Semi-structured questionnaires for in-depth interviews/ Focus group discussions (FGD)

Hilsa fishers (man and woman)-

- **Background Information** Name, village name, age, marital status, contact number, education, family members, village name, etc.
- **Fishing and fishers behavior-** Could you tell me a little about how and why you became a fisherman or What is the primary purpose of your involvement in fishing? Fishing as a profession (how long)? Do you have your own boat? Otherwise how you will manage to fish? Where do you go for Hilsa fishing? Do you know when Hilsa breed? Do you have any idea about the Hilsa fish breeding ground? Who fish there and are there any outside fishers? Do you take loan to operate your fishing activities and from whom you take the loan? How you will repay the loan? Is there any agreement between you and loan giver? What are the difficulties you face during your fishing? Is Hilsa overexploited? Is jatka overexploited? Could you tell me the reasons behind this? What is your advice to minimize the situation?
- The economy of the family-Could you tell me about the housing condition that you live (is it made of Cane/palm/trunks, corrugated tin, Cement & bricks, Wood planks & shingles)? Tell me the assets that you have in your house. What is your average monthly income from fishing? What are your other sources of income of the household? Are you a member of a fisher's association -Hilsa Conservation Groups (HCGs), Hilsa Ghat Groups (HGGs), and Community Savings Groups (CSGs), Alternative Income Generating Activity (AIGA)? If yes, then why? What do you do when there is no income from fishing? Do you have other alternative jobs, if yes what? Are you happy with your living conditions and do you want to be your child as a Hilsa fisher? Why and why not?
- Local ecological knowledge How was the fishery during your parents and grandparent's generation? What kind of gear they used, what species did they fish (Hilsa and others), were there any fishing rules? What gear types and vessels are used in the fishery? How does Hilsa vary with season and from year to year (Average catches per fishing trip, fish size, the presence of eggs, year to year decrease or increase)? With whom you share your fishing experiences? How will all the knowledge be passed on to younger generations (The question will be asked to indicate a potential change in traditions, knowledge transfer)?
- **Fishing rights and regulations** Are you aware of any Hilsa management regimes introduced by the Government (Hilsa sanctuaries, jatka fishing ban period, and conservation of gravid/full of eggs Hilsa?)
- **Resilience (Mainly to Hilsa fishers)** How climatic shocks and stresses impact your household (negatively or positively) both inland and at sea? (Shocks-unexpected and stresses-mental or emotional that include: cyclones, floods, sea

level changes, land erosion, and variations in temperature and rainfall, salinity intrusion, climate change and others). Furthermore, could you explain the impacts of those shocks and stresses include livelihood activities and strategies (fisheries or non-fisheries related). How you tackle these, both in the short-term (when it happens) and in the longer-term (after it happens and within a few months)? What things facilitate or constrain while tackling these? What things help most while tackling these and how? Describe the significant socio-economic and environmental concerns you face in your livelihoods and the fishing communities? Suggest actions and measures that should be taken to alleviate problems in the livelihoods of fishers, and the fishing communities. Do you think environmental changes or climate changes over time impact on the production of fish and your catch? Do you see any species of fish is no more available that you used to catch them before? In your opinion what are the reasons for losing fish species? Please, specify? What is your overall experience about environmental change over time in this area and influence on your livelihoods? Is your livelihood affected by the closed/offseason and zone? How enough is the compensation provided? If you are not a recipient or the compensation is not enough, what are the most important strategies you do to cope in times of hardship?

Ban period and the role of incentives - What is a ban period of Hilsa? Do you • know the importance of Hilsa ban period? When does it start? What are the rules and regulations during the Hilsa fishing ban period? How long is the ban period? Do you notice any enforcement activity take place during the ban period? Are there any poachers? What kinds of punishment are subjected to? Do you think ban period is good for you or not? What do you want to do during the ban period? How will you survive or compensate? Do you get any subsidies from the government? Is it enough for your family? Do you have new ideas to improve the situation during the ban period? Has not being allowed to catch Hilsa zones during the ban period changed your fishing behavior? If so, has this influenced your household income and how much? How much in household income do you get from other activities that you do during the ban period, which you would not have done if you had been fishing? If you are affected by the current ban period (or if you were to be affected in the future) how much is your minimum willingness to accept compensation in Taka? Are you a recipient of the compensation scheme? How long have you been participating in the scheme? Do you think the compensation scheme has had the positive impact on Hilsa stock regeneration, Hilsa catch levels and the improvement of fisher's livelihoods? Over the last years, do you think have changed as a direct result of the compensation scheme? If no change, what is the reason? Do you think the distribution of compensation is fair, why and why not? Which people in the village get compensation? Who do you think should be receiving compensation? In your opinion, what is the level of compliance with the ban period and If not,

everyone complies in a particular group, then (in your opinion) what needs to be done to enhance compliance within these groups? Why do you think the pressure to repay the loan is an obstruction to abide by ban period? Do you think the fishing ban period fits well with the Hilsa breeding season?

Co-management- What are the problems of fisheries management? Do you know • something about co-management? Are you involved in fisheries management and co-management, please explain what advantages and disadvantages of the comanagement system are? Who is involved in the co-management processes and what is their role? What co-management activities have been carried out in your village or areas? Do you have ideas, who is funding for the co-management activities? What do you think about the role of the local leaders and government officials in developing and implementing co-management? What do you think about the power of fishers in co-management in your village/union/upzilla? What factors affecting the exercise of fishers' powers? What do you think about the government policies and legal support for co-management in your village? What are the most significant changes in your village after co-management initiated? In your opinion what are the shortcoming of the co-management system? What is your advice / are your suggestions for successful co-management in your locality? In your opinion, what are the conditions for you as an individual to continue participating in co-management activities? Do you think that the co-management activities would be continued without any external support and how you will do that?

Specific questions to other stakeholders involved in hilsa fishery:

• **Boat owners**: How you are involved in Hilsa fishery? What are the conflicts/cooperation that you have with other stakeholders?

• **Fish traders**: Are you a currently a fisher? Were you a fisher in the past? Since when local fishers started to sell their catches to you? When did you start to sell fishing products? What fishing products sell the best? Do you sell only Hilsa fish? Do you have any arrangements with any of the local fishers to have them sell their products exclusively to you? What is this arrangement? How many fishers only fish for you?

• **Money lenders:** What is the primary purpose of your involvement in fishing? What do you think about the co-management arrangements? How do you think you can co-operate in the co-management arrangement?

• **Local NGOs** (officials working with fishing communities): What is the primary purpose of your involvement in Hilsa fishing? What do you think about the co-management arrangements? How do you think you can co-operate in the co-management arrangement?

• **Local government representatives** (Upazila Chairman, Union Parishad Chairman, Union Parishad Member)- What is the primary purpose of your involvement in fishing? What types of problem do you face while implementing the government fisheries regulations? What are the essential things that you consider implementing the incentive scheme among hilsa fishers?

• Local governments administrative personnel's (Fishery officer, Police and Coast Guard): What is the primary purpose of your involvement in fishing? What types of problem you face while implementing the government fisheries regulations? What is your idea about the comanaging Hilsa fishery? What do you think about the ban period and its outcomes?