

# Wetland Sanctuary Co-management and Conflict: An Exploratory Study of the Impacts of the Baikka Beel Project in Bangladesh

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## Abstract

In 2003, the Government of Bangladesh declared Baikka Beel, a 100-hectare wetland in the north-eastern part of the country, as a permanent wetland sanctuary conservation project intended to preserve its fish breeding and bio-diversity. Within the framework of the Borogangina Resource Management Organisation, a co-managed project was launched with the support of the USAID. Through a community husbandry initiative several NGOs and one multi-national company also took part in the project. Field research was conducted in 2012 to explore the socio-economic and environmental impacts of the co-managed project. The research revealed that the primary dependent group (i.e. the fishermen) who live in the surrounding vicinity were excluded from the co-management process and that the project impacted their economic, social, political and cultural lives considerably. The top-down approach apparently failed to persuade relevant stakeholders to buy in, resulting in a conflict among three relevant project stakeholder groups as they perceived and pursued their interests on a piecemeal basis.

**Keywords:** Co-management, conflict escalation, natural resource management, Bangladesh

## Introduction

Bangladesh is a country of deltaic floodplains, making it one of the world's most important wetlands, upon which a vast population remains highly dependent. Therefore it can almost be claimed that "Bangladeshis are sculptured by the rivers, lands, and wetlands rather than the land being shaped by the people" (Rahman/Davis 2005: 11). A survey shows that approximately 80 per cent of the rural households are either subsistent or commercial fishermen (Islam/Braden 2006) and about 60 per cent of animal protein is attained from fish consumption (Belton et al. 2011).

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Depending on various local (resource depletion) and global (donor funding) factors, the state often intervenes to protect its bio-diversity. Such intervention is often essential because, on the one hand, the state does not want its citizens to remain overly dependent on a natural resource, thereby causing its depletion, while on the other hand, intervention helps to maintain the delicate ecological balance of the country. Baikka Beel (the first and only permanent wetland sanctuary in Bangladesh) is one such case where the Government of Bangladesh (GoB) intervened, because an excessive dependency on and misuse of the wetland had been causing large-scale bio-diversity extinctions since the 1990s (Mukul 2007).

This paper explores the case of a wetland and its stakeholders working within a joint wetland management system, the Baikka Beel Project. This conservation project evolved from the Bangladesh Ministry of Land's (MoL) realisation that a multi-party conservation approach in small areas has the potential to sustain the ecology and bio-diversity while at the same time protecting the livelihood of hundreds of people living in the vicinity. While the reports of the MoL, as well as of participating project partners, describe only positive aspects of the project,<sup>1</sup> our research shows that this project might have brought some unintended consequences for the local inhabitants in general and for the fishermen in particular.

One might even go so far as to say that our study shows that the co-managed project did more harm than good, especially to the local inhabitants: it impacted negatively on livelihood and led to nutrition loss and geographical dislocation for the most vulnerable group (i. e. fishermen), who were highly dependent on the wetland's natural resources, and eventually escalated into inter-group conflict. Co-management sometimes disrupts an already existing social power hierarchy as it attempts to realign the power relationship among social groups, which in turn triggers inter-group rivalry. Resistance in this case came in passive (non-cooperation) and active forms (protests and demonstration), as observed during the study period. Moreover, an analysis of historical data points to the fact that the conflict in question can be termed a "conservation conflict" related to the preservation of the wetland sanctuary, since visible manifestation of conflict was not discernible before 2003.

## Natural resource co-management approaches and conflict

Co-management concepts have been developed in many countries around the world where a state has felt the necessity to co-opt locals and interested external third party agencies to operate certain conservation projects. This occurs

1 See reports by Winrock International 2013 and of the Center for Natural Resource Studies (CNRS 2012).

mainly for two reasons: to rely upon the technical, financial and knowledge expertise of external agencies and to reduce the government footprint in active resource management. However, scholars define co-management as a condition that “refers to joint decision making by the state and communities (or other interest groups) about one or more aspects of natural resource access or use” (Castro/Nielsen 2001: 230). Certain salient aspects occur in such collaborative environments: for example, “two or more social actors negotiate, define, and guarantee amongst themselves an equitable sharing of the management functions, entitlements, and responsibilities for a given territory or set of natural resources” (Borrini-Feyerabend et al. 2000: 1). Additionally, co-management also involves “state agencies sharing resource allocation or management responsibilities with communities. [...] Although these stakeholders may hold different interests, the fundamental assumption is that sharing authority and decision making will enhance the process of resource management” (McCay/Jentoft 1998: 26).

Le Billon posits that natural resource-related conflict is often expressed in binary terms (i. e. abundance or scarcity), although conflict can result from mere “vulnerability resulting from resource dependence”; he therefore linked violence generated from conflict to “the conflictuality of natural resource political economies” (Le Billon 2001: 561). In a similar vein, the primary stakeholders who live in two villages within the study area, the core constituents of the conservation project, are those most likely to engage in activities to protect their livelihoods, which is why it is beneficial to understand that the “growing human production of nature, and the political forces behind such production” drive conservation-related conflicts (Bryant/Bailey 1997: 191). However, inasmuch as the conflict is a “situation that occurs when two or more parties with strongly held opinions clash over conservation objectives and when one party is perceived to assert its interests at the expense of another”, it is also about people organised into different camps while disagreeing about fundamental conservation and development goals (Redpath et al. 2013: 100).

Escobar suggests a holistic understanding of environmental conflicts, taking into consideration three inter-related elements: “economic, ecological, and cultural” (Escobar 2006: 6). He also contends that in order to lay out a political ecology framework to understand the dynamics of conservation-related conflicts, one should also focus on understanding the stakeholders’ relationships based on “access” to resources and the prevailing “cultural” diversity of different stakeholders (ibid.). Scholars argue that political economy only takes into account the economic distribution resulting from social groups’ proximity to political power; whereas political ecology, in contrast, takes into account the “ecological and cultural dimensions of distribution and equality” that are pertinent to our research (ibid.). Similarly, another scholar has commented

that a better way to analyse conservation-related conflict is to use an “ecological distribution conflict” lens (Martinez-Alier 2003).

Conflict Escalation (CE) is one of the useful theories in understanding natural resource-related conflicts and their constructive management. However, CE theory is dependent on the resource in question and the actors or stakeholders in terms of their interest in and influence on the matter (Yasmi et al. 2011). Conflicts related to forests, aquatic resources and cultivatable and/or arable land are ubiquitous and may involve violence, such as physical attacks or even assault.<sup>2</sup> In this article we have used Friedrich Glasl’s CE model to analyse the conflict. This model has nine stages based on the level of conflict intensity, which increases as the number rises: 1) hardening; 2) debate, polemic; 3) actions not words; 4) image and coalition; 5) loss of face; 6) strategies of threat; 7) limited destructive blows; 8) fragmentation of enemy; 9) together into the abyss (Glasl 1999). The important aspect of the model is that conflict intensifies not only due to the existing differences (both perceived and real) of the stakeholders but also because of the perception of “impairment” that one party feels due to the behaviour of another actor because of these differences. For this reason conflict management strategies should be devised based on conflict intensity level. Consequently, Glasl suggests that conflict intervention should be implemented when the conflict is at its least intense phase.

## The case of Baikka Beel – past and present

Baikka Beel is an extended part of Hail Haor, one of the three major haors<sup>3</sup> in Bangladesh under community management initiative. It is a 100-hectare wetland sanctuary located in Kalapur Union, in Sreemangal Upazila,<sup>4</sup> located 200km northeast of Dhaka. During the dry winter season, the haors tend to dry up significantly, but Baikka Beel retains water throughout the entire year. Therefore, it is an important breeding ground for numerous aquatic and fish species, of which many are categorised as rare and endangered. It is also a premier birding destination in Bangladesh. The aquatic species that mostly shelter and breed at Baikka Beel also disperse to Hail Hoar to re-populate the region during the rainy season, thus safeguarding the availability and sustainability of natural resources.<sup>5</sup> Approximately 172,000 people living in 60 villages surround Hail Hoar and the majority of these households are fishermen

2 For some examples see Peluso/Watts 2001; Ayling/Kelly 1997; Alston et al. 2000.

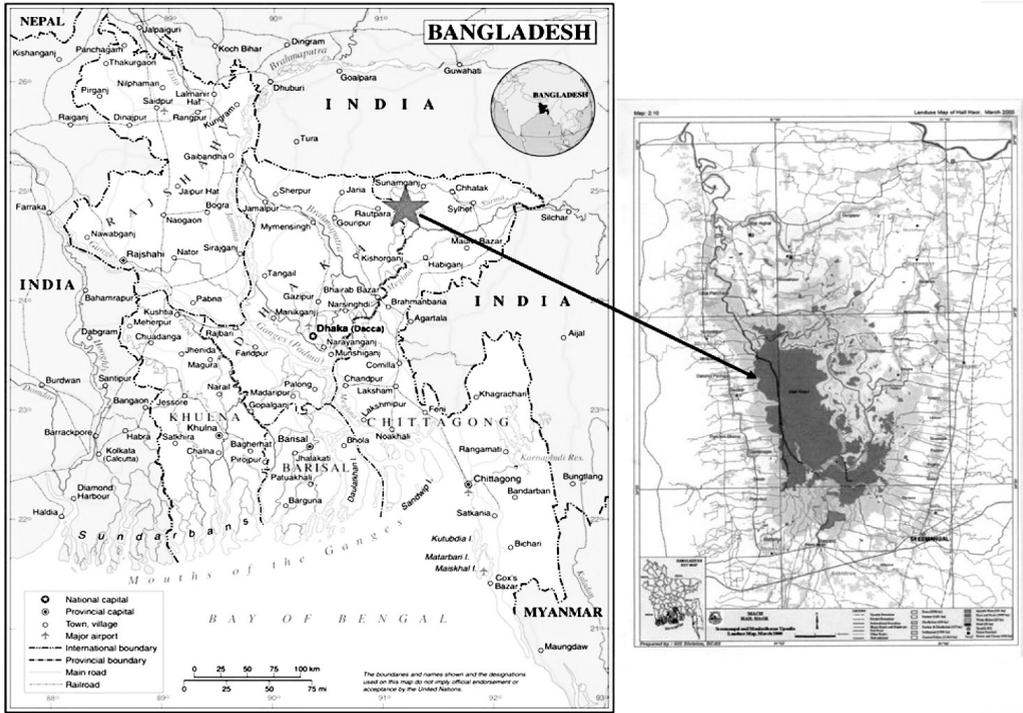
3 A *haor* is the local term for a large wetland. It consists of bowl or saucer-shaped shallow depressions that are inundated or flooded seasonally.

4 An *upazila* is a sub-district. Sreemangal Upazila is a sub-district of Moulvibazar under the Greater Sylhet district, Bangladesh.

5 For further reading refer to John Valbo-Jørgensen/Paul M. Thompson (2007): *Culture-based Fisheries in Bangladesh: A Socio-Economic Perspective*. Rome: Food and Agriculture Organization of the United Nations.

by profession (CNRS 2012). The living standard of the majority of people in haor areas, Baikka Beel included, is one of the lowest in Bangladesh and the population density is high. With one of the poorest road communication networks in terms of connectivity with the mainland, eleven haor upazilas are not connected with the roads network.

Figure 1: Location of Baikka Beel



Source: Monwar et al. 2014

Since 2003, when the Baikka Beel area was declared a sanctuary zone, it has been considered a safe haven for birds, reptiles, mammals and fish and from 2004 onwards all fishing, hunting and aquatic plant collection was banned (although limited fishing rights were given to selected people, who were awarded lease by the local government). Consequently, it was observed that the wetland sanctuary declaration resulted in increased fish size and abundance (Dev 2011: 67). The GoB’s approach to the management of Baikka Beel is based on a multi-party participatory model in which USAID, the US-based funding agency, is the principal project donor; it supports the project through its Management of Aquatic Resources through Community Husbandry

(MACH)<sup>6</sup> programme. MACH began in 1998 and is implemented jointly by Winrock International, the Bangladesh Centre for Advanced Studies, Caritas Bangladesh and the Center for Natural Resource Studies. The major purpose of MACH is to demonstrate to communities, local government and policy makers the viability of community approaches to sustainable natural resource conservation and management in aquatic ecosystems, with the ultimate goal of ensuring food security to those dependent on wetland aquatic resources. During the fieldwork period, the project supported training and micro-credits for alternative occupations and income sources for fishing households, among other activities (MACH 2017). Besides MACH, the United States Agency for International Development (USAID), Borogangina Resource Management Organization (BRMO), Ministry of Land (MoL), Social Welfare Development, Center for Natural Resource Studies (CNRS, a Bangladeshi NGO), Integrated Protected Area Co-Management (IPAC), Chevron Bangladesh (a multinational company) and other resource management organisations (RMOs) are the stakeholders in this project. Principal aspects and stakeholders of the co-managed programme are illustrated below (see Table 1).

The institutional approach of all these organisations that work within the co-managed environment shows the following characteristics (Thompson / Choudhury 2011): 1) The resource management organisations (RMOs) that have been established to protect and sustain wetland resources represent all stakeholders. 2) Separate organisations, the Federations of Resource User Groups (FRUG), have been formed to help the poor diversify and enhance their livelihoods. 3) These community-based organisations have been formally linked with local government (both union parishads – elected local councils and upazilas, or sub-district administration) through Upazila Fisheries Committees. 4) Separate partner NGOs have worked to support each of these bodies and their activities in a collaborative and coordinated way.

Once the project was implemented, a limited number of fishermen were still able to work with selected lessees (selected by BRMO authority) who obtained the right to catch fish. However, this dual system – the total ban on fishing under the conservation regime vs selected fishing rights (who was included, and who was not) – gave rise to questions amongst the primary stakeholders. The exact number of those “fortunate” fishermen could not be ascertained during the study period.

6 “The key elements of the MACH approach have been establishing community organizations and then embedding within them institutions for sustainable wise use of wetland resources, formally linking these with the existing local government system, and through this making interventions to restore wetland productivity and improve the livelihoods of the poor. The organizations involved comprise: 16 Resource Management Organizations representing all local people with interests in wetlands and fisheries, 13 Federations of Resource User Groups comprising of poor fishers and other poor wetland users, 25 Union Parishads, and the administrations of 5 Upazilas. Co-management is formalized through Upazila Fisheries Committees where representatives of all bodies sit to coordinate and oversee management of the systems” (Thompson / Choudhury 2011).

Table 1: Organizations involved in the co-managed project of Baikka Beel

<b>Internal Stakeholders</b>	
Ministry of Land (MoL), Government of Bangladesh	The MoL declared Baikka Beel as a permanent wetland sanctuary on 1 July 2003. It chose a multi-party participatory model to provide sustainable management of Baikka Beel.
United States Agency for International Development (USAID)	USAID is a US-based funding agency, the principal project donor, supporting the pilot project MACH financially.
Management of Aquatic Resources through Community Husbandry (MACH) Program	MACH was run from 1998–2008, implemented jointly by Winrock International, the Bangladesh Center for Advanced Studies, Caritas Bangladesh, and the Center for Natural Resource Studies (CNRS, a Bangladeshi NGO founded in 1993).
Borogangina Resource Management Organization (BRMO)	BRMO was developed under USAID and the MACH program. The organisation is registered as an NGO with the Social Welfare Department of the Government of Bangladesh with a general body (consisting of 47 fishermen, farmers, women and local leaders). It is also supported by 1) the local union council; 2) the Department of Fisheries; 3) the upazila committee under the supervision of the local administrative head. BRMO is responsible for the concrete management of the wetland.
Federation of Resource User Group (FRUG)	Separate organisations, which have been formed to help the poor diversify and enhance their livelihoods.
<b>External Stakeholders</b>	
Integrated Protected Area Co-Management (IPAC)	IPAC was set up by Nishorgo Network, another NGO in Bangladesh, which funded the MACH project from 2008.
Chevron Bangladesh	Chevron Bangladesh is a multinational company, and a financial partner for promoting tourism in the Baikka Beel region.

Source: compiled by authors

Of the 16 RMOs, Borogangina RMO (BRMO) is the one situated within the study area. It used the concept of a Community Conserved Area,<sup>7</sup> which included 45 surrounding villages (fishermen, farmers, women and local leaders were included) to manage the conservation as well as to liaise with villagers, with multiple goals in mind. An important stakeholder representing the

<sup>7</sup> This includes realistic activity packages for the stakeholders, which cover household-level livelihood planning and intervention, training needs assessment, awareness and institution building, habitat rehabilitation, afforestation, wise use of fish and other wetland resources, establishment sanctuaries, community development and local level institution building, and social and biological monitoring.

MACH programme in Baikka Beel is the Center for Natural Resource Studies (CNRS), a Bangladeshi NGO. Additionally, the Integrated Protected Area Co-Management (IPAC) programme of Nishorgo Network, another NGO in Bangladesh, funded the project from 2008. For conservation purposes, a variety of wetland management functions were divided among different stakeholders: the management part of the wetland to BRMO; policy monitoring to USAID; financial partner for promoting tourism to Chevron Bangladesh; and wetland policy implementation to the CNRS.

BRMO is registered with the Bangladesh Social Welfare Department and its local stakeholders are local fishermen, farmers, women and local leaders randomly chosen by BRMO officials. Additionally, the local union council, the Department of Fisheries and the upazila committee support it. Under the BRMO, a Federation of Resource User Group (FRUG) was also formed and some fishermen signed up to become participants of the MACH programme<sup>8</sup> while others did not. MACH-participating fishermen received significant training on knowledge sharing, financial and technical services, marketing, organisational information, alternative income and social and cultural activities (Dev 2011).<sup>9</sup>

In Bangladesh, several laws and acts are in place governing distribution and access to lands by the population.<sup>10</sup> One study showed that at least 60 per cent of rural families are land-poor or even landless (Ali 2010). Local fishermen, in particular, are not dependent on arable lands per se but rather on wetland areas, and they have enjoyed their traditional “usufruct rights” to resources since the colonial period (Khan 2011). Through the Permanent Settlement Act of 1793, the colonial administration included Sylhet District (including Mou-

8 The Management of Aquatic Ecosystems through Community Husbandry (MACH) project is a US\$ AID-supported pilot project that started in 1998 and is implemented jointly by Winrock International, the Bangladesh Centre for Advanced Studies, Caritas Bangladesh and the Center for Natural Resource Studies. The major purpose of the MACH project is to demonstrate to communities, local government and policy makers the viability of community approaches to sustainable natural resource conservation and management in aquatic ecosystems, with the ultimate goal of ensuring food security to those dependent on wetland aquatic resources. The MACH approach has been to consider all factors that affect the community and the aquatic resources at the ecosystem level. This has involved a multi-disciplinary, multi-sectoral and participatory process of planning, implementation and monitoring. For example, recognising that the reduction of fishing pressure to a sustainable level is a critical part of fisheries management, and that this would cause hardship for some fishers, the project supported training and micro-credit for alternative occupations and income sources for fishing households (MACH 2017: 10).

9 The study by Bishwajit Kumar Dev (2011) compared the statuses and livelihood patterns of fishermen participating in the MACH project with those who did not participate (for details see p. 70). It is assumed that membership in such a programme was on a voluntary basis. The fundamental expectation was to educate the dependent fishermen about fish resources and train them for alternate professions in order to reduce dependency on fishing. In line with this study, we also observed that the fishermen who participated in the MACH programme benefited from it.

10 For example, the National Land Use Policy of 2001, the 1972 Constitution (last amended in 2011), the 1950 State Acquisition and Tenancy Act, the 1984 Land Reforms Ordinance, the Transfer of Property Act of 1882 and the Registration Act of 1908. *Khas* lands are owned by the Ministry of Land, which may allow their use by the otherwise landless or by those who pay money to lease it. *Waqf* or trustee lands are under control of another ministry or department but managed by a committee. *Khas* bodies of water are owned by the Ministry of Land, and forest lands are completely owned and managed by the Ministry of Forest and Environment (Khan 2011).

luvibazar sub-division, which contains a large part of the wetland that includes Baikka Beel) in the revenue collection system (Hunter 1881: 495). This 1793 historical record actually gave birth to a perceived right in people's minds to enjoy the natural resources "located in common properties" (often described as public land or *khas* property in Bangladesh: common-law freehold government land) for those who live near wetlands, without being engaged in a renter-owner relationship. However, things have changed since the mid-1990s, when many of the wetlands were leased out to interested lessees (who participated in the bidding process in order to use the wetland for the purpose of fish extraction) for revenue generation by the MoL, leading inevitably to great difficulties for subsistence fishermen in accessing the resources.

Beginning in the 1970s the Department of Fisheries actively pursued a proper management of wetland resources based on sustainable fishery management principles; however, it did not see much success until the New Fisheries Management Policy came into effect in 1986 (Ahmed et al. 1997: 3). This new policy actually attempted to address some of the inequitable wetland management processes and also outlined ways to empower local fishermen by "free[ing] the fishers from exploitation by middle agents, leaseholders and financiers in sharing resources" (ibid.). Nevertheless, inter-departmental rivalry arose between the MoL and the Department of Fisheries, as described by one scholar: "stemming from the reluctance of MoL to give up ownership of jalmohals [local name of the fishing estates] to the DoF [Department of Fisheries], conflict arose between MoL and the DoF as regards to implementation of the 1986 NFMP [New Fisheries Management Policy]. There are two main reasons why MoL wants to hold absolute authority on beels/jalmohals management: i) to ensure easy income from beels/jalmohals leasing for the government exchequer by which MoL can claim to be a profitable government institution compared to others; and ii) the process of leasing of jalmohals allows various types of malpractice and manipulation" (Khan et al. 1989: 149).

In essence, the "usufruct rights" of the fishermen of Baikka Beel to freely access the wetland for resource extraction came to an end (with some exceptions, of course) when the conservation project was launched. Although previously some parts of the beel were leased out to local and external clients (i.e. businesspeople who obtained leases, supported by local elites), local fishermen still enjoyed some rights to fish and remained gainfully employed, since they constituted the main workforce who were hired by the lessees. Under the new circumstances following the New Fisheries Management Policy, however, not only was their free access to resources curbed significantly, but they also saw that local and external businesspeople continued to enjoy fish extraction as per new lease conditions. For example, whereas previously the fishermen could catch fish anywhere in the beel, now, as the new conditions came into force,

they were required either to fish in a restricted area within the beel during a given period or to be employed by the lessees in order to catch fish.

## Methods

This research uses a mixed methodological approach (Johnson / Onwuegbuzie 2004), combining qualitative and quantitative data. The main reason to adopt such an approach is to gain deep insights about the nature of the conflict from the stakeholders and to see how the co-managed project impacted their lives. During the data collection stage we primarily aimed to collect quantitative data, but collected qualitative data in interviews and from ground observations as well. Further, we included secondary data from various studies conducted thus far on Baikka Beel to support our findings. In the analysis, we carefully compared both forms of data with regard to the overall research question as to the impact of the co-managed project on the primary stakeholders and on the conflict, which has escalated over the years.

Purposive sampling was used to reach out and access different stakeholders situated in three tiers within the co-managed framework (direct stakeholders such as the village communities of Baruna and Hazipur; external stakeholders such as USAID, NGOs and Chevron; and GoB officials). Initially, pre-test questionnaire surveys of ten households and later 100 households were conducted in Hazipur and Baruna – two village communities where most of the dependent groups of Baikka Beel live. Two practical aspects influenced our concentration on these villages: logistical ease (i. e. transportation, accommodation, concentration of participants and project activities) and accessibility to a maximum number of participants. Research participants were carefully chosen, keeping in mind the overall aim of the research to study the three tiers of the co-managed project environment. However, in the BRMO, only two local businesspeople participated in the study although we reached out to more than ten. This could be related to a prevailing perception that businesspeople are the “bad guys” who exploit the fishermen, leaving them unwilling to participate in the study.

Research fieldwork was carried out in the summer of 2012 by a research team composed of Nahreen I. Khan and four graduate students from Jahan-girnagar University. Six Focus Group Discussions consisting of about 12–15 participants each (with different stakeholders – project members, local leaders, fishermen) were held. In addition, 22 open-ended key informant interview sessions lasting 90–120 minutes each were conducted with the fishermen, with six external stakeholders from Chevron, CNRS and the GoB, with ten local community members and with six BRMO stakeholders. The details of the

study participants are highlighted in Table 2 below. Study participants were reached through letters and word of mouth. It is worth noting here that when interviewing the direct stakeholders, we often noted that they felt uncomfortable in the presence of local elites and BRMO members. These latter groups sometimes accompanied our research team to the places where interviews were conducted. They often did so uninvited, claiming that they were only curious onlookers. In the Bangladeshi rural context, such a situation is rather typical, as local elites perceive the presence of any outsiders in their area as an intrusion in their sphere of dominance. However, it took some trust-building efforts from the research team (such as dialoguing in local dialect and explaining the aims and benefit of the study), but eventually the team was able to successfully access the direct stakeholders in private. Although we tried to include as many female participants as possible, the gender distribution clearly shows a dominance of male participants in this research, which is due to two reasons: females are not usually involved in the catching of fish with their male counterparts and they are reluctant to speak to strangers.

Table 2: Details of the study participants (N=135; number of household surveys / study participants)

Direct stakeholders		BRMO project stakeholders		External stakeholders	
village community of Baruna	59	local leaders	3	USAID (MACH project)	6
village community of Hazipur	41	BRMO members	14	NGOs (CNRS)	6
				Chevron	2
				GoB	4
<b>Total</b>	<b>100</b>		<b>17</b>		<b>18</b>
Gender distribution					
Male	97		14		18
Female	3		3		0

Source: compiled by authors

## Impacts of the Baikka Beel project on the local fishermen

Since the commissioning of the BRMO, which was developed under MACH and CNRS in 2004, a number of social, economic and cultural conditions have changed, impacting the lives of the people living at Baikka Beel. Thus, 88 per cent (N=119) of the respondents reported that they experienced significant changes in the environment, sometimes including the death of fish, and 12 per cent (N=16) reported changes in the social (negative), economic (mixed) and cultural (negative) conditions. For example, a demographic shift occurred, triggered by the influx of external labourers, trades changed among local inhabitants, and increased poverty, as well as a change of values, could be seen.<sup>11</sup> While alluding to environmental change, they observed that “the impacts are subtle yet the environmental quality of the area has deteriorated in the years following the declaration as a sanctuary”, in the form of fish stock degradation and noise pollution caused by works for the tourism project. A small number (12 per cent) of participants (all of them local fishermen) reported drastic environmental changes such as incidences of flash floods, which had a negative impact on the fish and prevented these participants from working as fishermen throughout the years. However, opinions regarding the socio-economic-environmental changes varied widely according to which stakeholder group the respondents belonged to and how freely they felt they could speak. According to the majority of the respondents from the group of direct stakeholders, the conservation project benefited only the local elites, only exacerbating poverty and complicating life for the fishermen, as one of them explained:

This development is nothing but an eye-wash. We live here, but we feel like outsiders. We are not allowed [?] to walk beside the sanctuary, anytime police can come and arrest us with false allegation. We feel that this is not our land. We are living in no man’s land (male fisherman in his early 40s, 24 July 2012, Srimangal).

Some of the small-scale commercial and subsistence fishermen in the area observed that despite an increase in the quantity of fish in the beel (due to the conservation regulation), they were not able to catch fish freely because they couldn’t gain fishing rights under the regulation. On the other hand, the BRMO allowed businesspeople coming from outside the area to lease a portion of the sanctuary and harvest fish in a regulated way. Such a dual practice fuelled animosity among the direct stakeholders, although BRMO stakeholders tried to negotiate between businesspeople and fishermen. Still, the direct

11 We observed that in the study area there was a signpost every few meters reminding women to keep their modesty by speaking softly and covering their heads. This shows that the area is fairly conservative, and this was a reaction to the clear impact of deviant cultural and social values that arrived with the newcomers who came for project-related works. Further, the participants mentioned that there was an increase in prostitution, which is considered a grave sin.

stakeholders witnessed their livelihoods and tradition in jeopardy while they saw businesspeople – some of them belonging to local elites – profiting from the project. Although some skills training was imparted to selected fishermen who joined the MACH programme, no organised efforts were made to provide alternative employment for them.

External stakeholders (i. e. project workers from MACH, CNRS and Chevron) shared their optimism and positive experiences about the project outcome. In line with these, BRMO stakeholders (especially the local elites) echoed similar impressions. For example, one of the respondents of the local elites remarked that he personally had benefited from the project and that the reported conflict was a rumour to derail the project:

This project is for the wellbeing of the community, we have benefited from it and we have no complaint. We are better now in every aspect. The news regarding conflict is just a rumour (male member of local elite in late 50s, 3 July 2012, Srimangal).

When confronted with this feedback on the project's impact, the fishermen didn't share this opinion. Since the direct stakeholders could not extract natural resources as they used to do previously, they felt deprived and stripped of their natural rights of access to fishing and therefore saw no positive outcome to the project. Instead, they felt disempowered, since they perceived that the locus of power, especially concerning the decision-making ability regarding sharing local resources, had shifted from them to the external stakeholders. The majority of the external stakeholders were seen as outsiders who did not have any natural ties to the land – only the GoB had a few local employees, whereas all the others, such as MACH, CNRS and Chevron, hired workers from different parts of Bangladesh for the project. We also observed a notion of an “us” vs “them” condition when the respondents shared their hopelessness with us. The sense of alienation was rooted into their perception that the government had adopted an approach of parachuting in an external organisation, which determined “what was good for them” (i. e. how to increase fish size and number, improve air quality and concentration of migratory birds and increase the touristic value of the area) without any participatory process. Such an approach might have deprived the direct stakeholders of their sense of involvement in the project.

Respondents alluded to environmental degradation yet could not substantiate these allegations with any examples of possible degradation. Nevertheless, a Department of Fisheries study succinctly corroborates our respondents' claims with the following observation:

The income of marginal fishers has decreased over the years due to reduced availability of carp and other fish in the haor. Moreover, every year more people from neighbouring communities are getting involved in fishing as a seasonal or part-time occupation. As a result, fishing pressure is continuously increasing. In addition, environmental degrada-

tion caused by late rains, heavy river siltation, agricultural and industrial pollution, and other environment factors further intensify the problem (Dev 2011: 78).

In 2013 several construction activities took place at Baikka Beel, such as tourist toilet facilities, footbridges, a tourist centre and bird-watching towers. Such eco-tourism initiatives did not employ a significant number of fishermen seeking alternate jobs because of their lack of skills and education. Chevron Bangladesh sponsored these constructions as a part of their Corporate Social Responsibility to further develop local tourism. For the construction activities, external labourers (according to a member of the local elite, approximately 270 of them) stayed overnight in the area, dumped construction materials in the water and used various loud machines, which distracted the birds. Further, since there were no proper waste disposal facilities in the area, the labourers often disposed biological, non-biological and even hazardous wastes in haor water, posing substantial risks to the ecology and biodiversity of the wetland.

The Baikka Beel project had a clear impact on migration patterns of surrounding communities of the project area. A substantial degree of out- and in-migration could be witnessed, causing a demographic shift. Three reasons stood out: 1) many fishermen lost their traditional jobs and left the villages to seek employment in urban areas; 2) for project management purposes external stakeholders and the local elites who were allowed to fish brought cheap labourers from outside; and 3) many construction workers came in from outside to build project infrastructure. For example, 79 per cent (N=107) of the respondents observed a definite trend of out-migration from their communities; 69 per cent (N=93) reported that they knew at least 8–10 families who migrated to other, mostly urban areas, of the country and took up seasonal or transitory jobs within the past year. Moreover, a distinct out-migratory trend was noticed among the young people within the communities (23 fishing families revealed that from each family at least one young man had left to seek a job in urban areas and eleven families reported that all of their able-bodied males had left the villages to earn a livelihood).

Out-migration also impacted the traditional local way of life in tight-knit families, in which males were the principal breadwinners, maintaining control of the family. Now that a significant number of males had left their families to find work in nearby urban centres, family cohesion and participation in community affairs by male family members were adversely affected. Although cellular phones help people keep in touch and the absent males visit their families once or twice a month to share their wages, the traditional way of life for families has changed for many. Furthermore, the absence of male family members has also pushed the females to take on menial labour to support their families, further straining the very fibre of traditional (patriarchal) village

lives. The following statement by a research participant corroborates this finding:

I work as a housemaid in two houses in the village. I never worked like this before, yet I had to take up these jobs to help my family to survive. Earlier, I used to help my husband in preparing the fishing net and now we no longer have to do it. I carry my young child with me while I work and it makes me sad because most of the day we remain outside of our home (wife of a fisherman, in her early 30s, 30 June 2012, Srimangal).

According to 75 per cent (N=75) of the direct stakeholder respondents, there was a direct link between migration and ongoing cultural changes.<sup>12</sup> Under the project mandate, some non-local and local businesspeople (who gained fishing rights) teamed up and hired cheap labourers from other parts of the country, some of whom eventually settled in the area. The interplay of out- and in-migration had a ripple effect on the traditional cultural landscape of the study area, which was also related to the ongoing economic changes, especially the increased poverty. One study participant summarised the new situation as follows:

We were peaceful in the past, now we are not. Earlier, people used to know each other, people used to help each other, and intermingling was a normal situation. Since the strangers arrived, we hardly get together. The project impacted on small families very much, as so many fishermen left the village to cities and it created problems in their previous *sukhi* [happy] families (54-year-old male fisherman, 29 June 2012, Srimangal).

We were particularly interested in likewise obtaining some insights into what sorts of cultural impacts the project had on the primary stakeholders and asked them to reflect on their lifestyles before and after the project was implemented. As the project was launched in 2003 and we studied the case in 2011–12, the primary stakeholders had already lived through a significant amount of time under the project environment. Consequently, viewed from macro and micro perspectives, we deduce two aspects here: 1) From the macro perspective, their reflections about changes might have been rooted in the ongoing broader socio-economic-cultural changes in Bangladesh that adversely affect collective living and give rise to a nuclear family system, as well as lessening intra-group interactions based on mutual trust and fellowship. 2) From the micro perspective, the fishermen at Baikka Beel live in a certain “niche” where they experience the impact of the Baikka Beel project on an ongoing basis, as it changes existing social hierarchies and brings about new social rules that continuously affect their social relationships.

The respondents mentioned a couple of significant changes that they noticed: one of the most important was the change in local dialects as outsiders arrived

12 This information was revealed during Focus Group Discussions (FDGs) and from the local community leaders. The interview question was: “What kind of changes have you experienced in your cultural life since the conservation project was launched?” Here, “culture” was used in a broad sense to mean the way traditional fishermen used to interact with other people in the area as well as amongst themselves.

for project work. Also mentioned were an increase in instances of inter-marriage, the engagement in informal trades, the use of recreational facilities (such as going to the cinema and attending *jatra*, local theatre) and a rise in anti-social behaviour.<sup>13</sup> The change in language can be attributed to an unfolding phenomenon, what we term here as the effect of “domestic globalisation”.<sup>14</sup> This signifies a growing realisation amongst the primary stakeholders that people’s “long standing cultural practices [are] being transformed [both positively as well as negatively]” due to unavoidable encounters with outside cultures and individuals that the project ushered in (Escobar 2006: 7). It is merely a comparative assessment of social conditions that the respondents thought important to mention when they alluded to phrases like *shanti noshto hoye geche* (“there is no peace anymore”). In this regard, we observed that the socio-economic differences between those people who came to work in the study area vis-à-vis the local population had increased to such an extent that it affected inter-group social harmony and reinforced class differences based on inequality. For example, one might say that social inequality had always existed (at the lowest level the fishermen; at the top local elites, businessmen and politicians), whether or not the project actually accelerated the process. What we gained from the participants’ responses was that the sense of inequality felt by the fishermen was rooted both in perception as well as in actual effects of the project. In other words as the project unfolded, the first thing that the fishermen experienced was the loss of their natural rights (i.e. the right to fish anywhere in the beel). In addition, the project also realigned the social class system by producing new beneficiaries (such as middlemen and workers), a development viewed unfavourably by the fishermen. Whatever the case, a complex interweaving of perception and reality with regards to inequality precipitated a conflict.

The “inequality” that the project precipitated can be linked to the idea of a struggle where several factors – physical power, familial reputation, religious or political authority, wealth, capital and technical knowledge – are in play with an aim to control a “dominant good” (although at times it can be more perceptual than real) (Waltzer 1983). Inequality does not always reside within the “material social sphere” (i.e. economic) related to “unequal distribution of goods and services, yet economic inequality also encompasses the intersectionality of culture, gender, environment, education, race and the social esteem of people living in a society” (Giesen/Nobre 2010: 339). In the context

13 “Anti-social behaviour” is defined here as the increase in petty crime in the area, the availability of casual sex workers and inter-group violent conflicts. A number of demonstrations had taken place in the area in the past and these were also referred to as anti-social behaviour.

14 We use this generic term to denote the nature of changes the respondents alluded to. The key components of globalisation (such as inter-connectivity, transfer of ideas, free trade and outsourcing) were also present in the study area. We viewed in a smaller framework the very presence of these components in the area and assert that a correlation exists between the advent of the project and the observed changes.

of the Baikka Beel project, this is contextualised in the following way: as the outsiders who landed in the area were mostly employed or tied to some sorts of economic activities, they were viewed as privileged against the locals whose quality of life had experienced a continual downward trend since the project's inception. Some of the fishermen were chosen in the MACH programme or allowed to fish only because they were known to the local elites. Consequently, this "closed circle" played a dominant role in granting access to the project.

The project included all the villagers of Baruna and Hajipur and triggered a necessity for occupational change for the majority of the villagers. Traditionally, two thirds (according to local information provided by local government officials) of the population of these villages were fishermen, and among them, 23 per cent of the study participants said that they had to change their occupation in the post sanctuary declaration due to limited or no access to catching fish. The list of new occupations that some of the fishermen adopted includes: rickshaw-puller, grocery seller, vendor and day labourer; however, the majority of fishermen still remained unemployed. Moreover, under the changed conditions, they had to resort to taking a number of different jobs without much preparation or education; at the same time, they faced steep competition in the alternate job market. Although one study documents that MACH-affiliated fishermen received some training for alternative employment (Dev 2011), we did not receive enough responses to confirm such a claim. According to the questionnaire surveys, limited self-employment opportunities prevailed in the area. Furthermore, the respondents also said that most of the people had to take up two jobs in order to support their family, which was not the case in the past.

Some of the fishermen told us that they had to learn new skills as taxi drivers, and in varied circumstances many resorted to selling their land or borrowing money from local lenders, micro-credit firms and/or banks to buy a taxi. Some 29 per cent of the direct stakeholders had to put up their houses as collateral, giving rise to anxiety and insecurity about the future. These are new experiences for the fishermen. In rural Bangladesh fishermen seldom like to take out bank loans due to the fact that they cannot provide any collateral; although micro-credit has gained popularity in the country, taking out a loan remains culturally perceived as a bad thing. In the same vein, 54 per cent of the direct stakeholders stated that they had lower job satisfaction in their current occupation, as they were no longer able to practice their traditional fishing skills.

## Conflict Analysis

As the project began (2002–2003), tension built among the direct stakeholders when the news first broke hinting that the government was considering a conservation project to protect the biodiversity of the Baikka Beel wetland. In the absence of any direct consultation process with the villagers, the rumour spread rapidly in the community regarding the likely loss of their livelihood. Using Friedrich Glasl’s model for Conflict Escalation (see above) this can be termed the “(1) hardening stage” and took place around 2004–2007. Consequently, the villagers got the impression that BRMO stakeholders were “sell-outs” and that they were acting merely as a tool of the local elites and government agencies. Although a semblance of dialogue between the direct and BRMO stakeholders existed, with the occasional presence of the external stakeholders (representing the stage of “(2) debate and polemic” according to Glasl), the villagers quickly perceived that subsequent dialogues were not a sincere effort. They felt, rather, that these were aimed at buying out the villagers so that they would not resist the project’s implementation. Moreover, the promises of the BRMO to generate alternate employment opportunities for the villagers were not fulfilled after the first round of dialogue. Once the dialogues failed, the conflict moved to the next, third stage: “(3) actions, not words”.

The principal reason why the dialogues failed was due to the lack of trust between the primary stakeholders (i. e. fishermen) and the external stakeholders, as the former were not very convinced about the project’s benefit. Consequently, the external stakeholders failed to bring the fishermen into the overall project management process. The villagers informed us that as soon as they realised that dialogues wouldn’t solve the problem they gradually avoided any consultation sessions. It is worthwhile noting here that mutual mistrust deepened between the direct and BRMO stakeholders, as manifested in a number of quarrels and local protests, leading even to “damaging infrastructure installed by BRMO such as an area map billboard, or a foot bridge connecting watch-towers” (Khan/Falk 2013: 14). As a result, BRMO stakeholders stopped communicating with the villagers, although some of the union members tried to keep the dialogue channel open. Positions hardened, as can be seen in the statement of one BRMO member and a villager:

This is the time to handle the situation boldly; if anyone does not like to protect our beel, he may stay somewhere else. We are repeatedly convincing them [the villagers], but unfortunately they have no idea about environmental awareness (47 years old, male BRMO member, 20 June 2012, Srimangal).

This is the land of our ancestors, we cannot allow any outsider to rule us or control us. Our indigenous knowledge is enough to protect our beel (male villager, in early 40s, 21 June 2012, Srimangal).

It might be worth noting that the visible presence of the external stakeholders was minimal in the conflict area; instead, their interests were represented by their local representatives (i. e. the local elites). Three external representatives, especially from MACH and Chevron, described frequently feeling insecure in the project area, leading them to avoid communicating with the villagers about the project directly. Some of them even left the project sites and started living in nearby urban areas. Subsequently, as both the primary and BRMO stakeholders started to blame each other for not delivering the promises of the project and started rallying their groups behind a cause, the conflict moved on to stage 4, “concern for images and coalition”, between 2012–2013.

Within a span of years after we completed our project, there was a report of a massive attempt to catch a large amount of fish at once in Baikka Beel (Prothom Alo 2013). According to a news report, the water levels at Baikka Beel were low due to insufficient rainfall in the monsoon season, further causing a detrimental impact on the fisheries. Nevertheless, villagers believed that an artificial environment had been created that caused the fish to die and that it had been orchestrated by sanctuary guards and some BRMO members. The BRMO authority, however, dismissed the allegation of their members’ involvement and instead accused the locals of violating project regulations. In addition, it was reported that illegal fishing continued unabated, impacting the project’s future (Dhaka Tribune 2014).

Although at the time of the fieldwork in this study, the conflict seemed to be moving from stage 3 to stage 4 according to Glasl’s CE model, only a few months later the conflict rapidly intensified and resulted in open protests and rallies between the villagers and BRMO stakeholders. Some local inhabitants now raised similar concerns about resource exploitation:

The authorities always ignored it when the beel was being grabbed and polluted and the eviction drives often stopped midway due to “unknown reasons”. Aroj Ali, another resident of the area, said protecting the beel from grabbers and pollution is a must to save the life and living of the local people (Daily Star 2015).

This rapid deterioration of the conflict situation between the stakeholders confirms that conflicts often do not proceed in a linear way. Conflict progression depends upon three factors: the presence of some or all of the conflict escalating factors (for example, propaganda, threat, intimidation, lack of access to authentic information and coercion), negative social relationships (among the stakeholders) and the perception of continuing deprivation among the marginalised. Eventually, the period between conflict stages contracts and a conflict could escalate at a faster pace, resulting in violence from any side at any time.

## Co-management of the Baikka Beel Project

The co-management model that the GoB came up with underpins a host of lofty goals, as evident from one of the project partner's strategies:

To reduce natural resource dependency and increase their adaptation capacity, CREL [Climate Resilient Ecosystems and Livelihoods] livelihood beneficiaries are required to provide sustainable market-based solutions. Using a value chain approach is one of the key strategic points that has been identified as a catalyst to mitigate the adverse effects of climate change on the livelihoods of the beneficiaries. Other interventions include adequate and substantial skills and knowledge transfer, improved practice and technology based on market demand, and a response to climate resiliency (Winrock International 2013: 7).

Our findings indicate that although the above-mentioned strategy looked good on paper, it actually not only failed to bring all stakeholders to a common platform through implementing a community-based resource management system but also failed to deliver a "market-based" solution (*ibid.*: 9). Additionally, researchers had already identified unique sets of challenges that came with the concept of the Community Conserved Area and what could be done to overcome these conflicts. Yet, in the Baikka Beel case, we observed that many challenges remained unaddressed (Islam et al. 2006). Similar studies carried out in Botswana also noticed limitations of co-managed projects as the "local people find it difficult to voice their concerns [...] given the power relations involved in this participatory process. [...] [And] implicit in the policy implementation process are mechanisms which constrain empowerment and dictate the forms of participatory conservation" (Twyman 2000: 323).

Under the co-management model, other GoB-initiated projects (such as forestation) were also unable to succeed, pointing towards a lack of stakeholder cooperation within the system (Dhaka Tribune 2015).<sup>15</sup> One scholar noted that it is not the declaration's aspect or government's good will to "protect and preserve" but rather how the preservation is being managed that is crucial, through a "cooperation between residents of different economic status and local leaders, councillors and officials" (Dev 2011: 67). Additionally, communication, education, and public awareness activities that various parties initially performed might have failed to deliver the expected outcome.

As indicated above, the co-management model had upset the pre-2003 hierarchical power scenario and a previously familiar living arrangement within a familiar power dynamic (i. e. a small number of elites and local government

<sup>15</sup> Climate Resilient Ecosystems and Livelihoods (CREL), an NGO working at Baikka Beel, reported that the forest department took the initiative to plant various trees during the 2012-2013 fiscal year under the climate trust fund. In this regard, Md. Shamsuddin, treasurer of Borogangina Wealth Management Association, an organisation involved in managing Baikka Beel, confirmed that the Murta plants planted by the forest department no longer existed: "After the forest department planted the trees, they did not contact any of the private organisations associated with managing Baikka Beel. Hence there was no one to take care of them. Most of the Murta plants died within one to two years of planting" (Dhaka Tribune 2015).

officials at the top followed by poor fishermen at the bottom). The GoB's intervention to preserve and protect Baikka Beel reshaped the power relation landscape, since the project brought in external experts, new NGOs, created new elites (such as businessmen), introduced new laws, and last but not least launched new ideas (such as eco-tourism). Consequently, the poor fishermen had to go through a familiarisation process to understand new power brokers under the new arrangement as the GoB's power became manifested through a meso-level organisation (i.e. BRMO) composed of local elites, officials and selected fishermen. External stakeholders who set the agenda for preservation and protection support this organisation. On the surface, it might appear that the direct stakeholders are reasonably represented within the BRMO; nevertheless, from the "power" consolidation and decision-making perspectives we observed that the external stakeholders and GoB were in an advantageous position to influence BRMO objectives. Moreover, in the process of project implementation, not all the local fishermen subscribed to a certain resource group (FRUG, MACH- and non-MACH and other NGOs) for two primary reasons: fishermen were free to choose to join the resource groups based on their employment and training needs, while some of them were preferentially able to join a particular resourceful group based on their access to local elites and local government officials. This resulted primarily from the lack of a harmonised approach by external and BRMO stakeholders to "buy in" the local fishermen.

## Conclusion

The case of Baikka Beel shows that an expected correlation among "increased environmental scarcity", "decreased economic activity" and "migration" for conflict generation does not always exist (Peluso / Watts 2001: 5). Rather, the investigated conflict originated locally (i.e. was site specific), was rooted in local histories and was manifested in social relations, although "[it is] connected to larger processes of material transformation and power relations" (ibid.). An examination of the conflict suggests that it is definitely rooted within the study area (6 similar projects have been launched in Bangladesh thus far and encountered similar issues in terms of implementation) and thereby "site specific" with its unique characteristics (Islam et al. 2006: 13).

The external stakeholders involved in this conflict came with varied agendas; for example, Chevron aimed to improve tourism conditions while CNRS tried to improve socio-economic circumstances. Synchronisation of all these agendas became a daunting task for the government – one that the co-managed approach in Baikka Beel project management failed to achieve.

The project generated an inter-group conflict and clearly changed social patterns in the traditional village society. The seeds of the conflict were sown when it became clear that the project parameters (such as addressing alternate livelihoods and the social impact of the project on the villagers) could not be properly determined in consultation with all the stakeholders. From that point, project implementation suffered and other factors (such as misuse of power by local and external elites) compounded the issue. The primary stakeholders and a group of several organisations (i.e. BRMO, MACH, Caritas and Chevron) are the two distinct conflict parties, as the conflict essentially gave birth to new “winners” and new “losers”. On the one hand, the Baikka Beel preservation project empowered local elites to retain control over the project management that systematically disempowered the poor and dependent groups. Thus the fishermen who were dependent on Baikka Beel felt vulnerable; this is a classic manifestation of conflict originating from the “vulnerability resulting from resource dependence”, as identified by Philipp Le Billon (2001). The Baikka Beel conflict altered the social class system in the area as the project ushered in new business opportunities for outside traders, which created new elites and their beneficiaries. In addition, the traditional roles in village life were questioned, with some respondents mentioning that the project presented a psychological challenge, especially to the village elders, by systematically diminishing their role and their informal authority in mediating conflict between and among various parties.

The conflict eventually polarised the villages and pitted different social groups against each other (i.e. the BRMO members and local elites against the fishermen). In this complex situation, although it appears that the local elites, middlemen, project workers and external stakeholders gain from the project (i.e. winners), conflict analysis shows that the prevailing antagonistic atmosphere rooted in widespread frustration among the fishermen might escalate into hostility in the future, whereby the apparent winners might eventually lose their businesses and interests.<sup>16</sup> In the long-term perspective, this could be termed a “lose-lose” situation that might destroy the socio-ecological-cultural balance of Baikka Beel.

In our recommendation, to avoid a protracted conflict that might lead to violence, the GoB should review the project’s mandate and allow the stakeholders to engage in a fresh round of dialogue, not only by taking stock of previous output but also by mapping out the ways to move forward. Care should be taken to empower the direct stakeholders by taking a number of steps, including but not limited to eliminating local divisions, by restoring mutual trust and by including the direct stakeholders in the decision-making process for project implementation.

16 In the aftermath of the study, several local protests were reported in the newspapers.

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