

# **Observed Adaptations During Moderate and High-Intensity Floods in Bangladesh**

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Observed Adaptations During Moderate and High-Intensity Floods in Bangladesh      Expert Meeting on Adaptation

## **Outline**

Why Bangladesh is vulnerable to flood (biophysical features)

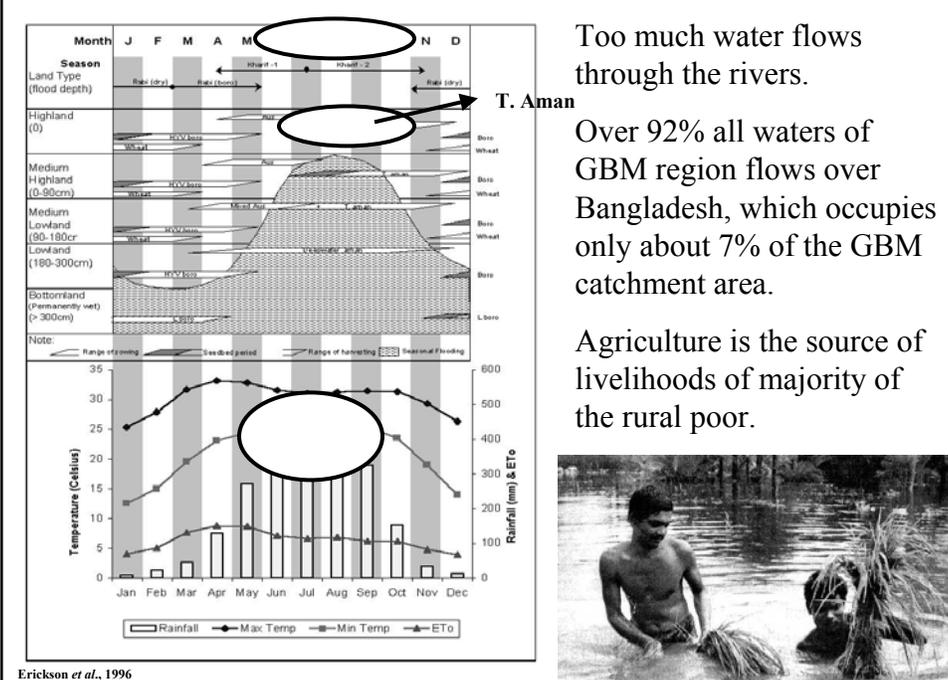
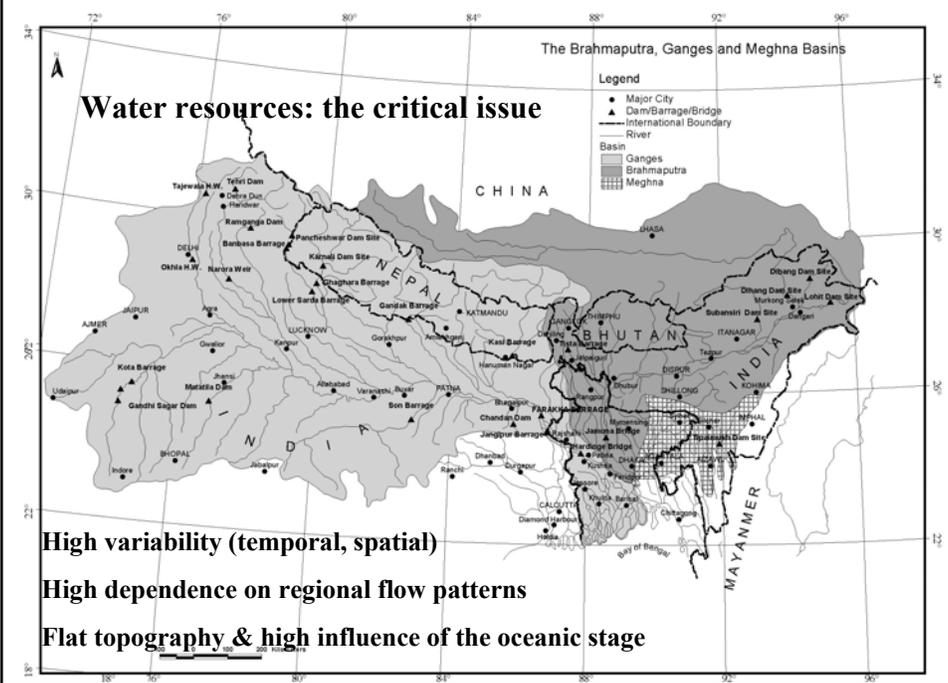
Observed adaptations

    Pre-flood preparedness

    During flood adaptation

    Post flood rehabilitation/reconstruction

Long-term measures



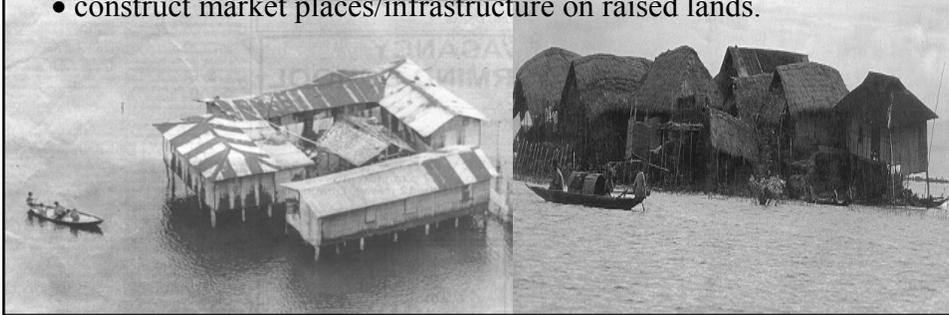
## Observed adaptations

### Moderate flood – ‘barsha’

People perceive barsha to be useful. Barsha does not cause any significant harm.

To avoid harmful effects of barsha, people

- use boats for transportation
- construct houses on raised plinth
- construct market places/infrastructure on raised lands.



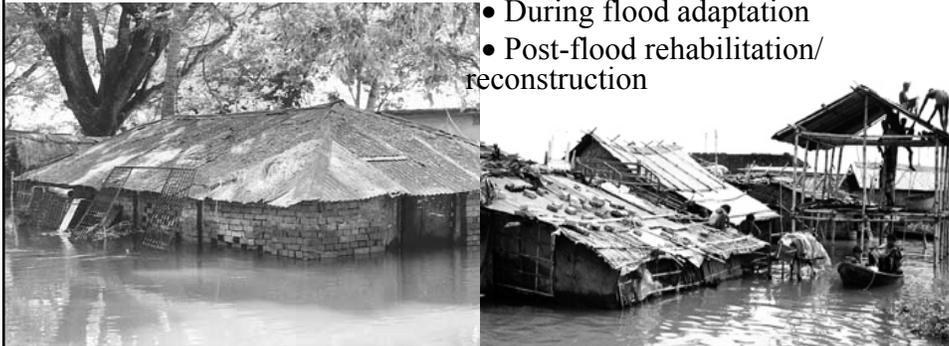
## Observed adaptations

### High Intensity Flood – ‘bonna’

People perceive bonna as harmful. Bonna causes significant damages to livelihoods of ordinary people. People have been considering variety of adaptations to avoid damages.

There are three significant stages:

- Pre-flood preparedness
- During flood adaptation
- Post-flood rehabilitation/reconstruction



### Pre-flood preparedness

Follow flood warning/forecast (supported by institutional adaptation)

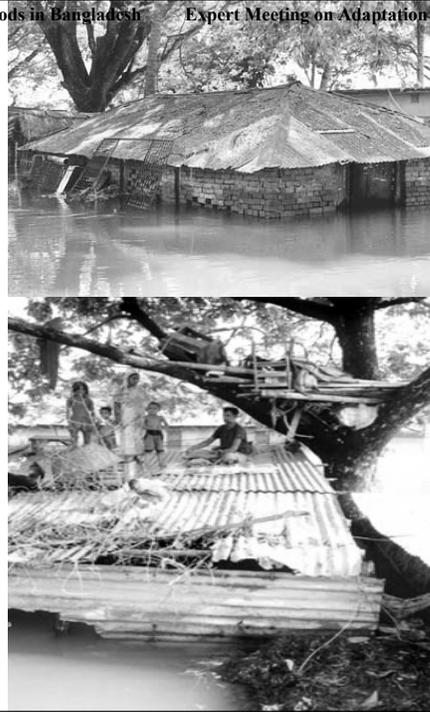
Construct a makeshift platform inside and/or outside the house

Construct platform on stilts outside the house (within the homestead)

Make raft (bamboo and banana plant) for people/livestock/poultry

Prepare/mend or collect boat(s) for transportation

Wrap dried seed, food items, medicine etc. in water resistant polythene bags and hang from the roof



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### During-flood adaptation

Continued adjustment with floodwaters

Relocate to safer places (flood shelters/highways)

Help neighbours during relocation processes

Raise height of tube wells (add extra tube)

Use raft/boat for transportation

Prepare/mend or collect boat(s) for transportation

People themselves manage activities in flood shelters

The image contains three black and white photographs. The top photograph shows a large truck with a tall load of goods being transported on a raised tube well structure in a flooded area. The middle photograph shows several people on a raft, with one person in the water. The bottom photograph shows a car parked inside a flood shelter, with people sitting around it.

### Managing a flood shelter

Within a community, the rich contribute to a common fund, while the poor contribute physical labour to run the flood shelter (prepare & distribute food 3 times day; arrange medical services; supply drinking water; ensure sanitation services etc.)

Relocate household animals (pets, cattle & poultry) in safer places

Government offer various kinds of support (food, relief, infrastructure, ...)



### Post-flood rehabilitation

Coming back to own dwelling

Bringing back household animals

Mend houses, as needed (neighbours help each other)

Restructure cropping calendar, if needed

- Drain floodwaters from the crop land as early as possible

- Choice of crop variety (late transplanting cultivars)

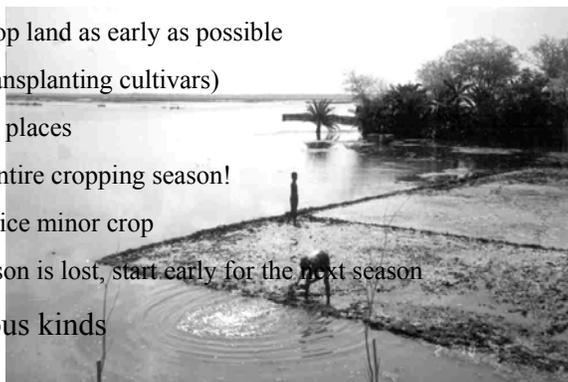
- Bring seedlings from far away places

- Skip, if deemed appropriate, entire cropping season!

- Choose a quick growing non-rice minor crop

- If the immediate cropping season is lost, start early for the next season

State offer support of various kinds



## Post-flood rehabilitation

### State's support programmes

Relief for (i) food security, (ii) clothing, (iii) house rebuilding

Test relief (distribution of food items, VGF cards)

Safety net approach – addressing the needs of poor, old

Income generating restructuring activities (FFW programme for roads/infrastructure)

Agricultural support and extension (credit, seed, fertilizer subsidies etc.)

Soft term loans/credits

### NGOs

## Long term approach

Knowledge-bade enrichment;

flood proofing; flood regulation

Pilot testing on alternative livelihood options

(CARE RVCC project)



**Thank you for your kind attention**