



INITIATIVE ON  
Aquatic Foods

# Perceptions of fisheries compensation schemes by fishing communities in Bangladesh



Photo credit: Patrick Smallhorn-West/WorldFish



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## Photo credits

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# Table of contents

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Background	1
Objectives	3
1. Methods	4
2. Results	7
2.1. Management	7
2.2. Livelihoods	7
2.3. Compensation	8
2.4. Resources	10
2.5. Practice	11
3. Conclusions and recommendations	12
3.1. Implement adequate monitoring and evaluation programs	12
3.2. Focus efforts on those who are most vulnerable	12
3.3. Strengthen community cohesion, registration of community-based organizations (CBOs) and registration of fishers	12
3.4. Strengthen community savingsgroups (CSGs)	12
3.5. Consider minimum investments in communities and ensure sufficient follow-up	13
3.6. Hire social scientists to work on social projects	13
3.7. Avoid over dependency on NGOs for market connections and development	13
3.8. Link fisheries programs with other government departments	13
Notes	14
References	15
Appendix 1 (Bhola): Hilsa fishing ban and compensation schemes	16
Appendix 2 (Patuakhali): Hilsa fishing ban and compensation schemes	21
Appendix 3 (Cox's Bazar): Hilsa fishing ban and compensation schemes	27
Annex 1. Questionnaire for the experimental AIGA group	38



# Background

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Seventeen million people in Bangladesh depend primarily on inland and marine fisheries, comprising approximately 11% of the population and 3.5% of the national GDP (Bhowmik et al. 2021; Sultana et al. 2021). Most are small-scale fishers, who, in the context of Bangladesh, are regarded as one of the most vulnerable groups in the fishing industry (Alam et al. 2021). While inland and marine fisheries in Bangladesh provide critical support for food, poverty alleviation and livelihood security, they are also considered to be heavily overexploited, risking the persistence of these fisheries and posing a major threat to biodiversity and ecosystem integrity (Billah et al. 2018; Islam et al. 2020). Of particular importance is the hilsa (*Tenualosa ilisha*) fishery, which comprises 12% of total fish production and 1% of Bangladesh's GDP (Talukdar et al. 2022).

Since 2003, in response to concerns over declining fisheries resources, the Government of Bangladesh (GOB) has implemented various fisheries management measures (Nahiduzzaman et al. 2018). These include the following:

1. A 65-day ban on all marine fishing activities from May 20 to July 23 each year (implemented in 2015).
2. A 22-day brood hilsa ban across the whole country from October 1 to 22 each year (implemented in 2007, but current extent since 2016).
3. An 8-month jatka (juvenile hilsa <25 cm) fishing ban from November to June (within the conservation areas).
4. A 2-month hilsa ban in five designated "hilsa sanctuary" areas: four established in 2005, with a ban in March–April, and the other in 2011, with a ban in November–December.

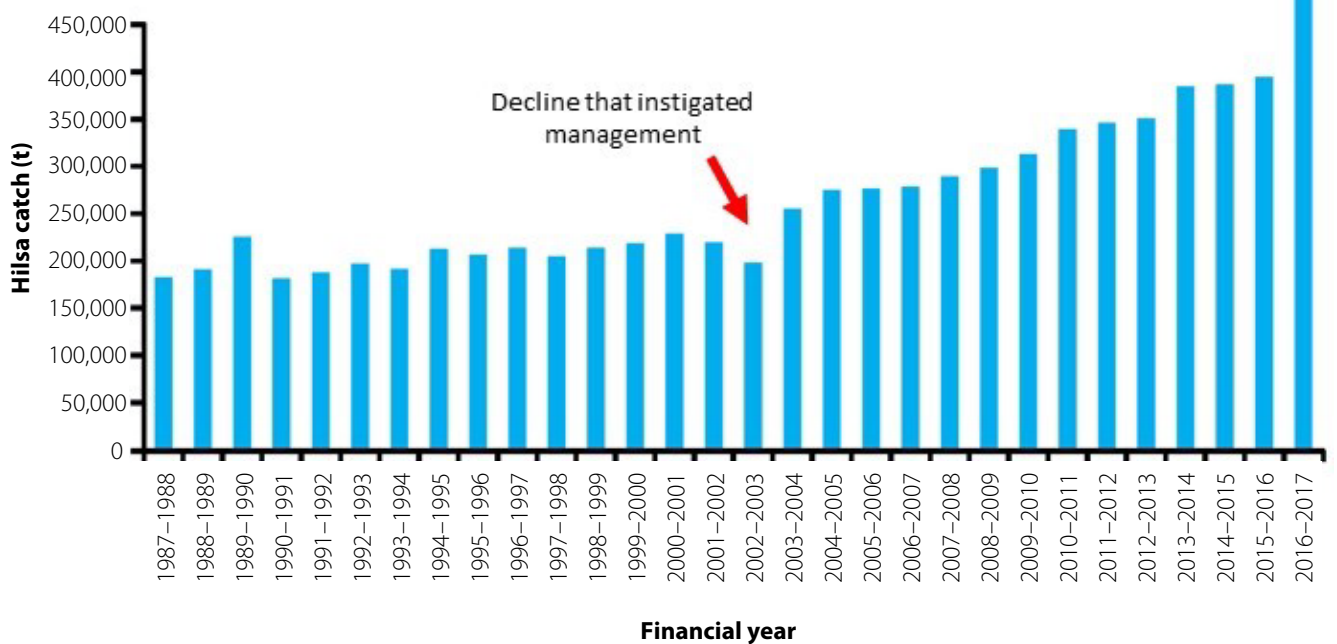
The fisheries and conservation values attributed to these ban periods are significant, both for the ecosystem as well as the sustainability of the fishery. Yet the negative impacts of the periods on the livelihoods and food security of small-scale fishers are substantial since many families rely on fishing as a single or near-single income source (Bhowmik et al. 2021). For example, many fishing communities have reported increased levels of poverty, reduced food intake, and increasing loan uptake from moneylenders or microfinance nongovernmental organizations (NGOs), as well as increased migration away from communities to find alternate employment, such as day labor (Bhowmik et al. 2021; Sultana et al. 2021; Talukdar et al. 2022).

As a result of these concerns, both government and nongovernment actors, such as NGOs and universities, have implemented compensation programs to support fishers during the ban periods, with varying degrees of success. The Bangladesh government runs a rice distribution program to all registered fishers, that is those with a Fisher Identification Card (FID). Studies have suggested several challenges of this program, resulting in no rice, insufficient rice or poor-quality rice reaching many fishers (Mredul et al. 2020).

Numerous NGOs also manage programs to support affected fishing communities through practices such as alternative income-generating activities (AIGAs) (e.g. CSGs, animals, plant seeds, rickshaws), and the strengthening of co-management practices. Many of these projects have been highlighted as successful by internal evaluations (e.g. Nahiduzzaman et al. 2018; Abdul et al. 2020; Abdul 2021). Attributed changes include (i) substantial (10%) increases in hilsa production over very short timescales, (ii) increased biodiversity across managed areas, paradoxically as catch of a catfish species, (iii) improved fishing incomes by 67%, on-farm incomes by 116% and total income by 65%, (iv) and increased food security, community resilience, fisheries governance and women's access to finance (Nahiduzzaman et al. 2018; Abdul et al. 2020; Abdul 2021).

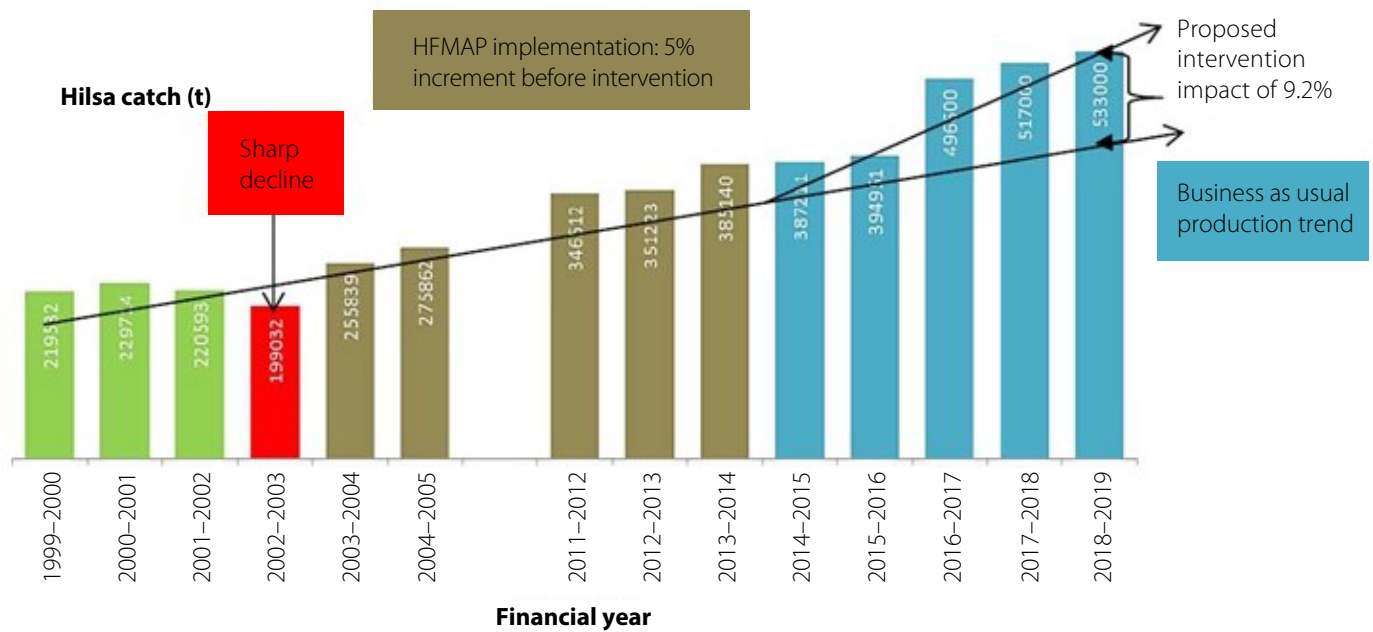
However, more rigorous impact evaluation of some programs found fewer positive results. There was only a minor propensity for communities to be more resilient to shocks and engage in adaptive strategies, but also limited or even greater risk of engaging in harmful coping strategies, such as loans and reducing meals (Béné and Haque 2022). There is also concern that while some benefits have been provided by these organizations, they may be insufficient to offset the losses fishers incur as a result of the ban periods.

Additional questions remain regarding the impact of bans on the status and recovery of Bangladesh fisheries. For example, the initial concern regarding the hilsa fishery was a decline in the total catch to below approximately 200,000 t in 2002 (Nahiduzzaman et al. 2018; Abdul et al. 2020) (Figure 1). However, this number is within 10% of catch levels across the previous 15 years and from reported catch data does not appear to be part of a consistent declining trend. Since management measures began, the reported catch of hilsa has increased 125%, to approximately 450,000 t in 2017. Yet small-scale fisheries are notoriously difficult to monitor, and changes in catch are a poor indicator of the sustainability of the resource, particularly if neither effort nor confounding factors are properly monitored, such as other factors that also effect catch. Indeed, the 2020 completion report for one intervention program attributed 9.1% of the increase in hilsa catch over the project cycle to their interventions, while providing little evidence that changes in catch were either sustainable or directly related to program interventions (Figure 2). Hence it remains unclear whether changes in reported catch statistics are cause for celebration or concern.



Source: Nahiduzzaman et al. 2018.

**Figure 1.** Total hilsa catch in Bangladesh 1987–2017 (data from the DOF).



Source: Nahiduzzaman et al. 2018.

**Figure 2.** Attributed changes in hilsa catch production as a direct result of NGO program interventions.

## Objectives

The overall objective of this study was to understand the extent to which fishing communities are aware of, understand the reasons for, and can cope with various fishing ban periods in Bangladesh. In addition, we sought to provide a third-party qualitative assessment of government and NGO supported compensation programs on fishing communities, enabling communities to voice their support and concerns about the impacts they perceived of these programs.

Specifically, we aimed to answer five questions:

1. **Management:** To what extent are fishing communities in Bangladesh aware of fishing ban periods and conservation, and what is the reason why these management measures are in place?
2. **Livelihoods:** How have fishing ban periods affected livelihoods, and what coping strategies have been used to mitigate negative socioeconomic impacts?
3. **Compensation:** What external support has been provided and has this support been adequate to offset the negative socioeconomic impacts from the ban periods?
4. **Resource:** Do fishers support claims of hilsa stock recovery?
5. **Practice:** What challenges and opportunities exist to improve the way government and NGO programs conduct their work?



# 1. Methods

Focus group discussions were completed in 17 fishing communities from September 21 to October 4, 2022. This included four communities in Bhola, four in Putokhali and nine in Cox's Bazar. Three communities in each district were part of NGO supported project groups. The remaining five communities in Cox's Bazar had specific projects linked to NGOs and two universities to provide training and support for seaweed, green mussel culture and dried fish processing. Meetings were also conducted with the district fisheries officers of each district visited (three meetings in total) to discuss our findings and understand their interpretations of them.

Each focus group discussion took 45–90 minutes and consisted of two facilitators (Firoz Khan and Shaila Rahman), two note takers and one observer (Patrick Smallhorn-West). Local staff from each district also joined to help organize the discussions.

The structure of each focus group discussion varied based on the participants and their concerns, but all loosely followed a predefined checklist based on the five study questions (Table 1), as well as time for rapport building and the ability for the participants to ask questions or raise concerns of their own. Groups varied in size, as well as representation of women and men (Table 2).

From the outset, we acknowledge several caveats. First, our sampling design and methodology were not sufficient to conduct a quantitative impact assessment. This was a qualitative assessment of a subset of communities involved in various projects, seen as a way to provide alternative insights from local vulnerable groups, stakeholders and experts. Our answers, therefore, represent the perceptions of the fishing communities interviewed, as well as our general interpretation of their responses.



Focus group discussion in Bhola.

## Management

What types of fisheries management measures have been implemented that affect your community? Please list the different measures.

Do you understand why these management measures, specifically the fisheries ban periods, are in place?

What is the level of compliance during ban periods?

## Livelihoods

What challenges to the community have occurred from the ban periods?

How do fishing communities maintain their livelihoods during the ban periods? What strategies have been used?

## Compensation

What types of compensation have you received from the GOB or other organizations during the ban periods? How much?

Has the compensation provided been adequate to offset any negative socioeconomic impacts incurred from the ban periods?

Has the compensation provided been adequate to maintain day-to-day living, even if it does not offset all losses incurred?

## Resources

Have the ban periods improved the population of the target species?

Has the diversity of species caught changed since management was implemented?

## Additional considerations

How has the COVID-19 pandemic affected fisheries management, livelihood issues associated with the fishery, or the compensation programs?

How has the Rohingya influx affected fisheries management, livelihood issues associated with the fishery, or the compensation programs (specific to the Cox's Bazar region)?

Are there any other issues or challenges you would like to discuss?

**Table 1.** Questions that were covered in each focus group discussion.



District	Date	Upazila	Union	Village	Village #	# Participants	Gender
<b>Bhola</b>	21/09/2022	Bhola Sadar	Dhomia	Balaramsura	1	55	Men
	22/09/2022	Char Fassion	Char Kukri Mukri	Shahbazpur	2	45	Mixed
		Char Fassion	Char Kukri Mukri	Rashulpur	3	18	Women
	23/09/2022	Bhola Sadar	Poro Ilisha	Ilisha	4	65	Mixed
<b>Barishal</b>	26/09/2022	Patuakhali		Nizampur	5	60	Mixed (even)
	27/09/2022	Patuakhali		Sudhirpur	6	30	Female
		Patuakhali		Fatehpur	7	60	Male
	28/09/2022	Patuakhali		Hossenpara	8	40	Male
<b>Cox's Bazar</b>	2/10/2022	Teknaf	Shahporir Dwip	Jaliapara 1	9	8	Male
		Teknaf	Shahporir Dwip	Jaliapara 2	10	6	Male
		Teknaf	Shahporir Dwip	Dakshin para	11	12	Mixed (mostly male)
		Teknaf	Shahporir Dwip	Mundar dayil	12	30	Male
	3/10/2022	Ukhia	Madarbonia	Notun pochchim para	13	30	Mixed (mostly male)
		Teknaf	Shaplapur	Naya para	14	20	Female
	4/10/2022	Cox's Bazar sadar	Chofuldondhi	South Rakhaine para	15	12	Mixed (even)
		Cox's Bazar sadar	Kurushkul	Rastar para 1	16	8	Mixed (mostly male)
		Teknaf	Kurushkul	Rastar para 2	17	11	Mixed (mostly female)

**Table 2.** Participating villages in focus group discussions.

## 2. Results

### 2.1. Management

#### **To what extent are fishing communities in Bangladesh aware of fishing ban periods, and what is the reason why these management measures are in place?**

**Synopsis:** Overall, most people appear to know the rules, understand why they are in place and follow them, even though this leads to increased economic constraints during the ban periods.

Almost all individuals interviewed were aware of at least some fisheries management measures. The two most widely recognized are the 65-day ban on all marine fishing activities and the 22-day band on fishing for brood hilsa. Compliance with these two ban periods appears to be high, though some poaching occurs. There was some contention in coastal communities about whether the marine ban should apply equally to industrial and small-scale fishers, or whether it could be modified to only come into effect a certain distance from shore.

Conversely, there is some confusion around the jatka ban and the rules within the hilsa sanctuaries. Even WorldFish staff were not in total agreement about the specific rules for these strategies. For the jatka ban, some suggested it was 2 months, while others suggested 8 months. For the sanctuaries, if they are classified as “sanctuaries,” then some suggested fishing should be prohibited all year long. Or if fishing is only limited at certain times of the year, then they should not be called sanctuaries. This confusion was also evident among communities, and there was not always agreement on the duration or timing of these bans.

The reasons for the bans were generally well understood by the communities. Most fishers and community members had a basic understanding of patterns of overfishing and the ecology of species. In particular, it was well understood that the 22-day brood hilsa ban is important for hilsa to reproduce and create the next generation of fish. Many also suggested that fishing improved immediately following the ban periods of 1 to 2 weeks. Given that this is not enough time for stocks to recover, it could be evidence of hyperstability, where stocks decrease but catch remains stable or improves, which could be leading to increased rather than reduced catch. Some communities, particularly those without previous interactions with NGOs, appeared to have little understanding of fish life

cycles, suggesting that fish catch is primarily related to “what god provides.” Our findings suggest that interactions with NGO projects have been successful at increasing conservation knowledge and ecological understanding among fishing communities.

*“After the 65-days interval when we go to fish, we always notice an increase in size and catch.”*

– Ilisha Village, Bhola

### 2.2. Livelihoods

#### **How have the fishing ban periods affected livelihoods, and what coping strategies have been used to mitigate losses?**

**Synopsis:** Even though most understand the benefits of the ban periods, most communities struggle because of limited access to other occupations and resources. Many coping strategies appear to be detrimental, such as taking out loans and reducing food consumption.

There was a common concern across most communities about the socioeconomic impacts of the ban period. Most have little or no savings, and the average daily income during fishing periods appears to be around BDT 300–800, and close to zero during the ban periods. Yet while fishing was the dominant occupation of most families interviewed, most were not exclusively reliant on fishing. AIGAs included agriculture, day laboring and garment manufacturing. Yet during the ban periods, the scope of employment is limited and many struggle to find work.

The main coping strategies that communities employed appear detrimental, such as taking out loans and eating less. While loans predominantly come from microfinance institutes (at approximately 15% interest), some were supplied within the community from CSGs (at approximately 5% interest). However, some landless coastal communities, such as Hossenpara, were deemed too high risk for the microfinance NGOs and instead borrowed from moneylenders at high-interest rates (approximately 100% interest). These communities appeared locked in intergenerational debt traps, providing 10% of daily catch as interest and bound to local moneylenders in such a way that they could not exit the fishing

industry. Food shortage appeared very common during ban periods, and eating less was one of the key coping strategies used.

*"We're all poor, and we don't have money to get out of this life."*

**– Hossenpara Village, Kalapara, Patuakhali**

*"Sixty-five days ban is too much, it's too long. We know it's the government's decision to impose the ban, and we understand it has certain benefits. But when we cannot fish, we almost live on no food. Fishermen's lives are worse than beggars'. Beggars can beg, but we can't. We are a professional community, we can't beg, it hurts our dignity. Some of us sometimes are so desperate that we even pawn little assets like a nose-pin of a wife to borrow money to buy food."*

**– Shah Alam Musully, Andharmanik Hilsa Fish Sanctuary, Nizampur FMC**

### 2.3. Compensation

**What external support has been provided, and has this support been adequate to offset the losses from the ban periods?**

**Synopsis:** *The GOB's rice compensation program appears widespread, though insufficient. Compensation and support from NGO compensation projects appear helpful in terms of developing alternative livelihoods but are inadequate relative to other basic needs of communities during the ban periods.*

Government compensation consists of fixed quantities of rice supplied to registered fishers—those with FID cards. While imperfect, this program does appear to be providing rice to most communities during the ban period. The main challenges appear to be insufficient quantity (e.g. not enough to last the duration of the ban period) or quality (e.g. rice is spoiled), as well as loss of rice along the value chain. An additional dual challenge is low coverage of registered fishers in some places, while in other areas it is improper vetting of non-fishers obtaining FID cards. It appears that initially fishers were not aware of the benefits of the FID cards. Since they were not registering, they were ineligible for rice compensation. However, in some instances where the importance of FID cards has been advertised (e.g. by NGO development projects) there are now concerns with non-fishers also obtaining cards and hence rice.

*"There are seven members in my family. We need minimum 2.5 kg uncooked rice per day to make three meals for the family. So that means for 22 days we need minimum 55 kg rice. In addition, we also need some basic items like oil, salt and firewood to cook a meal. If we are lucky, and if rice distribution comes on time, then we receive 20 kg rice from government. How can I feed my family with this?"*

*From my tailoring business, I make BDT 2000 to 3000 a month in good times, but when there is no fish no one here has money, and no one buys clothes. So, I bring no money home. My husband can't fish, so that also means no money and no food."*

**– Rahima, secretary,  
CSG Sudhirpur, Kalapara, Patuakhali**

Most NGO compensation programs appear to have been based on discussion with communities about what support is most suitable for their needs and focuses primarily on alternative AIGAs. Support includes providing livestock, such as goats and ducks, establishing CSGs, tailoring supplies, and trained in aquaculture and fish processing programs. Support has also been provided to communities by providing information on how to register for FID cards, as well as understanding the rules and ecological reasons behind the fisheries ban periods. Some safety equipment, such as lifejackets, has also been supplied. Many communities interviewed appeared to have found out about the ban periods and FID cards through the compensation programs. Two key benefits of the compensation programs appear to have been supporting the registration of fishers and an improved understanding of the ecological mechanisms behind the fisheries ban periods and conservation. It should also be noted that these programs have made efforts to contextualize support based on community needs, rather than a single approach that characterizes the GOB program.

Overall, the compensation and support that the NGO compensation programs have provided appears to have been helpful but inadequate relative to the difficulties communities face during the ban periods. Most still take out loans, still struggle and are still poor. AIGAs might have helped households supplement their income from time to time, but they do not appear to contribute to any sustainable impact on their lives. Most benefits appeared short term, sporadic and temporary. Some individuals interviewed



had benefitted from additional livestock for a while, but only in the short term. Even the best performing community participants acknowledged struggling to cope with the ban periods and eating less. While we acknowledge that no single program in isolation is capable of solving many of the difficulties these communities face, these findings suggest that the positive impacts of NGO compensation programs could be overemphasized. Anecdotal evidence also suggests the program's impact is fragile. Despite providing assets, there were often few follow-up services to equip program participants to look after such assets. In addition, no strong evidence of links with the local-level relevant government agricultural or livestock extension offices were seen. As a result, even the best performing CSG members were not aware of remedial services available to them. So, when natural disasters strike or livestock get sick, they lose their investment and whatever little profit is made gets eroded.

CSGs appeared to be a successful and enduring intervention. In these, women in the community receive business training and then commit to saving a set amount per week or month (e.g.

BDT 100) in a group members account. Once this account reaches a predefined level (e.g. BDT 20,000), then the NGO matches the amount, doubling the account value. Group members can then use this account to take out loans during the ban period at a much lower interest rate (around 5%) than is accepted by the microfinance institutes or the moneylenders. Many of the communities had strong CSGs, with members that were well organized and vocal and with people already using them for loans. While this does not avoid the challenges of borrowing money for the ban periods, it reduces the burden of repayment. In several instances the compensation programs had even matched saved funds multiple times. In Sudhirpur (village six), a member took a loan of BDT 10,000 from their CSG group, to be repaid in 10 instalments. She invested the money in a tailoring business. In the first month of starting production, she earned BDT 13,000 from investing a capital of BDT 10,000, making a 30% profit.

Aquaculture and fish processing programs have also been established in some communities. Concerns were raised about the functioning of these programs.

### **Case study: Seaweed and green mussel livelihood programs**

Two key alternative livelihood programs we examined were seaweed and green mussel farming. These projects have been marketed as providing a "ray of hope" for fishers, with a promise to secure profits and livelihoods away from fishing. These programs also had several high profile events in Cox's Bazar, including a "blue foods festival," and are listed as a success on program websites. Our interactions with several seaweed and green mussel farming communities suggest that these programs are over-ambitious and need refinement.

During this study, we visited five villages involved in cultivating seaweed or green mussels.

#### **The experience of two communities (Jalia para 1 and Jalia para 2) were as follows:**

Two years before this study, a group of people associated with NGO compensation programs (referred to as "trainers" by the communities) visited the communities and provided a 1-day training course on how to grow seaweed and cultivate green mussels. The trainers discussed the benefits of cultivating seaweed and green mussels with the communities and made it sound like a lucrative business, and they provided BDT 400 compensation per person for 1 day of training. The trainers then promised to return to the communities and provide all the necessary equipment and stated that the communities would not require any investment other than their labor. The trainers never returned, however, and at the point of our visit 2 years later the community was still waiting for them to provide the equipment and training. Information made available to field mission members showed that 16 members of one group were involved in a seaweed AIGA, and that each member had gone through one production round, producing between 10 and 30 kg of seaweed. Investment per group member in records was reported to be BDT 12,000. In reality, it appears that the intended AIGAs never took off in this village, and the funds could not be accounted for.

### **The experience of a third community (Dakshin para) was as follows:**

Two years before our visit, a group of trainers provided training to the group members on how to grow seaweed. The trainees received BDT 400 per person as a training allowance for the day. After the training, the group members worked under the supervision of the trainers and produced two to three cycles of seaweed. The trainers provided all the necessary equipment and seed stock to grow seaweed and, aside from labor, no additional costs were required to grow seaweed or mussels by the community. In 2021, the community jointly produced approximately 400 kg of dried seaweed, all of which the trainers bought back across six collection times. In November 2021, a storm surge then destroyed all the equipment and seaweed. At the time of the field mission, no one in this community was growing seaweed and all were waiting for the trainers to return.

### **Our overall impression of this program was as follows:**

- Some communities that programs forgot about were left waiting for the support they were promised. Many are nursing seaweed and green mussels with the hope to start production at some point in the future. In some instances, no one ever returned following the initial meetings.
- While some communities have made small profits from selling several rounds of seaweed back to the trainers, no formal market channels have been established. This dependency makes communities extremely vulnerable since their only trade link is through the trainers, and the community members do not know where or how to market these projects without the trainers. Field offices could have some technical knowledge of seaweed and green mussel cultivation, but the rest of the value chain development work that is essential for the communities to start an ALGA appears lacking.
- Although communities have not invested their own money in the projects, they have invested their time, and this does not appear to have been compensated for.
- Information supplied on investments and return on investments in some communities appears false or incorrect.
- While trainers and project staff appear to have stopped many support visits, according to some communities they were occasionally bringing visitors to demonstrate the apparent success of the program. Once, the trainers also sent 10 kg of green mussels to a local restaurant for some experiment not known to the community.
- Project planning appears incomplete and to lack an exit plan.

*Our overall impression of these projects was that communities were being used as participants in a research experiment without adequate free, prior and informed consent.*

## **2.4. Resources**

### **What are the views of fishers concerning changes in the status of the fishery because of the ban periods?**

**Synopsis:** *Most fishers report improvements in catch because of the ban periods, over short and longer timescales. The extent to which these patterns are valid, or due to observer bias, remains unclear.*

Almost all fishers interviewed agreed that the ban periods are improving fishstocks in the region. Most also suggest that catch immediately after the ban periods is also above average, usually

persisting for approximately 2 weeks following re-opening. Two questions emerged out of these discussions:

#### **1. To what extent are fishstock recovery observations valid over longer timescales?**

Most communities have received training on the benefits of fisheries management, so they might be expecting fishstocks to recover. It is not uncommon for communities engaged in fisheries management to “observe” changes in fishstocks within weeks of implementing management, despite many target species taking years to recover. As such, other lines

of evidence are needed to corroborate community observations of longer-term increases in fishstocks.

## **2. What could be driving the reported short-term increases in catch immediately following the ban periods?**

Many communities reported improvements in catch following the ban periods. Yet this cannot be because of stock improvements since the lifespan of target species is greater than the duration of the ban periods. This could be due to the placebo effect. Alternatively, following periods of reduced catch, many fisheries species become “tamer,” enabling them to be harvested with greater efficiency. Understanding these mechanisms could be useful for improving stock management in Bangladesh.

### **2.5. Practice**

#### **What challenges and opportunities exist to improve the way of government and NGO compensation programs are conducted?**

**Synopsis:** *While acknowledging the limitations of our study, our observations suggest the observed compensation programs might be challenged by being overspread, limited exit strategies, a lack of transparency, limited oversight of subcontractors, and a greater need for counterfactual framing of impacts.*

A major challenge we observed was that projects in general appear to be spread thin. In many places, investments were low and spread across many communities, rather than heavily focused in a few communities. However, there may be a minimum investment required in communities for positive impacts to accrue. If investment is below this minimum threshold, then programs struggle to fulfill basic requirements such as supporting community cohesion, which is an important first step for projects to be successful. Further understanding about the value of a “light touch” approach would be useful, but only if they are done with consideration of the potential caveats. Regular support and follow up with communities are also necessary, as well as clear exit strategies for what happens when the project is complete.

Impact attribution may also be oversold. As noted in the introduction, the impacts of NGO compensation programs have been reported as resoundingly positive for the fisheries and the livelihoods and well-being of fishing communities. These benefits are inconsistent with our observations, though we acknowledge the qualitative nature of this study. Yet the large increase (125%) since the implementation of hilsa management could be a result of a wide range of factors. Counterfactual analysis appears to be lacking, where the question is asked: what would the hilsa catch be if the programs had not been implemented? Changes in reported catch can be a poor indicator of resource sustainability, particularly if neither effort nor confounding factors are properly monitored, such as other factors that also affect catch. Reported improvements in well-being, income and food security were also generally inconsistent with our observations. These inconsistencies could be the result of (i) different scales of observations, either in time or level (individual, household or community), (ii) our team being unable to quantitatively assess changes in income, or (iii) overemphasis of earlier studies.



## 3. Conclusions and recommendations

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### 3.1. Implement adequate monitoring and evaluation programs

Impact attribution of projects appeared *ad hoc*, resulting in overblown emphasis on positive results from projects. For example, unless the 9.2% increase in hilsa catch over one project life cycle can be directly attributed to the project, it is not acceptable to credit improvements to the project. Many confounding variables can effect overall catch beyond population recovery due to management interventions, such as siltation, rainfall, changes in fishing gear, better monitoring, more people fishing, etc. These confounders are the known and unknown factors that can mask the true impact of an intervention, resulting in over or under-estimations of impact. Impacts are the intended or unintended consequences (e.g. changes in catch) that are caused by an intervention. Proper impact analysis involves reflecting on or quantifying counterfactual conditions—the outcomes that would have occurred in the absence of the intervention (e.g. project). While some approaches (e.g. statistical matching or modeling) require extensive effort and time, simpler approaches can still be effective. These include developing basic theories of change, and asking, what would have happened if the intervention had never occurred? These problems are not unique to Bangladesh or the projects reviewed in this study, but are common across programs that incentivize inflated narratives due to pressure to show positive outcomes from interventions.

### 3.2. Focus efforts on those who are most vulnerable

We interviewed several communities that had been unable to receive support from any NGOs or microfinance institutes. These communities tended to be landless and the poorest of fishing communities. Generally, NGOs and microfinance institutes are not interested in working with these particularly poor fishing communities, since they are considered un-bankable and too high risk. Can these groups be supported by various programs? Poverty profiling, wealth ranking or household food insecurity

indicators in use seem to be leaving these most vulnerable groups out of the program. These communities could be supported to help them break out of intergenerational debt traps.

### 3.3. Strengthen community cohesion, registration of community-based organizations (CBOs) and registration of fishers

Legally recognizing the rights for communities to manage their fisheries resources is a critical first step toward successful community-based fisheries management. In Bangladesh, this can be done through formal registration of community-based organizations (CBOs) with the government. Exerting rights access can increase resilience toward shocks, improve compliance and buy-in with rules and regulations, and allow communities to negotiate with different service providing agencies. We therefore recommend support for community registration as CBOs. In addition, we suggest that programs continue to strengthen the fisher registration process. The approval process for FID cards needs to be widened, political interference rooted out, and awareness increased of the value of obtaining these cards, as well as proper vetting so that non-fishers do not exploit the program. Lastly, the importance of good leaders was observed across all communities where they were present, and noted where they were absent. Working with community leaders to promote the program, while focusing on the equitable distribution of benefits, is also recommended.

### 3.4. Strengthen community savings groups (CSGs)

The most successful projects we observed were CSGs. In most cases, the women's groups involved in these activities were well organized and cohesive. Although these do not alter the fact that communities borrow money during the ban periods, it changes how they borrow, and reduces the burden of interest repayments. In addition, these programs also strengthen community cohesion and organization, as well as

provide business training for other community ventures. CSGs are also common throughout the region, and well known and understood from other non-fisheries programs. As such, the buy in for these projects is likely higher, and so they are more likely to create enduring impact.

### **3.5. Consider minimum investments in communities and ensure sufficient follow-up**

NGOs need to acknowledge the power imbalance between their staff and community members. It is unacceptable to make promises to vulnerable groups about improvements to their lives if these are not realized. It is also unacceptable to go years in between contact with communities. Projects should not be allowed to proceed unless a minimum investment of time and resources can be guaranteed for a community. This might require working with fewer communities, but with firmer commitments to each.

### **3.6. Hire social scientists to work on social projects**

Many of the design elements of compensation programs reflect old-fashioned livelihood models. Implementation also at times appeared weak or lacking energy and resources. Of note is that many within the observed projects were fisheries ecologists who were hired during previous projects centered around ecology. Yet it is unlikely that most ecologists have sufficient training to properly implement social welfare programs. We suggest that projects and interventions should be designed by social scientists and be integrated throughout the project's timeline.

### **3.7. Avoid over dependency on NGOs for market connections and development**

We observed extreme over-dependency in the seaweed and green mussel farming programs, in that all market interactions and value chain connections were through the trainers or consultative staff. This leads to extreme vulnerability and power imbalance for the communities and likely restricts future growth of the program.

### **3.8. Link fisheries programs with other government departments**

Links between NGOs and the GOB's line departments seem weak, which will limit the sustainability of the programs. While compensation programs provide poultry, livestock or other items as productive assets to diversify alternative livelihoods options and to supplement household income during hilsa fishing ban periods, there is often no follow-up services to equip program participants to look after such assets. In addition, no strong evidence of links with the local-level relevant government agricultural or livestock extension offices was seen. As a result, even the best performing CSG members are not aware of any remedial services available to them. So, when natural disasters strike or livestock get sick, they lose their investment. And whatever little profit is made gets eroded. Links with government social protection schemes under National Social Security Strategy programs is a must, as well as emphasizing creation of local jobs, both farm and off-farm. Connect young fishers with market-based skills training, not the wholesale off-the-shelf training courses. Influence and advocate for adequate, appropriate, life cycle-based compensation support packages for extremely poor and poor fishers. Explore if cash could be a better option over rice in the government compensation schemes. If cash is to be provided, then government-to-person (G2P) payment options could be explored to ensure quick and efficient transfer of money, cutting out the middlemen. Explore other ways to anchor support services and package with the GOB's National Social Security Strategy programs.

# Notes

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- <sup>1</sup> These subheadings are taken from the pre-agreed checklist. See the attached checklist in Annex 1.
- <sup>2</sup> Head of the local-level administrative unit.
- <sup>3</sup> These subheadings are taken from the pre-agreed checklist. See the attached checklist in Annex 1.
- <sup>4</sup> One house one farm.
- <sup>5</sup> This needs to be verified by the project team.
- <sup>6</sup> Potential groups refer to a group of people intended to form an IGA group around seaweed or green mussels, but the intended IGA work never took off. These people were used only as subjects in a failed or discarded experience without their knowledge and consent.
- <sup>7</sup> Potential groups refer to a group of people intended to form an IGA group around seaweed, or green mussels, but the intended IGA work never took off. These people were used only as subjects in a failed or discarded experience without their knowledge and consent.
- <sup>8</sup> See Annex 2 for the set of questions put to green mussel and seaweed group members.
- <sup>9</sup> Potential, because the group was promised to be set up by Falcon International, but it was never delivered.
- <sup>10</sup> Potential, because the group was promised to be set up by Falcon International, but it was never delivered.



## References

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- Abdul WM. 2021. USAID Enhanced Coastal Fisheries in Bangladesh II annual report (December 1, 2019–December 31, 2020). Dhaka, Bangladesh: WorldFish. <https://hdl.handle.net/20.500.12348/4546>
- Abdul WM, Rahman MJ, Haque AM and Nahiduzzaman M. 2020. Enhanced Coastal Fisheries in Bangladesh project: Completion report. Dhaka, Bangladesh: WorldFish. <https://hdl.handle.net/20.500.12348/4543>
- Alam S, Rahman M and Coastal AA. 2021. Challenges and opportunities in artisanal fisheries (Sonadia Island, Bangladesh): The role of legislative, policy and institutional frameworks. *Ocean and Coastal Management* 1–12. doi: 10.1016/j.ocecoaman.2020.105424
- Béné C and Haque MABM. 2022. Strengthening the resilience of vulnerable communities: Results from a quasi-experimental impact evaluation in coastal Bangladesh. *European Journal of Development Research* 34(2):843–68. doi: 10.1057/S41287-021-00399-9
- Bhowmik J, Selim S, Irfanullah H, Shuchi J, Sultana R and Ahmed S. 2021. Resilience of small-scale marine fishers of Bangladesh against the COVID-19 pandemic and the 65-day fishing ban. *Marine Policy*. doi: 10.1016/j.marpol.2021.104794
- Billah Md, Kader Md, Siddiqui AAM, Mahmud SS and Khan Md. 2018. Studies on fisheries status and socio-economic condition of fishing community in Bhatiary coastal area Chittagong, Bangladesh. *Journal of Entomology and Zoology Studies* 6(6):673-679. <https://www.entomoljournal.com/archives/2018/vol6issue6/PartL/6-6-106-515.pdf>
- Islam Md, Nahiduzzaman Md and Wahab Md. 2020. Fisheries co-management in hilsa shad sanctuaries of Bangladesh: Early experiences and implementation challenges. *Marine Policy* 117. doi: 10.1016/j.marpol.2020.103955
- Mredul M, Ektear Uddin M, Kanak Pervez A, Yesmin F and Binte Akkas A. 2020. Food aid program during restricted hilsa fishing period: Effectiveness and management perspective. *Journal of Fisheries* 8. <http://journal.bdfish.org/index.php/fisheries/article/view/144>
- Mredul MMH, Uddin ME, Pervez AKMK, Yesmin F and Akkas AB. 2020. Food aid programme during restricted hilsa fishing period: Effectiveness and management perspective. *Journal of Fisheries* 8(1):752–61. doi: 10.17017/j.fish.144
- Nahiduzzaman Md, Islam Md and Wahab, Md. 2018. Impacts of fishing bans for conservation on hilsa fishers' livelihoods: Challenges and opportunities. New Delhi, India: Academic Foundation. <https://hdl.handle.net/20.500.12348/2669>
- Sultana R, Irfanullah HM, Selim SA, Raihan ST, Bhowmik J and Ahmed SG. 2021. Multilevel resilience of fishing communities of coastal Bangladesh against the Covid-19 pandemic and 65-day fishing ban. *Frontiers in Marine Science* 8. doi: 10.3389/FMARS.2021.721838
- Talukdar A, Schneider P, Begum A, Kawsar M, Sultana M, Sumon T, Nabi M, Mozumder M and Shamsuzzaman M. 2022. The premium of hilsa sanctuary: A socio-economic and ecological evaluation from the Meghna Estuary, Bangladesh. *Sustainability* 14. doi: 10.3390/su14137782

# Appendix 1 (Bhola): Hilsa fishing ban and compensation schemes

## Field Note 1: Bhola

### Introduction

A three-member field mission team (FMT) from WorldFish visited four fisher villages (FVs) in Bhola as well as the local district fisheries offices (DFOs), on September 21–23, 2022. Bhola was one of three districts in southern Bangladesh selected for the visit, the others being Patuakhali and Cox's Bazar.

The objective of the mission was to understand the impact of the fishing bans on hilsa fishing and what coping strategies communities use during the bans.

Field Note 1 highlights findings from Bhola District.

Date	Location	Group/entity
21/09/2022	FV1: Valaramsura	Model hilsa village fisheries management group (FMG) (mixed)
	Bhola Sadar	Molla Emdadullah, DFO
22/09/2022	FV2: Shahbzipur, Char Kukri Mukri	FMG
22/09/2022	FV3: Rasulpur	CSG
23/09/2022	FV4: Elisha	Mixed control group

**Table 3.** List of meetings in Bhola.

### Common findings

- Almost every community member was aware of the fishing ban periods, and all of them said 65 days is too long.
- All the households visited during the field mission were involved in other AIGAs besides fishing to supplement family income. Taking out loans from NGOs for consumption and investment in AIGAs were the two most common coping mechanisms during the bans.
- Almost every community member visited suffered from hunger during the bans. Eating less food or fewer meals was a common practice.
- The distribution of rice from the GOB was inadequate in both coverage and amount.
- AIGAs might have helped households supplement their income from time to time, but they did not make any sustainable impact in their lives. The benefits were short term, sporadic and temporary.
- There was a lack of knowledge of fish ecology among all fisher communities. Every member visited said the fish looked bigger when they returned to fish at the end of the bans after 2–3 months.
- The coverage of the FID cards was unsatisfactory.

## **FV1: Valaramsura, Bhola**

### **FMG**

#### **Model community**

##### **Phase: Group started in 2015**

There were 22 participants at the meeting, and 15 of them had a FID card. Most of the participants were in their early 40s to 60s and had stopped fishing because they felt they were too old to work in such a risky profession like fishing. Instead, their adult sons were fishing. Initially, there were 150 households in the group, but within first 3 years of operation 25 of them had migrated elsewhere because of river erosion.

#### **Management<sup>1</sup>**

- Almost everyone at the meeting was aware of the hilsa fishing bans.
- The community observed both the 65- and 22-day bans, but everyone thought the 65-day period was too long. Sometimes, people fish during the ban period just to make a living, as there is no other work.
- The participants identified three types of nets that are banned for the protection of hilsa and other species. They said they followed the bans, but that the local elites and rich fishers routinely bribe the local administration to evade the law.

#### **Impact**

- All the participants said they struggled to cope during the bans. Eating less was generally the most common coping mechanism.
- Those who received rice from the GOB said it helped to some extent, but it was not sufficient to meet the needs of the families to cover the entire ban period.

#### **Compensation**

- In the village, there were 120,000 registered fishers, but only 87,000 had a FID card. About 30% of the participants said they had received rice from the GOB's distribution program.
- Project beneficiaries received cows, goats and chickens. These were distributed as per the members' preference and space available at their homestead to manage such assets. The participants said there was a condition that recipients could not sell these assets in the first 3 years after acquiring them. Some said they managed to make a little profit using these assets, while others said they did not remember if these assets made any contributions to their family income. None of the households seemed to possess any of the livestock given as tools for AIGAs.
- Most of the households were members of NGO savings groups. In 2022, 14 of the participants took out loans either to meet basic consumption demands or to invest in their fishing business.
- Daily wage labor or running a small grocery shop were the two most common forms of AIGAs.

#### **Resources**

- The participants said that every year after the bans they notice that both the fishstocks and the size of the fish increase temporarily.

#### **Coping strategies during the COVID-19 pandemic**

- No information was recorded.

#### **Other key observations**

- River erosion was a reoccurring problem. It was common for people to move homes two to three times during their lifetime because of river erosion.
- The productive assets that were distributed might have helped some families at the time they received them, but none of the assets were used as source of AIGAs.
- The project had phased out this community, and the group did not form any tertiary organization.
- The community's understanding of the ecology and lifespan of hilsa was limited.

## DFO, Bhola

Molla Emdadullah had just been transferred to the DFO in Bhola in June 2022. His earlier post was in Patuakhali.

### Key discussion points

- WorldFish staff said about 32% of the fishers that the FMT visited did not have a FID card.
- The coast guards who attended the meeting said they did not receive their remuneration in 2022.
- Some of the fishers who attended meeting said they had not received rice from the GOB's rice distribution program, while others said the quantity was inadequate.

### Key decisions

- The DFO said it would address the FID card issue immediately and would start enlisting fishers soon.
- The coast guards would receive their remuneration soon.
- The DFO said it would ensure that all fishers with a FID card received the correct amount of rice at regular intervals, as per GOB policy.

## FV2: Shahbazpur, Kukri Mukri

### FMG

#### Phase: FMG started in 2020

The FMG had a total of 70 households. Members came from two villages, with a leader representing each village. It seemed like an odd structure for a group. Moreover, the group members did not appear well connected with each other, and they openly expressed their displeasure with the fellow group members of the other village. The current local staff members of WorldFish could not explain the rationale for the group's composition.

### Management

- Most of the participants were aware of the fishing ban periods, and most of them reported that they all follow them. The chairperson<sup>2</sup> of the village kept all nearby waterbodies under strict monitoring so that everyone in the village followed the ban.
- However, the members of this village said the members of the group from the other village did not follow the ban.
- Everyone was aware of the ban on certain kinds of fishing nets and the rationale for the ban, but they still continued using them from time to time.

### Impact

- Most people in this village did not have adequate food during the bans. Every household at the meeting said they sometimes ate less food to cope.

### Compensation

- The GOB's rice distribution program was insufficient.
- Ducks, chickens, cows or goats, according to the preference of the households, were distributed as productive assets. Some of the participants benefitted from having these additional productive assets for a while, but most of the families had either lost the livestock or used them for consumption.
- The households that still managed to retain some of the assets were making some supplementary income from them. However, the additional income was often too little or infrequent to cover the basic consumption needs of the families during the bans.

### Resources

- All of the participants said that the amount and size of fish had always increased by the time the bans end.

### Coping strategies during the COVID-19 pandemic

- No information was recorded.



## **Other key observations**

- The participants clearly expressed their dislike toward the group members from the other village. Social bonds among members is key to the functioning of any group, so the rationale for combining the two villages into one group was not clear.
- WorldFish staff said that they could not make regular follow-up visits to support the group because of budget constraints.
- An NGO was responsible for implementing the program in this village. However, it had stopped working in the village because of administrative reasons, though the decision was never communicated to the group members. As a result, the members were still waiting for the NGO to return to help the group with the work.
- It was also clear that WorldFish staff had stopped making regular follow-up visits in this village too. However, this too was not communicated to the members.
- The members accessed services from input suppliers, but they were less keen to do so from the local government's line department offices.

## **FV3: Rasulpur, Bhola**

### **CSG**

This village had 400 households, 80% of which had fishers, and there were 16 participants who attended the meeting. All the members in this group had basic literacy skills, all seemed very vocal and all were managing some form of AIGA to supplement their family income. In addition, it seemed like they were also managing loan revolving programs successfully. Each member saved BDT 100 per week in their savings group. The IUCN formed the group.

### **Management**

- Everyone was aware of the fishing ban periods.
- However, like most of the communities the FTM visited, fishers in the village sometimes fished during the bans just to meet the basic consumption needs of their family.

### **Impact**

- Despite the apparent success in managing the loan revolving programs for AIGAs at the individual level, every participant said they often went hungry during the bans. Like all the others visited during the field mission, the members of this CSG also ate less to cope during the bans.

### **Compensation**

- The GOB's rice distribution program is ongoing in the village, but coverage is insufficient.
- Members borrowed from their own savings group. They did not like borrowing from NGOs, because the interest rates were too high.
- This group received livestock and dried fish as supplementary assets for AIGAs, but most of them were not using them anymore.

### **Resources**

- Information was not recorded.

### **Coping strategies during the COVID-19 pandemic**

- Information was not recorded.

### **Other key observations**

- All the women in this group were very vocal and had good communications skills.
- All the group members seemed relatively well off compared to their counterparts in Bhola. However, even the most empowered and well-off community was not immune from stress during the bans.
- This group also said they ate less as a coping strategy.

## **FV4: Ilisha, Bhola**

### **Control group**

There were 16 participants who attended the meeting, 10 of whom had a FID card.

#### **Management**

- Like the rest of the groups that the FMT visited, all the members of the control group were aware of the fishing ban periods.
- However, because of the lack of AIGAs made available to them, they sometimes had to fish during the bans to meet basic family consumption needs.
- “Poor people like us have no money to bribe local administration, so they all abide by the rules,” said Nur Banu Mahajan, a female moneylender. “The rich fishermen defy the ban bribing local coast guards.”
- NGOs like the Association for Social Advancement, BRAC and Grameen were common sources of credit for the villagers, as well as local moneylenders.

#### **Impacts**

- Every household suffered from hunger during the bans.

#### **Compensation**

- Some of the participants had received rice from the GOB’s rice distribution program, but the amount and coverage were inadequate.

#### **Resources**

- According to the men at the meeting, “After the 65-day interval when we go to fish, we always notice an increase in size and catch.”

#### **Coping strategies during the COVID-19 pandemic**

- “Covid period was very difficult,” said Nur Banu Mohajan. “Even the meager rice support did not arrive. Everbody forgot about us. We thought we all will die. We only had fish caught illegally by our men to keep us alive.”

#### **Other key observations**

- The findings in the control group were the same as the other groups that the FMT had visited so far.
- There was no qualitative difference in the lives of group members compared to the those in the control group.

## Appendix 2 (Patuakhali): Hilsa fishing ban and compensation schemes

### Field Note 2: Patuakhali

#### Introduction

The team visited four fisher villages in Patuakhali, as well as the DFOs, on September 25–28, 2022. Patuakhali was the second of the three districts in southern Bangladesh selected for the field mission, and the FMT had already completed its field work in Bhola before visiting Patuakhali.

The objective of the mission was to understand the impact of periodic fishing bans on hilsa fishing and the coping strategies of the communities during the bans.

Field Note 2 highlights findings from Patuakhali District.

Date	Location	Group/entity
26/02/2022	FV5: Nizampur, Kolapara Andhar Manik Hilsa Sanctuary	Mixed-male FMG CSG
	FV6: Sudhirpur	CSG
27/09/2022	FV7:	Dropped
	Control group	Mixed control group
28/09/2022	Patuakhali Sadar	DFO

**Table 4.** List of meetings and groups in Patuakhali District.

#### Common findings

- Almost all of the group members that the FMT visited knew about the fishing bans, but there was some confusion about their exact timing. All the participants said the 65-day ban was too long and that smallholder fishers in the community should be exempt.
- All the households were involved in AIGAs besides fishing, and most of them had taken out loans from NGOs either to feed their family or for AIGAs. None of the households had any savings, even the ones that seemed relatively better off.
- All the households suffered from hunger during the bans.
- Connections with the GOB's line departments were weak.
- There was a lack of knowledge of fish ecology, as all of the participants said the fish looked bigger after the bans.
- Not every fisher had a FID card, and coverage is insufficient.

## **FV5: Nizampur, Kolapara**

### **FMG: Andhar Manik Hilsa Sanctuary**

Sixty group members participated in the meeting, while 76 others could not attend as they had to go fishing.

Group members present: 60

Members could not join as they went fishing: 76

#### **Management<sup>3</sup>**

- Most of the participants understood the importance of the fishing bans and knew that there were several of them throughout the year. However, they were a little unclear about the different bans and when they were. All the participants said the 65-day ban was too long.
- No one in this area had violated the bans, as they practiced a self-imposed “naming and shaming” policy to deter each other from violating the bans.

#### **Impact**

- “Sixty-five-days ban is too much, it’s too long,” said Shah Alam Musully. “We know it’s government’s decision to impose the ban, and we understand it has certain benefits. But when we cannot fish, we almost live on no food. Fishermen’s life is worse than beggars. Beggars can beg, but we can’t even beg. We are a professional community, we can’t beg. It hurts our dignity. Some of us sometimes are so desperate that we even pawn little assets like a nose-pin of a wife to borrow money to buy food.”
- During the bans, many of the people work as day laborers, most in the agriculture sector and some in the town of Patuakhali. However, they felt there was an oversupply of labor during the bans, so finding work was difficult.
- All the participants said they took out loans from NGOs. These loans were always used as capital for income-generating activities such as fishing, including repairing boats, nets and other equipment, but never for consumption.
- The Association for Social Advancement (ASA), Social Development Foundation (World Bank), Gram Bangla, Community Development Center, Caritas, Heed Bangla, BRAC and the GOB initiative *Ekti Bari Ekti Khamar*<sup>4</sup> (“One House, One Farm”) were among those that provided loans.
- Members had received rice from the GOB, in varying quantities, but they complained of irregularities, patronage and corruption in rice distribution. Most of the members said they received rice three to four times in 2022, about 120 to 160 kg.
- Although it was true that there might be some political interference in the rice distribution program, there was also a general misunderstanding within the community about its entitlements.
- In the village, 2200 people had a FID card, but the participants alleged that only 700 cardholders were actually fishers.
- There were some young and new fishers who had not received a FID card as of yet.

#### **Compensation**

- The project provided fingerlings, chickens, ducks and goats according to each individual household’s choices and capacity, though two FMG members reported they did not receive any such assets from the project. Some of the group members managed to increase their assets, but others did not. The ones who managed to establish connections with private input sellers saw an increase in the size of their assets. They were entrepreneurial enough to seek out and access information about livestock management from the right people at the right time, while others from the same community failed to establish such connections.
- Some households said they were not convinced that a small collection of poultry would help increase their household income significantly, so they did not attempt to look after them. Some participants said their goats had died, which left them with no assets.

#### **Resources**

- Participants said that the yield was larger and the fish were bigger following the bans.



### **Coping strategies during the COVID-19 pandemic**

- The pandemic brought additional challenges to the community, because the markets closed. Alternative work, such as agricultural labor, also shrunk. No additional support was received from either public or private sources.
- Almost all the fishers continued fishing throughout the pandemic. Most of the catch was used to meet the immediate consumption needs of their family. The remainder of the catch was sold door-to-door to avoid getting caught by the authorities.

### **Other key observations**

- Almost all the fishers used banned nets. They were aware that use of these nets were illegal, but said they were desperate.
- The Ghat Guards received no money the previous year for sanctuary management.

### **Andharmanik CSG: An informal unplanned meeting**

This meeting was not pre-planned. Some of the fishers in the Andharmanik FMG were at work, so they were represented by their wives, who were also members of an CSG.

### **CSG members were worried about their money**

The members of the CSG said no one from project had followed up with them in the past 2 years, so they thought the meeting with the FMT was a good opportunity to enquire about their group savings. There were 25 women in the group, and each had saved between BDT 5000 and 7000. The group's total savings were over BDT 100,000<sup>5</sup>.

The participants said the CSG's work had stopped for about 2 years, and they were unsure why. They also did not know what had happened to group's savings. They seemed disappointed, frustrated and concerned about their money. They were also unhappy about the discontinuation of their group's work. The participants said they were worried that they might have lost their money.

### **Team explanation**

The local project management team said they had temporarily halted the CSG's work to protect the group from a potential gang of scammers and that the group's savings remained intact in their designated bank account. The account is in the name of the CSG, and money cannot be withdrawn without the signature of authorized group members. However, team acknowledged that they had not explained this adequately to the CSG.

About 2 years ago, there were reports of a potential scam in the area. The scammers deceived a few villagers by setting up fake savings and credit groups. As a result, the local team stopped the CSG temporarily, which seemed like a prudent option to protect the group from possible theft.

### **What happened after the group's work stopped?**

The following are possible mistakes the team made:

- The project did not explain the reason behind putting a halt to the work of the CSG.
- It never made any follow-up visits to the community after stopping the CSG's work.
- This created misconception and fear among the CSG's members that they had lost their savings.

### **Possible danger**

- This could damage WorldFish's reputation as an organization.

### **Recommendations for immediate action**

- Meet with the CSG immediately to clarify the reason for stopping the group's work.
- Offer an immediate solution to the problem.

## FV6: Sudhirpur

### CSG

There were 30 members in the group, which was started in 2016. They saved BDT 25 per week, and their group's savings currently stood at BDT 158,788. On average, savings per member was between BDT 5500 and 7500.

The size of the loans among the group members varied between BDT 10,000 and 50,000, depending on individual's capacity to repay the loan. Loans were to be repaid in 10 instalments. Interest rates, regardless of the size of the loan, were 5%.

The project provided BDT 25,000 as a first matching grant in 2017. The second matching fund came in 2022.

#### **Women's specific issues and concerns around the hilsa ban and coping strategies**

- No specific issues related to sex or gender were mentioned at the meeting. The main concern of the participants was the ability of households to cope during the bans.
- Despite most women contributing to their family's income from their AIGAs, almost all the households suffered from hunger during the bans. Eating less food or fewer meals was the main survival strategy.
- Every participant was aware of the bans, but all of them still fished from time to time, on a limited scale. Most families also used illegal nets while defying the ban.
- The participants knew there were different fishing bans, but they seemed unsure of the exact dates and lengths. They said they were not concerned about the 65-day marine ban, as there were no marine fishers in their community.

#### **Women's contribution to household income during the hilsa ban period**

- The participants said they received poultry, fingerlings, goats and cut-piece fabric.
- CSG members contributed to their family income not just during the bans but year-round. "I earn regularly about BDT 2000 per month from my tailoring business," said Rahima, the CSG's president. "I also have a cow that I bought from my income. We're waiting for the cow to give milk, this will help to increase our family income. There are some members in our CSG who also managed to increase family income and asset like me."
- Another member had taken out a loan of BDT 10,000 from their CSG group, to be repaid in 10 installments. Like Rahima, she invested the money in her tailoring business. In the first month of starting production, she earned BDT 13,000, a 30% profit.
- Shahinoor, another CSG member, took out a loan of BDT 50,000, to be repaid in 10 installments. She too wanted to invest in her tailoring business.
- Even though most of the women in the CSG group regularly supplement their household's income, almost all the families reported struggling to cope during the bans. They either ate less or ate fewer meals to cope.

#### **Other key observations**

- As a group, the CSG seemed very strong. Most members had basic literacy and numeracy skills, and many demonstrated a good entrepreneurial spirit to set up and run AIGAs. Interpersonal relationships among the members were also good.
- The participants were not members of any other NGO group. They did not want to borrow from NGOs, because the interest rates were much higher than their own savings group.
- Selling readymade garments locally using cut-fabric pieces seemed to be the most popular AIGA. The women entrepreneurs had not yet explored whether they could sell their products outside the immediate limit of their village.
- No market feasibility study had been done to assess the local demand and supply of locally made garment items. This could pose a potential danger, as the market might get saturated with readymade garments, resulting in fewer interested customers per seller than were currently available.
- Further understanding of contributing factors leading to high empowerment among the group members is recommended. It could provide useful information for future CSGs.
- During the pandemic, the households in this village did not receive any support from the GOB's rice distribution program.

## **FV7: Fatehpur, Maheshkhali**

### **FMC**

This meeting was dropped, as most of the members were at sea.

## **FV8: Hossain para, Kuakata**

### **Control group**

A total of 25 fishers participated in the meeting. They were not members of any NGO groups, as the participants said most NGOs are reluctant to give out loans to people in extremely poor fishing communities like theirs. None of the participants had their own homestead, as most of them live on government embankments. They had almost no assets whatsoever.

### **Management**

- Every participant had some idea of the fishing ban periods, but they all seemed confused about the different bans.
- The participants were in favor of the 22-day ban, as they believed it directly impacted the hilsa stock and breeding, but they were completely against the 65-day ban. They felt that small-scale fishers like them fishing within 10 km of the coastal shore did not impact the breeding and ecology of hilsa. They thought it should only apply to commercial marine fishers.
- Most of the fishers admitted they had poached fish during the bans because they or their family were hungry.

### **Impact**

- All the participants said they had borrowed money from local moneylenders.
- Ten percent of the catch needed to be given to the moneylenders, on top of repaying the principal amount, which was borrowed at high interest rates.
- The time to fish was between the two ban periods. With the 22- and 65-day bans, as well as adverse weather conditions, they only fished about 2.5 months each year, and fishing was their main source of income.
- The participants said the bans would only impact fishstocks and breeding if they were imposed properly. They said large commercial fishers always bought their way out of the restriction on fishing by bribing local administration. It was only the small and destitute fishers like them who suffered from restrictions on fishing.

### **Compensation**

- This group was the poorest of the poor, and one of the most disadvantaged groups the FMT met.
- All of the households seemed like they were in distress, and they all suffered regularly from hunger throughout the year. They said they routinely skipped meals year-round.
- Three of the participants did not have a FID card. Overall, the participants said about 80% of the fishers in their community had cards. They also said some of their young men had started fishing but had not been enlisted yet, even though they had applied for their FID card about 2 years ago. Originally, most people in the community were not interested in getting their FID card, as they did not know about the benefits.
- The participants said the GOB's rice distribution program was unreliable and inadequate.
- There were very few AIGAs around.
- Some young adults in the group said that before taking up fishing as a profession they occasionally worked as tour guides on Kuakata Beach, with a relatively good prospect of income. However, their family was beholden to local moneylenders in such a way that they had to return to fishing just like their fathers. They said, "We're all slaves, and we don't have money to get out of this life."

## **Resources**

- Like most communities, there was a lack of knowledge on the ecology and lifespan of fish.

## **Coping strategies during the COVID-19 pandemic**

- The pandemic was a very difficult time. Even the meager rice support from the GOB did not arrive.
- All the families ate less during the pandemic. Many only ate one meal a day for a prolonged period.

## **Other key observations**

- This group seemed to be the most marginalized and disadvantaged of all the fishing communities the FMT had visited so far. Despite this, project had left the community behind.
- One of the key survival strategies of the members was to borrow money from local moneylenders.
- Everyone who attended the meeting had an outstanding loan to a local moneylender. Most people often borrowed from multiple lenders and were trapped in complex loan cycles for life.
- Most families told stories of how they were trapped in intergenerational loans. This perpetual loan cycle prevents families from getting out of fishing.
- Generally, NGOs were not interested in working with the poorest fishing communities, as they were considered unbankable.
- The stories that the participants shared had multiple layers of complexities: different interest rates, various types of loan cycles, survival strategies, illegal fishing, getting stranded out at sea because of a natural calamity, no assets and no alternative job prospects.
- Members shared information that seemed to contradict each other, such as the reason for not leaving fishing behind as a profession and looking for a different life.
- Because of time limitations, the FMT could not arrange a second meeting. It is important to return to this group to understand and verify some of the information the community shared.
- It is also important to consider working with such destitute groups.
- To use such a poor community only as a “control group” to collect information for learning purposes is wrong and this practice should be stopped.

## **DFO, Patuakhali**

The DFO was away attending another meeting, so the FMT met with the senior sub-district fisheries officer, Opu Shaha.

## **Three key problems**

- The current compensation package and its coverage was inadequate.
- Alternative livelihoods opportunities for fishers and their young adult children were also inadequate.
- There was a lack of understanding about safe and sustainable fishing practices among most fishers in the community.

## **Four key recommendations**

- Carry out an assessment to understand the impact of the 65-day ban so far. Based on the findings of the effectiveness and challenges in implementing the ban, the GOB could revise future policy around hilsa conservation and breeding.
- Consider introducing insurance for fishers and providing productive assets from the fishing industry.
- Design a needs-based compensation package for poor fishers in the community.
- Offer an alternative skills training program for young fishers and young adult children of fishers in the community.



## Appendix 3 (Cox's Bazar): Hilsa fishing ban and compensation schemes

### Field Note 3: Cox's Bazar

#### Introduction

The three-member FMT from WorldFish visited nine villages, as well as the DFOs, in Cox's Bazar on October 1–6, 2022.

The objective of the mission was to understand the impact of periodic fishing bans on hilsa fishing and the coping strategies of the communities during the bans.

In addition to this, the FMT visited a few groups regarding cultivating seaweed and green mussels and trading dried fish. These groups were under an experiment to test the prospects for these AIGAs as viable alternative livelihood options for poor and extremely poor fisher communities. The findings of these experiential groups followed a different set of questionnaires than other groups (Annex 2).

Field Note 3 highlights findings from Cox's Bazar District.

Date	Location	Group/entity
2/10/2022	FV9: Jalia para, Teknaf	Potential <sup>6</sup> seaweed group
	FV10: Jalia para, Teknaf	Potential <sup>7</sup> mussel group
	FV11: Dakshin para, Teknaf	Seaweed cultivation
	FV12: Sabrang Mundardel, Teknaf	Control group
3/10/2022	FV13: Madarbumia para, Ukhia	Mixed group: FMC and CSG
	FV14: Shaplapur Notun para, Teknaf	Dried fish IGA
4/10/2022	FV15: Cox's Bazar Sadar, Choufaldi	Seaweed and green mussel farming, same group
	FV16: Rastapara, Sadar	Seaweed and green mussel farming, same group
	FV17: Rastapara 2, Sadar	Mixed group, FSG
5/10/2022	FV18 and FV19: Moheshkhali	Dropped, as most members were fishing at sea
6/10/2022	DFO Cox's Bazar	DFO

**Table 6.** List of meetings and groups in Cox's Bazar.

#### Common findings

- Among the communities, the findings in Cox's Bazar regarding the overall understanding of the fishing bans, the rationale for such bans, coping mechanisms and resources during the bans, as well as AIGAs, were similar to the findings in both Bhola and Patuakhali. As such, they have not been repeated here.
- Seaweed and green mussels:
  - Is it still at the experimental stage? Has it been abandoned? Forgotten?
  - Some communities are completely forgotten and left alone by project teams, and its partner organizations, without adequately explaining the reason and future strategies.

- Some communities are being used as experimental research labs without their knowledge and consent.
- Some of the members had made small profits from selling a few rounds of seaweed, but they had not established any formal marketing channels. These communities are waiting for the return of project team or the implementing partners to go forward with the work.
- Information that WorldFish's Dhaka office made available to the FMT on the profitability of the seaweed and green mussel trade was mostly inaccurate and misleading.

## **FV9: Jalia Para, Sabrang, Tekhnaf**

### **Experimental seaweed AIGA group**

#### **Background<sup>8</sup>**

- Originally, there were 24 people in the potential<sup>9</sup> seaweed AIGA group. Nine of them lost their home because of river erosion and had migrated to nearby villages.
- Eight of the remaining 13 members participated in the meeting.
- Half of the participants had a FID card.
- Fishing was their main profession. Average income varied between BDT 800 and 300 per day, when people were able to fish. During the ban, however, they often made no income.
- Most of the members said they only fished about 7 months a year.

#### **Source of information on seaweed, green mussel or dried fish AIGAs**

- About 2.5 years ago, a group of people from the project (referred to as "trainers" by the group members) came to Jalia para and provided a 1-day training course on how to grow seaweed.
- The trainers made seaweed cultivation sound like a lucrative business and said it was relatively easy to grow, and the community members received BDT 400 per person as a training allowance for the day.
- The trainers promised to come back to the community and provide them with all the necessary equipment and seeds. They also told them they would not need any investment other than their labor. But the trainers never returned.
- The members heard of a nearby group in Dakshin para growing seaweed and believed it could be a profitable business, so they were waiting for the trainers to return.

#### **Resources**

- Information that WorldFish's Dhaka office made available to the FMT showed that 16 members of this group were involved in seaweed AIGAs and that each member had gone through one production round, producing between 10 and 30 kg of seaweed. According to the records, investment per group member was reported to be BDT 12,000. But in reality, the intended AIGA never took off in this village.

#### **Challenges and coping mechanisms during fishing bans or natural disasters**

- People in this community said they continued to fish, albeit on a limited scale, during the bans, as there were hardly any other alternative work opportunities.
- FID cardholders received an average of 80 kg of rice during the 65-day ban, but it was not enough to meet household needs.
- People borrowed money from NGOs to cope during the off-season. The average loan was BDT 20,000, repaid in nine installments, at a monthly rate of BDT 2500. Villagers also borrowed money from moneylenders.

#### **Other information**

- All the participants were aware of the fishing bans. The 65-day ban was considered the most difficult.
- The project distributed goats to FMC members, and some members used them as productive assets for a limited period, but eventually all the households either stopped raising goats or lost them.
- It was apparent that the members were just mere participants in a research experiment, without their knowledge and consent.
- Falcon International and Chittagong University designed and implemented the research experiment.

## **FV10: Jalia para, Sabrang, Teknaf**

### **Experimental potential<sup>10</sup> green mussel AIGA group**

#### **Background**

- There were 24 people (20 men and 4 women) in the potential green mussel AIGA group.
- Seven (six men and one woman) of them attended the meeting arranged by the FMT.
- Six of these seven had a FID card.
- Fishing was their main profession. Average income during their main fishing period varied between BDT 200 and 800 per day. During the bans, fishers often earned almost no income.
- This community did not fish hilsa. They were all small-scale marine fishers.

#### **Source of information on seaweed, green mussel or dried fish AIGAs**

- In February or March 2020, a group of trainers provided a 1-day training program to the members on how to cultivate green mussels. The trainees received BDT 400 per person as an allowance for the day.
- The trainers made cultivating green mussels sound like a lucrative business.
- They promised to come back to the village with the necessary equipment and seed mussels. They also said the community would not need to make any investment other than their labor. But the trainers never returned.
- None of the participants had heard of WorldFish, nor did they recognize the organization's current staff members.
- The members were still waiting for the trainers to return.

#### **Resources**

- The green mussel program never took off.

#### **Challenges and coping mechanisms during fishing bans or natural disasters**

- People in this community continued to fish to some extent during the fishing bans because alternative options in the village were limited.
- FID cardholders received an average of 80 kg rice for the 65-day ban, but it was only enough to support an average family of five for 40 days.
- The participants said they borrowed money from moneylenders to meet basic daily expenses during the bans.

#### **Other information**

- All the participants were aware of the bans, the 65-day one being the most difficult.
- They said that during the year an average marine fisher could only fish roughly 4–6 months. Poor weather conditions also restricted fishing, on top of both fishing bans.
- Current field office staff had never met the trainers.
- The group members were used as subjects in a research experiment without their knowledge and consent.
- Falcon International and Chittagong University were both involved in this exploration mission.

## **FV11: Dakshin para, Shah Porir Dwip, Teknaf**

### **Experimental seaweed AIGA group**

#### **Background**

- There were 20 people (16 men and 4 women) in the experimental seaweed IGA group, which was formed in 2020.
- Twelve (seven men and five woman) of them participated in the meeting.
- Most people in this village did not fish directly. They were involved in trading—buying and selling fish locally. Members also made dried fish.
- In good times, average income was BDT 15,000–20,000 per month per household.
- During the storm season and the fishing bans, there was a shortage of work, during which all households suffered from want of food. Because of storms and tidal surges, most households only had 15 productive days per month, on average.
- During the bans, they worked occasionally as day laborers, but there was never enough work for everyone.

#### **Source of information on seaweed, green mussel or dried fish AIGAs**

- About 2.5 years ago, trainers provided members with training on how to grow seaweed. The trainees received BDT 400 per person as an allowance for the day. After the training, the group members worked under the supervision of the trainers to produce two to three cycles of seaweed.
- The community did not invest any capital, because the trainers provided all the necessary equipment and seeds needed to grow seaweed. Besides labor, no additional capital was required to grow either seaweed or mussels.
- In 2021, the trainers collected seaweed six to seven times from the community.
- “I used to be a tailor to supplement household income,” said Tasmin Ara, a group member. “My income from tailoring business on average was BDT 3000 per month. But since receiving the seaweed IGA training, I started seaweed cultivation as my new business. After 2 months of regular follow-up, I earned about BDT 12,000 from selling dried seaweed to the trainers. This made me very happy. So I stopped my tailoring business, and I am ready to become a full-time seaweed grower. Now seeing my success, a lot of my neighbors also want to grow seaweed.”
- Raw seaweed was sold at BDT 30/kg and dried seaweed at BDT 300/kg.
- The community jointly produced about 400 kg of dried seaweed in 2021, all of which the trainers bought back.
- In November 2021, the community lost most of the seaweed, including all its equipment, because of a storm surge. At the time of the field mission, no one in the community was growing seaweed. They were all waiting for the trainers to return.

#### **Resources**

- AIGA work around seaweed proved profitable in the short term.
- Despite this, however, no one in the community had considered investing their own capital into starting a seaweed business.
- Overdependency on the trainers perhaps restricted future growth plans.

#### **Challenges and coping mechanisms during fishing bans or natural disasters**

- The community seemed to be better off than its peers, but they all suffered from a lack of food during the bans and adverse weather conditions.
- The participants said they regularly borrowed money from relatives and NGOs and that eating less was their main coping mechanism in times of need.

#### **Other information**

- The community showed initial success in the short term. Most of them went through a few productive cycles of growing seaweed.
- However, no one in the group established a direct connection with markets to sell their seaweed. The only link to trade was through the trainers. This dependency made them vulnerable.



- Even with the prospect of growing seaweed as an AIGA, people had not considered investing in this trade.
- From time to time, the trainers continued to make follow-up visits to the village.

## **FV12: Sabrang Mundardel Village, Teknaf**

### **Control group**

A total of 26 people participated in the meeting, most of them marine fishers. Twenty-three had a FID card, 18 of whom had received rice from the GOB. This community appeared to be the most well off among all the communities the FMT visited. Most of the people in this village had a concrete house, which was a major sign of wealth in a rather economically depressed coastal village in Bangladesh.

Seven of the participants worked overseas as illegal workers in the fishing industry. Migration, though illegal and came with harsh and exploitative working conditions, was considered a clear route out of poverty. Most of the returning migrants brought back an average of BDT 1.1 to 1.5 million after 2 years of working overseas. The community members said an aspirant migrant on average invested BDT 200,000 to migrate illegally to work on foreign fishing boats as daily wage laborers. Popular migration destinations were Malaysia, Vietnam and Saudi Arabia.

### **Management**

- All the participants said that some form of a fishing ban was needed to continue improving fishstocks and to help with fish breeding, but they also thought that 65 days was too long.
- Support from the GOB or the private sector, such as NGOs, was inadequate to cope during off-seasons.
- The community followed the fishing bans, but they all said they sometimes had to fish during the bans to maintain basic family consumption needs.
- The marine fishers could only fish about 7–8 months a year. Ban periods, coupled with adverse weather conditions, cut fishing times short.

### **Impact**

- Same as other communities.

### **Compensation**

- Same as other communities.

### **Resources**

- All the participants thought the bans resulted in increased fishstocks and bigger fish.

### **Coping strategies during the COVID-19 pandemic**

- No information was recorded.

### **Other key observations**

- Using fixed nets was a common practice, as the participants catch more fish with relatively little effort. The large trawlers sometimes deliberately destroy the nets of poor fishers.
- The influx of Rohingya had affected the community negatively. Competition for work as a day laborer had increased.
- Increased demand for food resulted in price hikes for daily necessities, including food items.
- Participants said that local petty crime had increased since the Rohingya had arrived.
- Finding work on fishing boats had become more competitive. The number of boats remained the same in the area, but the number of laborers had gone up. “Rohingya are taking up our job” was a common complaint in this area.
- Migration, though illegal and came with exploitative working conditions, was considered the best route out of poverty.
- Although villagers in this community looked relatively better off compared to other fishers in nearby areas, all of them said they struggled to cope during the bans.

## **FV13: Madarbunia Village, Ukhia**

### **Mixed group, formed in 2020**

A total of 25 members (16 men and 9 women) participated in the meeting. Professions in this group were mixed: fishers, skippers, seasonal fishers and boat owners.

At the time of the meeting, the group had saved a total of BDT 93,000, including two matching grants. The members used the group's savings regularly as rolling capital, and the interest rate for loans was only 5% annually.

#### **Management**

- Like the other communities, members of the CSG were aware of the fishing bans but said the 65-day ban was too long.
- During the ban, they said they still sometimes fished for food.

#### **Impact**

- Same as the other communities.

#### **Compensation**

- There were about 240 fishers in this community, but only 84 had FID cards, 22 of whom had received rice in 2022.
- Most of the group members had received productive assets, such as goats, chickens and pigeons, as well as training on livestock and poultry breeding and maintenance from the project.
- Most households managed to retain some of the productive assets provided, and these productive assets are helping to supplement household income.
- Even with this supplementary income, however, most households still had to borrow money from NGOs to cope during difficult times. Some worked as daily laborers. Salam Mia, who was in his early 60s, was frail and had difficulty with his vision, but still had work as an earth cutter to cope during the bans. Like him a few other people in the group despite physical difficulties, had to continue to fish to feed their families.

#### **Resources**

- The participants said the fish were bigger in the first 2 weeks after the bans.

#### **Coping strategies during the COVID-19 pandemic**

- The pandemic was hard, as the GOB did not distribute rice.
- No work was available.

#### **Other key observations**

- Most members of this group managed to retain some of their productive assets. This was unique.
- The influx of Rohingya had made life more difficult for the villagers, as the price of daily necessities had gone up. "Vegetable used to cost maximum BDT 30 per day to feed a family of five," said Rasheda, a CSG member. "Now it takes minimum BDT 100 for the same amount."
- Petty crime in the area had increased.
- There was one benefit to the influx of Rohingya, albeit temporary. The International Organization For Migration used to manage a clinic for the Rohingya families, and non-Rohingya residents were also given access to the clinic. However, once the Rohingya moved to the camps, the IOM stopped providing the service.

## **FV14: Shaplapur Notun Para, Teknaf**

### **Experimental dried fish AIGA group**

A total of 16 members participated in the meeting, all of whom were women, and only 10 of the participants had a FID card. Drying fish was an additional AIGA to supplement household income, though fishing (by male family members) remained the main profession of these households. The average daily income of a fisher varied between BDT 500 and 2000. Those who had their own resources, such as boats and nets, earned more. Because of adverse weather conditions, most of the fishers in coastal areas of Cox's Bazar only fished about 10–15 days per month. During the fishing ban periods, the number of productive days dropped even further.

#### **Management**

- Most of the members were aware of both the 22- and 65-day bans.
- Most participants had to fish illegally during the bans, as there were no other viable alternative sources of income.

#### **Impacts**

- Most of the participants said it was very difficult for families to cope during the bans.

#### **Compensation**

- Often, people did not receive the correct amount of rice as mandated by the GOB's rice distribution program.
- Rice distribution was inadequate.
- Group members received fish in varying quantities to use for AIGAs. Most families used the fish for both consumption and productive purposes, and many were already engaged in dried fish businesses. Local demand for dried fish was always high.
- The project provided a metal platform that the members could use to dry fish. Most members said they found the platform very useful, as they could easily bring it indoors during the rainy season. The project also provided training, which the participants also said was useful.

#### **Resources**

- No information was recorded.

#### **Coping strategies during the COVID-19 pandemic**

- No information was recorded.

#### **Other key observations**

- Dried fish had potential as an AIGA, as the communities already had prior knowledge and were skilled in this area. Market links to sell dried fish were also well established.
- Further investment in this sector could bring immediate positive results, as the members possessed the basic skills needed to dry fish and local demand for dried fish was high. Some form of organized groups could strengthen the bargaining power of the fishers.
- The working environment and the business practices looked very unhygienic.
- Social cohesion seemed low among the members. Immediately after the meeting, the FMT provided snacks to the meeting attendees, and the members fought openly over them, alleging some members received more snacks than others. They also openly challenged the group leader who distributed the packets.

## **FV15: Rakhaine Para, Cox's Bazar Sadar**

### **Experimental potential seaweed and green mussel AIGAs**

#### **Background**

- This is the only ethnic minority group (Rakhine community) that the FMT visited during the mission. The main profession in this village was making shrimp paste, locally known as *napi*. Besides this, some people ran small grocery shops or tailoring businesses or worked as day laborers. Since the influx of the Rohingya community in Bangladesh, some Rakhaine youth had found new jobs as interpreters in the Rohingya camps.
- Eleven (seven women and four men) participated in the meeting.

#### **Source of information on seaweed, green mussel or dried fish AIGAs**

- Contrary to all other community groups that the FMT visited, the group in Rakhine para already knew about growing seaweed and cultivating green mussels. Except for Heri, however, the leader of the group, no one had AIGAs around either of these ventures. Only Heri ran a profitable business growing these.
- Along with Heri, the group received a daylong training from the trainers about 2 years ago and received BDT 400 per person as an allowance. The community did not need to invest any capital, as the trainers provided all the necessary equipment and seeds to grow both seaweed and mussels.
- The group members worked with the trainers to grow green mussels and seaweed for about a year. The exercise brought mixed results, but the community remained interested in growing them. They believed one day it could become a profitable AIGA. However, the trainers had stopped their follow-up visits about a year earlier without any notice. The community still awaits the trainers' return.

#### **Resources**

- The participants said they did not invest any money to grow seaweed or green mussels. They did, however, invest their productive work hours to grow them both, though they had not been compensated for this.

#### **Challenges and coping mechanisms during fishing bans or natural disasters**

- This community was not directly involved in fishing, so they were less affected by the bans.

#### **Other information**

- Information provided to the FMT said the community had grown about 600 kg of seaweed and earned money from selling it. However, a storm destroyed everything, so the members were unable to sell any of it.
- Participants said they had spent time to support what looked like a research experiment by Falcon International, but never received any compensation for the loss of their productive work hours.
- The team stopped making follow-up visits in the area over a year earlier.

## **FV16: Rastapara 1, Choufaldi, Cox's Bazar**

### **Experimental green mussel group: A research hub?**

#### **Background**

- Only three out of the 20 FMG members participated in the meeting, while the rest went out to fish.
- Fishing is the main occupation of the community. Sometimes, members work as day laborers when they cannot fish. Only one of the three participants had a FID card.
- During the storm season and the fishing bans, there was a shortage of work, and all the households in the village suffered from a lack of food. Like the rest of the groups that the FMT visited, people in this village sometimes had to fish during the bans just to meet basic family consumption needs.

#### **Source of information on seaweed, green mussel or dried fish AIGAs**

- No one in this village knew anything about seaweed or green mussels before the trainers came. About 2 years earlier, the trainers convinced the villagers that seaweed and green mussels can be profitable AIGAs.
- The group members received BDT 400 per person as an allowance on the training day.
- The community did not invest any capital, as the trainers provided all the necessary equipment.
- The community grew seaweed and mussels relatively well for 1 year, but there was never any scope to trade.
- The trainers had stopped making regular follow-up visits for over a year. From time to time, however, they did bring visitors to view the cultivation sites. Once the trainers sent 10 kg of green mussels to a local restaurant for an experiment that the group members did not know about.
- In November 2021, the group lost almost all the seaweed it had grown because of a storm. Some mussels died too.

#### **Resources**

- The community was never asked to invest any capital to grow seaweed or mussels.
- They did not know where or how to market these products, and they were waiting for the trainers to return to teach them the follow-up steps needed to start the AIGA that they promised them.

#### **Challenges and coping mechanisms during fishing bans or natural disasters**

- Like most of the communities the FMT visited, all the households suffered from hunger during the bans. People took out loans from NGOs, worked as day laborers and ate less to cope.

#### **Other information**

- The village was used only as a laboratory for experimental research.
- Occasionally, the trainers and project staff used this village to demonstrate its "success" to external visitors, including a high-level US embassy official visit by the US ambassador.
- Currently, the members were just nursing the green mussels and seaweed with the hope of starting production at some point. None of them had received any compensation for their time. It looked like they were all just pawns in a research experiment done without their knowledge and consent.



## **FV17: Rastapara village 2, Cox's Bazar Sadar**

### **Mixed group**

A total of eight women and one man from the group participated in the meeting. The men in the village were marine fishers. Mohammad Nurul Amin, the head of the local marine fish conservation society, was the only man who attended the meeting. Nurul was a relatively wealthy trader, and all the fishers in this village worked for him.

### **Management**

- All the group members were aware of the fishing ban periods.
- During the bans, most households had to defy the ban on occasion to meet basic family consumption needs.

### **Impact**

- All the participants said the 65-day ban was too long.
- They said as they were marine fishers and that the hilsa ban should not apply to them.

### **Compensation**

- Most fishers in this community had a FID Card.
- The GOB's rice distribution program was not enough to help families cope during the bans.
- The CSG members were running some form of AIGAs using their savings, tailoring and poultry being the most common. Even with supplementary income from these AIGAs, however, most households struggled to cope during the bans.

### **Resources**

- No information was recorded.

### **Coping strategies during the COVID-19 pandemic**

- The pandemic was very difficult, as the GOB did not distribute rice.
- No work was available.

### **Other key observations**

- The participants seemed relatively better off than most of the groups visited in Cox's Bazar. However, it was interesting to note that even better-off community members found it hard to cope during the bans.
- Everyone who attended meeting said competition for work on fishing boats had increased since the Rohingya arrived in Cox's Bazar. They seemed resentful about them competing for their jobs and resources. They said the Rohingya received additional support from the GOB and from international assistance, but the Bengali community did not. "We don't have access to medical care, but there are plenty of medical facilities for Rohingya by international projects," said one woman participant. "Everything is for Rohingyas only."
- The cost of living expenses, including registration for births and deaths, had increased the since Rohingya arrived.

## DFO, Cox's Bazar

### Key discussion points

#### Emergency financial support during the COVID-19 pandemic

- During the pandemic, the GOB provided a one-time emergency cash support to fishers in coastal areas, from Satkhira to Cox's Bazar. The support varied between BDT 10,000 and 18,000 and was given directly to beneficiaries through mobile money transfer accounts. However, only shrimp growers were eligible to receive it.

#### Compensation

- Family members were entitled to receive BDT 50,000 in compensation from the GOB in case of a fisher's death from a natural calamity while at work.
- The GOB was willing to introduce life insurance for fishers, but no commercial insurance companies were interested in providing coverage to this community.

#### Inadequate rice support to help fishing communities cope during the bans

- Information was not recorded.

#### Vetting process for getting a FID card

- The GOB rolled out FID cards in 2012–2013. It is an ongoing process, as people get in and out of this profession several times throughout their lifetime. The GOB's fisher registration program works accordingly.
- The DFO was aware that some non-fishers had also received a FID card, so they recognized the need to strengthen the process to stop this practice.
- In Cox's Bazar, there were 66,000 registered fishers.

#### MIS and central database

- The fisheries department of the GOB had created a database of fishers, but it was still in a very preliminary stage of management. Sometimes, there was political interference in distributing FID cards, but the GOB was supposed to develop systems to make sure only genuine fishers receive a card.
- The GOB had started monitoring the size of the fish population in the Bay of Bengal, and it aimed to begin real-time monitoring of fishstocks. But it is a challenging task, as the government's capacity is low. The GOB was considering adopting policies to limit registration of fishers proportionate to the fish population.

#### Length of the ban periods

- The GOB had determined the length of the bans based on scientific research and analysis. It acknowledged that some fishers did not like how long they were, as it affected their livelihoods.
- The length of the bans was not fixed, however, so it was possible that they could change, depending on further research.
- Fishers were aware of all the bans and had been given all information available. However, they were not willing to follow the bans.

### Key observations

- None of the community members or government officials in other locations apart from Cox's Bazar said anything about emergency financial support for fishers during the pandemic.
- Only the Cox's Bazar DFO said anything about accidental and occupational compensation for families upon the death of a fisher. It was unclear if this compensation was only for coastal marine fishers or for all fishers. The process to enlist and receive the compensation was also unclear.
- The GOB needed to strengthen the approval process for FID cards and roll out nationwide awareness program on the cards.
- The current compensation package for fishers during the bans was inadequate.

# Annex 1. Questionnaire for the experimental AIGA group

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## **Background**

- What is your family's background?
- What are your family's key income generating activities?
- Are you a members of any savings or credit group?

## **How did you become interested in getting involved in seaweed, green mussels or dried fish AIGAs?**

- How did you find out about the seaweed, green mussel or dried fish trade?
- How long have you been working in this trade?
- How well are you producing these products?
- What do you do with your products?
- How much money do you make from this trade?
- Are you interested in continuing to trade these products?
- How and where do you sell these products?

## **Resources**

- How much money have you invested in this trade?
- What is the source of your investment or capital? Your own money, WorldFish grant, other?
- Have you received any support from the government?

## **Challenges and coping mechanisms**

- What challenges do you face in this trade?
- When there is less work because of the fishing bans, natural disasters or COVID-19, do you receive any help from the government? Other sources?

## **Other information**

- Is there any other information you want to share with us?



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