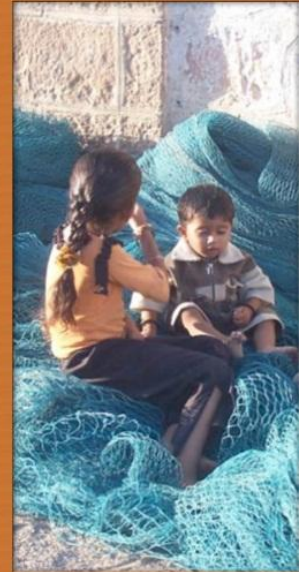




Bay of Bengal Large Marine Ecosystem Project



Report of the
**ICSF-BOBLME Training programme on enhancing
capacities of fishing communities**
November 2013- February 2014 • Sundarbans, India

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Country Report: India (Sundarbans)

**Fishers as participants in the Sundarbans Eco–Region–
Resources, Rights, Responsibilities, and Problems**

Sundarbans, India

26 November, 2013 – 10 February, 2014

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Acronyms used

BLC	Boat Licence Certificate
BOBLME	Bay of Bengal Large Marine Ecosystem
DAT	Distance Alert Transmitters
DISHA	Society for Direct Initiative for Social and Health Action
DMF	Dakshinbanga Matsyajibi Forum
EAF	Ecosystem Approach to Fisheries
EDC	Eco Development Committees
FAO	Food and Agriculture Organisation
FEO	Fisheries Extension Officer
FPC	Forest Protection Committees
FRA	The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
GIC	General Insurance Corporation of India
ICSF	International Collective in Support of Fishworkers
ISD	Indian Sundarbans Delta
MAB	Man and Biosphere
NTFP	Non-Timber Forest Produce
PPP	Purchasing Power Parity
SBR	Sundarbans Biosphere Reserve
SRDS	Sundarbans Rural Development Society
SSF	Small Scale Fishers
STR	Sundarbans Tiger Reserve
UNESCO	United Nations Organization for Education, Science and Culture
WLPA	Wild Life (Protection) Act, 1972
WLS	Wildlife Sanctuary

Currency rate: 1 USD = 61.93 INR

Rate as of 04.03.2014 (<http://www.dollars2rupees.com/>)

Rate corrected by PPP, see note to appropriate portion of the text

1. Background

Fishing communities in the Bay of Bengal region have depended for generations on coastal and marine resources for their lives and livelihoods. Over time they have developed ecosystem–and fisheries–related knowledge and skills, and have evolved institutions that regulate their interactions with each other, with the resource base and with the outside world. In a context where natural resources, including fisheries resources, are under pressure, the need to work closely with local communities, enabling them to play an integral role in resource management is increasingly evident. Also evident is the need to enhance efforts towards training and capacity building of local communities to take on such roles.

To date, however, efforts in this direction have been limited at best. Hence, the International Collective in Support of Fish workers (ICSF) with support from the Bay of Bengal Large Marine Ecosystem Project (BOBLME) held workshops and training programmes in five countries in the Bay of Bengal to enhance the capacity of fishing communities to engage with issues related to management and sustainable use of coastal and marine fisheries resources and habitats. Programmes were held in India, Bangladesh, Myanmar, Indonesia and Thailand. ICSF and its partner agencies in each country worked with fishing community representatives, including youth and women. The programmes also sought to strengthen the fishing community organizations and enhance their linkages and working relationships with local level functionaries responsible for fisheries and coastal resources management.

In India, two sites were chosen – the Sundarbans in the state of West Bengal and the Gulf of Mannar in the state of Tamil Nadu.

2. Introduction

In West Bengal, India, the term Sundarbans may refer to the southernmost tracts of the Ganga delta or to the tidal halophytic forest in this region. The second usage is the more popular and hence, Sundarbans in this report will denote the tidal halophytic forest area.

Between 1765 and 1875, under British administration, the Sundarbans was divided into “lots” for reclamation and settlement. In the 1800s, scientific forest conservation became the buzzword in official British circles. The coming of Dietrich Brandis and the setting of scientifically trained forest service led to the promulgation of forest conservation laws and the creation of reserve forests. In the Sundarbans, in 1875, some areas (in present–day Bangladesh) were declared as a reserve forest. In spite of these changes, the Sundarbans continued to be cleared and settled. The extent of the Sundarbans shrank from around 17,000 km² in the early 19th century to 10,200 km² today. Of this, about 42 per cent lies in India and the rest in Bangladesh. In 1928 and later in 1943, some parts of what is now called the Indian Sundarbans were declared as reserve forests¹.

3. The Sundarbans Tiger Reserve

The total extent of the Indian Sundarbans is about 4,260 km². In 1973, the Government of India launched Project Tiger, a scheme aimed at conserving the charismatic tiger and thus the forests in which this species ranged. The Sundarbans Tiger Reserve (STR), extending over 2,585 km², was one of nine Tiger Reserves declared in 1973. The STR was divided into a core and buffer area for

¹ Chacraverti. S. The Sundarbans Fishers: Coping in an overly stressed mangrove estuary. ICSF, 2013 (unpublished).

management purposes. However, tiger reserves, core and buffer areas were administrative classifications and had no legal basis. The core area was about 1,330.10 km² and here forestry operations (collection of resources, fishing etc.) were not allowed. To legalise this regime, the core was declared a Wildlife Sanctuary (WLS) under the Wildlife (Protection) Act of 1972 (WLPA²) in 1977. It was later designated as a National Park in 1984, increasing the level of protection accorded under the WLPA.

The buffer area of 1254.9 km² (STR total area minus the core) was open to forestry operations. In 1976, the north-western part of the buffer, the Sajnekhali Bird Sanctuary was notified as a WLS which meant forestry operations were curtailed. Thus the area within the STR available for fishing was reduced to about 892.38 km², or about one-third of the area of the total STR. It is to be noted that this 892.38 km² includes both land and water areas.

In December 2007, the core area expanded to 1699.6 km²; a 28 per cent increase³. Consequently, the area within the STR now open to fishing is roughly 523 km². Once again, only a portion of this 523 km² is water area, i.e. available for fishing. While the fishing area has shrunk, the number of fishers has increased due to population growth.

3.1. Reserve forests and the SBR

The reserve forest areas (outside the STR) cover about 1675 km², and consist of general reserved forest areas and WLSs⁴. All these categories have implications for the human users of the Sundarbans — the fishers, crab-collectors, and honey collectors.

In 1989, under the Man and Biosphere (MAB) Programme of the UN Educational, Scientific, and Cultural Organization (UNESCO), the Sundarbans Biosphere Reserve (SBR) was declared. This includes the STR and the reserve forests outside the STR. The 9630 km² large SBR extends from the Dampier-Hodges line (imaginary) in the north to the Bay of Bengal in the south, and from the Indo-Bangladesh border in the east to the River Hooghly to the west.

Once, most of this region was forested, now more than half of it is reclaimed and settled. These non-forested areas, the so-called revenue areas, are heavily populated⁵. As per the 2011 census, the total population of the SBR is 4,426,259, a density of 969 persons per km². Given that some 94 per cent of the population is rural and dependent on local resources, this, in addition to the many non-local sources of pollution (e.g. pollution brought down by the river and created by tourism activity), there is a heavy ecological footprint.

The forested areas, under the forest department, have no resident human population. Yet, the notified forest areas are neither ecologically nor socially isolated from the rest of the SBR. They are subject to a considerable degree of human intervention, through normal forest operations including wood cutting, fishing, and collection of honey. There is also illegal use of forest by poachers and poor people who are compelled to enter the forests, mostly for collecting fuel wood.

² In India, all protected areas are declared under this law. These can be wildlife sanctuaries or national parks; the latter has a higher degree of protection i.e. some use of resources in sanctuaries is allowed while in national parks, even entry is prohibited.

³ The notification no. 6028-For, dated 18.12.2007 was issued under Section 38V of the WLPA. This established the Core Area or Critical Tiger Habitat of the STR. The notification declared that the Core Area was to consist of the areas included in the previously declared STR plus additional areas. This notification also provided the Core Area and the STR with a legal basis. For, before the Wildlife Protection Amendment Act of 2006 introduced section 38V into WLPA 1972, tiger reserves, core and buffer areas had no legal foundation.

⁴ All figures have been rounded to the nearest km².

⁵ Chacraverti. S. The Sundarbans Fishers: Coping in an overly stressed mangrove estuary. ICSF, 2013 (unpublished).



Figure 1 The Sundarbans Tiger Reserve

3.2. Fishing community

Forest users, like fishers and honey collectors, have been an integral part of the Sundarbans ecology since pre-colonial times. There is ample historical evidence that during the colonial period and thereafter the customary rights of the fishers to fish in the tidal waters of the Sundarbans was officially recognized⁶. Although there is no record of settlement of rights⁷ when the Sundarbans was reserved part by part, the reserved forest regime continued to respect the rights of the fishers to fish in tidal waters; the only thing that was introduced was the system of keeping track of who was entering—by issuing permits, called Boat Licence Certificates (BLCs), to registered boats for consumption of dry firewood for each fishing trip. It is important to note that even the first Management Plan of the STR refers to fishing as a normal “forestry operation”, along with the collection of honey and golpata (*Nypa fructicans*),⁸ and also mentions the freedom of the fishers to fish in tidal waters.

3.3. The fishers who fish in the STR

At some point after the creation of the STR, 923 BLCs⁹ were issued to the fishers who used to fish in the area. It is not entirely clear how the number was arrived at. Of these 923 BLCs, 9 BLCs can no

⁶ See, for example, W.W. Hunter, A Statistical Account of Bengal, Vol. I, Part-II, 19.

⁷ The Indian Forest Act, 1927 requires the State to settle rights before declaring a reserve forest.

⁸ Management Plan of Tiger Reserve in Sundarbans, West Bengal, India, Calcutta, 1973, 39.

⁹ Boat License Certificates were issued by the forest department to the fishers in Sundarbans after the creation of STR. Only those with BLCs are allowed to fish inside STR. There is a separate BLC for those who fish in Sundarban Reserve forest too.

longer be located; some two hundred are inactive (on account of non-renewal due to death, change of profession, etc.). So the number of active BLCs is a little more than 700.

Data on fisher population in the Sundarbans is hard to get. The Marine Fisheries Census, 2010, provides data based on administrative units. By picking out the areas which fall within the Sundarbans, we can estimate the population to be 4172248. The census however is limited to marine fishers and hence the many inland fishing communities are not counted in the census. However, estimates indicate there are 20,000 fishers in the STR¹⁰. Thus, even at the rate of 5 persons per boat, the number of boats that need to go into the STR would be about 4,000¹¹. Many of those who hold BLCs are well-off people who do not fish. As a result, those who fish but do not have BLCs are forced to hire BLCs; the current rate for a BLC is USD 484.42 (PPP corrected value USD 1211) annually¹². This is despite the fact that BLCs are non-transferable and may only be mutated in favour of blood relations or to genuine fishermen.

Given the inadequate number of the BLCs, many are forced to fish in the STR without any BLC to show. If caught, their boats and nets are seized, and they may be physically assaulted.

They suffer silently and try to get away with paying a fine, if they have the necessary wherewithal, hoping for better luck the next time around.

3.4. Non-motorized boats

Typically, the fishing boats in the STR are non-mechanized and non-motorized, as engine-driven boats are not allowed within the STR. Thus, inside the STR, the fishers row their boats, with occasional use of makeshift sails.

3.5. The rules, the prohibitions, and the geography

Forest officials take action against not only the fisher without the BLC, but also come down heavily on the fisher with a BLC, if he is found fishing in or passing through the core area or the Sajnekhali Wildlife Sanctuary. Bypassing the WLS and the core increases the travel distance enormously, especially when the boats are non-motorized. In addition, not all parts of the buffer yield good fish harvests, making movement from one fishing area to another a necessity (see **Appendix VIII** for Maps).

3.6. The fishers who fish outside the STR

There is about 1,675 km² of reserved forest area outside the STR. Here, too, fishing is permitted only to boats with BLCs. These are called “reserved forest BLCs” or “forest BLCs” to differentiate them from the 923 “Tiger BLCs” for the STR.

The number of forest BLCs is about 3,700. The number of fishing boats operating in the area, however, far exceeds this number. Here also there is a regime of restriction on fishing, although generally the restrictions are less asphyxiating than in the STR. The fishers who have “forest BLCs” are not allowed in the STR.

Until 2013, the reserved forest areas outside the STR only had two WLSs—Lothian Island and Halliday Island—with a combined area of some 44 km². In 2013, a new WLS was designated, the West Sundarbans WLS, with an area of 556.45 km². Therefore, presently, in the non-STR reserved

¹⁰ Chacraverti has estimated the number of fishers based on his field research. Chacraverti. S. The Sundarbans Fishers: Coping in a overly stressed mangrove estuary. ICSF, 2013 (unpublished).

¹¹ These estimates are based on Chacraverti’s field work. There is no census of boats or fishers in the region.

¹² Purchasing power parity (PPP) value arrived at by converting INR to USD and multiplying by 2.5 as suggested by the World Bank’s recent estimation of PPP as 0.4; see, <http://data.worldbank.org/indicator/PA.NUS.PPPC.RF>). The direct conversion value is given first followed by the PPP corrected value in parentheses.

forests the total area under sanctuaries is about 600 km². Consequently, the area outside sanctuaries is about 1,075 km². The restrictions in the latest WLS are yet to be imposed completely (as the WLS is a recent creation) but the West Sundarbans is gradually becoming unavailable for meeting livelihood needs.

3.7. The workshop

ICSF has been working with the Society for Direct Initiative for Social and Health Action (DISHA) and Dakshinbanga Matsyajibi Forum (DMF) in West Bengal since 2005 on several studies and workshops. The workshops include:

- Small Indigenous Freshwater Fish Species: their Role in Poverty Alleviation, Food Security and Conservation of Biodiversity, organized at the Central Inland Fisheries Research Institute, Barrackpore, Kolkata, West Bengal in 2010;
- Social Dimensions of Marine Protected Area Implementation in India: Do Fishing Communities Benefit?, held in Chennai in 2010;
- Sustainable Small-scale Fisheries: Towards FAO Guidelines on Marine and Inland Small-scale Fisheries, held in Kolkata in 2011;
- Fishery-dependent Livelihoods, Conservation and Sustainable Use of Biodiversity: The Case of Marine and Coastal Protected Areas in India held in New Delhi in 2012.

ICSF and DISHA have also collaborated on the study on Marine Protected Areas in India¹³ and on a study on the perspectives of fisher folk on climate change as well as on a film, Under the Sun on the fisher folk of Jambudwip Island.

The seven workshops planned with the support of BOBLME are a continuation of the work ICSF, DISHA and DMF have carried out together in West Bengal. The workshops were meant to ascertain fishers' opinion on governance and management of the Sundarbans and to enhance their capacity to develop proposals for sustainable use, conservation and management of resources in the Sundarbans.

4. Objectives

Sundarbans provides an example of an ecosystem under severe stress—large footprints created by overpopulation and various sources of pollution, including tourism. While increase in fisher population negatively impacts this eco-region, it is equally true that the fishers of the Sundarbans constitute one of the most important players in the Sundarbans ecosystem. Despite their long fishing tradition and knowledge of generations, fishers have not been consulted in the formulation of management policies for the region. There is also little recognition of the value of their knowledge and how it can be used to sustainably manage the Sundarbans fisheries resources.

5. Workshop sites

The seven workshops were held in vital sites in the Sundarbans area¹⁴.

1. Rajat Jubilee (26 November 2013)
2. Saterkona in Gosaba Block (27 November 2013)
3. The fish market in Canning in Canning I Block (28 November 2013)

¹³ Rajagopalan R. Marine Protected Areas in India. Samudra Monograph. ICSF. 2008.

¹⁴ The workshops are not listed in chronological order but are listed according to whether participants fish in the STR or outside. The first 5 workshops in the list were attended by fishers who fish within the STR, the others were attended by non-STR fishers.

4. Shamsheeranagar in Hingalganj Block 23 January 2014)
5. Moipth–Nagenabad in Kultali Block (10 February 2014)
6. Sridharnagar in L–Plot, in Patharpratima Block (16 January 2014)
7. Chandanpiri in Namkhana Block (17 January 2014).

Based on discussions with DISHA and DMF, it was decided that the focus would be especially on fishers fishing in the STR and those fishing in the reserve forest outside the STR. This is because the STR constitutes almost 61 per cent of the forested area of the Indian Sundarbans.

Hence, 5 out of 7 workshops (numbers 1 to 5 above) were held at sites where STR fishers would be able to participate in strength. The remaining 2 were held at sites where the participants were expected to be wholly or largely non–STR fishers.

The other criteria of site selection were whether the fishing communities targeted for participation inhabited the site, and whether the site was easily accessible to them.

The report does not follow the chronological order of the workshops; instead dividing the report on the basis of whether the majority of the participants operate within the STR or not.

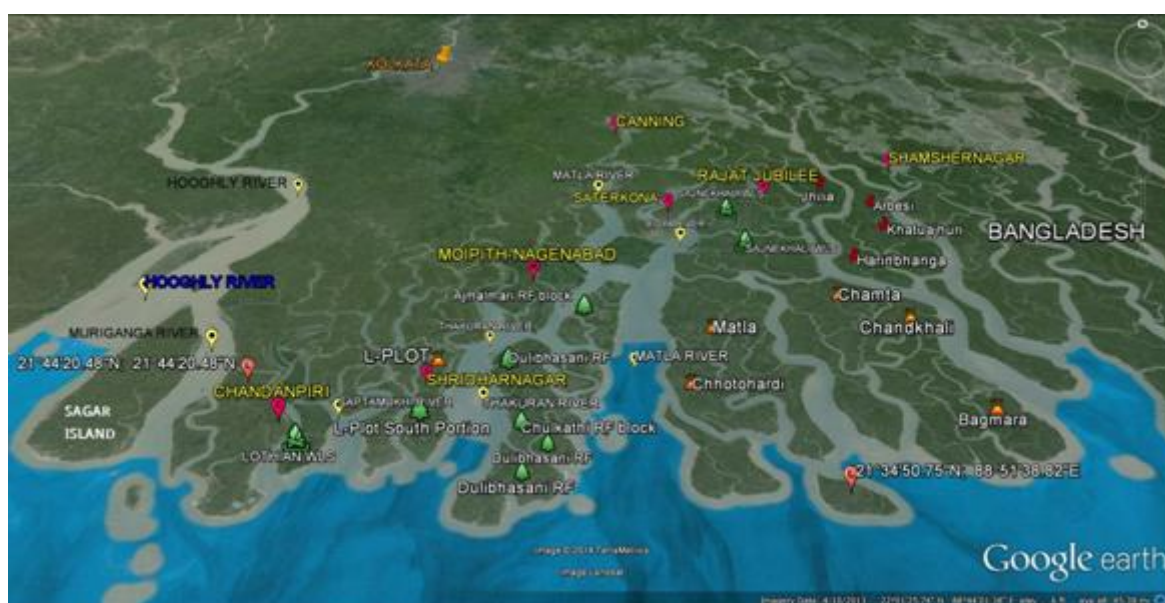


Figure 2 All the workshop sites

6. Participants

The target participants for these workshops were the Sundarbans fishers who fished either in the STR or in non–STR reserved forest areas (that are part of the SBR). The Rajat Jubilee workshop was attended by 47 fishers — 40 men and 7 women; the Saterkona workshop by 81 fishers — 64 men and 17 women; the Canning workshop by 46 fishers — all men; The Shamsheeranagar workshop was attended by 25 fishers — all men; the Moipth–Nagenabad workshop was attended by 133 fishers - 105 men and 28 women; the L-Plot workshop was attended by 64 fishers — 54 men and 10 women; the Chandanpiri workshop was attended by 95 fishers — 72 men and 23 women. The seven workshops in total had 491 participants — of which 360 were men and 131 were women. The detailed participant list is given in **Appendix I, Appendix II, Appendix III, Appendix IV, Appendix V, Appendix VI, Appendix VII.**

The resource persons who attended the workshops were:

1. Vishnu Narendran from ICSF Trust, Chennai
2. Sasanka Dev, Secretary, DISHA, Kolkata
3. Santanu De, Naturalist and Environmental Activist
4. Santanu Chacraverti, President, DISHA, Kolkata
5. Pradip Chatterjee, Secretary, National Fishworkers' Forum, Kolkata
6. Gobinda Das, a veteran leader of the fishers' movement in West Bengal, Canning
7. Mihir Mondal, a veteran leader of the fishers' movement in Sundarbans, Hedia
8. Milan Das, a veteran activist of the fishers' movement in the Sundarbans, Diamond Harbour.

7. Focal themes

A set of framework questions were circulated to the local workshop organizers for preparing the participants with the basic concerns well before the workshops.

1. What was the condition of the fishers and the experience of fishing before the present restrictive regulatory regime emerged in the Sundarbans?
2. Has there been a rise in population in the area under consideration? How has the increase in population impacted fishing?
3. What kinds of gear are used for fishing and which gears or methods of fishing are harmful?
4. Does tourism lead to any environmental problems or pollution and/or affect fish resources?
5. What is the fishers' experience with the STR regime?
6. Have tiger attacks increased? Are victims are compensated?
7. What are the other problems that the fishers face?
8. What measures or governance methods can lead to a solution of the problems?

These themes were discussed in each of the workshops. In what follows, we have summarized the responses of the fishers in connection with the aforesaid themes and resolutions/decisions of the various workshops.

8. Summary of all workshops

The STR fishers

8.1. Topic I: The condition of the fishers and of the fish stock before the present restrictive regime emerged in the Sundarbans.

Response

Participants indicated that in the past there was an abundance of fish. Fishers had no problems getting fish and crabs in the waters of the Sundarbans. The only problem was that the prices of fish and crabs were very low, resulting in low incomes.

Most fishers said that the present restrictive regime developed some three to four decades ago, with the conversion of large parts of the Sundarbans forest into Tiger Reserve. Before this, the forest department used to give permission to all fishers to fish in the forests. In those days, fishers who wished to fish in the reserved forest had only to get their boats registered, procure an annual permit, and pay a small fee for the right to procure dry wood (for fuel) from the forest. Apart from this, there were no restrictions. Fishers, generally, did not have any conflict with forest officials. In fact, the relations were often rather cordial.

8.2. Topic II: When were the restrictions imposed? What was the nature of the restrictions? What is the fishers' experience with the STR regime?

Response

The restrictions were imposed with the coming of the Tiger Reserve.

Now, only 923 boats were certified for entering the tiger reserve. These certificates were called BLCs. Even for those days, when the fishing population was far less than at present, the number of BLCs was inadequate. At present, the number is absurdly inadequate. What makes matters worse is that the number of actually functioning BLCs is much less than the original 923, it is barely more than 700. Hence, large numbers of fishers do not get the chance of entering the STR legally. Therefore, such fishers enter illegally.

Fishing is not permitted in the Core Area and in the Sajnekhali WLS. Moreover, in 2007 the size of the Core Area increased considerably. As a result, the overwhelming bulk of the Sundarbans waters are officially closed to fishing. Fishing is permitted only in a portion of the buffer zone, consisting of four forest blocks, Arbesi, Khatuajhuri, Jhilia, and Harinbhanga.

This fishing—permitted zone is too small for fishers coming in from various parts of the Sundarbans. Hence, there is overcrowding, leading to decline in fish stocks in the buffer and evident decline in catch per unit effort. The fishers, thus, are often compelled to fish in the prohibited areas.

The forest officials fine, or physically assault anybody caught fishing without requisite BLC or permits, or found fishing in the Core Area or in the Sajnekhali Sanctuary. Often they seized the fish and crabs caught, and even the boats and nets. Moreover, they do not even allow the fishers from merely passing through the Core Area or Sajnekhali WLS or taking shelter in these tracts during rough weather. Several fishers narrated how they resented the fines and the other means of treatment by forest department. However, what the fishers resented most was the humiliation — the verbal and physical abuse. In short, the relation of the fishers with the STR administration is one of almost ceaseless conflict. This is not to say that there are not some decent forest officers. There are. These sympathize with the fishers plight, and if they impose rules, try to do so without unnecessary harassment. However, such officers prove unable to improve the general situation in any significant sense.

8.3. Topic III: What is the condition of catch per unit effort and fish stock in the Sundarbans at present?

Response

The fishers felt that catch per unit effort has declined drastically. Estimates given by participants varied, but many said that it was a quarter of what it was some twenty years ago. The overall stock has also declined significantly. For example, it is extremely difficult to get good yield in the reserved forest areas outside the STR. Again, within the STR, the buffer zones do not yield much. Only the Core Areas, like Chamta and Chandkhali, provide relatively good yield. Artisanal fishers manage to make their ends meet only because of the high price of fish and crabs.

8.4. Topic IV: What are the factors responsible for decline in fish stock (and catch per unit effort)?

Response

The most common responses were:

- there are just too many fishers
- a wide spectrum of nets of various sizes are used, scooping up fish of all sizes and ages

- the use of particularly harmful fishing gears, such as mosquito nets and *chawrpata* (shore stake nets), particularly *chawrpata* with very small mesh size
- the catching of brood stock and juvenile fish in large quantities
- the devastating impact of trawlers and mechanized boats, which fish not only in the coastal waters, and also fish the river mouths and even in the rivers of the STR, destroying female fish and juvenile fish
- the violation of the three—month fishing ban by the fishers.

However, fishers in many places said that the impact of trawlers and mechanized boats was a far more important cause of depletion of the Sundarbans waters than mere overpopulation. The argument offered in this regard was that a single mechanized boat could catch or destroy more riparian fauna than was possible for fifty or even a hundred dinghies. The fishers emphasized on the wasteful and destructive practices of the trawlers and mechanized boats. They pointed out that the fishers of mechanized vessels sort their catch and retain the fish which are big and highly priced, and throw away the smaller or less priced ones, already dead by then.

There were two other definitive responses:

- Pollution of the waters by chemicals, mostly pesticides
- Reckless tourism practices — tourist launches moving up and down the rivers, disturbing the fish with the churning of the water and the noise, and littering the waters with plastic (which causes damage to fish habitat and ecology).

8.5. Topic V: Have tiger attacks increased? Are victims are compensated?

Response

The participants in some workshops felt that tiger attacks had increased. They said that the tigers had become more ferocious and had lost whatever little fear of humans they may have once had. Moreover, several fishers reported that in trying to escape the forest patrol, fishers often entered narrow creeks overshadowed by mangroves, which constituted ideal sites for tiger attacks.

The fishers (i.e. their families) are entitled to compensation from the Fisheries Department for death due to tiger attack. Further, they are entitled to money from insurance cover that goes with their fishing permits. However, most victims did not receive the compensation from the Fisheries Department because, most often, they were not aware of this provision. They often did not receive the insurance money as well. This occurred whenever they were found to have entered the forest without BLCs or permits or if the casualty had occurred in the fishing—prohibited zones. In fact, there were reports that the police even refused to lodge an FIR or simple diary of forest casualty (indispensable for claiming insurance) without a report from the forest department.

8.6. Topic VI: What are the other problems that the fishers face?

Response

A major problem was caused by the present system of BLCs in the STR. Many of those who fish do not possess BLCs. On the other hand, many who have BLCs, no longer pursue fishing as a profession. Such non—fisher BLC—holders rented out their BLCs to other fishers at very high rates of rent — almost everyone reported a rate of at least USD 484.42 (PPP corrected value USD 1211) annually. This increased the cost of fishing operation. This often led the fishers to take local loans at high interest rates. All this made eking out a livelihood extremely difficult, often leading fishers to violate STR norms more than they would otherwise have done.

With catches declining, the threat of poverty looms large and even mere survival demands a high degree of exertion.

Although most fishers approved of the 3—month fishing ban, they did not enjoy the benefit of the Savings—cum—Relief Scheme, which was expected to help them tide over the no—fishing period. Almost no ordinary fisher seemed even to have heard of the scheme.

There was no such thing as pension for a fisher in his old age. Nor was there any social insurance for a fisher whose illness or ailment prevented him from pursuing his profession. Indeed, there was no appropriate or adequate social insurance scheme for fishers.

8.7. Topic VII: What measures or governance methods can lead to a solution of the problems?

Response

The fishers' response is given below in the specific demands raised in the workshops and articulated as recommendations/ decisions/resolutions. It may be noted that the responses, notwithstanding a great deal of commonness, varied across workshops. Thus, while we have avoided repeating what is exactly the same demand, variations in articulation, where they are seen to be significant have found separate mention.

9. Resolutions

Since the following decisions have been combined from the 7 workshops, there are sometimes seemingly contradictory statements. This is because different sets of participants had different ideas on what is required. For example, participants in one workshop agreed that the entire core area should be open for fishing while in another workshop they decided that the core should reduce in size, and parts of it be opened for fishing.

9.1. Resource management

- Those who are dependent on the Sundarbans were responsible for the welfare and development of the same. Therefore, policies and restrictions should not be imposed from above
- Fishers and fishing should be subjected to restrictions. Fishing in breeding areas was to be avoided, irrespective of it being in core or buffer zone. However, such restrictions must come not as undemocratic administrative fiat but from the Sundarbans fishers acting in cooperative capacity
- Participants felt no—fishing zones were unnecessary. There were several suggestions regarding the current core area: the entire core and the WLSs should be open for fishing; while others said that if the size of the core area decreased to its original size and two—thirds of the core was opened for fishing, it would be good
- Innocent passage should be allowed through the core areas , and also resting place and shelter during foul weather
- Core areas should not be confused with fishing restrictions. Core areas, in terms of tiger habitats, could be increased or decreased based on tiger ecology; however, fishing restrictions must be based on the ecology of fish resources
- BLCs should be substituted by permits issued to all genuine fishers
- Local lists of such fishers must be prepared in consultation with the local fishing community
- The fishing season should not be more than six months: from *Kartik* to *Phalgun*, perhaps a little during early *Chaitra* [roughly 19 October to the end of March]. Thus, there should be a no—fishing season of at least six months; however, there should be provision for compensating fishers during the six month no—fishing period.

- The 6 month fishing season was not accepted by participants of other workshops who said instead they would abide by the three-month fishing ban from *Chaitra–Joistho* (Mid–March – End June); however, the fishing ban should not be for any longer period. The no-fishing season of three months must be strictly implemented.
- Trawlers and mechanized boats to be effectively banned in inland waters and waters close to the coast. Are there any fines if they are caught fishing in estuaries or river mouths?
- Use of mosquito nets to be banned
- *Chawrpata* (shore stake nets), particularly ones with very small mesh size, should be banned
- Crabs weighing less than 100 g should not be collected
- Forest officers must desist from ‘foul behaviour’ and offensive language
- Honey—collectors had a right to get fair price for their honey
- Honey—collectors must get the right to take the second cut (until the Forest Rights Act is implemented, when the forest—users can decide how best to dispose of non—timber forest produce)

9.2. Welfare measures and livelihood concerns

- Efforts should be made to bring all the fishers under the net of *Sanchay—O—Traan Prokolpo* (Savings—cum—Relief Scheme)
- *Sanchay—O—Traan Prokolpo* and fishermen pension schemes should be implemented in addition to *Samajik Suraksha* (social security) Cards
- All fishers should get the benefit of Savings—cum—Relief Scheme and some extra financial support to tide them through the no—fishing season
- Benefits through Gitanjali Prokolpo (Housing scheme) should also be implemented quickly and with transparency
- General Insurance Corporation of India (GIC) scheme to be implemented for USD 1614.73 (PPP corrected value USD 4036.82) on death of the insured and the premium paid by government)
- Fish storage facilities and infrastructure development like jetties are necessary
- An ice factory needed to be set—up near the Canning Fish market (Issue specifically raised at Canning Workshop)
- Renovation of the fish wholesale market at Canning to be done immediately (Issue specifically raised at Canning Workshop)
- Pensions for old fishers over 60 years should be implemented
- Genuine fishers who are unable to go on fishing expeditions due to old age, ailments, or injury must be given pension
- Biometric cards for fishermen should be issued early and to all fishers
- Compensation/insurance payment should be distributed promptly and without fail to tiger and crocodile victims irrespective of where the attack happened — in the fishing—permitted zone, Core Area, or WLS
- Fishers could support themselves during the six months non-fishing period by developing inland fish farms and crab farms
- Besides fish farming, poultry, piggery, goatery, and pigeon rearing could be other alternative livelihood options
- The fishers looked forward to the government and non—government institutions to support them in these ventures

10. Way forward

The recommendations from the seven workshops were consolidated and discussed further in a two-day workshop organized in Kolkata on 24–25 March, 2014. The participants for this workshop included leaders from these seven regions. The detailed report of the two day workshop is available separately.

11. Detailed workshop proceedings

11.1. Workshops with STR fishers

11.1.1. Workshop I: Rajat Jubilee village

The workshop was conducted on 26 November 2013. This village is situated in Lahirpur Gram panchayat¹⁵, on Satjelia Island in Gosaba community development block. The island was reclaimed and brought under cultivation by the Hamilton estate as part of a plan for rural development in the Sundarbans. This reclamation took place in 1932 or so, according to the fishing community in Rajat Jubilee. The area was settled by people from Khulna, Bangladesh whose descendants constitute most of the local populace; their accent also indicates their origins.

The local group, Sundarbans Rural Development Society (SRDS), with mostly fisher members who are also activists of the DMF, took the initiative in organizing the workshop.

The programme was divided into two sessions — the morning session aimed at hearing from the participants, all of whom were fishers or crab collectors; and the afternoon session to discuss possible solutions.

Morning session

Several participants raised the issue of fishing permits or, rather, the lack thereof. A participant, with 40 years of fishing experience in Sundarbans waters, noted that years ago, the forest department used to give permission annually to fish in the forests, unlike the current practice of BLCs. Questioning how 923 BLCs could suffice for the entire fishing community, he said that this is why people had to sneak into the core for survival. Fishing in the buffer zone, he noted, did not suffice. Others added that many people went without permission into the forest and when caught had to surrender their gear and were often humiliated. One participant noted that BLCs were now being rented out for USD 484.42 (PPP corrected value USD 1211) annually.

Many participants expressed concern over the frequent tiger attacks. They felt that tigers consider humans to be prey just like deer. In addition, a participant noted, a great number of people were entering the forests. Moreover, they were often not careful. These increased the chances of a run in with tigers. Some participants felt that the tiger population (and populations of other animals) had increased as well. Others noted that the families of those killed by tigers rarely received compensation and that this needed to be looked into. It was suggested that the forest department was sabotaging the compensation scheme.

The impact of rapidly-growing tourism was of concern to participants. Several people noted that tourism has meant disturbance to wildlife and that tourist boats with propellers were killing fish.

Another important issue for the fishers was the depletion of fish and crab stocks. A participant noted that some gear like *bagda* net (net with a very small mesh size) had contributed to this problem. He noted that in the years past, fewer people depended on the forest as the overall population was less. At the same time, he pointed out that it was hard to be sure if the overall catch had declined drastically since the number of fishers had increased. Therefore, the catch per person was obviously

¹⁵ Gram panchayats are local self-government bodies at the village level.

less. A 70—year—old fisher said that trawlers were catching all the fish in the sea, especially the breeding females, before they migrated up the river to spawn.

Fishers also said that the use of *chawrpata* (shore stake nets) caused great damage to mangroves. They said that some fishers tied the ends of the stake nets to the tree trunks which got entangled in the roots of mangroves. To unfasten these ropes, mangrove roots got cut regularly.

A participant noted that there was no scope of entering the forests and bringing forest products like timber, deer, etc. That was strictly prohibited. The forest administration had created Eco—Development Committees (EDCs) in the villages, who reported to the administration if anything was brought from the forest, leading to immediate action and punishment. He added that the bulk of the Sundarbans has been brought under the core area. Only a small proportion was left for the fishers. Therefore, many were forced to enter the core, while others without BLCs and permits were forced to fish illegally.

A participant added that the threat of dacoits was on the rise and they were hand in glove with local politicians and Bangladesh fish merchants.

Afternoon session

The Secretary of Sundarbans Rural Development Society (SRDS) spoke on major issues faced by the fishers in Sundarbans such as the decline in the catch of some species like Ayr Tangra or Ayr (*Sperata aor*), Pangash (*Pangasius pangasius*), Bhetki (sea bass or *Lates calcarifer*), and Bhola (*Nibeas soldado*).

He also said that 2,485 km² of Sundarbans was divided into 13 blocks some of which were closed (Core and WLS) and others were open to fishing (fishing—permitted areas of the buffer). However, the decision regarding which were to be open and which closed was made without consulting the fishers. The open blocks were close to the Bangladesh border, and far away from the Indian villages. Here, the dacoits from Bangladesh often attacked fishers, seized their goods, and escaped across the border. He noted that the fishers also wanted the fish to regenerate and the closed blocks helped the fish to regenerate. However, the fishers should have had a say regarding which blocks to close and which to leave open.

He also highlighted the travails of honey collectors, noting that the honey collected from the forest by honey collectors have to be deposited with the forest department for a mere USD 1.21 (PPP corrected value USD 3.05) per kg, and that the collectors were always paid late. He noted that collection was done at great risk to life, yet the collector had to give up his entire collection to the forest department. The collector could not even take some for their own consumption. To add insult to injury, the price paid for the honey was much lower than market rates.

He called for the banning of stake nets such as *chawrpata*. He called on the community to discard the use of *chawrpata*. Noting the need for self—regulation and self—discipline to avoid the use of such nets that cause damage and avoid catching fish species that were going extinct, he added that the fishing community needed to be united as well.

He also suggested the fisheries department train the fishermen in identifying the gender of the fishes, in order to save the breeding females and the eggs.

Other issues such as the impacts of tourism (scaring away the fish, increased load of plastics and oil in the water), and unpaid compensation for tiger/crocodile attack victims and/or their families irrespective of whether this takes place in the core or the buffer zone were raised. He also demanded fishermen other than BLC holders too must have the right to the Sundarbans waters. To enable economic empowerment of fishers, and thereby reduce the pressure on the forests, he suggested government aid and proper training to promote cooperative tank pisciculture and crab—culture.

Discussion

This was followed by an open discussion to come up with solutions to the problems posed. An elderly fisher and crab—collector who is widely respected as a fisher community leader spoke of how things have changed. He said that when he first began to fish there were no restrictions, permits were easy to come by and few people were entering the forests. Now the pressure on the forests was more and once the tiger project came, so did the restrictions. The off—limits area had increased steadily and the number of prohibited species had also gone up. No longer, he said, could fishers catch chakul (sting ray), kamot (Sundarbans river shark), koibol (*Epinephelous* spp.), shushuk (dolphin), and some other species. The forest department, he said, even gave matchboxes with pictures of the prohibited species. Then came an order saying that fishing was banned for 3 months (18 *Baishakh* to *Ashadh*, i.e., 1 April to 30 June) each year¹⁶. The reason given was that this was the breeding season for fish but no answer was provided as to how fishers were to sustain themselves in this time, he noted. Now, he says, at the last permit renewal the forest department said that fishers must keep 5 km away from the border. Where then can fishing be done — between the core and this 5 km from the border and all the restrictions, there is no place left. Balancing these issues with the increased fishing population, he suggested, that fishing should be allowed for six months or less annually. Further, the mesh size should not be less than 6.35 cm (to allow the juvenile fish to escape). Existing BLCs were held by very few and the BLC—holders seem to have developed a paternal claim on the Sundarbans waters. This BLC system should be substituted with a system of group pass, i.e. pass given to a group of fishers were going out to fish on the same boat. However, the group pass should be given only to genuine fishers. To ensure that this was being done, all fishers should have fisher identity cards.

The gathering responded positively to the suggestion of operating on the basis of group pass and fishing only for six months or even less.

The elderly fisher also suggested that fish—farming and crab—culture could offer a viable alternate livelihood option. He went on to suggest that these ideas be discussed across the community through awareness camps so as to organize the fishing community to take charge of their lives, their surroundings, the fisheries stocks, and the future.

Regarding the question of what should be the nature of Sundarbans governance; several participants reiterated that the forest department should not make rules and regulations regarding the Sundarbans unilaterally. The fishers must be an indispensable part of the decision—making process. They also said that only genuine fisher by profession should have the right to fish.

Regarding the question of what mesh size was advisable, a participant said any net, monofilament or otherwise, was good for sustainable fishing if the mesh size was sufficiently large. The mesh size should be of at least two—finger size (about 5.08 cm). The fishers preferred monofilament because it offered less resistance to the current.

However, another fisher said that small mesh size was needed to catch certain species such as shrimp and parshe (*Liza parsia*).

To the question as to what would be the solution to the problem that small mesh size also picked up juvenile fish of larger species, the fishers discussed this and said that there was no solution to this problem. Because, a fisher, was casting his net for, say, *Liza parsia*. However, if his net caught a juvenile of a larger variety, say *Lates calcarifer*, he would not return the juvenile to the river. That would never happen. The only solution was to allow for a long (at least six—month) no—fishing period, which would allow the stocks to be replenished naturally.

¹⁶ The fishers mention dates in terms of the Bengali calendar. The official dates, of course, are according to the Gregorian calendar. This could lead to a minor discrepancy. For example, 1 April could be 18 *Baishakh* in one year and might shift to 17 *Baishakh* in another. However, the discrepancy is never larger than a day, so it makes little difference.

The question, which part of the year should be the no—fishing season, provoked a lot of discussion. Finally, a participant resolved the issue by saying that even 15 years ago, fishing used to be from *Kartik* to *Phalgun*, perhaps a little during early *Chaitra* [roughly 19 October to the end of March]. Fishing stopped from the middle of *Chaitra* (end of March), when summer began, because of the great heat and occasional storms. During these months, soil was tilled and crops grown in the little land fishers owned. Everyone agreed that this practice could be revived.

The reduction of the fishing season brought the issue of bringing the core area into the fishing zone. Since the fish stocks were getting a chance to recuperate, it was suggested (and found favour) that a no—fishing zone was no longer needed to provide the fish a protected haven. [Although the official purpose of the core area was in terms of tiger habitat rather than fish resources, foresters often pointed out that the core area acted as a fish reserve].

The above suggestion was immediately linked to the issue of tiger attack compensation. Fishers' families did not receive compensation or insurance if they were known to have been killed by a tiger or crocodile in the core area or did not have BLC/permit. The participants argued that the fishing should be allowed in the core area, and consequently, fishers and /or their families should receive compensation/insurance money on being wounded or killed by tiger attack irrespective of the place where the attack occurred.

There was also a discussion of implementing the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (hereafter referred to as the Forest Rights Act (FRA)¹⁷ in the Sundarbans. Fishers did not have much awareness of this legislation. However, they were in complete sympathy with the spirit of this act and argued that their rights to the forest should be given full legal recognition and official sanction.

Next, the discussion moved on to the *sanchay-o-traan prokolpo* or the savings—cum—relief Scheme. It was clear that most fishers had not heard of this scheme, supported by the Union and State government, which provided a little support to fishers. This was marginal to the workshop's concerns but was of immense practical significance.

The discussion then moved on to the importance of fishers' identity card. It was found that not more than three fishers in the room had fishers identity card issued by the Fisheries Department. It was decided that the fishers' activists would take initiative in procuring these cards, aided by Dakshinbanga Matsyajibi Forum and DISHA.

At the close of the discussions, the meeting took the following decisions.

Resolutions

- Mosquito nets should be banned
- *Chawrpata* (shore stake nets), particularly ones with very small mesh size, should be banned
- The fishing season should not be more than six months: from *Kartik* to *Phalgun*, perhaps a little during early *Chaitra* [roughly 19 October to the end of March]
- BLCs should be substituted by permits issued to genuine fishers
- The permits should be issued in the form of group passes (5–6 persons), for each group going on a single boat
- The core area should be opened to fishing
- The fishers should receive compensation/insurance money irrespective of where they were fishing at the time of tiger or crocodile attack
- There should be provision for compensating fishers during the six month no—fishing period

¹⁷ The Scheduled Tribes and Other Traditional forest Dwellers (Recognition of Forest Rights) Act, 2006 is more commonly known as the Forest Rights Act or FRA.

- In addition, fishers could support themselves during the six months non—fishing period by developing inland fish farms and crab farms
- Besides fish farming, poultry, piggery, goatery, and pigeon rearing could be other alternative livelihood options
- The fishers looked forward to the government and non—government institutions to support them in these ventures
- The six—month no—fishing period should also be used for rejuvenating silted tanks
- Community campaigns to be increased to spread the above messages
- Efforts should be made to bring all the fishers under the net of “*Sanchay—O—Traan Prokolpo*”/Savings—cum—Relief Scheme.

Note: In post—workshop discussions, fishers and crab—collectors expressed their interest in developing fish and crab farms on individual and cooperative basis.

11.1.2. Workshop II: Saterkona village

The workshop was conducted on 27 November 2013. Saterkona village in Amlameti Area on Satyanaryanpur Island comes under the Gosaba community development block. This island too was reclaimed and brought under cultivation during the 1930s and 1940s. Like Satjelia, Amlameti also seems to have had a large influx from Khulna. Almost all the fishers in this area seem to be descendants of the early settlers from Khulna.

Local activists of the DMF were active in organizing this workshop.

Due to unavoidable circumstances, it took an inordinately long time to reach the workshop site. Hence, the workshop began at 1:30 p.m. making it impossible to have two sessions. Presentation from the participants was combined with discussion in a single session. There was often extremely active discussion, with several fishers chipping in almost at once.

Reporting & discussion

The session began with a presentation of the focal themes of the workshop, followed by participants narrating their experiences.

Here too the dynamics of the fishers’ relationship with the forest department was raised repeatedly. Participants spoke of how, if caught, they would have to pay fines starting from USD 8.07 upwards (PPP corrected value USD 20.18). In addition, they said, the officials harass and insult them. All this had taken a toll on their livelihood. Other participants noted that in the process of trying to escape from forest officials, fishers often entered narrow creeks, overshadowed by mangroves, creating an ideal situation for tiger attack.

Participants also noted the declining fish catch — not only per head, but in total. The reason for this, said a participant, is that many fishers, constrained by poverty, are unable to respect the three months fishing ban or respite. This was the breeding season for fish. Fishing at this time led to pregnant fish as well as eggs being hauled up. This caused drastic decline in fish population. This led to a discussion on nets of varied sizes and how they were being used indiscriminately. The issue of impact of trawlers¹⁸ and “trawleys” on fishery resources was also raised. It was noted that several species of fish swam upriver to spawn and trawlers caught them at sea before they could breed. A participant noted that he had heard that trawlers had gadgets that provided them with visuals and information of fish and shrimp in the water. Thus, they could unerringly target and sweep up entire shoals. This resulted in declining fish stocks.

Although the trawlers did not have permission to enter the inland waters [actual trawlers must fish outside the territorial waters] to fish, they entered all the southern rivers, Raimangal, Harinbhanga,

¹⁸ The traditional artisanal fishers often use the term “trawler” to describe mechanized boats using 6—cylinder engines. The actual “trawlers” they call “trawley”. The STR fishers all use non—motorized country boats.

etc. They fished at the mouth of all the rivers, inside the STR area, even though they did not have permission to do so¹⁹. The participants alleged that trawlers had an understanding with the forest patrol boats.

The participants also felt that while the increase in fisher population has impacted fish stock, this paled in comparison to the impact of trawlers. They noted that trawlers used a variety of large nets of various mesh sizes, hauling in incredible amounts of fish and leaving nothing in their wake.

Another participant noted that when he began fishing 21 years ago, it was not uncommon for the forest department boat to aid a fisherman in distress. Now this has changed. He said that between the rent for a BLC, fines, and other costs, he spent USD 678.19 to USD 694.33 (PPP corrected value USD 1695.46 to USD 1735.83) a year.

The limited area open to fishers was a recurring topic. Participants noted that almost all the Sundarbans waters were off—limits for fishers. To reach the fishing—permitted zone [Arbsesi, Khatuajhuri, etc. forest blocks — see **Figure 4** Rajat Jubilee, Saterkona, Canning and Shamsbernagar], the easiest route was through the Sajnekhali WLS²⁰. This was not allowed and so to bypass this, a circuitous route had to be taken involving days of rowing to reach the fishing area. This resulted in great hardship.

This led to active discussion with fishers pointing out that while having a core area was justified, the core area had increased absurdly in recent years. They demanded that fishers be allowed to pass through the core area and take refuge in the creeks of the core area and WLS during storms and foul weather. However, unlike the fishers at Rajat Jubilee, fishers here were not keen on the idea of having a fishing ban for six months.

Thereafter, a discussion of the benefits of the *Sanchay—O—Traan Prokalpo*, importance of biometric identity cards being issued for fishers, and the need for fisher pension schemes ensued. There was also a discussion of how the fishers did not receive the benefits of Gitanjali (Housing) Scheme, meant for the economically weaker section of the people.

Resolutions

- The size of the core area should decrease and brought to its original size Alternatively, fishers should be allowed to fish in some parts of the core area
- Fishermen should be allowed to rest or take shelter in core areas during foul weather
- Forest officials must behave courteously with the fishers
- Biometric cards for fishermen should be issued early and to all fisher folk
- Benefits through *Gitanjali Prokalpo* (Housing scheme) should also be implemented quickly and with transparency
- Fishers were willing to abide by a closed season from *Chaitra – Joistho* (Mid—March — End June); though there was already a standing ban during these months, it was not followed by the community, they admitted. However, they were prepared to adhere to it.
- *Sanchay—O—Traan Prokalpo/savings—cum—relief* scheme and fishermen pension schemes should be implemented in addition to *Samajik Suraksha* (social security) Cards

11.1.3. Workshop III: Fish Market, Canning town

The workshop was conducted on 28 November 2013. Canning was the bridgehead of the colonial expansion into Sundarbans. It is situated on the once grand and now dying Matla River. The British

¹⁹ Notification No. WB (P art-I) 12013/SAR-136, dated 04.04.2013 and No. WB (P art-I) 12013/SAR-137 dated 09.04.2013.

²⁰ The fishers often use the term “Core Area” to denote the Sajnekhali WLS also. This is because, to the ordinary fisher the term “Core Area” is synonymous with areas closed to fishing and the term “buffer area” synonymous to area open to fishing. They are not encumbered by the legal distinctions involved.

government wanted to develop it as a port town; this was put paid to by the cyclonic storm surge of 1867. However, Canning remained and further developed as a major centre of fish trade and is now the most important fish trading centre for the Indian Sundarbans area. Thus, the Canning fish market holds almost iconic significance for the fishers of Sundarbans. Canning also remains the most important gateway to the Sundarbans.

The fishers who attended this workshop were inhabitants of the Matla area (Canning I and II community development blocks), located on the West of the STR, as distinct from the fishers who participated in the two previous workshops, who reside north of the STR (See **Figure 1** The Sundarbans Tiger Reserve). These fishers were mostly descendants of some of the earliest settlers in the Indian side of the Sundarbans, and have been living in this area for several generations.

Local DMF and Sundarbans Matsyajibi Sangram Committee members helped to organize the workshop.

The workshop was conducted in two sessions. In the first session, the fishers presented their experience and inputs. The second session consisted of open discussion followed by resolutions.

Morning session

Gobinda Das began the session by introducing the themes and this was followed by experience sharing by participants. As in the other workshops the run—ins with the forest department was raised as was the concern of depleting fish stocks, and the issue of BLCs. A 53 year—old fisher noted that some species were now rare. For example baor chingri, chapra chingri (*Penaeus indicus*), Java bhola, Pangash (*Pangasius pangasius*) were rare in the Sundarbans waters. He also noted that some years ago the Forest Department started fixing nets at creek mouths to keep out fishers. These were kept fixed 24x7 and round the year. Fish would get caught in these nets and die in large numbers.

Participants were also concerned about the constantly increasing size of the core, leading to reduced areas open to fishing. Several participants highlighted the increased pollution of the Sundarbans and its impact, the impact of trawlers and the deplorable situation of fishers that forces them to carry out illegal activities. They also raised the issue of trawlers spilling diesel into the water and thereby killing fish. This, they felt, was the major cause of the decreasing number of dolphins in the Sundarbans waters as well. Participants also cited the large—scale use of pesticides in agriculture as a reason for the decline in the availability of fish. The pesticides got into the water bodies, creating a poisonous environment for the fish, they noted.

The entire group demanded that the core and buffer limitations be scrapped and the fishes be allowed into all parts of the Sundarbans. Here too, participants raised the problem of passage through the core areas being banned which resulted in fishers having to break the law or take a long, arduous route to the buffer. Once again, the need to allow fishers in distress to halt in the protected area was brought up. The present BLC system led them to take BLCs on rent, leading to severe economic hardship. A participant reported that he had taken a BLC on rent for USD 484.42 (PPP corrected value USD 1211) in mid—March this year (2013) and had earned only USD 80.8 (PPP corrected value USD 202) until then.

Afternoon session

The second session discussed in detail the issues raised through the various reports. Most of the fishers argued for an immediate end to the oppression of the forest department and that fishers must have a say in forest governance, in so far as it touched their lives and livelihoods. The fishers felt that they needed to preserve the Sundarbans and its fisheries resources. However, they needed to do so on their terms and on the basis of their own experience, although they were open to suggestions from officials and experts.

The meeting ended with the following resolutions/decisions.

Resolutions

- Those who are dependent on the Sundarbans were responsible for the welfare and development of the same. Therefore, policies and restrictions should not be imposed from above
- Core areas should not be confused with fishing restrictions. Core areas, in terms of tiger habitats, could be increased or decreased based on tiger ecology. However, fishing restrictions must be based on the ecology of fish resources
- Thus, core areas should be allowed as routes and passage ways, and also resting place and shelter during calamities
- On the other hand, fishers and fishing should be subjected to restrictions. Fishing in breeding areas was to be avoided, irrespective of it being in core or buffer zone. However, such restrictions must come not as undemocratic administrative fiat but from the Sundarbans fishers acting in cooperative capacity
- The BLC system should be replaced by permits issued to genuine fishers
- Trawling to be banned in the area
- Use of mosquito nets to be banned
- Compensation should be distributed promptly to tiger and crocodile victims even if the attack happened in the core area
- GIC scheme to be implemented USD 1614.73 (PPP corrected value USD 4036.82) on death of the insured and the premium paid by government
- Pensions for old fishers over 60 years should be implemented
- The housing scheme, “*Gitanjali Prokalpo*” to be implemented with transparency
- The fishers were prepared to follow the 3—month fishing ban
- Renovation of the fish wholesale market to be done immediately
- An ice factory to be set—up near the fish market, which was the need of the day
- Fish storage and infrastructure development like jetties, to be set—up

11.1.4. Workshop IV: Shamshernagar

The workshop at Shamshernagar—I village was conducted on 23 January 2014. This village belongs to a cluster consisting of four villages, Shamshernagar I to IV, under the Kalitala Gram Panchayat, in Hingalgaon Community Development Block. The villages are located near the river Kalindi, along the middle of which passes the Bangladesh border (the yellow line on the maps in the **Appendix VIII**). This is an overwhelmingly rural site, characterized by poverty and underdevelopment. The census data for 2011 indicates that almost 80 per cent of the population belongs to the Scheduled Castes²¹. Large numbers pursue fishing as a major or minor profession. Most of the fishers describe themselves as descendants of settlers who had come in from Khulna (in present day Bangladesh) during the partition of India.

In this area, earlier activists of DISHA and SundarbansJana Sramajibi Mancha²², keen to get the Forest Rights Act implemented in this area (for fishers), tried to organize them into *gram sabhas*. The local *panchayat* went along with their efforts and the fishers in the four villages of Shamshernagar I to IV organized themselves into four *gram sabhas*. They now negotiate with the forest department in united capacity. However, the legal status of these *gram sabhas* remains

²¹ Refers to a group of historically—disadvantaged people who are eligible for affirmative action steps described by the Government of India.

²² SJSM based in Radhanagar, Gosaba block, works mainly to implement FRA in Sundarbans.

uncertain, given that the process of implementing the FRA 2006 in the Sundarbans has not even begun.

The workshop was attended by 25 fishers from six villages — Shamshernagar I to IV, Pargumti, and Kalitala. Due to an unfortunate mistake this, as in the case of the workshop at Canning, turned out to be an all-male affair.

Initially, the plan was to have the workshop in two sessions — the first consisting of the fishers reporting their problems and the second with discussing the issues raised in the earlier session and trying to arrive at a solution. However, the reporting often provoked spontaneous discussions. This led to an effective merger of the sessions. The only division was temporal—pre-lunch and post-lunch.

Reporting & discussion

The first fisher to speak reported that he had no BLC. If he could rent a BLC he could have taken his own boat into the forest. However, nowadays, a BLC rent was USD 484.42 (PPP corrected value USD 1211), which he could not afford. Hence, he went along as a member of a party in others' boats.

The fishers reported that their usual fishing grounds were the forest blocks of Arbesi and Khatuajhuri. These, as one can see from the maps in the **Appendix VIII**, are the forest blocks closest to the Shamshernagar area. These belong to the buffer zone of the STR. The fishers reported that since the core was closed to fishing, fishers from both North and South 24 Parganas (the two districts over which the Sundarbans are spread) were forced to converge on the buffer, which led to overcrowding and decline in fish catch. A fisher, supported by several others, complained that the buffer yielded little, and the only option was to dare the forest administration and enter the core areas.

This brought in another key issue. The fishers reported that the fishing population had greatly increased down the decades. Requested to provide an estimate, the fishers suggested that the number had grown about five-fold in some four decades. This overpopulation, they felt, resulted in decline in fish catch per unit effort.

Related to this was something that seemed to trouble the traditional fishers who were also BLC-holders. One traditional fisher and BLC-holder said that a few decades earlier there were in this locality only some 70 odd boats that had BLC. Only these boats entered the forest. Now, plenty of fishers who did not have BLC took their boats into the forest and the overcrowding caused friction. The issue of friction among fishers due to overcrowding of the fishing locales came up more than once during the workshop.

A related issue thrown up was that of the undeserving having BLC. A fisher described the situation as follows. BLCs were issued several decades ago. It is quite possible that all those who received the BLC then were genuine fishers, who were certified for going into the forest. However, with the passing of time, many fishers had become less dependent or non-dependent on fishing. Often, their children had grown up to hold stable office jobs, rendering fishing unnecessary. Such fishers no longer needed to pursue fishing as a profession. However, in possessing BLCs, they owned a highly rentable good. Hence, they rented out their BLCs at high rates to those who had the need to enter the forest.

A fisher reported that the high rates of BLC greatly raised the costs of fishing. This compelled him to take loans. Consequently, it became more difficult for the fishing expedition to show profit. Hence, when the fisher did not find sufficient fish, he was sorely tempted to indulge in prohibited activity — for example, cutting some wood from the forest for selling outside. This brought the issue of the BLC-regime to the fore. It was clear that while many who had BLCs did not need to fish, many legitimate fishers had fishing boats but no BLCs, which compelled them to depend on those in a position to rent out BLCs. The solution to this problem was replacing the BLCs with licences issued to all genuine fishers who were known to fish on a regular basis. One fisher said that licences should

only be issued to the poor and needy, for it was they who needed to enter the forest to sustain themselves. It came out in the discussion that lists of genuine fishers and crab—collectors who entered the forest on a regular basis should be prepared and licences should be issued only to those in the list.

At this point, someone pointed out that there were BLC—holders who proved incapable of going into the forest due to some mishap — e.g. severe ailment or injury. They were forced to rent out their BLCs. The end of the BLC regime would hurt them. Here, the suggestion that emerged was of providing such persons with pensions.

The overall consensus was that the existing BLC—regime was utterly unfair and created a source of unjustifiable rent for those owning them. Yet, the forest department, which was fully aware of the situation, took no steps towards changing this unjust system.

The paramount conflict was with the forest department. One must bear in mind that given the geographical location of Shamshearnagar, fishers starting from their homes did not need to pass through the core area or WLS to reach the buffer. Thus, the fishers reported that the conflicts were mostly of two kinds. First, the forest department came down heavily on boats without BLC, which now constituted the majority of boats entering the forest. Secondly, the fishers were often forced by the overcrowding and lack of good yields in the buffer areas to enter the core area — particularly the Chamta and Chandkhali forest blocks (see **Figure 2** All the workshop sites). This led to inevitable conflict with forest officials. The fishers resented the fines. However, they tended to accept to an extent the reality of being fined when apprehended while fishing in prohibited areas. What they resented most was offensive behaviour and foul language. Several fishers emphasized on this aspect of their interaction with the forest administration.

The issue of honey collection received particular emphasis in this workshop, for a substantial portion of the participants were also honey—collectors. The fishers reported that the forest department allowed the fishers to collect honey only during a stretch of three weeks — during the last week of *Chaitra* and the first two weeks of *Baisakh* (the last three weeks of April). They were allowed to make what they described as the “first cut”, i.e. honey of the khalsi²³ flower (*Aegicerus corniculatum*). Each collector was allotted a collection—quota. The collector had to collect the honey indicated in the quota. For collection, he was paid at the rate of 1.21 USD per kg (PPP corrected value USD 3.03)²⁴. If the collector collected more than his quota; the remaining portion was taken away from him at a lesser rate. Under no circumstances was the honey—collector permitted to take away even a gram of honey, even for personal consumption.

The fishers said that they were prepared to give the entire first cut to the forest department, which appeared to be interested in taking only the honey of the khalsi flower. However, they wanted free and untrammelled rights over the second cut, the honey of the other flowers that produced pollen and nectar a little later than did the khalsi. Among these second cut flowers, the fishers specifically mentioned the flower of the keora tree (*Sonneratia apetala*).

It came up during discussions that the FRA did not allow the forest department to deprive the traditional users of the forest of their claims to non—timber forest produce (NTFP). It was also noted that the FRA had not been implemented in the Sundarbans, although the Shamshearnagar fishers had

²³ The expression “first cut” appears to refer to the fact that the khalsi is an early pollen—and nectar—producing flower.

²⁴ Formally speaking, it is not the forest department but the West Bengal Forest Development Corporation (WBFDC) which engages the honey—collectors. Having procured the honey at USD 1.21 per kg, the WBFDC sells it at USD 2.42–3.23 per kg. Of course, the WBFDC processes the honey before putting it in the market. However, the processing costs come nowhere near to explaining the difference, even when a decent rate of profit is factored in. However, the forest department claims the honey as a forest produce and, hence, their property under the Indian Forest Act of 1927, a claim challenged by the FRA 2006.

organized themselves into *Gram Sabhas* and had themselves recognized by the local *panchayat* in anticipation of the implementation of the FRA.

The discussions now moved on to the size of the core area. The fishers felt that the core area was simply too large. If tens of thousands of fishers had to be accommodated in the STR, then the size of the core area must shrink considerably. One fisher raised the question whether shrinking the core would not result in destruction of the fisheries resources in the long—term. For, he said, the core acted as an area where fish populations could be born and grow in relative non—interference. Other fishers responded that the three—month no—fishing season should take care of providing sufficient breather to fish populations. This led to the questions whether the three months sufficed for a non—fishing season and whether April to June²⁵ was the correct time (i.e. whether this was the time when most fish species spawned and the younglings grew). Most fishers agreed that if one were to select a three—month no—fishing season in terms of fish spawning time, April—June was the best choice.

The fishers felt that the no—fishing season should be strictly imposed and fishers everywhere should not fish in this season. This triggered the question of self—regulation. The discussion veered towards the implementation of FRA in the Sundarbans and fishers having a crucial say in the governance of fishing and fisheries in the Sundarbans. Everyone agreed that for fishers and honey—collectors the FRA needed implementation in the Sundarbans and that governance of the Sundarbans must include the fishing community.

Resolutions

- About one—third of the “Core Area” may be maintained as no—fishing zone; the rest must be thrown open to fishing
- However, the no—fishing season of three months must be strictly implemented
- All fishers should get the benefit of Savings—cum—Relief Scheme and some extra financial support to tide them through the no—fishing season
- The BLC—regime must be substituted with licences for all genuine fishers; local lists of such fishers must be prepared in consultation with the local fishing community
- Genuine fishers who are unable to go on fishing expeditions due to age, ailments, or injury must be given pension
- Harmful gears like mosquito nets must be prohibited
- Trawling in inland waters must be prohibited according to the Marine Fishing Regulation Rules
- Forest officers must desist from foul behaviour and offensive language
- Until the FRA is implemented the honey—collectors must get the right to take first cut
- However, steps should be taken to implement the all the legal provisions suitably in the Sundarbans context, thus giving the fishers a fundamental say in the governance of Sundarbans’ fishing and fisheries.

11.1.5. Workshop V: Nagenabad village

The workshop at Nagenabad village was conducted on 10 February 2014. This village belongs to a *mouza*²⁶ known as Moipith—Nagenabad, under the Moipith—Baikunthapur Gram Panchayat, in Kultali Community Development Block. The village is located on a creek that leads to the Matla River, some 5 km to the east. A tributary of the Thakuran River lays a couple of kilometres to the west. The fishers here usually follow the creek to the Matla, sailing east, south, or north.

²⁵ The official “no fishing season” in the STR.

²⁶ Smallest revenue unit usually consisting of 3 to 5 villages.

As **Figure 5** Moipith Nagenabad, Sridharnagar, Chandanpiri indicates, the location of Moipith—Nagenabad in terms of the protected areas is as follows. It is immediately adjacent to some tracts of the Ajalmari Reserved Forest block. Sailing further west, and bypassing an entire island—cluster under Ajalmari, one reaches the Matla, Chhotohardi, Chamta, and Chandkhali cluster—forest blocks, which, in their entirety, belong to the core area. Further, Moipith—Nagenabad is close to the West Sundarbans WLS (which is located to the south—west, south of Bonnie Camp, and roughly indicated by the space within the red curve).

This is overwhelmingly rural area, where poverty and underdevelopment are noticeable. However, census figures for literacy (as in the 2011 census) are not too unfavourable. Interestingly, many of the women fishers insisted on signing their names in the register (visibly taking pride in their ability), and only a few proved incapable of scripting their names. Large numbers pursue fishing as a major or minor profession. Most of the fishers appeared to be descendants of migrants from Purba Medinipur district, and some still had contacts in that district; some even possessed land there.

The workshop was attended by 133 fishers from six villages in the Moipith—Nagenabad *mouza*. Among these, 105 were male and 28 female. Besides, there were three fishers (males) from other localities (Hedia and Taldi) who attended as observers. Most of the participants were STR fishers (who also occasionally fished in reserved forest areas). Many of them did not have BLCs for the STR, but fished there nevertheless. However, there were also some fishers and crab—collectors who worked the reserved forest areas only.

There appeared to be a small population of marine fishers in the Moipith—Nagenabad area. They, however, did not attend the workshop.

Reporting & discussion

The discussion began with the issue of declining fish catch. One after another, fishers reported decline in catch. One fisher suggested that the catch per unit effort was about a quarter of what it was some 15–20 years ago.

When asked to indicate the reasons, they mentioned the following:

- Too many fishers and too little area (a fisher estimated that the number of fishers had grown about five—fold during the last 15 years)
- A wide spectrum of various kinds of nets, scooping up catch from large to small, leaving nothing behind
- Trawlers and even mechanized boats using trawl nets of different sizes exhaust the waters; the nets scoop up fish of all kinds and sizes, a large portion of which they do not need and throw away dead; moreover, large numbers of juveniles and seedlings get killed in the process
- Use of harmful fishing gears such as *chawrpata* and mosquito nets.

The majority of the male fishers present went to fish in the STR. Many of the women fishers also fished in the STR. “We do not get any yield in the reserved forest area”, a fisher explained. “Hence, we need to enter the STR.”

It was evident from the fishers’ discussions that while many boats that entered the STR had BLCs, there were many boats without BLCs that entered the STR. Moreover, they entered the zone of the STR nearest to them, that is, they entered the core area. As opposed to the fishers in Shamsnagar, who generally entered the buffer area (which was nearest to them) and only entered the core area occasionally, the fishers here, whenever they entered the STR, tended to target the core area and tended not to try for the buffer.

Normally, there were no serious problems while fishing in the Reserved Forest area. However, the fishers strongly demanded the issuance of new BLCs for the Reserved Forest area, for plenty of fishers were operating there without BLCs.

The fishers have also started facing some problems in the zones close to the West Sundarbans WLS. The forest guards have increased their vigil in the waters close to the Dulbhasani and Chulkati Forest Blocks and fishers were facing resistance. However, since most of the fishers targeted the STR, this issue did not perhaps receive due importance in the workshop.

Many of the women crab—collectors caught crabs in the rivers and creeks within in the nearby forest areas (Ajmalhari Forest Block). They reported that whenever forest officials found crabs of less than 100 g weight in their collection, they threw away all the crabs. The women expressed deep resentment over this issue. Interestingly, during the discussion on this issue some time later, fishers, while they expressed deep resentment over the actions of the forest officers and guards, agreed that one should only collect crabs that were sufficiently mature — weighing 100 g or more.

The anger against the forest department took the form of almost an explosion. The fishers were deeply offended with the beatings, foul behaviour, and abusive language of the forest officers. However, when asked whether they were prepared to take legal action against the officers and go the full course, the fishers shied away. They pointed out that their livelihood depended on the forest and they spent days, occasionally weeks, on end in the forest, and, hence, did not want serious confrontation with the officials. However, the fisher movement leaders mentioned some instances where hostile deputations to the forest department had led the senior officers of the department reprimanding officers against whom complaints had been made.

The fishers expressed tremendous outrage over not being allowed to fish in the core area. They were particularly angry with the immense size of the core area. They felt that maintaining no—fishing zones was unnecessary. However, most fishers believed equally strongly that the three month fishing ban was vital and should be implemented strictly. They felt that if the fishing ban was strictly implemented, maintaining no—fishing zones would not be necessary. This led to the issue of whether the period April—June was the most suitable period for choosing as a no—fishing season. In the ensuing discussion, fishers tended to agree that, at least in the Sundarbans area, most fish species spawned and their younglings matured during this period. The fishers also agreed that all genuine fishers must be given licences.

Resolutions

- Spatial no—fishing zones unnecessary; the core area and the WLSs must be thrown open to fishing
- However, temporal prohibitions are desirable — in the form of no—fishing season of three months, which must be strictly implemented
- All fishers should get the benefit of Savings—cum—Relief Scheme and some extra financial support to tide them through the no—fishing season
- The BLC—regime must be substituted with licences for all genuine fishers; local lists of such fishers must be prepared in consultation with the local fishing community (due to an error, the discussion of BLCs was limited to BLCs in the STR, although there were fishers here who fished or hunted crabs in the Reserved Forest area)
- Harmful gears like mosquito nets and *chawrpata* (shore stake nets) must be prohibited
- Crabs weighing less than 100 g should not be collected
- Trawling in inland waters must be prohibited
- Forest officers must desist from foul behaviour and offensive language
- However, steps should be taken to implement the FRA suitably in the Sundarbans context, thus giving the fishers a fundamental say in the governance of Sundarbans' fishing and fisheries

Report on workshops with Non—STR Fishers

Background

Both these sites are located in the vicinity of the reserved forests in the western SBR. The fishers in these sites consist of two categories — first, artisanal fishers who fish in the local rivers and in the reserved forest area, and secondly, fishers who work in trawlers and mechanized boats fishing in the coastal waters (which vessels make frequent illegal intrusions into the estuary). The fishers from L—Plot make occasional forays into the STR. This is more so with fishers who go out to serve in the trawlers and mechanized boats, for these make more frequent illegal intrusions into the coastal and estuarine waters of the STR. Initially, the artisanal fishers only used row—boats. However, nowadays, anyone who can afford it proceeds to get an engine installed (mostly single—cylinder), thereby converting his vessel into a motorized boat.

11.1.6. Workshop VI: Sridhar Nagar, L—Plot

The fourth workshop was held on 16 January 2014. This workshop was held at Sridharnagar village in Sridharnagar Gram Panchayat, Patharpratima Block, located in L—Plot Island. L—Plot is in the western part of Sundarbans. Its eastern fringe has a strip of reserved forest. On the south, across a creek, is the L—Plot Southern Portion, which is completely under reserved forest (See **Appendix VIII**).

On its east is the Thakuran River along which the artisanal fishers fish and hunt crabs. The fishers take the southern creek and row westwards to go into the Thakuran River or, occasionally, they take the creeks passing through the reserved forest on the eastern fringe. Across the Thakuran River are the Dulibhasani and Chulkathi blocks of the reserved forest, which are now included within the West SundarbansWLS.

The number of boats from the L—Plot area that need to hit the waters considerably exceeds the number of boats in the area that have BLCs. Hence, many fishers do take out boats without BLCs. Most fishers in this area appear to be settlers from Purba Medinipur. Local activists of DMF organized the workshop.

There were 64 fisher participants — 54 men and 10 women. The majority were artisanal fishers — men and women. However, some fishers employed in mechanized boats were also present, at least during the initial proceedings.

Reporting & discussion

The session began with a presentation of the focal themes. The fishers began with discussing their fishing experiences over the years. Everyone said that the fish catch during last decade had declined considerably. They identified population pressure and restrictions imposed by the forest department as the main reasons.

The following situation emerged from the fishers' reporting. First, no new BLCs had been issued in the last several decades. Second, during the last 4 or 5 years, the forest department, for reasons unknown, was not renewing the existing BLCs. Third; the department was also not issuing permits. Consequently, all fishers, even if they possessed BLCs, were fishing "illegally", though the forest officials mostly chose not to trouble fishers carrying outdated BLCs.

However, the Directorate of Fisheries (Marine) has provided the fishers with "papers" of a different kind. They have provided some fishers having boats with log books in order to record their fishing trips. The fishers must always carry this on their boats, whenever they go out fishing they must make entries in the logbook, recording the date and time of journey, the name and number of fishers in the team, the amount of fuel—oil (in the case of a boat with an engine), the water and ice being carried, etc. On return, they must record the details of the itinerary, the number of fishers who have returned, etc. Since most fishers are only imperfectly literate, fishers' union activists take charge of making these entries. However, once in a week or two, the logbook must be taken to the local Fisheries Extension Officer (FEO) for official scrutiny and record.

The forest guards tend not to harass the fishers who don't have non-renewed BLCs but who carry these log books. However, many fishers still do not have log books, as this arrangement has not been imposed uniformly. Such fishers often face unpleasant consequences. The participants spoke how they were made to pay fines if caught without proper "papers", the minimum amount being USD 18.57 (PPP corrected value USD 46.42).

The participants then put forth the issue of decline in net fish stock as well as fall in catch per unit yield. They admitted that it is poverty that drives many small-scale fishers to fish even during the no fishing season (15 April to 2 June). Some participants complained that the "trawlers" (the term the fishers use for 6-cylinder mechanized boats) and the "trawleys" (i.e. trawlers) come very close to the shores, and even enter the estuarine waters very often, flouting the restriction of 12 nautical miles (for actual trawlers) and 15 km (for mechanized boats of 30 hp and more) from the shoreline shore. They also use large nets of varied mesh sizes, scooping up the entire spectrum of catch. Worse still, they sort their catch and retain the fishes which are big and highly priced, and throw away the smaller or less priced ones, already dead by then. They do this to make the best use of their vessel capacity, but at huge environmental cost—juveniles are not allowed to grow and reproduce. It also came up during the discussions that trawlers of other countries, especially of Thailand and Myanmar, fish as close as 1 km from the mouth of River Saptamukhi.

Some of the women fishers stated that they caught crabs with ropes and hooks. They operated on a very small-scale without boats and did not have log books. To avoid harassment at the hands of the forest guards, the women even swam across the creek into the forested southern portion of L-Plot, tagging along *handis* containing ropes and hooks to catch crabs. During such endeavours, they occasionally fell prey to crocodile attacks.

One women fisher blamed the industrial effluent released in the river waters to be another reason for decline in fish stocks. Others focused on the influx of tourist boats and use of plastic cups and plates by the tourists, which, in the long run, hurt the fish and affected their habitats.

Some of the participants claimed to be members of Forest Protection Committees (FPC), but said that they were being ignored by the forest department and no work has been assigned to them till date. They mentioned that such assignments were promised during the formation of FPCs and could create alternative livelihood; but this was not happening in reality. The FPC members should have been empowered for negotiating with the Forest Department when the fishermen are caught without valid papers and/or their boats and nets seized. But that does not happen in reality. The fishers also complained that the forest guards did not stop woodcutters but seized the boats and nets of fishers if the latter collected some wood for fuel. Some fishers mentioned that when they did not find fish in the neighbouring waters they rowed for hours on end to get fish from the STR, though they did not have permission to fish there. They were fined if caught and boats and nets confiscated. They claimed to be using nets with mesh sizes ranging from 70 mm to 80/85 mm for hilsa (*Tenualosa ilisha*) during the dry season, but mechanized boats used 32–42mm sized mesh. Both fishers in mechanized boats and artisanal fishers caught hilsa weighing 300–350 g, although everyone was aware of the ban on catching hilsa weighing less than 500 g.

Resolutions

- To form a Union where they would decide what was good for their community and how they could reduce pressure on forest resources
- The existing fishing ban (from 15 April–2 June) should be strictly obeyed by all fishers. The participants agreed to take responsibility of motivating their own community members to adhere to the existing ban

- Fishing in “Thakuran” area, which has been declared hilsa sanctuary²⁷, should not be banned for the whole year. Such restrictions would be fatal to the interests and livelihood of fishers of the area
- Alternative livelihood options should be provided to all the fishers before imposing such bans
- Use of mosquito nets must be banned by all and should be strictly adhered to 16mm gill nets with mosquito nets stitched at the lower end are to be banned
- Trawl nets, which destroy the fish habitats, must be banned not only in the Sundarbans but also throughout the country
- Bigger mesh nets to be used during monsoons and smaller ones during winter
- Species like Lyata (*Harpadon nehereus*), Parse (*Liza parsia*), and Topse (*Polynemus paradiseus*) of smaller sizes should not be caught (no suggestions materialized about the methodology of avoiding juveniles of these fish while catching other species whose mature specimens were comparable in size to juveniles of the aforesaid species)
- A lighthouse for signalling and for direction is a dire necessity for identifying the landing station
- A proper jetty was required for unloading the catch; it was especially difficult for the women to traverse the muddy banks during low tides
- Distance Alert Transmitters (DAT) must be provided free for the fishers for use in distress, on being attacked by foreigners or on fire
- Pension must be given to fishers of more than 60 years of age
- Housing Schemes and other Social Security Schemes having accident benefits to be implemented
- The fishers must be allotted space for net repairing and fish drying
- A concrete space with drainage system is to be provided for sorting fish
- A minimum of one tube well is to be provided for community use at the landing station
- Solar powered lights must be provided at the fishers’ villages

11.1.7. Workshop VII: Dakkhin Chandanpiri

The fifth workshop was held on 17 January 2014. Dakkhin Chandanpiri is in Namkhana Block in South 24 Parganas district. To its north is the village of Uttar Chandanpiri. These villages are located on the western bank of the Saptamukhi River and are often referred to with the shortened name of Chandanpiri.

These and other villages in the area with riverfronts are home to artisanal fishers who fish mostly in the Saptamukhi estuarine area. However, the sea is about 20 km downstream from Chandanpiri. No wonder, many from these parts go to work on trawlers and mechanized boats, but are equally willing to fish in the rivers if they can so manage.

It is to be noted that opposite Chandanpiri, right across Saptamukhi, is the Lothian WLS. The overwhelming majority of the people in these parts are from the Medinipur area, mostly from what is today Purba Medinipur district. However, there is a population of fishers and fish workers in the Namkhana block who have come in from districts of present Bangladesh (mostly Khulna). However, they are mostly to be found in Bakkhali, Frazergunj, and Narayanpur.

This workshop was organized by local activists of DMF. A total number of 95 fishers attended the workshop out of which 72 were men and 23 women. Participants were mostly artisanal fishers.

²⁷ Notification No. WB (P art-I) 12013/SAR-136, dated 04.04.2013 and No. WB (P art-I)12013/SAR-137 dated 09.04.2013.

Some fishers who work on mechanized boats and trawlers were also present. The participants were from Uttar Chandanpiri, Dakkhin Chandanpiri, and some other villages in the vicinity.

In addition to resource persons, Arun Bhattacharya, Tarun Bhattacharya, Suman Kalyan Mondal, Runu Mallik, and Mita Bhattacharya — writers and activists from Kolkata, were present as observers during the workshop.

Reporting & discussion

After a presentation of the focal themes, the participants shared their experiences. Several participants unanimously noted the fall in catch per unit yield the decline in fish stocks. One fisher from Dakkhin Chandanpiri, who had been fishing in the Sundarbans waters for last 20 years, stated that earlier there was an abundance of fish. He said that, in those days, they used various kinds of nets for various kinds of fish.

A veteran fisher stated that the fish stocks have declined by 90 per cent in the last 20 years. He has the experience of being a hired sailor in trawlers. He mentioned that the trawlers previously used hilsa—nets of mesh sizes ranging from 70 to 85 mm, while at present they used ones whose mesh size is smaller than even a finger's breadth. The mechanized boats use 32—42 mm sized mesh and even enter the estuaries nowadays. Both fishers in mechanized boats and artisanal fishers caught hilsa weighing 300—350 g, although everyone was aware of the ban on catching hilsa weighing less than 500 g.

An artisanal fisher from Dakkhin Chandanpiri, who had five years experience in trawlers as a sailor and fisher, shared his views. Trawlers targeted big fish and prawns, while the ordinary mechanized boats looked for a wider array of catch. For capacity utilization, trawlers threw away the smaller or less priced ones, already dead by then, thereby reducing the fish stock as well as denying the smaller ones to grow and reproduce and keep the cycle on.

Another fisher with long experience working in trawlers said that trawlers used 62 mm mesh nets nowadays, to catch big, medium, and even small fish. He said that trawler crew even carried firearms, killed animals, and cut trees in forests.

Another fisher from Purba Bijoybati claimed to be using nets with small-sized mesh. To him, one could not get any fish with the permissible 80 mm net. Trawlers and mechanized boats, he said, have no respect for rules. The trawlers often fished within 12 nautical miles from the shore and mechanized boats entered estuaries to fish. This resulted in small fishes getting caught and juvenile fishes getting killed.

A fisher from Dakkhin Chandanpiri mentioned other problems faced by the fishers of the area. The forest personnel did not allow them to fish and catch crabs within 100 yards from the Lothian Islands. He questioned why they were restricted, when they were inflicting no harm to the forest. Only 4 or 5 years ago, they caught crabs at Lothian. Since then, however, restrictions have been imposed, and these have become rigorous during the last couple of years. If they violate the ban, they are instantly arrested. In last 3 years, the Forest Department has stopped issuing any permits to the fishers to enter the forest area for fishing. He claimed that the fishers of the area were not criminals. They caught fishes and crabs, but never indulged in killing animals or cutting trees. He further stated that the influx of tourists in the area also had negative impact on the fish stock. He highlighted that the fish require calm waters to breed. Now with the brisk movement of tourists, the Sundarbans waters were no more tranquil. The proportion of salt in the water has also risen considerably.

A fisher from Dwariknagar mentioned that the people of his village were mostly from low income group. They entered the forests to steal wood. He stated that they would stop such theft, if allowed to fish and catch crabs around Suzni Islands, where there a ban had been recently enforced by the Forest Department. They were fined between USD 17.76–35.52 (PPP corrected value USD 44.40 - 88.81) per person whenever caught violating the ban. It was alleged that forest personnel try to win

the favours of women fishers with the lure of allowing to fish at Lothian Island. It also came to the light that honey collection was allowed into Lothian Island.

A fisher from Dakkhin Chandanpiri said that in addition to drying fish, she goes on fishing trips. Women fishers caught fish as well as crabs with ropes and hooks. She discussed the great difficulty of walking long distances through mud and slush to reach home from where their boats were anchored. She expressed the need for solar lamps at the landing station. They dried fish on government land, and occasionally faced problems from the authorities. She demanded that the Forest Department must provide adequate land for them to dry their fish. She said that she catches *bagda* seed during monsoon, when fish—drying was not possible.

Resolutions

- To form a Union where they would decide what was good for their community and how they could reduce pressure on forest resources
- The existing fishing ban (from 15 April–2 June) should be strictly obeyed by all fishers. The participants agreed to take responsibility of motivating their own community members to adhere to the existing ban
- Efforts, in addition to the fishing ban, should be made to increase fish stock
- Use of mosquito nets must be banned by all and should be strictly adhered to
- Bigger mesh nets to be used during monsoons and smaller ones during winter
- There should be a ban on use of nets of 40 mm or less
- The government must construct a proper jetty and walkways to facilitate unloading of the catch and reduce walking through mud and slush
- Pension must be given to fishers of more than 60 years of age
- Government to provide space for net repairing and one for drying fish
- Government to provide the fishers with a cemented area for sorting fish
- Government to provide solar powered lights at landing stations

Appendix I List of participants – Rajat Jubilee, Gosaba (26 November 2013)

Anpur village

Dinesh Ch. Mondal
Bhupati Mondal
Amal Mondal
Usha Sardar
Subal Ch. Mondal

Chawrgheri village

Achin Paik

Hedia village

Milan Mondal
Sujan Mondal
Baburam Halder

Jwahaar Colony village

Sujit Mondal

No.10 Bidhan Colony village

Shibapada Biswas
Giribala Mondal

No. 10 Chowargheri village

Sachindra Mondal
Harimoti Mondal

North Taldhah village

Godinda Mondal

Parashmoni village

Kamal Ch. Das
Nirmal Mondal

Rajat Jubilee village

Mangal Biswas
Sukumar Mridha

Sachindra Mridha
Monojit Burma
Sushil Mondal
Tukur Pada Mondal
Thakur Pada Mondal
Kelebala
Sushil Swarnakar
Jamini Mondal
N Mondal
Harendra Mondal
Kalpana Burman
Manju Mondal
Alapi Mondal
Mohanlal Swarnakar
Amal Mondal
Subhendu Joddar
Rabindranath Mridha
Santosh Mondal
Monoranjan Biswas
Anil Mondal
H Joddar

Appendix II List of participants – Saterkona (27 November 2013)

Amlamethi village

Animesh Mondal

Ganga Mondal

Gour Tarafder

Kalipada Mondal

Bolai Mondal

Chitta Mondal

Biswanath Mondal

Khokan Monda

Ananta Mondal

Banalata Tarafder

Panchi Mondal

Sabita Mondal

Anjana Sarkar

Bishnupada Tarafder

Nitai Mondal

Kalpana Mondal

Anjali Mondal

Kalpana Mondal

Ananta Mondal

Nitai Maji

Ashok Mondal

Rabindra Mondal

Pulak Mondal

Anil Mondal

Bistupada Mondal

Kesab Mondal

Bhola Gayen

Manotosh Mondal

Binoy Mondal

Paresh Gayen

Samaresh Bain

Shyamapada Mondal

Nitai Rout

Kohkan Mondal

Paresh Chandra Mondal

Sarojit Majhi

Sibasath Baidya

Ashim Mondal

Dolu Bain

Bali village

Tufan Tarafdar

Mathura Khanda village

F Ari

Sanjoy Mondal

Satyanarayanpur village

Gobinda Mondal

Bhakta Mondal

Santosh Mondal

Kanak Mondal

Bijoli Mondal

Bishnupada Mondal

H Mondal

Sadhan Baidya

Mrinal Baidya

Sundari

Santosh Sardar

Babul Mondal

Krishnapada Mondal

Nirodh Mondal

G S Mondal

Ashit Chowkidar

Buddheshwar Sardar

Santosh Mondal

Nirapoda Mondal

Tarapada Mondal

Brojen Mondal unadhar Mondal

C Tarafdar

Gita Mondal

Bhaduri Mondal
Saraswati Mondal
Sima Mondal
Samaresh Mondal
Monotosh Mondal
Abinash Mondal
Lakshmi Mondal
P Das
Shyamal Mondal
Gour Baidya
Harikhit Mondal
D Mondal
Gita Mondal
Samaresh Mondal
Koushyalia Mondal

Appendix III List of participants – Canning (28 November 2013)

Ashjhara village, Basanti

Ratikanta Pramanik

Lalan Khan

Tridip Sarkar

Jyotish Pramanik

Tarani Mondal

Nanda Kha

Mihir Mondal

Kusthapada Mondal

Sujan Mondal

Jibantala, Canning II

Rajib Ali Laskar

Matla II

Ashu Adak

Canning

Nimai Singh

Mangal Mondal

Purna Mondal

Bolai Mondal

Badal Patra

Bishu Adab

Shambhu Mondal

Balai Shikari

S Das

Montu Mondal

Biswanath Mondal

Satish Patra

B Adhikari

Anil Mondal

R.M. Road

Gobinda Das

Radhanagar

Pabitra Mondal

Rajarlat Jelepara

Basudeb Adak

Tarak Biswas

Uttar Taldih

Uttam Mondal

Ganesh Mondal

Samir Sardar

Bholanath Pramanik

Subal Mondal

Kanta Mondal

Akal Mondal

Judhisthir Mondal

Subal Mondal

Moni Mondal

Canning Bazar

Gopal Das

Canning II

Barala Kanta Halder

Dibakar Naskar

Hedia, Canning II

Hasesh Laskar

Nabir Alam

Paritosh Mondal

Appendix IV List of participants – Shamshernagar (23 January 2014)

Shamshernagar 1

Md. Rekat Gazi
Bokkas Sardar
Nityananda Barman
Maslem Gazi
Probhash Mondal
Anil Mondal
Mrinal Kanti Gayen

Sundarbans Sramajibi Mancha

Pabitra Mondal

Shamshernagar 2

Ziad Barkan Das
Gangadhar Mondal
Subodh Mondal
Monotosh Gazi

Shamshernagar 3

Harendranathmunda
Dulal Chandra Munda
Kartik Munda
Parimal Munda

Shamshernagar 4

Gour Mridha

Kalindi Para

Nabendu Boidya
Krishna Ch. Mondal
Achheruddin Gazi
Rabindra Mridha
Tapan Mistri

Kalitola

Bidyut Sardar
Kanai Sardar
Abul Haq Sheik

Appendix V List of participants – Moipith–Nagenabad (10 February 2014)

Moipith–Nagenabad

Mahadeb Bairagi

Nabakumar Choudhury

Panchanan Sheet

Madar Dhali

Manoranjan Sheet

Sailen Baidya

Swapan Pradhan

Jaydev Haldar

Uttam Baidya

Basudeb Pradhan

Basudeb Mondal

Gopal Paik

Nabin Manna

Amit Bairagi

Alokesh Bairagi

Gautam Baidya

Sekhar Sid Ali

Subhash Chakraborty

Shibram Bairagi

Nanu Sarkar

Banamali Niyogi

Kamalendu Bera

B. Haldar

Mrityunjoy Bhuiyan

Dilip Samanta

Dinesh Mondal

Khokan Mondal

Bablu Maity

Dipak Sarkar

Shyam Kumar Mondal

Sanatan Manna

Gautam Samanta

Haridas Mondal

Kakali Baidya

Srimati Mondal

Kabiram Baidya

Lakshmi Deyasi

Gauranga Das

Arati Samanta

Haradhan Sheet

Bhabasindhu Niyogi

Parul Mondal

Dulal Baidya

Kalipada Paik

Khokan Chakraborty

Biswajit Paik

Prasenjit Haldar

Bhabani Dandapat

Bisawjit Samanta

Malati Baidya

Ekadashi Das

Madan Haldar

Narayan Pradhan

Nirmal Maity

Hari Bairagi

Pareesh Paira

Bamdeb Bairagi

Minoti Bairagi

Ajay Baidya

Sanjay Baidya

Nandalal Dhar

Bablu Jana

Sudarshan Manna

Kamalendu Pal

Jhantu Bera

Bharat Mondal

Bikash Dandapat

Raimoni Haldar

Dulal Baidya

Panchu Pradhan

Tapasi Haldar

Panchali Samanta

Bhupal Bairagi

Khokan Paik	Sreehari Das
Tapati Samanta	Gurupada Das
Mangala Baur	Tapan Mondal
Gopal Bairagi	Ashok Mondal
Kanaklata Baidya	Gaurchand Das
Lakshmi Mondal	Khokan Bairagi
Namita Manna	Rahim Ali Sheikh
Chandana Niyogi	Nityananda Bairagi
Pradip Das	Khokan Das
Behula Manna	Krishna Bairagi
Rabin Manna	Gaur Jana
Satyen Haldar	Subhash Das
Sukdeb Bairagi	Indrajit Das
Tapan Baidya	Lakshmi Baidya
Rikta Manna	Kamala Baidya
Arababinda Mondal	Parbati Pradhan
Sahadeb Mandal	Parul Pradhan
Suryakanta Manna	Pushparani Pradhan
Ramkrishna Sheet	Jharna Das
Nilmani Jana	Arun Kumar Baidya
Arjun Munda	Jagadiswar Chakraborty
Buddhiswar Samanta	Tapas Paira
Baneshwar Sheet	Subal Gharai
Amalendu Dandapat	
Nimai Pradhan	Canning
Jaydeb Bera	Gobinda Das
Durgaprasad Manna	
Tapas Munda	Hedia
Sarathi Samanta	Mihir Mondal
Shyamprasad Manna	Rajab Ali Laskar
Madhusudan Manna	Nabir Ali
Malati Manna	
Gauri Bhuiyan	Taldi
Jashoda Das	Ganesh Mondal
Dhananjay Chakraborty	Diamond Harbour
Ram Haridas	Milan Das
Tapan Paira	

Appendix VI List of participants – Sridharnagar, L-Plot (16 January 2014)

Diamond Harbour

Milan Das

Sridharnagar

Bikash Samanta

Birendranath Ghoroi

Biswanath Ghoroi

Narugopal Das

Arjun Das

Swapan Samanta

Rita Rani Samanta

Gurupada Das

Chandan Barui

Gopal Samanta

Prabir Pradhan

Amal Das

Chiranjit Maity

Pintu Kumar Prabal

Biswajit Barui

Manikanchan Barui

Bimal Barui

Sashadhar Das

Kulankaj Das

Lakhan Ghoroi

Madhab Barui

Kanai Ghoroi

Sushil Das

Shambhu Barui

Jayanta Ghoroi

Jagannath Pal

Ananta Das

Birendra Nath Das

Santosh Samanta

Bikash Chandra Ghoroi

Arun Pradhan

Naba Kumar Barui

Ramkrishna Dabrna

Dilip Das

Badal Maity

Ajit Barui

Bharat Ghoroi

Swapan Samanta

Prasanta Samanta

Dipak Samanta

Gopal Samanta

Rama Kanta Das

Sachin Barui

Parbati Das

Basanti Das

Anita Das

Jyotsna Maity

Mamata Ghoroi

Jyotsna Ghoroi

Kamini Das

Sanatan Ghoroi

Khokan Samanta

Lakhan Maity

Rajkumar Samanta

Bharat Kumar Pal

Nitai Chandra Maity

Sankar Jana

Gurupada Barui

Balai Das

Nimai Chandra Maity

Gita Ghoroi

Kshudiram Giri

Arati Barui

Kartik Samanta

Appendix VII List of participants – Chandanpiri (17 January 2014)

Dakshin Chandanpiri

Sukumar Shyamal
Raju Shikari
Biswajit Kamila
Sukdeb Purua
S.Karan
Gourhari Payra
Kanai Ojha
Gopal Manna
Pranab Gopal Guria
Radha Ram Karan
Sudhangshu Acarya
Ramchandra Karan
Chandan Kumar Bijoli
C. Maity
Shambhu Karan
Sasanka Karan
Durga Das
Aparna Mondal
Shibani Mondal
Uma Mondal
Lakhi Maity
Bharati Payra
Durga Shyamal
Manjuri Manna
Sandhya Karan
Renuka Karan
Pratima Guria
Mamata Karan
Pratima Payra
Lakhi Rani Karan
Tuku Moni Pradhan
Sumitra Bijoli
Dipali Das
Arati Samal

Menora Bibi
Kajal Manna
Shyamali Pal
Narayan Chandra Bera
Krishna Karan

Dakhin Durgapur

Sheik Altaf
Sheik Nuruddin

Durgapur

Bhim Mondal

Dwariknagar

Lalu Sardar
Amjad Khan
Susanta Mondal
Bhim Kara
Swapan Majhi
Chandra Mohan Jana
Mahadeb Shikari
Basudeb Shikari
Prabir Mondal
Debu Prosad Bhuia
A Das
Ansar Ali Khan
Badal Bor
Goutam Giri
S. Guria
Aziz Rahman Khan
Gurupada Mal
Arun Das
Sukumar Paik

Haripur

Manashi Giri
Manik Bijoli
Kashi Nath Bera

Lakhipur

Susanta Barui

Purba Bijoybati

Gobinda Jana
Sheik Haren
Utpal Maity
Swapan Rana
Biswanath Gayen
Akash Kumar Jana

Purba Dwariknagar

Meghnad Shikari
Himangshu Sardar
Arjun Das
Bhabesh Shikari
Amar Sardar
Sunil Kamila

Rajnagar

Tapas Maity
Bijoy Mondal
Dilip Loya
Bishnupada Bor

Ramnagar

Monoranjan Sadhu
Sheik Dil Mohammad
Badal Bor
Narayan Sadhu
Niranjan Bor
Lal Mohan Mondal

Soumitra Mondal

Uttar Chandanpiri

B.Jana
Dilip Manna
Sasipada Ads
Surabuddin Khan
Dhiren Kumar Das
Swapna Das

Kolkata

Mita Bhattacharya
Runu Mallik
Suman Kalyan Mondal
Arun Bhattacharya
Tarun Bhattacharya

Appendix VIII Maps

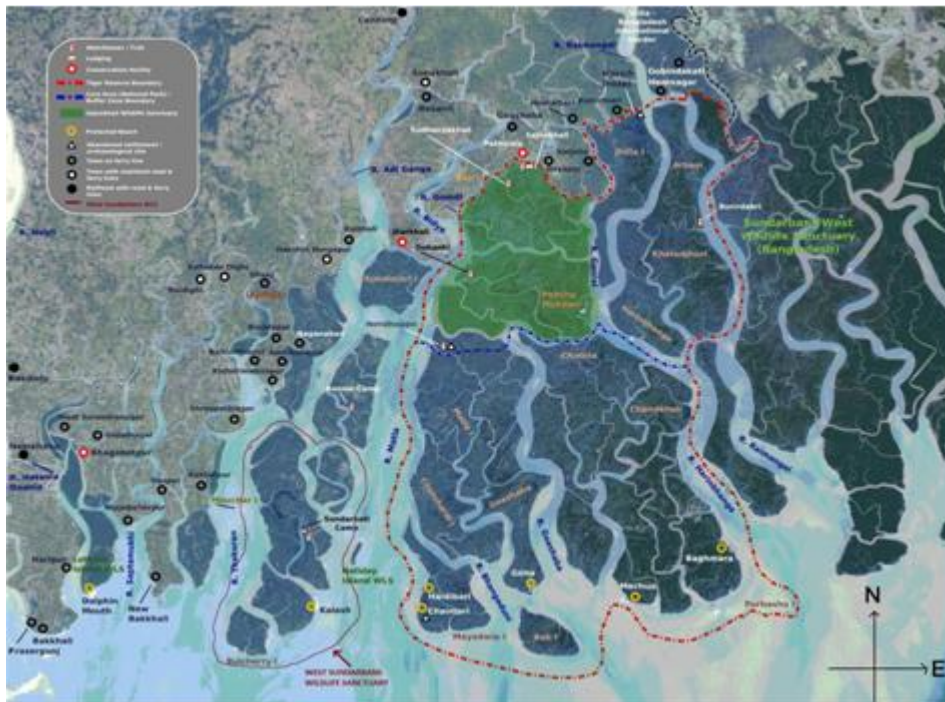


Figure 3 The STR and the Sundarbans

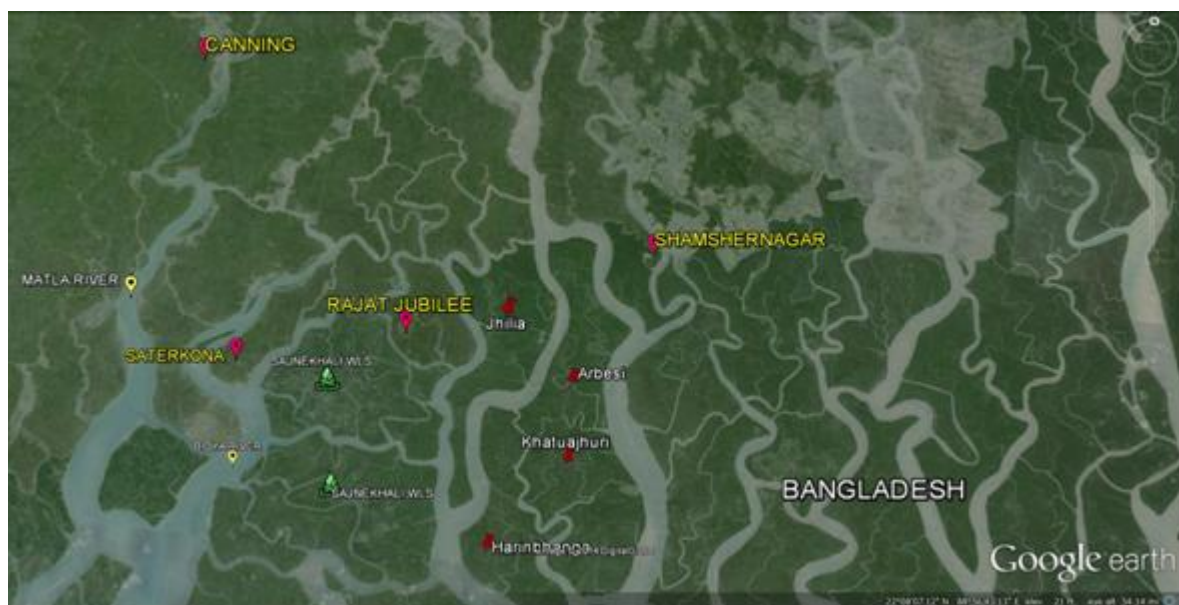


Figure 4 Rajat Jubilee, Saterkona, Canning and Shamsheer Nagar

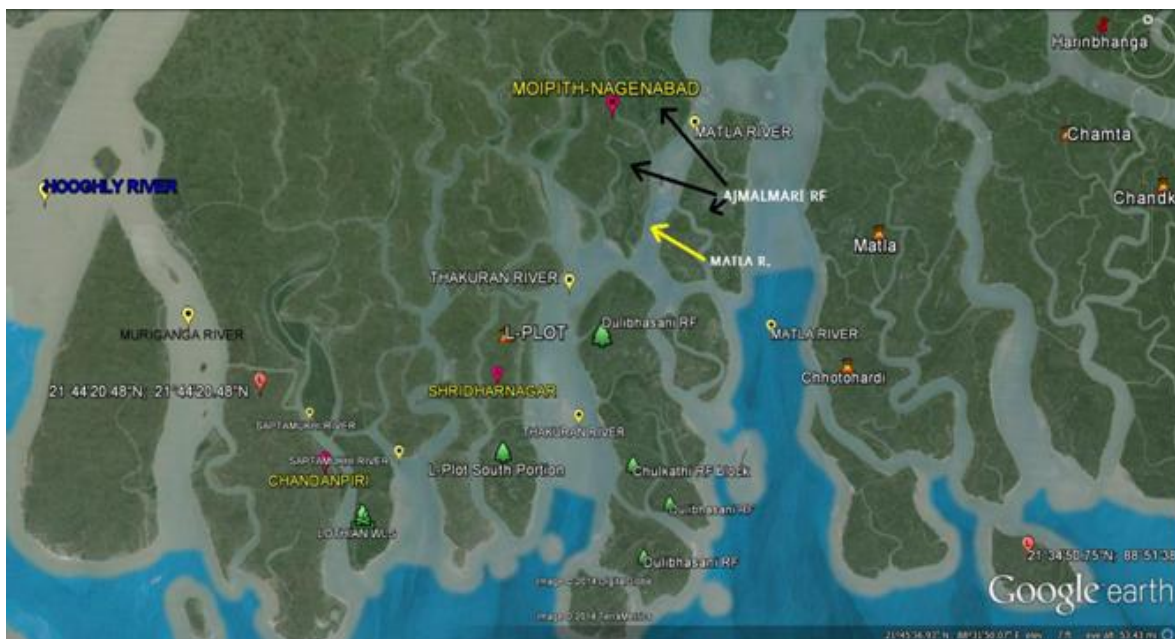


Figure 5 Moipith Nagenabad, Sridharnagar, Chandanpiri

Appendix IX Feedback

Given the low level of literacy among participants, no feedback forms were distributed. Instead participants were asked the following questions.

1. Did they find the workshop interesting?
2. Was the workshop useful?
3. Did they think workshops along similar lines would contribute to their empowerment?

The participants answered almost unanimously in the affirmative and with great enthusiasm. However, in Shamsdernagar, a participant and one of the local organizers pointed out, after the workshop, that the pre-workshop briefing had been inadequate and that more information would have ensured better preparation of the participants regarding the issues discussed.

This has been duly noted and hopefully will inform our course of action in future.

Appendix X Training materials

1. Booklet on An Ecosystem Approach to Fisheries (EAF)
2. Brochure on Small–Scale Fisheries: Their Contribution to Food Security, Poverty Alleviation and Sustainability
3. Leaflet on Draft Voluntary Guidelines for Securing Sustainable Small–Scale Fisheries in the context of food security and poverty eradication.



Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand are working together through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project to lay the foundations for a coordinated programme of action designed to better the lives of the coastal populations through improved regional management of the Bay of Bengal environment and its fisheries.

The Food and Agriculture Organization (FAO) is the implementing agency for the BOBLME Project.

The Project is funded principally by the Global Environment Facility (GEF), Norway, the Swedish International Development Cooperation Agency, the FAO, and the National Oceanic and Atmospheric Administration of the USA.

For more information, please visit www.boblme.org



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