

Title: Socio-Hydrological dynamics in Bangladesh - Understanding the interaction between hydrological and social processes along the Brahmaputra floodplain

Questionnaires for household survey

Date:

Sl. No:

GPS location/ mark in map:

Section A: General household information

1. Name of respondent:

2. Age:

3. Father's / husband's name:

4. Address:

5. Contact number (if any):

6. Distance of house from river (approximately):

7. Main occupation (household main income source):

7a. Farmer: ☐ Large (land > 7.50 acres) ☐ Medium (land 2.5-7.49 acres) ☐ Small (land 0.5-2.49 acres) ☐ Marginal (land 0.05-0.5 acres) ☐ Share cropper

7b. Fisher: ☐ Fishing in the rivers ☐ Fish culture in ponds ☐ Both

7c. Businessman: (type)-

7d. Service holder: (Institute/organization)-

7e. Daily wage labor: ☐ Agricultural-labor ☐ Other (specify)

7f. Housewife

7g. Other (specify):

8. Distance of agricultural land from river (approximately):

9. Basic information about household

9a. Household Size:

9b. No. of earning member:

9c. Number of household members absent much of time here:

9d. Assets of the household: Land ownership

Type of Land	Area (dec)	Value (BDT/dec)
Agriculture		
Ponds		
Homestead		
Others		

9e. Other assets:

Assets	Number	Approximate value (BDT)
Housing materials/ construction type/size		
Livestock		
Others		

9f. Average annual income of the household (BDT):

Agriculture:

Fisheries:

Other sources list:

9g. Average monthly expenditure of the household (BDT):

9h. Housing Condition (building material):

10. How long are you living here? years.**11. Information about origin?** ☐ Born here ☐ Immigrated from another place**12. Reason of immigration** (Only applicable for immigrated people from another place):

12a. From where did you come here?

12 b. What is the reason/s of your immigration?

12c. Before immigration, did you know if this location was exposed to flooding or not? ☐ Yes ☐ No12d. Before immigration, did you know if this location was exposed to riverbank erosion or not? ☐ Yes ☐ No**Section B: Flood experiences of the household****13. Information about flood:**13a. Have you seen floods in your area before? ☐ Yes ☐ No

13b. If yes, please specify:

Years	Months	Flood depth (feet) in your homestead	Flood depth (feet) in your agriculture land	Flood duration (days)

13c. From where does the flood come to your home or agricultural land?

☐ Heavy rainfall ☐ From Jamuna river ☐ Other rivers/channels (please specify):

13d. Agriculture cropping pattern vulnerable to flood:

Name of crop/s:

Stage: Seedling / Vegetative/ Flowering/ Ripening

13e. Did you change your agricultural cropping pattern due to flooding? ☐ Yes ☐ No

If yes, then how many times and how?

13f. Did you change your agriculture land use pattern due to flooding? ☐ Yes ☐ No

Years	Permanently/ Temporarily	Land from- to	Changed area (dec)	Reason for changing

13g. List of household's assets damaged in these flood events (same year as Q13b) and their value:

Household assets	Value (BDT)					
Years						
Agriculture crops						
Farming tools (e.g. pump)						
Fisheries						
Livestock						

House and HH materials						
Others:						

14. How did you recover from these damages? What were the strategies?**15. In your opinion, what is main cause of these floods?**

- ☐ Excessive monsoon rain for several days ☐ Increased discharge of the nearby rivers and channels
☐ Rapid sedimentation of riverbeds ☐ Sea level rise ☐ Others (please specify; if, necessary explain)

16. What are the effects of these floods you have experienced?

- ☐ [a] Totally displaced from home ☐ [b] Partially (temporarily) displaced from home
☐ [c] Not displaced but the home was submerged under flood water ☐ [d] Lost all field crops
☐ [e] Lost all fisheries ☐ [f] Loss of daily income
☐ [g] Suffered from diarrhea/stomach flu/ pneumonia/cold/fever/skin disease/snake bite/death
☐ [h] Others (please specify; if, necessary explain)

Years	Codes	Others (please specify)

17. Coping strategies of flooding: For homestead:

- ☐ [a] Raising homestead ☐ [b] Raised platform for human
☐ [c] Raised platform for food, fuel, water ☐ [d] Moving to flood shelters/ safer places
☐ [e] Raised platform for poultry and livestock ☐ [f] Changing eating behavior
☐ [g] Use purifying tablets for drinking water ☐ [h] Portable stove for cooking
☐ [i] Transferable construction materials of house
☐ [j] Plantation/ iron sheet/ bamboo around house to prevent erosion
☐ [k] Others (please specify):

Years	Codes	Others (please specify)

For agriculture, aquaculture and other economic activities and income generation:

- ☐ [a] Flood resistant crops (crops:)
☐ [b] Planting a short duration crop after floods
☐ [c] Keep fallow during flood season ☐ [d] Grow vegetable in raised land/ platform
☐ [e] Protect fish pond with net ☐ [f] Alternative source of income during flood
☐ [g] Selling women jewelry ☐ [h] Borrowing from others
☐ [i] Mortgaging and selling land and other productive assets.
☐ [j] Others (please specify):

Years	Codes	Others (please specify)

18. Did you change your occupation due to flood? ☐ Yes ☐ No

Years	Permanently/ Temporarily	Previous occupation	Changed occupation

19. Has your income level decreased due to flood? ☐ Yes ☐ No

If yes then, ☐ Permanently ☐ Temporarily

Mention monthly amount and year?

20. Has your cost of living increased due to flood? ☐ Yes ☐ No

If yes then, ☐ Permanently ☐ Temporarily

Mention monthly amount and year?

21. Is there scarcity of job opportunity due to flood? ☐ Yes ☐ No

If yes, mention how does this arise?

22. Is there any new job opportunity due to flood? ☐ Yes ☐ No

If yes, mention how does this arise?

23. What is your perception about controlling flood with structure like embankment or others?

☐ Good for society, it saves lives and damages

☐ Not good for society. (Why? Explain: _____)

☐ Others (please specify)

24. The presence of an irrigation project (with its bunds etc) would affect the pattern of flooding?

☐ Yes ☐ No

Please clarify:

25. Are you thinking of migration to another place for better opportunity? ☐ Yes ☐ No

If yes, mention why and where?

☐ Temporary migration for few months (explain: _____)

☐ Permanent migration with family (explain: _____)

26. Do you know anyone (neighbor, family friends) who had migrated from this area? ☐ Yes ☐ No

If yes, mention why, which year and where?

☐ Temporary migration for few months (explain: _____)

☐ Permanent migration with family (explain: _____)

Please specify if there are multiple possibilities:

27. Did you receive any early warning message about the flooding? ☐ Yes ☐ No

Years	how many days before of the event	from whom	how/medium

28. What measures were taken by the government against flooding?

29. Did you do any special flood response activity for the society? If yes, list them below.

Section C: River bank erosion experiences of the household

30. Information about river bank erosion: (if char erosion then mention)

30a. Have you ever experienced with river bank erosion? ☐ Yes ☐ No

30b. Did you migrate due to river bank erosion? If yes, when and how many times in your life?

Years	Old place	New place	Distance (km)	Reasons

30c. Have you lost your lands due to river bank erosion? ☐ Yes ☐ No

Years (with occurring month)	Type of lands	Area (ha)	Value (BDT)

If no, then do you think that you will lose your lands in future? ☐ Yes ☐ No

30d. Have you lost your homestead and move home due to river bank erosion? ☐ Yes ☐ No

Years (with occurring month)	Area (ha)	Value (BDT)	Homestead assets lost	Value (BDT)

If no, then do you think that you will be forced to move home in future? ☐ Yes ☐ No

30e. Did you change your agricultural cropping pattern due to river bank erosion? ☐ Yes ☐ No

If yes, then how?

31. How did you recover from these damages listed in Q309c, Q30d?

32. In your opinion, what is main cause of river bank erosion?

33. Did you receive any assistance during riverbank erosion? ☐ Yes ☐ No

If yes, from whom and how?

34. In your opinion and experience, has the Jamuna embankment helped to protect people from river bank erosion?

35. Coping with riverbank erosion:

For homestead:

For agriculture, fishing and other economic activities and income generation:

36. Did you change your occupation due to riverbank erosion? ☐ Yes ☐ No

If yes then, ☐ Permanently ☐ Temporarily

Mention the previous occupation(s) and year of change(s)?

37. Has your income level changes due to riverbank erosion? ☐ Yes ☐ No

If yes then, ☐ Fell ☐ Same ☐ Rose and ☐ Permanently ☐ Temporarily

Mention monthly amount and year?

38. Has your cost of living changed due to riverbank erosion? ☐ Yes ☐ No

If yes then, ☐ Fell ☐ Same ☐ Rose and ☐ Permanently ☐ Temporarily

Mention monthly amount and year?

39. Did you receive any early warning message about the riverbank erosion? ☐ Yes ☐ No

Years	how many days before of the event	from whom	how/medium

40. What measures taken by the government against riverbank erosion?

41. Do you have any additional comments?