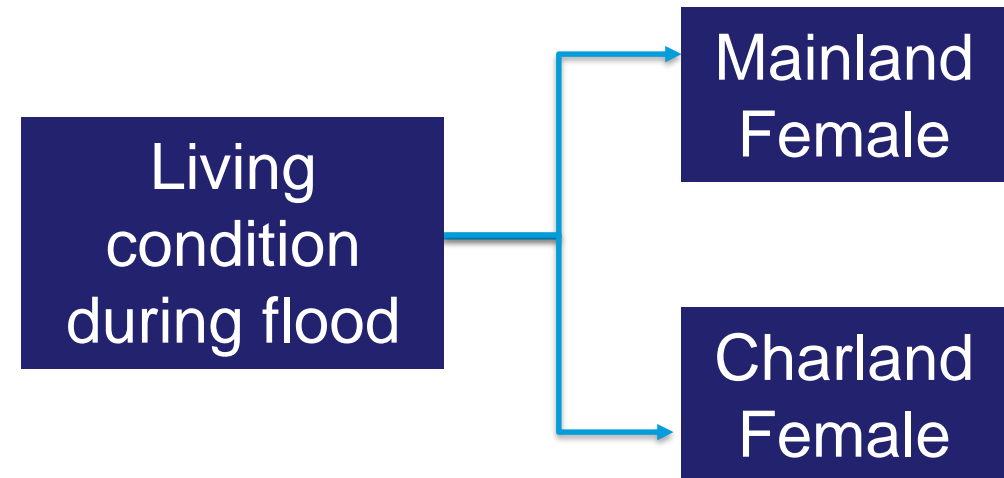
Methodology

- Qualitative research
- **Focus group discussions:**
 - ❑ condition of flood-shelters
 - ❑ coping strategies

- **Female respondent profile**

Occupation (primary)	Age range	HH size
Home maker	20-55	1-8

- **Key Informant interview**
Female disaster volunteers



Study area profile

- **Area:** 225 km²
- **Population:** 1,22,841 (Year 2011)
- **Economic condition:** Chilmari upazila is one of the most poverty-stricken areas of the country. *77% of the people here live below the poverty line*
- **Geographic vulnerability:**

Flooding Pattern	Mainland	Charland
Duration (Days)	14-15	14-15
Depth in 2020 (ft.)	4-5	4-5
Maximum Flood depth (ft.)	10-11	10-12
Number of floods in a single year	2 to 3	2 to 3

(BBS, 2014; Hasan, 2017; Field survey, 2022).



MAINLAND

Impoverished living conditions



A typical dwelling in mainland



Unpaved road-network in mainland, frequently gets submerged under water

CHARLAND – RIVER ISLAND

Equipped with improved facilities



Sloped walkway leads to an elevated area
where flood water does not reach



Almost all households here own multiple livestock
in this char

CHARLAND

Active involvement of GO/NGO



(Field survey, 2022)

By agriculture and rural development project
- GoB and IsDB



(Field survey, 2022)

Legal Information booth by Friendship NGO

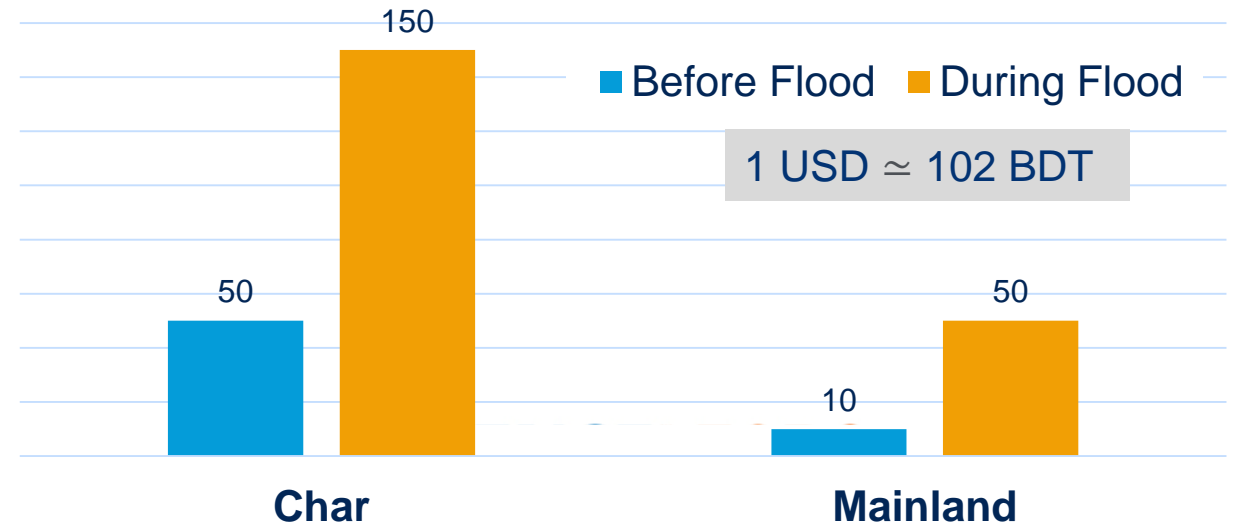
EVACUATION TO SHELTER

- Boats and banana tree rafts used for transportation
- difficult for pregnant and disabled people



- Boat charge is more than 3-4 times than usual
- 300-800 BDT is charged **when livestock are taken into the boat**

Changes in boat fare (BDT) during the year 2020



SHELTER- CHARLAND



- **No designated shelters**
- Residents of the entire char use Abashon as **temporary shelter**
- Abashon located at 0.5 km from the neighborhood
- During flood, Abashon area becomes **extremely congested**

Abashon- (*govt provided housing for low-income groups*) **located in the elevated area of Montola Char**

SHELTER- MAINLAND

Mainland residents mainly use schools as temporary shelters



- No designated shelters
- Aside from **nearby schools**, they use the **embankments** to stay during flood (*distance 0.5-1 km*)
- **People bring their livestock** with them during evacuation, and they stay at the shelter with them
- During flood, shelters become **extremely congested**

SHELTER- ACCESS TO UTILITY & HYGIENE FACILITIES



(Field survey, 2022)

Typical latrine in Char

	Char	Mainland
Sanitation facilities	<ul style="list-style-type: none"> • Latrine overflows during flood 	<ul style="list-style-type: none"> • School washroom was locked • One toilet for all • Long queue
Bathing	<ul style="list-style-type: none"> • River 	<ul style="list-style-type: none"> • River
Personal hygiene	<ul style="list-style-type: none"> • Cloths used during menstruation • difficulty in open air drying due to social taboo 	<ul style="list-style-type: none"> • Sanitary napkin provided by NGO • Clothes used • Unhealthy disposal practice

SHELTER- ACCESS TO SAFETY FACILITIES & PRIVACY



	Char	Mainland
Level of privacy	<ul style="list-style-type: none">Residents of Abashon provided accommodation when needed (breastfeeding, child birth etc.)	<ul style="list-style-type: none">No privacy givenClothes, Polyethene used as curtains
Security system	Night guard (Abashon)	N/A

SHELTER- Exposure to harassment/indecent behavior

No reported cases of physical harassment in this area. *However, females remain constantly conscious about their safety*

FGD Respondent from Charland	<i>“During our stay at Abashon, we have often seen boys from other chars gather around and openly consume weed. This kind of indecent behavior is not expected, especially at times of crisis. But we had no option to raise objection. This is a rural society, our concerns are never taken seriously”</i>
FGD Respondent from Mainland	<i>“We have three daughters in our house. During flood, people from different neighborhoods stay at the shelter (school) together. No body knows what is on others mind. There is even no security guard here to ensure nothing wrong happens. Hence, at least me or my husband stay up all night to look after my daughters”</i>

HEALTH CARE



(Friendship NGO, 2022)

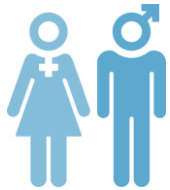
- **Mainland:** Healthcare was not much accessible to females in mainland as communication was disrupted during that time.
- **Charland:** a mobile clinic of Friendship NGO was available only once a month. The medicines provided was not sufficient to meet everyone's need.

PROBLEMS THAT REQUIRE IMMEDIATE ATTENTION

View of Disaster Volunteers



Evacuation of elderly, pregnant woman, disabled person



Lack of privacy in shelter, toilet and other facilities



No actions taken for **personal hygiene issues**, despite raising concern



Constant **fear of harassment**, insecure at shelters

*Participants name: Morjina khatun, Disaster Volunteer, FPP
Toma, Disaster Volunteer, BDRCS*

PRE & POST-FLOOD ACTIVITIES

1

- Elevate plinth

2

- Stock food & wood

3

- Construct earthen stove

4

- Keep HH items in elevated spaces

5

- Take loans from organizations

1

- Return home

2

- Repair house

3

- Cleanse surroundings

4

- Purify tube well with alum

5

- Elevate base

MAJOR FINDINGS

- Flood generates added responsibilities and sufferings for women, which are often ignored
- Years of flood exposure have forced women to manage with flood-related difficulties with limited resources
- Flood induced vulnerabilities for women are rooted in the rural socio-cultural setting

RECOMMENDATIONS

- Ensure gender responsive flood management system in flood-vulnerable regions
- Involve and ensure participation of women, disabled and other socially disadvantaged groups in the planning process
- Educate and empower rural women, ensure their rights

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THANK YOU

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