

'Fishantry as a social domain': Empirical observations from Bangladesh (Part 2)

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Abstract

This article, part two of a comprehensive research, contributes to the debate why fishantry as a social domain deserves separate analytical treatment by way of providing context-specific substantiations and insights from two farming and two fishing villages located in the floodplain and coastal ecosystems of Bangladesh. Part one of the series dealt with the flawed anatomy of the peasantry as a conceptual domain, relegation of fishers in the anthropological and political theorizing and development discourse, and the theoretical debates in favour of a separate taxonomical domain for fishers. This article focuses on the comparative aspects between peasantry and fishantry with further insights concerning the internal differentiation within fishantry. Grounding on the analyses of these two distinct senses of representations and the dialectical interplay between peasantry and fishantry, we argue that in view of changing social and anthropological fields in this new era of realignment, the dynamic dimensions of identities, scope of reconceptualization of social domains, and internally differentiated classes of rural Bengal deserve new attention. There is also a critical need for more thoughts on modifying macro-level policies in favour of fishantry.

Keywords: fishantry, peasantry, Bangladesh, differentiation, artisanal fishery

1. Introduction

In part one of the series titled '*Beyond the lens of Peasantry: Theoretical basis of Fishantray as a distinct social domain*', we debated the adequacy of the concept of peasantry, and argued in favour of a new social domain termed as 'fishantray', especially rationalized for the marginalised artisanal fishers. Briefly, the theoretical analysis in part one of the series involved a critical review of small-scale fishers in the development discourse and, an examination of the flawed anatomy of peasantry and the associated dilemma with small-scale fishers, followed by a new analytical framework for small-scale fishers as a social class. We attempted to justify the relevance of a new social domain from socio-political, economic, cultural-institutional, technological, and evolution dimensions (See Deb & Haque, 2014 for details). We asserted that historically, fishers in rural Bengal have been overlooked in anthropological and political theorizing of the peasantry, and given their multifarious distinctiveness, fishers deserve a separate analytical treatment. We noticed a trend of philosophical contradiction in the embodiment of artisanal fishers under the general category of peasantry, and regrettably, very few anthropologists (Firth, 1966; Ram, 1992) have intermittently debated the position of fishers within the wider peasant society.

In our attempts to contribute towards characterization of this new social domain, we defined fishantray as a 'unique social entity with distinct social, economic, political and cultural characteristics tuned to the complexities of the small-scale fishery, and who, using simple equipment and mostly family labour, capture fish and other aquatic organisms for household consumptions and sale for income, work as paid labourers, and/or remain engaged as coerced labourers on a share basis to serve the owners of production units' (Deb and Haque, 2014, p85). Our views of peasantry are based on some interlinked facets like the 'family farm as the basic multi-functional unit of social organisation, land husbandry and usually animal rearing as the main source of livelihood, a specific traditional culture closely linked with the way of life of small rural communities and multi-directional subjection to powerful outsiders' (Shanin, 1973, p. 63, quoted from Edelman, 2013). For the purpose of our research, this category of peasantry also includes a number of analytically marginal groups like sharecroppers and wage-earning agricultural labourers who either lack sufficient arable land to sustain their families or do not have arable land at all.

In part one of the paper, we put forward the idea that fishers as an age-old professional category have survived based on active fishing or fisheries-related activities. They possess distinct characteristics relative to peasantry and their way of life is remarkably different from those of terrestrial farmers despite some similarities in labour-intensive modes of productions, dependence on natural resource base, seasonality of income, and reliance on rural and semi-urban markets for selling the produce. This part two of the series aims to contribute to the debate over peasantry and fishantray by providing context-specific insights in support of the relevance of the theoretical deliberations that we put together in part one, with substantiation from two fishing villages and two peasant villages of rural Bangladesh. In course of sustaining and socially reproducing both themselves and simultaneously the powerful governing classes and institutions that control them, both the peasants and fishers behave in similar ways in internalizing the production relations and processes imposed on

them. One of the arguments that we have in the article is that although both the farming and fishing households are engaged in rural productions and economic transactions for securing their subsistence needs, there are other areas of livelihood capitals and functions where substantial differences do exist, and differentiated views between the two rural groups can be observed. This triggers the idea that the concept of peasantry and the embodiment of fishers within it need to be contextually redefined to make it more perceptive of local situations.

The main thrust of our arguments is that in rural Bengal, a trend of heightened internal social differentiation exists in the micro-social niches. We argued that normative patron-client relationship and different modes of productions exist for activities in aquatic ecosystems. Fishers' nature of works and behaviour are substantially different from those of land-oriented peasants. Nonetheless, peculiarities exist in the sense that fishers are ultimately dependent on the 'existence of a rural market and on relations of exchange with the agricultural sector' (Ram, 1992, p.7). Eugene Anderson, who studied fisheries with fishers on four oceans out of seven, in this context notes: 'everywhere they are a very independent lot- making their own decisions, acting independently and responsibly, taking chances, ruling their lives, and fiercely independent in ideology and consciousness. This is true whether they are Anglo-American commercial large-scale operators, Mexican local guys, Malaysian small-scale fishers, or whatever' (Personal communication, Jan 10, 2014). So, there is scope to examine the situation of fishing within the dominant agrarian sector of developing countries and the prevalence of some similarities between these two groups of rural inhabitants should not wipe out the contrasts between fishing and agriculture.

This article is organised in five sections. Following this introductory section, section two deals with the methodology. Section three (results and discussions) deals with diverse attributes of differences between peasantry and fishantry in details, while section four deals with internal differentiation within the fishantry. Section five offers an analysis of policy issues regarding fishantry as a social domain.

2. Methodology

This research considered multi-stage place-based case studies focused on variations in ethnicity, ecosystem and subsistence production. Initially, field work was carried out in two fishing villages of Bangladesh- one coastal and the other floodplain, from January 2005 to September 2006 followed by another spell of group discussions with key informants during December 2009-February 2010. The coastal fishing village *Thakurtala* is located in the Moheshkhali Island (Figure 1) of Cox'sbazar district along the Bay of Bengal of the Indian Ocean. It represents caste-based Hindu fishers *Jaladas* (literally, 'slaves of the water'; one of the lowest in the caste-based social hierarchy). It has a population of 650 (male 300, female 350; 78 households; approximately 45% minor). The village is impacted by the semi-diurnal tides, especially during new moon and full moon phases. The periphery of the village is surrounded by a narrow strip of mangrove forests (a mix of *Avicennia* sps., *Sonneratia* sps., and *Rhizophora* sps.) and the terrain of the *Adinath* temple hill, a sacred place for the Hindu pilgrims.



Key: 1. ‘Hakaluki haor’ of Moulavibazar district, Sylhet division representing floodplain fishing village ‘Volarkandi’ and farming village ‘Daspara’

Key: 2. Moheshkhali Island representing coastal fishing village ‘Thakurtala’ and farming village ‘Palpara’

Figure 1. Map of Bangladesh showing the floodplain and coastal study areas
(Source: <http://geology.com/world/bangladesh-satellite-image.shtml>)

The floodplain fishing village *Volarkandi* is located in the Sujanagar union, Baralekha sub-district, Moulavibazar district of the north-eastern region of the country (Figure 1). It represents relatively new-entrant Muslim fishers (locally called *Maimal*, bearing low-status in social hierarchy). It has a population of 1240 (male 640, female 600; total 184 households; approximately 40% minor). The village is located within the *Hakaluki haor*- an ecologically critical area and the largest natural wetland system of Bangladesh. These low-lying fragile

landscapes with interacting dynamic waterbodies present an insightful historical-cultural geography of lower Bengal delta; they offer occupational niches of the inhabitants, and create the contexts of their relentless struggle over territorial uses, and of their access rights to the aquatic resources. These inhabitants primarily depend on such social-ecological systems for making simple livelihoods. The Hakaluki haor is significant from fishery and biodiversity point of view. It is the repository for 110 fish species and around 558 species of wild life, and an invaluable source of livelihoods for thousands of poor inhabitants. Geographically, it is a low-lying basin comprised of an intricate network of nine rivers and 238 perennial and seasonal waterbodies of differing sizes which remain inundated during monsoons.

In course of field works with the fishers of the above mentioned study villages, we started noticing that fishers, as an occupational group, do not fit well with the generally portrayed characterizations of peasants. In a focus group discussion, one fishing community leader of Moheshkhal Island, asserted that '*Jaila ar hailla ek na*'. (Literally, fishers and farmers can never be on par). Fishers' claims, associated with our close observations and instinctive experience in Bangladesh societies, opened up an avenue of in-depth investigations into a new social anthropological debate. As we started developing the concept of '*fishantry*', we explored with the farmers of the nearby coastal village *Palpara* (representing the coastal farming village) located on Moheshkhal Island. In the case of floodplain, farmers of *Daspara*, located adjacent to Volarkandi fishing village, were involved (Figure 1). *Daspara* and *Palpara* have population of 122 (male 67, female 55; 34 households) and 221 (male 109, female 112; 21 households) respectively. All these villages are socially and ecologically diverse, and epitomize diverse socio-economic and cultural activities (Figure 2).

Both qualitative and quantitative methods were used with an emphasis on participatory techniques (Chambers, 1994) as common people are more responsive to exploring complex phenomena that are situated and embedded locally. However, philosophically, field works in this study demanded a more nuanced ethnographic engagement with fishing and farming families to obtain fine-grained understanding of their day-to-day activities. Among the participatory tools, Focus Group Discussions (FGD), key informant interviews, case studies, livelihood analyses, and participant observations were extensively used. Baseline survey was conducted among 78 coastal and 60 floodplain fishing households; 45 coastal and 27 floodplain key informants were interviewed, and 42 events of FGD (coastal village: 23 events, floodplain village: 19 events) were carried out. Seven FGDs and 13 key informant interviews were conducted with the farmers of *Palpara*, and five FGDs and 11 key informant interviews were conducted with the farmers of *Daspara*. The parameter for the selection of key informants, either from the fishing villages or farming villages, was at least ten years experience of active participation in the profession. We observed the roles of women in the fishing and farming villages and conducted four separate FGDs with them in a culturally-appropriate manner. FGD functioned as a socially acceptable and flexible group interview method in this research, and generated and clarified empirical data and information.



a



b



c



d



e



f

Figure 2. a. Snapshot of the Hakaluki haor fishing village in the wet season, b. Farmers seen ploughing in the Hakaluki haor basin, c. A view of coastal farming village before harvest of paddy, d. Children seen playing in coastal fishing village, e. Lift net in operation in floodplain areas, f. Typical inshore coastal fishing craft usually featuring the caste-based fishers.

The unit of analysis in this research spanned from individual to households to community. Direct observations and participation with the fishers on the fishing craft were the most useful and straightforward way to learn about their experience and mental map. In similar vein, for learning from the farmers, we set out FGDs and interviews directly in the fields, predominantly rice fields in both the coastal and floodplain farming villages, and also betel leaf gardens in the case of coastal farming village.

3. Results and discussions

3.1 Fishing and Farming Villages: Differentiation and Comparative Web of Life

Based on some common attributes, Table 1 highlights salient differences between peasantry and fishantry. In this section, we deal with the basics of differentiation in both peasantry and fishantry. As we proceed to the next sections, we will deal elaborately with different attributes of differentiation and elements of comparison between peasantry and fishantry. Rural differentiation in peasantry that shaped up since colonial period through the actors like landlords (*Zaminders*), rich farmers (*Jotedaars*), self-sufficient peasants (*Raiyats*) and sharecroppers (*Borgadaars*) has witnessed a trend of decline in large farming units and fragmentation of landholdings. Rahman's (1986) work on peasant differentiation revealed that the key empirical categories reinforcing differentiation of peasantry included rich farmers with 7.5 acres landholdings who have the ability to hire wage labourers ready to sell manual labour to eke out a living. There is always a surplus of agricultural wage labourers in the rural areas because of the demographic bloom in the country. While Rahman (1986) indicated that small farmers are subject to partial proletarianization in the hands of top 10% landholders, recent studies indicated that although polarisation occurs in rural areas, poor households display the behaviour of persistence through clinging to their land, they possess (Mahapatro and Ullah, 2014). Similarly, among other socio-political and economic attributes, it is the holding of leasing authority in the floodplains and the ownership of powerful engines (25-65HP) in the coast that primarily catalyses the process of differentiation.

As we observed in the farming villages, farmers are primarily responsible for ensuring good harvests from the land they have or are trusted with by local landowners. In the customary tenure law, peasants themselves had the privilege to decide on seasons, types of crops, cropping cycle, time of ploughing, sowing, harvesting, techniques related to soil quality and water conservation, and labour utility. However, if peasants are the sharecroppers, leaseholders or otherwise dependent on the land allocation from the influential land owners, their farming-related decisions might be interrupted by the land owner. Most of the peasants end up with their produce in the local markets after partly meeting their subsistence needs. However, local intermediaries have the skill, network and financial capital to distribute the produces to other urban intermediaries. Farming is mainly location specific, and primarily consisting of crops and livestock with interdependence and integration in a biologically balanced complex of rural environment.

In the farming villages, both in the floodplain and coastal areas, farming technologies employed are more or less similar; almost all of them depend on primitive system of ploughing with bullocks or buffaloes. Though the terrestrial farming technologies are more or less homogenous, it is the supply of inputs, soil fertility, and seed quality that make a difference in production. In reality, especially in the floodplains, some wealthy landowners who also receive remittances are generally more successful in securing higher level of yields. Marginal farmers of both Palpara and Daspara reported that their yield level is 30-50% less than those of their rich counterparts. 'Jotedaars here have money to invest in better quality seeds; they can spread fertilizers as and when they want; they can employ more labourer to

get rid of weeds; they get better and earlier yields'- adds Subid Ali, 55, a seasonal farmer of Volarkandi village. This again relates to political-ecological dimensions of power relations, social dynamics, social reproductions and patterns of accumulation of different classes of producers. Low yield level pushes back the farmers to a vicious cycle of debt that eventually compound socio-economic differentiation and rural food insecurity. It reveals further how land fragmentation and commoditization influences agrarian change, which in turn generates socio-economic differentiation (Adnan, 1983; Rahaman, 1986; Gray and Dowd-Uribe, 2013).

While it is the land-holding that primarily matters in case of peasantry, it is the ownership of craft and gear, especially mechanized one with higher Horse Power of the engine that matters in the artisanal fisheries sector. The pattern of technological differentiation is quite sharp in the artisanal fisheries. Transformation of agriculture by patron-client production relations and a period of colonial domination has been the subject of vast research, but the history of capitalism in the artisanal fisheries sector and its consequences on the traditional fishers has been nominally researched. In the early decades of 1950s to 1970s, traditional fishers dominated the artisanal fisheries sector with their manually operated fishing craft and gear. Since the beginning of 1980s, they started losing ground to non-fisher elites, moneylenders, and businessmen as they could not afford the costly process of mechanization of fishing craft for both inshore and off-shore fishing. State policies encouraged the emergence of investment in the harvesting of fish from the sea, and the artisanal fisheries gradually became exposed to the forces of globalization. Because of non-compliance of regulatory efforts and an absence of policy instruments with regard to territorial management of artisanal fisheries, genuine fishers have been gradually pushed to existential crises by the mechanized and commercial fishing sector.

Table 1. Comparison between Peasantry and Fishantry

Issues	Peasantry	Fishantry
Ownership of resources and entitlement	Usually own certain areas of farming land. However, there are marginal or functionally landless farmers who depend on the land of others for sharecropping or working as wage labourers. The pattern of ownership of land largely determines the production relations and the sharing of benefits. Occasionally, fallow lands (<i>Khas jomi</i>) are distributed among the landless farmers by state agencies.	Mostly lack ownership of or legal entitlement over the important means of production. Usually harvest from the sea/coast, which are common property resources regulated by state agencies. However, in the floodplain, legal entitlement is bestowed for a certain period through a competitive leasing process. Only a few fishers can enjoy such legal entitlement. Despite the <i>de facto</i> community-based territorial management of certain areas, higher level institutions can challenge such rights over territory. Landless fishers largely depend on manual labour.
Livelihood related	Depend on terrestrial farming for livelihood. Some households faced crop failure in the last decade. Very limited evidence of occupational accident. Income level varied from US \$2-9/day per family. The productive labour utility period ranged from 8-11 months based on cropping intensity and land ownership.	Depend on aquatic resources like fish and shellfish for livelihood earnings. Majority of the households are food insecure. 100% of respondents agreed that catch per unit effort has declined drastically. Higher incidence of occupational accidents reported in the case of coastal fishers. Income level is relatively lower. The productive labour utility period ranged from 6-8 months based on the water table and weather cycle (<i>details later</i>).
Seasonality	Yield takes weeks to months from the time of sowing to harvesting. Growth of the produce is visible and can be estimated. Shelf life of the produce is usually longer. Farmers usually have domestic facilities for storage. Crops are occasionally subject to damage by flooding, drought, infestation and other natural calamities. Large producers are also subject to exploitation by intermediaries. They can utilize 8-11 months effectively in rotational cropping.	Harvest is often a regular activity on an hourly to daily basis; it is often uncertain and highly fluctuating; fish and prawn are highly perishable with a short shelf life, and hence, require immediate treatment with ice after catch. Most of the small-scale fishers usually lack long-term preservation facilities; some convert the wet products into solar-dried or fermented products. Fish treated with ice are less preferred by local consumers. This perishability aspect calls for the presence of a series of intermediaries. Fish breeding, growth and distribution are favoured by flooding. They can utilize 7-9 months effectively on fisheries-related activities.
Planning	Requires mid-term to long-term planning for the accumulation of land and seeds, irrigation, ploughing, fertilizers, storage facilities and distribution.	Planning is required for the accumulation of capital needed for repairing and purchasing craft and gear, hiring of labour, accessing certain fishing areas (in the case of inland fishing) and marketing. The investment for fishing equipment is usually higher compared to marginal farming.
Gender and hired labour	Mostly male-dominated, but women also participate directly or indirectly in several stages of planning, preparation, growing-out, harvesting, post-harvest activities, marketing and associated rituals. Seed storage is almost exclusively an activity of women. Depending on the size of land, there is scope to engage hired labourers on a cash or sharecropping basis; tend to involve kin relations.	Catching fish in the floodplain and coast/sea is predominantly a male pursuit. Women participate in post-harvest activities, marketing, and preparation of the fishing equipment and associated rituals. Depending on the size of the craft, there is scope to engage hired labourers on a cash or shared basis. Fisherwomen are perceived to enjoy better mobility compared to women in peasant villages (<i>details later</i>).

Social and economic attributes	Number of rituals is relatively fewer (<i>Nabanna</i> -new rice is widely observed). Peasants enjoy a relatively better standing in the social hierarchy. Land has higher value owing to appreciation. Agricultural tools undergo depreciation. Both fishers and farmers participate in common rituals apart from their own distinct rituals.	Higher number of ritual is observed as the risks and uncertainties, especially in case of fishing at sea, are very high. Both Hindu traditional (caste-based) and Muslim fishers are socially neglected. Fishing tools undergo depreciation over years. Intermingling between fishers and farmers is common, but marriage is quite restricted to caste-based fishers (Hindu) and similar social groups (Muslim).
Inter-dependence	Both farmers and fishers form integral parts of the wider rural economy. Farmers produce staple food- rice. They are relatively independent concerning the main foods needed on a daily basis. Farmers may turn to part-time fishing for subsistence and family consumption. The profession does not necessarily require geographical isolation and segregation from family. Fishers and farmers depend on kinship obligations for production.	Fishers produce cheaper bulk sources of protein for self-consumption and the wider society. They depend on farmers for rice as a staple food item. Fishermen or their female counterparts can engage themselves in rice and vegetable production if they have access to arable land. Both farmers and fishers have their own sets of traditional knowledge base that are usually ecosystem-specific and time-tested. The profession requires geographical isolation and segregation from family for days to several months.
Technological attributes	They are still largely dependent on manual labour for most stages of production. Physical risks associated with agriculture are negligible or less; the profession is not generally considered as life-threatening; flood damages crops, but usually not the land; erosion causes land degradation.	Floodplain fishing units are still widely non-motorized, while those on the coast are undergoing rapid mechanization to cover more sweeping areas and to handle more gear. Fishing in the sea is highly risky; often fishing crafts are capsized. There are frequent incidents of fatalities during storms. More early widows are prevalent in coastal fishing villages.
Geographical location	They tend to live close to their farming areas. This does not mean that people living close to a water body are all fishers.	Fishers have dependence on water bodies and resources therein for livelihood, spiritual, cultural and other needs, and hence, tend to live close to water body. Some fishers involved in marketing live in urban slums.
Political attributes, and informal institutions	They are relatively more conscious and active politically compared to fishers. Grassroots level political leaders are mostly from farming villages. They have access to cross-scale political networks, and are relatively more connected with NGOs. They comply with the wider societal system <i>Samaj</i> for socio-political functions.	Fishers are seen to be less involved in political activities, probably due to their geographical isolation and the nature of their job. Traditional forms of male-dominated leadership <i>Sardery</i> is unique among the caste-based fishantry (see 3.1.3 for details). NGOs and development projects play critical roles in informal community-based institution-building.
Cultural features	Many of the cultural activities relate to plantation and harvesting cycle of paddy and other important produce. They hardly participate in any cultural and religious activities relating to risks in the water.	Much of their cultural and religious activities relate to the risks associated with and uncertainty of production from the waterbody. More rituals are observed in the coast. Distinct sets of rituals are observed in the pre-and-post-voyage phases in the coast (<i>details later</i>).
Policy instruments	Peasants are relatively advantaged in the legal structures such as the constitution, policies, and support from state. Generally, policy makers are more sensitive to the needs of farmers.	Fishers are often relegated in the legal and policy instruments. Their roles in aquatic resource management are often denied by higher formal institutions.

(Source: FGDs and key informant interviews with fishers and farmers of the study villages)

3.1.1 Demographic Attributes

There are both commonalities and differences among the study villages. The small-scale fishers are distinct from other rural occupational groups in the sense that they behave typically as a social unit (with certain degrees of ethnocentrism and stratification), as an aquatic ecological unit, as a mental or cultural unity, as holders of a collection of institutions, as a typical way of life, and as a social process. We are aware of the overlapping nature of societal attributes that have common grounding in both peasantry and fishantry (for example, dowry). For both the farming and fishing villages, family (*Paribar*) is the basic unit of social and economic organization, production and consumption that primarily targets at maximization of welfare in neoclassical economic sense. By and large, it is used polysemically to mean aggregation of members dining from one cooking unit (*Khana, Chula*-meaning hearth group) who live under a common roof. Number of average family members is higher in case of coastal fishing village (6.9 individuals/family including parents) compared to the villages of Palpara (6.3 indivs./family), Volarkandi (6.7 indivs./family) and Daspara (6.1 indivs./family). Inhabitants in both fishing and farming villages belong to their own village in a way they belong to no other social entities. There are relatively more extended families in Thakurtala village compared to other villages. This is partly attributed to land-scarce situation, value orientation of staying together, subsistence mode of production, effort to minimize livelihood costs and to ensure social security.

Literacy level is noticeably lower in the fishing villages. Literacy is defined here as the ability to read newspaper and do basic calculations. 73% men and 79% women in Thakurtala fishing village, 50.6% male and 63% female in the Volarkandi fishing village, 43.89% men and 53.56% women in Palpara village and 46.63% men and 61.28% women in Daspara village are illiterate respectively. Old fishers are relatively reluctant about formal education; some of them argue that artisanal fishing as a profession does not require academic attainment. Also, school going children have to abandon their hopes of higher education in order to join the civilian labour force needed in harvest and post-harvest fisheries activities. However, the dismal picture of education is changing rapidly given the massive efforts of the government to boost up education in the country, and a general increase in awareness about the importance of education.

Within the family in both peasantry and fishantry, it is usually the husband who is nominally the *head* as main earner, provider of food, and a benevolent dictator. The role is automatically delegated to his wife or eldest son at a certain stage. In the case of an extended family, the old parents help to make critical decisions in cooperative arrangements of conflicts, social marriage and rituals. The decisions made within a household is though mirrored as the power relations within households, the socio-cultural values are such that usually the seniors deserve the social capital to override decisions taken by the economically powerful one within the household. As we consider kinship relations entailing cooperation, altruism and reciprocity outside domestic group, the limits of household units are transcended with regard to production relations (Grawert 1998). This socio-culturally embedded fluidity of sharing and reciprocal behaviour outside the ambit of households reveals that false suppositions on households as basic economic units in neoclassical economic analyses would not fit well for

Bengal rural societies. As appropriate to gender roles, children assist their parents in day-to-day domestic and land-based productive activities, especially in post-harvest fishing and farming activities. In all the study villages, marriage is virilocal (the bride moves to her husband's house as the post-marital residence), and a form of socio-religious and economic contract settled through a series of ceremonies. Inter-village marriage is common in the peasant villages, while the Hindu fishers of Thakurtala prefer distant supra-village level connections.

What is precisely common among the fishing and farming villages is patrilineal and patrilocal composition of households with distinct lineage groups forming clusters. Almost all the men and more than half of the women are born in the villages, thus giving impetus to patrilineal relationships. However, exception is observed in the case of Thakurtala fishing village. Fisherwomen of the coastal village bear more roles and responsibilities in the absence of their male counterparts who go for fishing in the sea for 6-8 months in a year. Such an ideological shift in roles and responsibilities liquidates many socio-culturally embedded values and barriers of rural patriarchal societies to the extent that male-authority based production relations transform to matrifocality, primarily as a coping mechanism for livelihood resilience and persistence of small-scale fishery operations (*see section 3.1.5 for details*).

Both the fishers and farmers usually wear plain loin clothes *Lungi*; however old Hindu fishers of Thakurtala wear white cloth *Dhuti*. The fisherwomen and farming women wear *Sharee*, and married Hindu women apply vermilion (*Sindoor*) at the parting of the hair in both the farming and fishing villages. A fisherman coming home after 6-8 months of stay in the sea can easily be distinguished by his sun-burnt skin, long hair and beard.

3.1.2 Social Dignity, Position and Power

We will have an elaborate discussion on these issues. In part one of the series, we mentioned that fishantry itself is indicative of low-classness within the socio-political hierarchy of rural Bengal. Crisis of caste and class is socially so embedded in rural societies that the hierarchical conflict would probably exist for some more decades to come.

The determinants of social power and dignity within the peasantry and fishantry are mentioned in Table 2. Focus group discussions with the farmers of the villages Palpara and Daspara revealed that ownership of the agricultural land, remittance earning, and service with local government are important determinants of social honour and power. As mentioned earlier, in the case of Thakurtala fishing village, ownership over costly mechanized craft (with 25-65 HP engine) and sets of fishing gear, and moneylending business are considered as the keys to prestige and power. In the case of Volarkandi fishing village, ownership over a non-mechanized craft and fishing gear is insignificant socially as almost every fishing household has access to such low-cost fishing equipment. However, access to arable land, scope of remittance earning, and connection with NGOs make a difference in social dignity there. Generally speaking, in the wider society of Bengal, farmers enjoy relatively higher social dignity compared to the fishers.

In the coast, the fishing village Thakurtala is inhabited by fishers exclusively with the *Jaladas* (literally, slaves of water) caste groups, in which membership is determined by birth. As Berreman (1983) aptly mentions Hinduism claims to justify the caste system by referring to a powerfully articulated set of concepts like *Dharma*, *Karma*, reincarnation, etc. The concept of earned, irreversible 'purity and pollution' in one's lifetime is tied directly to occupation, diet, ritual behaviour, lifestyle and other aspects of caste *Dharma*. The *Jaladas* fishers fall under this 'acquired congenital pollution' and their low social status is reinforced by ideological sanction. Within the *Jaladas* caste, there is the existence of further factions that are identified as: *Sada*, *Anandi*, *Kedar*, *Petan*, *Deba*, *Basudeb*, *Kichan*, *Projari*, *Mothura*, *Gangaram*, *Sari*, *Kam*, *Romai*, *Chondi*, *Joyram*, *Munder*, *Shova*, *Lalmohan*, *Borodome*, *Porshuram*, *Gulmanikya* and *Chura*. Among these factions, the *Sada* (white) and *Deba* (close to God) factions are known to be relatively more impressive than the others. There are two factions among fishers as well as village leaders, namely *Anikkya Jaladas* (literally, original fishers) and *Rohinga Jaladas* (meaning migrated or displaced fisher from other villages), further low in social status and command within the fishing village.

Table 2. Determinants of power and leadership in the farming and fishing villages

Determinants of power	Specific attributes	
	Peasantry	Fishantry
Economic	Ownership of land; agricultural equipment; number of cattle; remittance flow; ability to spend in marriage ceremonies; year round food security.	Ownership of mechanized craft; Horse Power of the engine; moneylending business; cash flow; ability to lend to villagers; ability to spend for rituals; food security and better daily menu.
Socio-political and institutional	Caste identity; social group belonging to higher social position; membership in the local government structure and village committee; political links with powerful groups, police, local administration, and thugs.	Caste-and-group based inferior social position; patrilineally ascribed village leadership - <i>Sarder</i> system that is unique for the caste-based fishers; position in local religious committee and <i>Gram Panchayet</i> (Village leadership forum); linkage with NGO-based committees.
Physical	Owners of brick-made houses; relatively better livelihood pattern; owns cellular phone and color TV.	Owners of semi-pucca house and tube well; radio, black and white TV; cellular phone; show off little for social security reasons.
Human	Higher literacy; private service; business; family members go to college; vocal; loud voice; judgment ability; higher social intelligence.	Level of education of family members; ability to sell fish; vocal; bad mouthed; capacity to organize fishing events; physical strength and attractiveness; fishing skill; indigenous knowledge holding.
Cultural	Not applicable	Ritual performers

Source: *Field observations and focus group discussions in study villages.*

On the other hand, the caste status (*Pal/Paal/Paul*) of the farming villagers in the coast is ranked higher compared to that of *Jaladas* caste, and anymore faction within the caste is known to be lacking. Fishers of Thakurtala reported that some farmers of Palpara are engaged in illegal brewing of local wine (*Dochuani*, literally double-filtered wine with high alcohol

content), but they are never interrupted by police as they have good relationship with the local administration. The local chairman also keeps the fishing families under some psychological pressure so that fishers always remain subservient and cast votes for him. In the coast, members from the farming families could win local union *parishad* election, while influential members from Thakurtala fishing village never tried to compete for membership in local government administrative structure. A rich fisherman commented:

“Look, for winning a membership position in the union parishad, you need both money and social power. I have money, that’s true. But there is hardly any chance that I will win as my social acceptance is very limited. The voters from neighboring farming village will not cast vote in my favour as they will be hesitant to see me in leadership and commanding position. Many of them are my good friends. They pass their lifetime ‘behind the cow’ (meaning ploughing); yet they might think- better to die than being under the administrative dictation from the fisherman. Even some families here in my village will not cast vote for me as they think that I exploit them through charging higher interest rates”- Nilmoni Jaladas, 65, a moneylender, Thakurtala fishing village, Moheskhali.

A section of the old Hindu caste-based Jaladas fishers still believe in ‘superiority of fishing as a profession over farming’. Although many common elements are operative between fishing and farming, the ego-based contrasts have not been sufficiently liquidated. This is why, at least in the coastal area, a unified pool of interchangeable or undifferentiated proletariat labour force is yet to prevail. Such old values of the fishers are not ‘free-floating cultural constructions, they are grounded in the continued persistence of the artisanal fishery itself’ (Ram, 1992, p.10). In a focus group discussion with members from both farming and fishing communities in Moheskhali, we noted down the following arguments: (Fc-facilitator, Fr: Farmer, Fs: Fishers)

Fc: So, how do you interact in your daily life, though you claim as two separate social identities?

Fr: Well, they do their jobs, and we do our jobs. When it is the issue of material exchange and selling of commodities, we approach each other. Sometimes we share some activities collectively. For example, as we get an early warning of an impending cyclone, both the communities work together for sharing the space in the local cyclone shelter. They come to our hamlet for selling fish and crabs, but we don’t go to their village to sell our produce.

Fs: Our lifestyle is different; they are on the land; we are on the water most of the time. However, the marketing business is always on the land. Scope of interaction on a daily basis is very limited. When we leave the village for fishing in the dawn, they sleep. When we come back from fishing and return home after selling fish, they go to bed. Where is the scope of interaction? Well, the natural calamity is a good binder between the two villages. Village leaders work together during cyclone; however our people never get priority in the allocation of space in the cyclone shelter. Once all the members of farming communities are accommodated, our children and women are left in the stairs; we the male adults hardly find any space there. Non-fishers take up all the rooms in the cyclone shelter. They tell us- ‘you

people are always on water, so you can survive on water, but in fact we die too during cyclone. Can anyone resist the force of cyclone?'

Fc: What about the observance of common rituals together?

Fr: The only religious festival that we can do together is for the Goddess *Durga Puja*. It is an annual event; we hire craftsmen for making the idols. It is an expensive event, and we do it at our own in the village. We have a heritage and we maintain it (Note: *This clearly means that the poor fishers can't afford the expenses of social worships, and hence, they are secluded from the active participation in the event, though the event is supposedly open to everyone.*)

Fs: In Hinduism, there are thousands of ways of offering prayers. For us, the worship of *Ganga* is of prime importance; she saves us on water. Well, we also celebrate *Durga Puja*; we don't have money for big idols. We pray before the 'printed poster' of Goddess *Durga* instead of 'live idols'. They hire mikes and drums; we do it pretty much silently, however with much devotion. They never participate in our *Ganga Puja*, though they remember the Goddess *Ganga* when they cross the turbulent coastal channel.

Fc: Any scope of social interaction like marriage!

Fr: One thing that never happened in the society is the arrangement of marriage. Fishers try their own ways and we try our own ways to arrange marriage. A fisherman, whatever wealth he has, will never be able to arrange a bridegroom from our farming families. It will be a social collapse if we allow marriage with fishing family members. Religion is not a barrier here; social prestige matters. Till now, this has not happened, but who knows about the future?

Fs: [*silent on the issue of marriage...*]

(*Facilitator's note:* In the joint discussion session, fishers were less vocal, and the farmers were dominant. As commonly observed, fishers remained somewhat docile).

In the floodplains, farmers of Daspara enjoy a slightly better social position; all the descendents of Daspara fall under the *Ruhidas* group, and there is no more faction within this group, so far. The Muslim fishers of the floodplains are excluded from the Islamic philosophy of *Umma Muslima* or all embracing brotherhood. Such exclusion is largely due to the fact that, though not grounded in religious praxis, a class-based fluid system of stratification exists in the Muslim-dominated rural area which is deeply rooted to social and economic inequalities (Deb 2009). The dominant social groups (*Khandan*, high status lineage) are *Chowdhury*, *Talukder*, and *Syed* who are primarily from the farming villages. They are known to be socio-politically powerful and affluent because of their primary connection to U.K.-based remittance earners. *Khandans* are known to maintain a separate pond (or at least a protected side) for the women and separate room (*Baithokkhana* or *Kacahri Ghor*) for the outsiders. There are hardly any socio-cultural relations between these two higher and lower order social groups. However, the former groups approach the latter for casting votes in favour during elections and for occasional employment of labour. The fishing community of the floodplain village belongs to *Maimal* social groups. *Maimal* as a professional community

is in the lowest strata in the society; *Kishal* as an agricultural farming community enjoys a higher social status than *Maimals*. Interestingly, with the full written name of a *Maimal* fisher, it is difficult to guess his/her social status. There are diverse opinions on how these social groups became fishers. Here is a comment:

'When our grandfathers came here, they saw that the Hindu fishers live well out of fishing. They thought that what the harm it would be if they also did the same. Fish were plenty in the haor those days; in reality almost everybody here catch fish. The upper society levels us as 'Maimal' as we fish for making a living. What an irony! Fishing is considered a hobby if the rich catch fish and a low profession if the poor catch fish for survival...Now, fishing has become an inherited profession. I fish because earning the same amount of money with the same labour and skill is difficult in other works.' - Kashem Ali, 56, Volarkandi.

It is known that Muslim societies are divided into three groups: *Ashraf* (noble born, perceived as Arab descendents), *Atraf* (low born) and *Azlaf* or *Arzal* (lowest status). Reportedly, the *Maimal* fishers belong to the *Azlaf* or *Atraf* category in the stratified society of greater Sylhet. Inter-group marriage and socio-cultural relationships are almost non-existent. One evidence will suffice to prove such tyranny of status. The only graduate (Bachelor of Arts) 'Siddique teacher' of Volarkandi village, a son of *Maimal* Muslim, failed to get married to an ordinary woman from the so-called upper status *Chowdhury* or *Talukder* groups. He ended up marrying a *Maimal* girl. The social outlook is peculiar.

3.1.3 Informal Institutions

A brief discussion on the social institutions in the rural villages can help here in understanding the local institutions. For around 80% people of Bangladesh living in the villages, social institutions- especially the informal or indigenous institutions- are very important. Anthropologists and sociologists view 'institutions as an endurable status and role, sets of which collectively shape the behaviour of a group of people' (Wallis 1985, Jary & Jary 2000, cited in Islam, 2002). Institutions often serve as clever solutions to many trust-oriented social problems and malfeasance in the arena of natural resource management and rural economy. However, institutional economists view institutions as rules of the game in a society or more formally, as the societal constraints that structure and shape human interactions (North, 1990). Westerners have long viewed the rural institutions of deltaic Bengal as the ones usually unlike the corporate institutions, what Tepper (1976) termed as 'institutional atomisation'. Other scholars view these informal institutions as the product of the deltaic ecology, dispersed rural settlement and openness (Khan, 1996) of the 'elusive villages' (Bertocci, 1970).

The rights and duties of fishing and farming villagers are not precisely defined and are particularly variable. A person's position is determined by his/her involvement and hierarchy in informal institutions, sex, age, wealth, urban contacts, possession of indigenous knowledge and linkages with political and administrative institutions. In both the farming villages of Palpara and Daspara, and fishing village Volarkandi, a morally-defined symbiotic social institution *Samaj* (etymologically meaning to live together or a residential brotherhood)

prevails. *Samaj* as a social and moral regulator tend to crystallize and represent hierarchically-linked groups of people demonstrating affiliations to common socio-cultural and ideological roots. Its social control mechanism is psychological coercion or manipulation according to socially constructed notions of honor and shame (Bertocci, 1996, p.17). *Shalish* (village judicial system) is an integral part of *Samaj* that helps to maintain normative disciplines through the leaders' exercise of adjudicating power (*Khomota*) conferred on them by villagers. In case of farming villages and Volarkandi fishing village, socially respectable old, educated, rich and politically connected leaders reign over the *Samaj* and *Shalish* institutions. *Shalish* committees in Volarkandi, Daspara and Palpara comprised of 19, 5 and 7 members respectively. Generally, the moral order in all the study villages is high. Issues like disputes over familial quarrels, financial transactions, cattle damaging neighbors' plants, sexual scandal, and land possession are usually settled by this committee. Depending on the complications and legal intricacies, 5-7% of the cases are referred to higher institutions like the 'Union Parishad' led by an elected local chairman and 2-3% cases are referred to the police station for final settlement.

An interesting and distinct age-old local institution *Sardery* (literally the system led by *Sarder*, the head of the community who plays socio-politico-jural roles) prevails in the fishing village Thakurtala. What is unique here is that though informal social institutions are composed of community members or individuals, and generally expected to keep hold of existence apart from specific group of individuals without reducing to purely psychological processes, one-man dictated *Sardery* system is an exception. *Sardery* is not synonymous to *Samaj*, but embodies the functions that *Samaj* as a relatively loosely-connected group does. Inevitably, with each *Sarder*, there will be one or more *Mukkhya* (literally, chief adviser to *Sarder*) and *Mannyamaan* (literally, respected persons). *Sarder* is the outcome of the family dynasty and confined to male authority only. *Sarder* plays major roles in organizing socio-religious functions and settles all the disputes except murder cases.

3.1.4 Economic Aspects and Livelihood Patterns

The livelihood system in the fishing and farming villages is complex and it has variations at the individual, household and community levels. Both peasantry and fishantry employ their asset base, networks and experience accumulated over time to develop workable livelihood strategies. In terms of livelihood security and the possession of asset bases, fishantry is more vulnerable compared to peasantry. The scope of rural pluriactivity and flexibility in accepting a new profession is wider in the case of peasantry. The diversification of livelihood opportunities is extremely important for the persistence of subsistence mode of livelihood in the case of both peasantry and fishantry as familial incomes are seasonally affected by a host of factors. For fishers, searching to gain earning from more than one source during the period of unemployment or disguised unemployment is critical for reducing the stresses of food insecurity. There are many caste-based fishers who adhere to fishing largely due to socio-religious obligations, typical psychological attitudes, gambling nature with regard to the seasonality of fishery, lack of skills for alternative activities, geographical remoteness, political powerlessness, and lack of endowments, which singly or together, tend to keep them dependent on a single profession.

The incidence of landlessness is acute in the Thakurtala fishing village. 85.8% of the coastal fishers are absolutely or functionally landless (either no land at all or holding a few decimals of homestead land; no arable land at all). 29.8% of the Palpara farmers, 38.3% of the Volarkandi fishers and 24.56% of the Daspara farmers fall under this category of landlessness. Only 3.7% inhabitants of Thakurtala, 39.43% inhabitant of Palpara, 31.98% inhabitants of Volarkandi and 43.32% inhabitants of Daspara own cultivable land equivalent to or less than five acres. Around 65% of all the respondents from fishing and farming villages reported that their position of landlessness and distress had not changed over the last ten years time frame. For peasantry groups, domestic valuables and economic safety net (including livestock and poultry) values range from US \$12 to \$900, while the range is US \$3 to \$525 in case of fishantry group. Interestingly, we found that marginal and less powerful category of people are overcautious and reluctant in buying land. One farmer from Palpara comments:

'Investment in land is unsafe; it is difficult to know the actual legal status of a piece of land. Land administration office is clogged with touts and corrupt officials. There is every possibility that you might not get possession of the land after paying the price for it....it is only safe to buy the land from Hindus and Buddhists, but quite unsafe to buy land from Muslims as the laws of inheritance make the entitlement complex. Now, because of political unrest and continued sectarian violence, rich Hindus of the locality had silent exodus towards India, and the rest had hardly anything to sell' (Nishi Chandra Paul, 64, Palpara, Moheskhal).

One farmer in Daspara observed that rural rich farmers no more want to buy new land. Rather they want to invest in nasty local politics so that the accumulated wealth can be saved and some new resources from state-driven development programs can be funneled in favour. Among these four study villages, living condition in the Thakurtala village is worst. Most of the houses in this village are mainly thatched or covered with cheaper roofing materials like polythene and dried coconut leaves. The ramshackle appearance of the homes becomes worse in the rainy season. Majority of the fishers are extremely poor, socially disadvantaged, and dependent on exploiting groups of intermediaries for sustenance of their birth-ascribed profession and livelihoods. In all the farming and fishing villages, household commodities are limited to few agricultural/fishing equipment, a few pieces of furniture, and cooking utensils.

Debt scenario is quite grim in the fishing villages compared to farming villages. A total of 91.1% fishers of Thakurtala and 65.20% fishers of Volarkandi villages are under some levels of indebtedness from relatives, moneylenders, craft owners and NGOs. The level of indebtedness is relatively low in the farming villages; only 48.36% and 38.46% residents of the Palpara and Daspara farming villages respectively are in debt. Dependency ratios for the residents of Thakurtala, Palpara, Volarkandi and Daspara are 57, 66, 61 and 46 respectively. The roles of formal institutions deserve attention. Government agencies have utmost focus on the agricultural sector. There is scope for farmers to manage loan from formal banking sector. We observed that farmers have greater abilities in maneuvering local institutions and credit networks. This is due to the fact that farmers' yield and production processes are tangible to lender, while lending to fishers is risky given their nature of profession and hence, formal credit networks are less interested in providing loans to them. Resultantly, they have to rely

on few moneylenders at exorbitant interest rates and conditional transfer of the catch at price dictated by the lender. Borrowing from moneylenders eventually keeps the fishers poor.

Considering cost of basic need as a measurement method, we found that the head count ratio for the incidence of poverty is 73.49%, 47.56%, 57.39% and 43.98% for the villagers of Thakurtala, Palpara, Volarkandi and Daspara. Their combined incomes from primary and secondary livelihood activities were inadequate to provide year-round food security and sufficient nutrition for manually demanding jobs like fishing and ploughing. The food insecurity scenario is grim in the fishing villages. Considering two meals a day, we recorded that 64% of the Thakurtala residents, 50% of the Volarkandi villagers, 39% of the Palpara residents and 29% of the Daspara residents are food insecure. If we consider the culturally appropriate food habit and manual nature of the coastal fishing, then around 80% of the Thakurtala fishers can be considered as food insecure. An *emic* view provided by an experienced fisher is mention worthy:

'Look, I have a simple calculation for you; every third person that you meet in the village remains hungry almost throughout the year and every second person remain hungry during the 'lean fishing periods'. It might be worse in some years when there are other troubles like cyclone' (Sudharam Jaladas, 55, Thakurtala).

Assessment of income level for these professionals is a very tricky issue, and suffers from possibility of false assumptions. We calculated these income range based on our daily participant observations over months and series of focus group discussions with both fishers and farmers. Hardly the marginal fishers and farmers keep black and white record of daily or monthly income, although commercial farmers track of their productions and sales records. Most of the respondents in this research were overwhelmingly poor. In case of Daspara and Palpara, farmers' monthly income during peak harvest seasons of paddy and lean harvest seasons of other crops and vegetables ranged from US\$ 250-400 to US\$ 120-200/family and from US\$ 175-350/family to US\$ 100-156/family respectively.

Between fishing and farming, artisanal fishing as a seasonal profession, income of the dependent communities from fishing is limited. Fishers have good fishing seasons and bad fishing seasons (*Note:* months and durations vary in between floodplain and coastal ecosystems). In case of floodplain fishers, income in good and bad fishing seasons varied between US\$ 0.5-5/day and US\$ 0.4-1.5/day respectively. In case of coastal fishers, income during good and bad fishing seasons varied between US\$3-30/day and 0.7-9\$/day respectively. In terms of consistency of income, farmers of Palpara and Daspara are better off compared to fishers of floodplain and coast, and again, fishers of Volarkandi are relatively better in livelihood options as they can opportunistically engage in non-fishing activities like duck rearing, upland terrestrial agriculture, poultry, and livestock as favored by the hydrological features and local ecosystem. That is the range of income for many families with higher number of children and old parents. Given the fact that income/day/family of around half of the households turn down to as low as US\$ 0.7-9 during the lean fishing periods of the monsoon season, meaning an allocation of only US\$ 10-15 cents/capita/day, and that 70-80% of the income is spent for purchase of rice and edible oil only, it is not difficult to envisage

how fishers are forced to compromise in the areas of livelihood well-being including housing, clothing, medicine, education, *etc.*

The existence and development of a rural non-farm economy is important because it greatly helps to mitigate the problem of under-employment and unemployment substantially through absorbing incremental unskilled and skilled labour forces. The scope of non-farm activities (like rural road maintenance project, road side plantation, *etc.*) is very limited in coastal and wetland areas. The scope of on-farm labour utility has been negatively impacted by the increased use of fertilizers, hybrid seeds and irrigation, and in a few cases small tractors. As the catch from the sea dwindles, scope of engagement of women in vending and post-harvest activities also decline sharply. Another limitation of non-farm manual jobs is that the employers choose physically strong adults and young, and thus families with a higher civilian labour force and old/sick persons have little access to such labour-exhaustive jobs. Here is a comment:

'I have five members, each with a mouth; one has been sick for months, two are too young to work; my husband finds work on craft for 5-6 months. I find work for road construction for 1.5-2 months only, not throughout the year. How can all these mouths be fed? Can anyone give me an answer?'-Nelly Jaladas, 43, Thakurtala, adds with anguish.

It is obvious that as rural inhabitants with dependence on finite resource base, both peasants and fishers work hard to meet their subsistence needs and to avoid short-or-long-term food insecurity. Their subsistence actions are being determined by the combined forces of 'economic category of maximizing personal utility and the sociological category of altruism' (Grawert, 1998, p. 153). We noticed that both peasantry and fishantry as rural producers are strongly impacted not only by the natural cycles of productions, but also by the dynamics of market relations which are mostly characterised by middlemen and merchants' oligopsonic and oligopolic dealing of business which generally deprive the rural producers of fair price. This is especially true in case of fishantry. Farmers can wait a certain period with their produce, but fishers cannot as their raw products are quickly perishable compared to agrarian produces. Peasants have the privilege of selling their produce to government-controlled outlets, whereas no such privilege exists for fishers. The informal structure of dependence on the local moneylenders has taken a permanent shape because of the psycho-socially embedded fear that livelihood options might be diminished without continued support from the lords of the markets.

Beyond the primary livelihood activities (active fishing in the sea/coast, fish drying, retailing, post-harvest processing, weaving/repairing nets), fishers of Thakurtala also engage themselves in shrimp fry catching (for stocking in monoculture ponds), carpentry, natural resource gathering, livestock rearing, tailoring, homestead gardening, hair dressing, paid manual labour, *etc.* As a land-scarce community, they hardly gain anything from terrestrial agriculture. The situation is compounded given the low elevation of the village and proneness to intermittent inundation by high tide water flowing from the adjacent Bay of Bengal and, consequent accumulation of soil salinity rendering soil unsuitable for many crops and

vegetables. The farmers of Palpara do not fall into this trap of tidal inundation. Beside their primary activities of paddy farming, paddy storage and trading, farmers of Palpara are engaged in service, small-scale business, brewing, carpentry, rickshaw pulling, home-based vegetable gardening, and private tuition for the primary and secondary level students.

It is not hard to build up a case that the local level resource depletion and denial of the access to common property resources along with some other forces of globalization have hard hit the rural households, specially the fishing households. The experience of betel leaf farming adds an interesting twist to the process of shift in crop selection. Here is a comment:

‘Betel leaf grown in Moheskhali is such an item that Bengalese cherish to chew almost throughout the day till midnight. No other variety of betel leaf can compete with this sweet variety. Its market price is almost double compared to other varieties. Now there are new markets in the urban areas of Bangladesh and also middle-east countries. However, it is increasingly displacing poor farming labourers as landowners can run betel leaf farms with less labourers needed in comparison for paddy farming’- Sukhendhu Paul, 63, Palpara, Moheskhali.

The floodplain fishers of Volarandi, beyond their primary profession of daily fishing (dawn to dusk or dusk to dawn cycle depending on targeted species and gear) are engaged in terrestrial agriculture, horticulture, rural transportation, poultry, duck rearing, remittance earning, fermentation of fish (*Puntius* spp.), paddy husking, running tea stalls, *beel* subleasing, etc. The fishers of Volarkandi are blessed in a sense that they can switch between fishing and farming opportunistically in different seasons given the hydrological pulse and the terrain of the floodplain. The farmers of Daspara, beyond their primary livelihood activity of paddy farming and trading, are engaged in milk vending, sweet production, clayey mud collection from *haor* basin (used for house building or elevating homestead land), shoe mending, snail collection, carpentry, remittance earning, and selling labour. Most importantly, both adults and youths of farming and fishing households tend to split livelihood activities along lines of opportunity spread all over rural societies.

3.1.5 Peasantry versus Fishantry Women:

We focused on this issue in our first article (also see Deb et al., 2013), and we make further elaboration here. Gender relation in rural Bangladesh, although part of social and power relations, is characterized by both rigidity and fluidity depending on livelihood needs and cultural values. In the patrilineal societies of rural Bangladesh, women’s capability to supplement and contribute economically independently of men is compromised by their socio-culturally deep-rooted continued dependence on ‘fixed relations’ with men. However, demographic pressures coupled with unemployment, underemployment, competition for scarce natural resource base by urban elites, and endemic poverty force many economically disadvantaged rural families to consider in favour of allowing women to work outside the territory of the villages if the workplace is safe and supported by social networks. The flourishing of the garments sewing sector in urban areas dependent almost exclusively on women labour is a good example of going beyond the socio-religious barriers.

In our attempts to compare aspects of peasantry and fishantry in the study villages, we noticed that one of the most interesting areas to look at is the activity and mobility of the women in the fishing and farming households. What is common among these women is the individual economic interest for maximizing familial utility, long-term livelihood security, a social dimension of altruism, and day-to-day reciprocal relations. The mode of production and perishability of the produce is an important determinant of women's mobility. The following two quotes make it clear:

'We have almost everything in the village for our daily sustenance. We have rice, potable water, eggs, chicken and vegetables. Only for cooking oil, fertilisers and kerosene, our males go to market. We are not in need of going to market; our males don't like the idea of letting the women alone in the public domain like market' (Bithika Paul, 46, Palpara).

'The local market is the source of our earnings. Our males catch fish whole day or whole night in the sea; they remain so tired that they don't want to go to market anymore. Also, we buy fish from the landing centres and retail those fish in the local markets. For many of the married women, this practice is common. Fish will start rotting right away after they are caught. We don't have ice or large refrigerator in the village; so we rush for selling them. Also, we don't have land to produce rice; almost everything except little fish, we have to buy from local markets. At any given point of time, you will see some fisherwomen in the local fish markets. If I sit idle at home, who will feed me?' - Kallyani Jaladas, 50, Thakurtala).

Boys and girls in the fishing and farming villages have distinct sets of activities tuned to the profession, gender roles appropriate for the profession, and their age (Figure 3). However, generally speaking, on a day-to-day basis, boys and girls of fishing villages do more laborious and time-consuming jobs compared to their counterparts in the farming villages. Results from focus group discussions revealed that in the peak harvest periods of fishing and farming, boys and girls work 9-13 hours in the fishing villages and 5-9 hours in the farming villages respectively in support of their parents. Fisherwomen in Volarkandi fishing village in the Hakaluki haor collect aquatic plants, such as, stems and fruits of 'Shapla' (*Nymphaea nouchalli*), root stocks of 'Ghechu' (*Aponogeton* sp.), 'Fukol grass' (*Euryale ferox*), 'Singara' (*Trapa natans*) and leaves of 'Kalmi' (*Limnocharis flava*) for household consumption. Fisherwomen of the Thakurtala fishing village collect crabs, shrimp fries, and small fish of various species from the adjacent Moheshkhal estuarine channel for domestic consumption and sale. Women of Palpara were not found engaged in harvesting from the channel. Deb et al (2013, p.12) mentioned: 'the overall societal attitude in the coastal areas, though apparently conservative, reveals itself as non-confronting and nonaligned in accepting and socially legitimizing fisherwomen's service and mobility in a predominantly male domain'. Such flexibility in social values favor women's enhanced roles across society.

In terms of mobility in the public domain and contributions in familial earnings, fisherwomen of the coastal village Thakurtala far exceeded those of the farming villages and also the fishing village of the floodplains. This is primarily attributed to the struggle for existence and

the very nature of sea-fishing as a profession. Fishing in the sea, being a highly capital intensive venture, most of the coastal hereditary fishers cannot afford to buy craft and gear needed for inshore and off-shore fishing. Eventually, they find contractual jobs of paid labourers for around 6-8 months in the mechanized sea-faring craft of moneylenders or businessmen. As soon as the fishermen leave the village in a group for a substantial period of the year, the customary form of patriarchy takes up the seasonal form of matrifocality because the subsistence fishing economy put forth enormous familial and social responsibilities on the coastal fisherwomen. This is quite the contrary to the trend that we see in the land-based farming systems, where women, despite their substantial labour inputs, fail to control the money earned through the production process.



a



b



c



d

Figure 3. a. Coastal boys and girls engaged in fish segregation (species wise), b. A young boy gathering shrimp fry in the coast, c. Floodplain boys engaged in cow ranching, d. A floodplain boy goes to local market to sell fish baskets

We experienced that coastal fisherwomen develop their own sets of social and economic networks for the sake of small-scale fishing businesses, livelihood security, and social reproduction. Their cardinal characteristics of diligence, patience, stress-bearing attitude, and aggressiveness for income earning make them quite distinct in the wider society and public domains. From our long observations in the study villages, we can conclude that hereditary Hindu fisherwomen of the coast enjoy relatively more freedom compared to the floodplain Muslim fisherwomen and women of the farming villages of the coast and floodplain (see Deb et al. 2013 for details). This observation in the rural Bengal society is in conformity with the observation of Norr and Norr (1997) who concluded that compared to the peasant women, fisherwomen by and large enjoy relatively more freedom and self-determination when fishers as a professional group are generally placed in the lower stratum of the societal hierarchy. However, when fishers are at equivalence with the peasant communities, fisherwomen behave differently and tend to have lesser socio-economic power.

3.1.6 Cultural Attributes

Culture can be viewed as the ‘integrated system of learned patterns of behaviour, ideas and products characteristic of a society’ (Hiebert, 1990, p. 25). Culture is a vehicle to explanation of people’s own realities; they share similar concepts, beliefs and values that carve their worldviews and help them organise their concepts and uphold values into rational activities. Human societies and cultures are claimed to adjust through subsistence patterns to a given environment, meaning that the ecological relationships are intricately linked to cultural adjustments and adaptations (Ellen, 1982). Our focus will be limited to observance of exclusively profession-related rituals that are the socio-religiously defined performance of behaviour and serve as gateway to understand stereotyped local culture of both fishantry and peasantry.

We will, first, analyze the cultural aspects among peasantries of floodplains and the coast. Farmers have relatively better control on their seed selection, ploughing, sowing, plantation, nursing and harvesting. However, occasionally they are worst-hit by prolonged flood, tornado and cyclone. One farmer mentioned:

‘I know well what to do on my land in different seasons; it’s a family practice. From the growth of the sapling, I can estimate how much paddy I would be able to harvest. Unless the ‘sky falls on my piece of land’, things are under my control. Land is so fertile that I don’t have to worry about surplus nutrients through adding fertilizers. I monitor everyday and take actions accordingly’ (Khetramohan Das, 58, Daspara).

This aspect of monitoring over growth and harvest of main crops provides some forms of psychological confidence in farmers, and their ritual requirements have been tuned and lessened that way. Farmers of Palpara arrange small-scale worships in their houses before their ‘ploughs touch the mud’ and offer some seeds of paddy in front of the icon of *Goddess Laxmi*, who is believed to take care of the harvest and wealth. Another *God Kartik* is also honored with seven bunches of paddy plants. A program called *Nabanna* (literally, new rice) is celebrated throughout the farming villages. Seasonal farmers in the Volarkandi fishing village hang some papers on ropes around the paddy fields that contain Islamic hymns written

by local priest (*Imam/Moulovi*), in order to protect crops from evil eyes, flood and insects.

Floodplain Muslim fishers observe very few rituals as they fish in relatively risk free ecosystem. They clean the craft and gear, wash the anterior part (*Golui*) with three buckets of clean water and then cover up the *golui* with clean clothes. On Friday, after the *Jumma* prayer, the priest of the local mosque owner of the craft, and local seniors gather near the craft. The priest utters certain hymns like *Doa Kunnut*, *Monajat*, *Sura Ayatul Kurshi*, *Sura Aklas*, *Sura Fateha*, etc. from the Quran. Just prior to stepping on the craft, they say a prayer concertedly (*Rabban jalamna anfumana wahillan anta ferri, wataar haamna laana kunaanna minaal jamiri*) seeking blessings from the Almighty. Both farmers and fishers of the floodplains strongly believe in the existence of *Jenes/Vhut* (supernatural effigies) in the wetland. We get similar cultural beliefs from the South African *Xhosa* people who believe their ancestors resided beneath the water as the ‘river people’ or ‘Abantu Bomlambo’ (Van der Wall, 2000). Diegues (2002) argues the religious beliefs of Brazilian artisanal fishermen, particularly in the Amazon, are influenced by the Indian mythologies and legends.

We will now examine the ritual aspect of the coastal Hindu fishers which is apparently diverse, rich and distinct compared to other communities. Despite some common cultural traits across rural Bengal (like observances of 1st day of Bengali calendar, days of national importance, etc.), artisanal fishers, especially the Hindu coastal fishers have separate sets of sub-culture unique to their works, ideological discourse and their relations with the immediate ecosystem. Most of the Hindu traditional fishers, especially the older generations, desire to be valued in the society as per ideals that historically constituted and defined the values of the fishing communities. Such ideals and values are ingrained in caste-specific identity such that their embodiments by individual fisher strongly attach to the upholding of the caste-identity. The overall social context is such that replication of caste-specific ideals and activities, singly and collectively, are appreciated and revered by the members of the fishing communities. Collectively, such active reproduction and continuation of traditional cultural values can be viewed as resistance against encroachment of ‘superior culture’ of the wider society. ‘I have seen my father and grandfather maintaining strictly the cultural ideals of fishers...in doing that we find peace of mind, and we gain solidarity as a small community’ (Jibanhari Jaladas, 2010). In fact such cultural resistance becomes integral to social differentiation (Kearney, 1996). Rituals observed in the fishing villages mainly centre around notions of uncertainty, luck and risks associated with the profession, and social implications.

Certainly fishing in the sea is highly risky, especially for those fishers who lack the very basic safety and communication appliances like buoys on their small mechanized or non-mechanized craft. Observances of rituals and submission to the God(s) presumably act as a psychological vehicle to get rid of possible causes of danger. We will look into the theoretical justifications behind the rituals observed by marine fishers of Thakurtala. There are two known vital elements in fishing: 1). the fishers with their gear, skill, knowledge, and experience, and 2). the natural uncontrollable ecosystem with a heterogeneous distribution of resources. In the coastal fishing village, sets of skill and experience of fishing matter when at sea, but even the best experienced fishers do not depend solely on their skills and efficient craft and gear. Good and bad luck are inevitably present in fishing villages and perpetually in

the minds of fishers. Firth (1966), from his detailed observations on the Malay fishermen, mentions that skill alone is not adequate although the role of it cannot be denied. This proposition points to the fact that the very nature of fishing itself provides the logical underpinnings for adopting special rituals. Lofgren (1989) argues the phenomenon called fisherman's luck is used instrumentally as cultural elements to express ideas about how social relations work. The varied abundance of fish spatially and temporally, and the probabilistic assumption of variation in catch per unit effort is culturally translated in terms of personal attributes like luck that is perceived as something quantifiable with positive (lucky-*Vagyabaan*, *Mach Kopaila*) and negative labeling (unlucky-*Kufaa*). Relevant goddesses are believed to bestow good luck on fishers and craft, meaning that luck is perceived to be in one's favour through observance of socio-culturally appropriate rituals.

The second notion of risk (*Bipod-apod*, *Durjoge*) is central to the observance of many rituals. The anxiety-ritual theory, attributed to and popularized by Bronislaw Malinowski (1948) through his seminal works with Trobriand fishers, pave linkages between the vastness of the marine ecosystems and the fishers' perceived insecurity, psychological depression, physical vulnerability, and hence, the justification that observance of socio-culturally appropriate rituals bestow with to alleviate marine fishers of otherwise irreducible anxiety. The positive relationship between the number of taboos and days involved in a fishing trip points to the fact that the greater amount of risks associated with trip fishing results in anxiety, which is lessened by more extensive ritual behaviour (Poggie, 1980; Poggie and Pollnac, 1988; Pollnac and Poggie, 2008). On the Pacific island of Ifaluk, Burrows and Spiro (1953) found no ritual associated with farming, in contrast to extensive amounts of magic associated with ocean voyages and canoe construction. Since anxiety can reduce many individuals' ability to function effectively in dangerous and highly unpredictable situations, religion and/or superstition may have adaptive value for the individual (Poggie and Pollnac, 1988). Traditionally, the sea exalts a special spiritual position to the wider Hindu fishing communities, and thus, evolves numerous sets of rituals. Here is a comment:

'What else can I do when I know that my husband might be lost forever from my life after he gets on the craft.... So, I pray to God for his safe return every day, every hour, every moment.... The sea keeps us alive with fish food and also takes our lives. If you were in my situation, tell me what would you do.' Sumati Jaladas, 40, Thakurtala.

With utmost devotion, the seafaring caste-based Hindu fishers observe the worship of *Ganga* (a nice-looking deity with four hands, sitting on an imaginary marine animal *Mokor*), that is widely believed to save their lives in the sea and also enhance the catch. On a lunar day fixed as per almanac, the priest completes the worship of the deity idol using essential ingredients like paddy grains, coconut, vermilion, 5 types of cereals and twigs, basil leaves, milk, betel leaves and nuts. Once the uttering of the hymns and lyrics (*Ganga Stoatra*) is over, the priest performs a fire sacrifice (*Homa Joggya*). Fishers then sing with devotion: '*Horey Krishna, Horey Krishna, Krishna Krishna Horey Horey, Horey Ram, Horey Ram, Ram Ram Horey Horey*'. Additionally, Hindu fishers say special prayer at the Adinath temple in honor of Goddess *Durga* and *Lord Shiva*. Hindu fisherwomen also observe *Shani puja* on Saturday night in honor of deity *Shani* to get rid of dangers, *Mongolchandi puja* on Tuesday night for

family members' welfare, *Bipodnashini puja* on 3rd lunar day of full moon for minimizing risks, *Laxmi puja* on Thursday night for wealth, and *Satyanarayan puja* for welfare and avoidance of risks. Coastal Muslim fishers show respect for the deity *Ganga* as well as *Bonodevi*, the Goddess of the Jungle. Hindu fishers also widely respect the Muslim saints *Gazi Kalu*, *Khoaj Khijir*, *Malek Shah* and *Akbar Shah*. Such instances of inter-religious practices speak of the communal harmony and peaceful coexistence among the fishers across their religious divides. Some of the rituals are exclusively observed by the sea-going caste-based Hindu fishers who have adopted a local form of Hinduism, rather than the regional or peninsular Hinduism.

In terms of cultural distinction between fishers and farmers, we noted that the sea-faring fishers develop and maintain 'two cultural entities', one for the wider land-based social organization, and the other centered on their 'stay and activity' on the craft in the sea. The same fellow may behave quite differently at sea and on land. The fact that coastal fishers are drastically different in many aspects of technology, perceptions, behaviour and culture is attributed to the reality that they remain geographically and emotionally isolated from families and society for a long time. Neither of the two cultures is transient or dissoluble to each other, but rather complimentary and intimately supportive.

3.1.7 Resource Governance- Intrinsic and Extrinsic Negativities

How active is the process of differentiation in peasantry and fishantry? As a politically reinforced matter, the rapid transition in the waterscape of Bangladesh (both floodplain and coastal/marine territory) might be analytically treated under two broad themes: 1. expropriation and wider coverage of productive territory for fishing by the powerful elites which in turn created a mass of marginal fishing labourers for use in the growing mechanized industry, and 2. a marked differentiation rooted on the dimension of social class as the vehicle of the transition.

Here, we would like to examine resource governance issues faced by the farming communities. Bangladesh as a country enjoyed an attractive spot in the regional and international media for its recurring natural calamities like flood and cyclones. Natural disasters caused heavy toll on the farming lands, crop cycle, and the produce. However, key respondent farmers from both floodplain and coast mentioned that they are much more aware of the dynamics of floods and cyclones, and hence, the financial loss owing to natural disasters lessened substantially. Capacity of the macro-and-micro-institutions in the country improved significantly in managing natural disasters and terrestrial resources. The other way of the interpretation is that farmers have learned and adapted well to the pulse of natural disasters. Farmers reported that there has not been a serious failure in the crop cycle in the last one decade. However, there are small localized issues of crop infestation in both the floodplain and coastal areas. The issue of land grabbing is discussed later on.

Situation of fishantry in terms of resource governance is shoddier. Artisanal fishers as a general category face stressors that originate from intrinsic and extrinsic sources (Figure 4). Some are natural and many are anthropogenic and cross-scale in nature. To mention a few: 1. a dyke in the *Farakka* region of India affects the *Hilsa* population of the Padma River;

desperate fishing using monofilament ‘current nets’ by fishers in the Myanmar territory affects the same stock in the Cox’sbazar/Teknaf region; 2. the unregulated dismantling of the abandoned carrier vessels in the south-east coastal region of Chittagong affects the water quality and fish abundance in the region; 3. *Jatka* (immature *Hilsa* sps.) fishing by fishers in the riverine areas of Chandpur, Barishal, Bhola and Patuakhali districts seriously affects the catch level of fishers of coastal regions including Moheskhali; 4. shrimp fry (*Penaeus monodon*) gathering from the shallow coastal areas for shrimp monoculture affects the catch and value of marine set bag nets of poor fishers (for details see Deb and Haque, 2011).

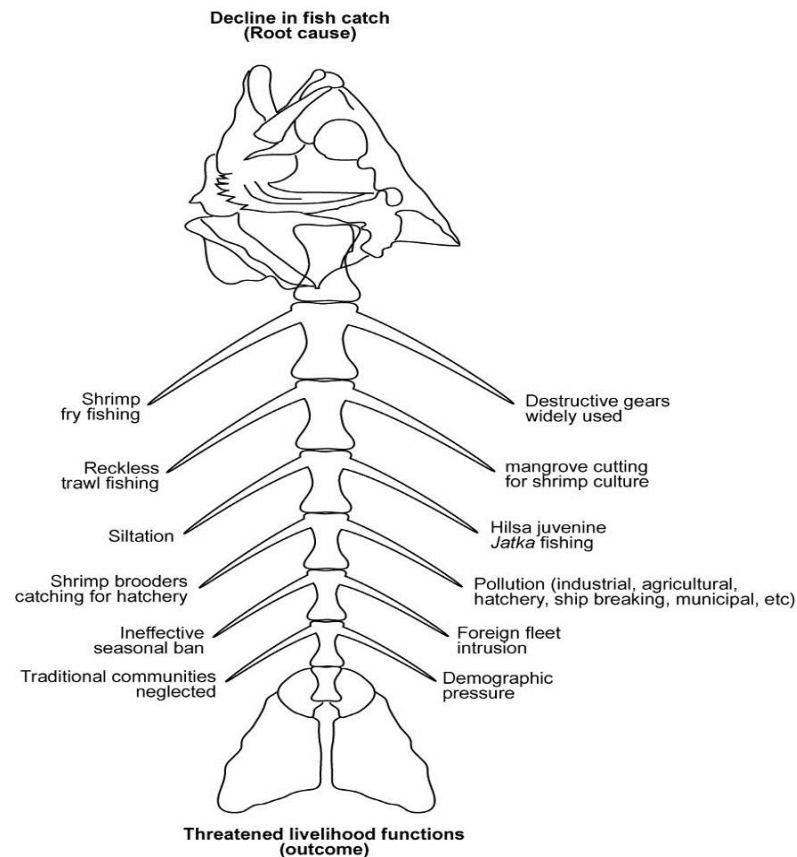


Figure 4. Sources of vulnerabilities leading to marginalized economy of fishers (redrawn from a sketch by fishers of Thakurtala fishing village, Moheskhali)

The situation is such that in a multi-gear and multi-species fishery, growth overfishing renders unavoidable if some measures like seasonal closure and compliance with mesh regulations are not strictly observed. The untreated pollution loads from all the municipalities, broad-spectrum pesticides used in the agricultural sector, ship breaking yards, tanneries, pharmaceuticals and other industries ultimately find room in the coastal water and their synergistic impacts on marine flora and fauna are not known. Coastal artisanal fishers complain that industrial trawlers frequently enter the designated ‘no-fishing zones’ (<40m depth zone as per Marine Fisheries Ordinance 1983) for a ‘bumper catch’. An analysis of the trend in mechanization shows that the number of mechanized fishing crafts increased by >100% between the 1980s and 1990s, and the industrial trawler increased by >1000% in the last two decades (Deb,1998) at the patronization of different international agencies.

Although both the mechanized and non-mechanized modes of production coexist, the mechanized sector keeps growing at the cost of the non-mechanized traditional sector. The escalation in mechanization is a growing concern for the very existence of the age-old non-mechanized fisheries sector. The impact of trawling on the pelagic, demersal and benthic/sessile resources is not clearly known. Fishers are worried that there has been serious decline in fish catch from the marine ecosystem. One old fisherman from Thakurtala gave us his own comparative calculation:

'Koli Kal' (worst epoch) now, fish keeps declining.....let me tell you my mathematics. I started going to sea along with my grandfather when I was 12. Fifty years ago, my grandfather used to count Hilsa fish in 'Kowns'; 20 years ago in my father's time, I saw him counting Hilsa in 'Pons'. Those days are gone. Now we count Hilsa in 'Halis' or one by one. See how wide is the difference in just fifty years! The change in the style of 'calculation' points to the corresponding change in the financial positions of the fishers-from affluence to paucity.' (Numeric: 1 Kown= 16 Pon= 1280 pieces, 1 Pon= 80 pieces, 1 Hali=4 pieces)- excerpt of interview with Jamini Jaladas, 68, Thakurtala.

The fisheries resource base in the *Hakaluki haor* is at jeopardy. Some of the causative factors behind decline in fisheries resources are: 1. increased mining-related sedimentation from the upstream areas of *Jaintiya* hills of Meghalya (India) resulting in reduced water retention period in the *haor* and less spawning success of some species; 2. insecticide flow from the surrounding tea garden; 3. uncontrolled use of some destructive gear; 4. drying of seasonal beels by leaseholders, thus killing all animals therein; and 5. erection of dykes and other barriers on the spawning route of fish. Fishers mentioned that their dependence shifted from earlier golden days of major carp fishery to less valued small minor carps, *beel* resident species, small predators, detritus feeders and small plankton feeders (excerpts from focus group discussions with floodplain fishers). These natural and anthropogenic attributes within the ecosystem have dire consequences on the fishing economy. Of all these causative factors, let us consider the case of insecticide flow from surrounding tea gardens which is a lucrative business of national and international corporates. The *haor* is surrounded by tea plantation valley. Annually, an estimated amount of 15,310- 30,620L of insecticide is being used in the 12,247ha area of tea garden and assuming that at least 25% of these poisons reach through rainfall in residual form, an estimated amount of 3827-7655L/year eventually find place in the downstream areas of *Hakaluki haor*. The impact of residual insecticides from up-land tea-gardens on the fish and other aquatic fauna deserves detailed study.

3.1.8 Process of Marginalization

Prior to in-depth research in the study villages, we made exploratory visits in seven fishing villages with a view to understand the fishers' way of life, the type of challenges they face, and how they interpret the issues in their own worlds. The most common set of words that we received are *Pora Kopal* (literally, burnt forehead or fate), which is simply indicative of an extreme state of poverty, deprivation, socio-political torture, sense of helplessness, absence of support from micro-and-macro institutions, and a stark process of marginalization. We cannot

cover all the issues here; rather we will focus on two cases that would expose how the use and *de facto* rights over natural resource bases, the very basic source of livelihood for fishers, are being compromised through institutional processes.

Case 1: Chakaria Sunderban: Institution-induced land grabbing and displacement

Transformation of *Chakaria Sunderban* (literally, beautiful forests), once widely used as Common Property Resource (CPR) into private properties is a dazzling instance of social injustice. This mangrove forest is located at the interface of the Moheshkhali Channel connected with the Bay of Bengal and the adjacent coastal land which was exceedingly rich in both terrestrial and aquatic biodiversity. This oldest mangrove forest of the South-East Asia (8510ha), once considered as reserve mangrove forest and ecological pristine area, has been converted to shrimp farming ponds for production and supply of tiger shrimp (*Penaeus monodon*) at the technical and financial support of World Bank in 1986-1988. Along with displacement of human settlement for the landless categories including artisanal fishers, majority of the mangrove areas has been subject to clear-cutting for quick earning of foreign money.

The vegetative cover that consisted of rich abundance of *Dalbergia spinosa*, *Heritiera fomes*, *Aegialities rotundifolia*, *Excoecaria agallocha*, *Avicenia tomentosa*, *A. Alba*, *A. Officinalis*, *Sonneratia aputala*, *Ceriops roxburghii* and *Rhizophora conjugata*, is hardly left. Key informant fishers informed us about the availability of 15 marine shrimp species and 40 finfish species in the area. Civil and military bureaucrats, politicians and businessmen benefitted from such destruction of CPR, while the fishers who depended on such a biodiversity-rich area for fishing, lost their livelihoods and some of them ended up as paid labourer in the shrimp farms. Forceful eviction from the CPR areas and occupational displacement eventually led the fishers to migrate elsewhere for survival, eventually causing disconnection with the hereditary profession and marginalisation. At least five traditional fishing families are known to find shelter in the Thakurtala fishing village. One family-head of the displaced families, losing all his ways of earnings, later committed suicide. Nothing is known in details what happened to other displaced fishing families.

Case 2: Leasing of productive waterbodies in the floodplain

Historically, the rural fishing communities reaped the naturally-grown fisheries resources from the nearby *Jolmohals* (waterbodies) in the floodplains, specifically in the *Hakaluki haor*. They devised and nurtured their own sets of institutional arrangements or 'rules-in-use' for ensuring benefits of the resource-dependent users by defining their relationships of production-extraction to the aquatic resources, developing commons' interest about the resource base, and transforming those interests into unwritten but locally-honored claims and *de facto* property rights. *The Permanent Settlement Act 1793* allowed the colonial rulers, specifically *Jaminders* (landlords), on their behalf as rent-collecting intermediaries, induced some restrictions on commons' use of and access rights to natural resources. However, *The East Bengal State Acquisition and Tenancy Act 1950* abolished the feudal lord *Jamindari* system.

After that, Ministry of Land (MoL) of the government became the custodian for CPR management and revenue collection, and initiated leasing of waterbodies to fishers.

Apparently an innocent initiative to lease out *Jolmohals* to genuine fishers was seriously compromised because of the fact that there was no legal mechanism in place to identify and define a fisherman (though fishing villages are distinct and well-known in the locality). Powerful local elites took advantage of the flawed system, and under the camouflage of fishermen group, they managed to take lease of the most productive *Jolmohals* by paying hush money to corrupt local officials. Genuine unregistered fishers, who had no scope of bidding with cash, were excluded from the legal ownership of the *Jolmohals*.

How fishy and faulty the leasing procedure is can easily be guessed from the fishers' anger and dissatisfaction following their exclusion from their generational entitlements. Fishers mentioned that in the *Hakaluki haor* area, out of forty most productive and larger *Jolmohals*, half the leased out waterbodies covering around 70% of the total productive area is absolutely controlled by only one political muscleman (and his group of thugs) in the disguise of fake fishermen cooperatives. Genuine fishers could retain control over only 18% of the productive area, while the rest is either under transition of hand over or legally disputed. Government's focus has been shifted to poverty alleviation and engaging unemployed youths for enhancing fish production, but the mechanism of privatization of productive *Jolmohals* to powerful elites remain unabated. Genuine fishers were forced to run into agreement with powerful leaseholders for fishing in the waterbodies (*field note*: one or multiple layers of sub-leasing exist for fishing in the *Jolmohals* for mere survival).

The very process of forced commoditization of waterbodies through increasing lease value each year is a deliberate attempt to keep off the poor fishers from leasing and exercising their traditional entitlements. Fishers reported that leaseholders, at the end of their leasing tenure, employ all possible ways of total harvesting leaving almost nothing for reproduction and regeneration of fish. It is estimated that 50% or more of the perennial wetlands of Bangladesh have been drained, encroached upon, filled or otherwise lost in the past 30-40 years, thus negatively impacting fishers' livelihood, environmental services and biodiversity (World Bank, 2005). *The New Fisheries Management Policy 1986, The National Fisheries Policy 1998* and subsequent *Jolmohal Management Policies 2005 and 2009* created room for the Department of Fisheries (DoF) for putting forward some forms of technical management into perspectives. MoL transferred insignificant number of *Jolmohals* to DoF, but relatively weaker institutional capacity of DoF and non-cooperation of MoL senior officials coupled with their colonial bureaucratic mindset hindered the success of a newly experimented community-focused fisheries management system.

Such resource grabbing through institution-supported process of transformation not only put the CPR users to a disadvantaged position through quantitative dispossession of livelihood resources, but also entails a structured process of qualitative transformation of property rights

and relations. Under this process, CPR historically held under ‘non-capitalist property relations are extracted and converted into forms of property that are compatible with deployment in capitalist production’ (Adnan 2013, p. 92). The whole process of decommodification of CPR generates huge cheap surplus labour from the marginalised section for convenient use later in the accumulated capital by the powerful groups. Qualitatively, these CPR bases are not only rooted to livelihood dependency, but also linked to socio-cultural and emotional attachments, and rich heritage of indigenous knowledge. One of the far-reaching negative externalities is that as the poor fails to ensure their subsistence needs from the CPR, they are forced to a process of ‘distress sale’ that includes their arable and non-arable land including homestead areas.

Especially in the last three decades, what we noticed is that much of the environmental and CPR management discourses in Bangladesh have sturdily persuaded a colonial legacy of bureaucrat-dictated resource governance, coupled with neo-liberal forces of privatisation. The whole process of institution-induced dispossession of CPR raises fundamental questions of deprivation from entitlements and environmental justice. Theoretically, in a quickly shifting era of neoliberal globalization, the land grabbing issues in both the coastal and floodplain areas can be analysed through the Marx’s (1976) theory of ‘primitive accumulation’ and Harvey’s (2005) theorization of ‘accumulation by dispossession’, what Adnan (2013) terms as a generic concept of ongoing ‘capitalism-facilitating accumulation’. Domestic corporate bodies, political thugs, government servants, several private interest groups including civil and military elites are some of the expropriating classes that grab land. For triggering an expansionary dynamic of capitalist mode of semi-intensive shrimp production, institutional arrangements and mechanisms are carried out by depriving common people of their *de facto* property rights. What is alarming in the landscape and waterscape accumulation process by the elites is that the CPR had been totally wiped away for transformation into individually owned shrimp farming lots through years of anthropogenic disturbances. The roles of some international agencies in this process of exclusion can be raised.

4. Differentiation within Fishanry: Social Groups and Classes

For a better grasp of the fishanry, the internal differentiation deserves attention (Table 3). The process of internal differentiation is dynamic, and heavily influenced by economic crises, patron-client relationship, political coercion, poor yield level, ecological destruction, and so on, singly or in combination. Marx’s theory of class differentiation for peasantry provides us prime analytical tools for examining the evolving process of socio-economic hierarchy, the real condition of production in the artisanal sector and the process of wealth accumulation by a group. Fishers can hardly defend against the intrinsic and extrinsic stressors they face, and succeed in merging with the higher ruling classes for extra secure social status and power. In conventional political economic theory, *class* is the dynamic structure of social spaces within which value-power is constructed and distributed. Membership and position within a particular class is determined by attributes of differential distribution including material production, transfer, accumulation, and structuring of production relations. Hence, the subjects that collectively comprise the formation of classes are also eventually defined by the multiple-dimensions of class which run through them. This theory of internal class

differentiation recognizes the process of identity and position of the subjects who make complex productive arrangements through their socio-economic and communication networks for their very existence. Kearney (1996, p.169) rightly argues that 'peasant politics as conventionally conceived and practiced is integral to the reproduction of class systems within which peasants and peasantlike communities are formed'. Based on our findings, we will now analyze the internal differentiations in production relations in the artisanal fishery.

It needs to be reiterated here that fishantry as a professional entity is not homogenous, rather a complex dynamic mix of different ethnicities, sub-groups, capital holders, forces, attitudes and responses within the apparently homogenous community. Table 3 provides details of the aspects of differentiation within the social class fishantry. Indicative of the livelihood pluralism, fishers derive incomes from multiple sources¹. We see seasonal and even diurnal changes in occupation at the individual level. Thus, there are subsistence, part-time and full-time occupational groups. There are both caste-based Hindu fishers (they are 'organically, socially and culturally' defined fishers), and newly entrant Muslim fishers, and there are family level to large-scale labour involvements. There are also farmers-cum-fishers, whose profession gravitates between farming and fishing as they produce both paddy and fish simultaneously or cyclically from the same area. Thus, there are multiple actors or groups within the fishantry.

With different sets of privileges and obligations among actors, class differentiation within fishantry is largely determined by the possession of number and types of fishing craft and gear, income, occupational and ancestry-based hierarchy in the social continuum, education, values, attitudes, self-identification, individual accomplishment, subtle or manifested overtones of political power, and recognition by others in the wider society² (Table 3). In the evolving nature of the class differentiation within the fishantry, there are uneven and varied outcomes, socio-politically and temporally, and the different classes of labour are impacted differentially. Specially, the caste-based wage labourers (the '*proletariat*' in Marxian terms), who form the majority among the traditional fishers, have been subject to multi-dimensional thumb effects. From the view point of ownership over means of production and power hierarchy, we identified three major layers of forces that impact the traditional caste-based fishers directly or indirectly:

- a. from the 'top' triggered through a host of sources (the *bourgeoisie* force in Marxian term): namely, globalization, regulatory policies of the government, waves of privatization of the CPRs, rapid mechanization, absence of bargaining mechanism, sea-based hazards, *etc.*;

¹ Through field work in the study villages, we identified broadly 17 categories of other activities that fishers carry out for livelihoods other than active fishing and fisheries-related activities. Some of these trades include: carpentry, remittance earning, selling manual labour, seasonal ranching, tailoring, hair dressing, masonry, homestead gardening and poultry.

² For the open water fisheries sector of Bangladesh, Dastider (2009) observed that variation in ownership of craft, technological innovation and adoption, inflow of capital, and socio-demographic shifts altered the pre-existing social organisation of production, thus emerging and expanding a complex form of production systems, social institutions and power relations.

- b. from the ‘periphery’ (the *bourgeoisie* and *petty-bourgeoisie* forces in Marxian term): through the groups of capitalists (craft and gear owners, monopoly in marketing channel, peer-pressure from moneylenders, *etc.*) who hold functional/regulatory power; *and*
- c. from the ‘bottom’ (another set of *proletariat*): through the huge entry of new class of wage-and-share based fishers, mostly Muslims, who can compete well and assimilate into fishery sector as unskilled labour force. This snapshot of a differentiated section of marginal fishers become more conflicting and complicated when we observe the massive intrusion of Myanmar-based Muslim refugees (locally known as *Rohingya*) in the southern coastal belt. Many of them are involved in massive-scale shrimp fry catching, leading to a colossal destruction of coastal biodiversity.

Ethnicity and caste-identity of fishers in the artisanal fishery represent another problematic of social, economic, political and cultural capital as it often tends to cross-cut the class. These caste-based ethnic groups possess a spatial focus too. They are mostly concentrated in the coast given their productionist/harvest nature, and the ecosystem and socio-political landscapes usually favour it.

Field research revealed that around 90% of the floodplain fishing operations is family labour-based, and 10% of the fishing operations with large costly encircling gear use a combination of family labour, wage labour and output-sharing labourers. Most of the non-mechanized craft owners in the coast, including motorized craft equipped with 5-10HP engines, depend on family labour almost exclusively. In case of all sea-going artisanal craft, steerer’s (*Majhi*) networks and social capital play influential role in the selection process of fishing crews. In the context of the demographic transformation in the last few decades resulting in new-entrant Muslim fishers’ dominance over Hindu caste-based fishers, we observed simultaneous changes in the pattern of crew composition. With this scenario of class differentiation (Table 3) and the prevailing typical pattern of patron-client relationship and mutual dependence (especially in the coastal areas), it is the group of moneylenders and craft owners who usually approve the existing social and economic organizations. The common wage-and-share based fishers have nothing to do other than comply with the existing social order. Class hierarchy and imbalance in socio-political power structure in the artisanal fisheries sector often tends to keep the caste-based fishers helpless and subservient in a hostile rural socio-political environment.

Table 3. Differentiation within the Fishanry (*analysis excludes commercial trawler owners*)

Coastal areas	Floodplain areas	Remarks
<i>Attributes of differentiation: 1. Caste, ethnicity and social groups</i>		
<p><i>Jaladas</i> (majority), <i>Koibartodas</i>, <i>Rajbanshi</i> and <i>Jolodhar</i>. Within the <i>Jaladas</i> caste, there are several sub-castes. Young fishers have started taking titles (surnames) from other castes with higher social status in order to avoid subjugation of birth-ascribed caste system.</p>	<p><i>Maimal</i>, <i>Jailla</i>, <i>Jaollwa</i>, <i>Baidya</i>, <i>Beparee</i>, <i>Nikaree</i>-all under the broad <i>Ajlaaf/Atraaf</i> socio-religious hierarchy. Leaseholders usually belong to <i>Chowdhury</i>, <i>Syed</i> and <i>Talukder</i> groups with higher status <i>Khandan</i> category.</p>	<p>Some Buddhist <i>Rakhain</i> fishers are involved in coastal fishing. See Deb, 2009 and Pokrant et al., 1997 for details.</p>
<i>Attributes of differentiation: 2. Ownership of craft and gear</i>		
<p>Ownership of mechanized craft symbolizes power and wealth. Craft widely vary from non-mechanized small <i>Kosha/Dingi</i> to small/medium sized mechanized (15-65HP) crafts. Traditional caste-based Hindu fishers mostly use non-mechanized crafts.</p> <p><i>Company</i>: Owner of several 40-65⁺ HP mechanized fishing craft and gear; mostly Muslims; influential and connected to administrative, police and political power sources. Profitably runs capture fishery-based entrepreneurship; maintains own group of ruffians for running business; sends fishing fleets to mid-seas. Unlike subsistence fishers, they hold superior position in the wider society.</p> <p><i>Bahadder/Malik</i>: Usually owner of 1-3 mechanized fishing crafts (15-35HP); mainly Muslims; recruits crews and runs fishing operations directly; can be a moneylender also; determines the marketing channel of his own produce, Usually Hindu <i>Bahadders</i> are economically bonded with powerful Muslim moneylenders.</p> <p><i>Gear</i>: Hindu fishers usually use estuarine/marine set bag net (<i>Behundi</i>) and small to medium mesh drift gill net (<i>Illish Jaal</i>). Muslim fishers usually use multiple pieces of larger <i>behundi</i>, hook and long line (<i>Borshi</i>), gill nets, and small push net (<i>Thela/Mashari Jaal</i>). New entrant Muslims can buy craft with multiple gear.</p>	<p><i>Craft</i>: Mostly non-mechanized wooden fishing crafts irrespective of ethnicity; rarely a few crafts with 2-10HP engines.</p> <p><i>Gear</i>: Small gill nets, traps (<i>Chai</i>), cast net (<i>Khep jaal</i>), small gill net, monofilament 'current net', encircling net (<i>Ber/Jagat/ Dharma Jaal</i>) and lift net (<i>Tola Jaal</i>) are used irrespective of ethnicity. Most of the gear is relatively less expensive; majority of the fishers can manage craft and gear at family level.</p>	<p>Each fishing village typifies a special gear. Use of mechanized fishing craft was demonstrated and popularized through support services from Denmark and the then Soviet governments in mid-70's and 80's. Such schemes helped emergence of a new group of opportunist entrepreneurs, mostly Muslims (see Deb, 2009).</p>
<i>Attributes of differentiation: 3. Labour hierarchy</i>		
<p><i>Hierarchically arranged 'active' fishers</i>: Helmsman (<i>Majhi</i>), senior labourer (<i>Agar Gaor</i>), wage labourer (<i>Gaor/Pounnah/Holla</i>), engineman (<i>Karigor/ Mechanic/Mistiri</i>), and cook (<i>Baburchi/bosti</i>). Given their age-old fishing traditions and indigenous fishing knowledge, Hindu fishers were selected as <i>Majhi</i>. Now, those jobs are mostly taken up by experienced Muslim fishers, rendering Hindu caste-based fishers as surrogates and mostly wage labourers. Some of the ancillary service providers are: ice suppliers and crushers, fishing bait suppliers, trap producers, wooden craft builders and repairers, net weavers, vendors, post-harvest workers, and touts. Some pirates also make livelihoods out of fishery.</p>	<p>Limited hierarchy; mostly family operated. Chief of wage labourer (<i>Korta/Head</i>) and labourer (<i>Naiya/Labour/ Jogali</i>) in case of group fishing. Leaseholders of productive waterbodies are most influential who hire wage labourers for seasonal fishing or total fishing at the advent of dry months.</p>	<p>Both Hindu and Muslim poor women work in the post-harvest sector. In the south-west coast, pirate groups compel craft owners and crews to 'pay' them for fishing in the sea. See CODEC 2007 for details.</p>
<i>Attributes of differentiation: 4. Penetration and flow of capital</i>		
<p><i>Moneylender (Mohajan/ Dadonder/ Sudhkhore)</i>: A very tricky group of Hindu or Muslim with considerable overlapping in roles, who may or may not be directly involved with fishing operations and business. Vigilant; linked to political power and thugs. Moneylenders usually</p>	<p>Usually less number of moneylenders involved. Some remittance earners invest for managing lease of</p>	<p>Moneylenders, as suckers of higher interests from poor fishers, are usually</p>

tend to hide their professional identity. However, they serve some critical social needs of fishers (e.g., dowry money, day-to-day safety), which NGOs fail to do.

productive waterbodies.

disliked socially.

Attributes of differentiation: 5. Marketing structure

Wholesaler and Stockist (Arotder/ Bahadder/ Paiker/Boro Sowdagor): Mostly Muslims; most influential in the marketing chain; have access to storage facilities. Shoulder substantial risks and uncertainty and provide money to craft owners on the condition of fish supply to them at a price fixed by them. *Arotders* can also work as 'commission agents' for selling fish/shrimp to retailers. Employ small boys and labourers for ice crushing, preservation and transportation; vigilant communicator on fish prices; maintain linkage with power sources.

Paiker/Party: Usually Muslims; middleperson between stockist and retailers.

Retailer: Mainly Muslims; control local level fish price; loud mouthed; aware of customer's choice. Some Hindu fisherwomen vend raw and dry door-to-door.

Foria is an intermediary group who purchases fish from the fishers (at land or on water). There are local stockists (*Party/Arotder/Mojutder*) and urban stockists/processors (*Boro Party*) who export fish to European and North American markets. *Foria* can also sell in the retail markets or transfer fish to other retailers.

Also see Alam, 1996; Dastider, 2009; Deb, 2009, and Pokrant et al., 1997 for an analysis of marketing transactions and how fishers negotiate social relations within the dynamic and recursive context of agrarian change.

Attributes of differentiation: 6. Level of involvement

Fishing is seasonal; coastal fishers cannot fish during turbulent monsoon months. However, those engaged in shrimp fry catching can continue throughout the year depending on demand and availability of fry in the wild. Most of the caste-based Hindu fishers are full-time fishers.

Fishing is mostly seasonal; some inland fishers have access to perennial waterbodies. Some fishers switch in between terrestrial farming and fishing.

See Dressler and Fabiny (2011) to examine how swiden farmers shift to grouper fishing in the Philippines.

Attributes of differentiation: 7. Gender involvement

Hindu fisherwomen are actively involved in catching crabs, post-harvest processing, vending, and fishing related rituals. Muslim fisherwomen are engaged in shrimp fry catching and fish processing in the southern coast. Irrespective of ethnicity, families with more sons have possibility of upward economic mobility, compared to those families with more girls that end up paying dowry.

Muslim fisherwomen play limited roles in fish processing and vending. Socio-religiously embedded restrictions hinder their mobility outside village territory.

See Deb and Haque (2011) for details.

Attributes of differentiation: 8. Formal and informal institutions

Informal: An age-old informal male-based institution *Sardery* is very much archetypical of the traditional fishing villages. Serves multiple social activities and acts as mediator of territory allocation for fishing. *Sarder* is considered 'an umbrella in the rain and sun'. *Sarder* and his associates enjoy high honor within the village. There is a network of all the *Sarders* in the southern coastal belt led by the priest of Gorakghata fishing village, Moheskhali. They sit annually to renew leadership and address multiple issues they face.

A 5-member mosque committee comprised of influential and rich landowners keeps the normative order and solidarity. A new group of remittance earners compete with existing power sources. Poor fishers refresh relationships conveniently.

Formal institution's role in fishery's operations and fishers' safety is scanty.

Source: Field study in coastal and floodplain fishing villages.

Another concern emanating from the class hierarchy and transformation of the age-old fishing sector is that traditional fishers' local institutions get ruined if they are disconnected from the aquatic resource base and its territorial management aspects. Nayak and Berkes (2011), from their study at Chilika lake of Odisha, India, observed that a set of social, economic, political and ecological drivers determine the process of 'commonization' and

‘decommonization’ while commonization is supportive and inclusive of fishers’ local institutions, and decommonization³ leads to shift in ownership and management of common’s resources to non-fisher capitalists. The fact that genuine fishers gradually lose their grounds to non-fishers in both coastal and floodplain ecosystems manifest that small-scale fishery and fishanry itself is subject to a steady process of decommonization. The outcome is obvious. Traditional fishers’ livelihoods are threatened (Deb and Haque, 2011) and the very bases of aquatic resources and ecological integrity will be increasingly vulnerable.

5. Fishanry Needs Policy Recognition and Support

Through the intellectual exercises extended in two articles, we analyzed two distinct senses of representations and the dialectical interplay of peasants and fishers. Social and anthropological fields, being dynamic in nature keep changing, thus making room for reconceptualization of peasantry. As Kearney (1996, p. 171) rightly argues: *‘constructed identities are important because of their constituting power...and to label persons or an entire community as a certain type and then to elaborate a theory of their essential social identity is to create a symbolic representation of those persons or that community’*. It is expected that social scientists and anthropologists will examine more into the aspects of differentiated classes of rural Bengal.

While the popular saying, ‘Rice and fish make a Bengali’, and the government’s efforts to increase rice production are appreciable, the fisheries remain an apparently less appreciated sector to the state planners. The constitution of Bangladesh specifically mentions the rights of workers/labourers to unite and function as a bargaining agency. Without long-term efforts and the commitment of the government to create political space and legal entitlements in favour of the fishing communities and their traditional institutions, it would be difficult for the majority of the fishers to ensure sustainable fisheries management and their livelihood well-being. In Bangladesh, fisheries development policies are characterized by predominantly top-down, expansionist, productionist and technology-led approaches, and contents of the policies favour priorities of powerful elite groups at expense of the rural poor (Muir, 2003).

An institutional approach in favour of fishanry emphasizes beyond the biological and economic parameters, or the adoption of a monolithic science-based fisheries management approach. The roles of higher level institutions are critical⁴. There are wide-ranging institutional arrangements (including legislative frameworks, policy instruments, mechanisms

³ Nayak and Berkes (2011) view commonisation ‘as a process through which a resource gets converted into a jointly used resource under commons institutions that deal with excludability and subtractability and decommonisation refers to a process through which a jointly used resource under commons institutions loses these essential characteristics’. Decommonisation offers analytical tool for understanding defisherization and refisherization too.

⁴ Berkes (2000) argues that higher level institutions can have both negative impacts (through the centralization of decision-making, shifts in systems of knowledge, colonization, the nationalization of resources, and increased participation in markets) and positive impacts (through state legitimization of local institutions, enabling legislation, decolonization and revitalization, capacity-building and institution-building) on the local and community-level institutions.

of fishers' participation and decision-making process, information collection, and analysis) which impact fisheries positively or negatively. Over the past decades, various linkages and reforms have been tried, but the examples of successful implementation are extremely limited, and institutional complexities still continue to prevail (Muir, 2003).

There are many instances from South-East Asia and elsewhere which show how informal institutions contribute towards the participatory management of fisheries resources, and that the solutions to many of the current fisheries management problems lie outside the traditional realm (Pomeroy and Viswanathan, 2003). Fisheries management policies have undergone a series of changes, but these changes have mostly ignored the interest of the fishanry, despite the good intention of the modified policies. The political process of policy formulation largely refuses to take into account the aspirations, needs and participation of the common people, who might be impacted by the narratives of the policies. There is a clear need for policy coherence among the different sectors, tuned to the country's national policies and international commitments. Very little attention has been paid by the government and donor agencies towards the long-term functioning of the fisheries institutions and the empowerment of the fishing communities. Mention worthy here, UN-FAO project 'Empowerment of fishing communities for livelihood security, 2001-2005' was remarkably successful in mobilising coastal fishers of 117 villages, and such development model needs replication and wider coverage in the fishing villages.

In Bangladesh, within the Department of Fisheries, the Marine Fisheries wing, which includes artisanal fisheries also, remains a relegated one. A preliminary assessment of human power shows that the inland sector has around 30 times more manpower compared to the marine sector, though the administrative area under the inland sector is far smaller. The allocation of resources is <5% for the marine sector compared to the inland fisheries sector. The government planners keep allowing more industrial trawlers in the sea through different initiatives, though the bases of such decisions are not known to fishers, marine scientists, and other stakeholders. Coastal artisanal fishers complain that the trawlers keep seizing fish and shrimp illegally in the shallow territorial waters, and such reckless activities have tremendous negative impacts on the catches of the artisanal fishers, and on the long-term sustainability of the resources (Excerpt of focus group discussions, January 2010).

The Marine Fisheries Ordinance 1983 was promulgated for marine resource management, but unfortunately, small-scale fisheries are largely unregulated and uncontrolled. The ordinance does not recognize the roles of fishers as a professional class; rather it focuses heavily on the mechanized sector. The official status of the present level of standing and harvestable stock is not known. Simultaneously, genuine fishers have lost control over important fishing territories they used to control for generations. Without serious attention to the interest of the genuine fishers, artisanal fisheries in Bangladesh would be in jeopardy. The following suggestions were made by the coastal fishers at a workshop held in August 2006 at Cox'sbazar district, regarding artisanal fisheries management.

- a. The territorial water spanning from the shore line to at least 5 km should be declared as an 'exclusive fishing zone' for non-mechanized craft, and up to 10 km for small

- horse-powered motorized craft with 5-20 HP engines. The existing rule that prevents trawlers to operate below the 40 m depth zone should be strictly enforced.
- b. The government should expand the surveillance actions of the Navy and Coast Guard to save fishers from pirates, to monitor the basic life-saving appliances in all the fishing crafts, and to enforce a ban during the no-take period declared by the government. Surveillance actions are needed to prevent fishers of neighbouring countries from fishing in the territory of Bangladesh.
 - c. Stern actions should be taken against the users of destructive gear, like synthetic monofilament nets, small-meshed beach seine, encircling net, and the push nets rampantly used for the collection of shrimp fry. Similarly, the catching of excessive 'mother shrimp' by shrimp trawlers should be restricted. The number of industrial trawlers should be reduced immediately. All the existing demersal trawlers should either be banned or converted to mid-water trawls.
 - d. A separate Fisheries Bank (note: there is a national bank exclusively for the farmers, named the Bangladesh Krishi Bank-BKB), or at least special wing of BKB should be launched to save fishers from rural moneylenders.
 - e. Regulate the entry of new fishers and more development projects for the socio-economic betterment of fishers should be undertaken.
 - f. Steps for extensive community-based mangrove plantations along the coastal belt should be undertaken for resource conservation and for the safety of coastal villages from cyclones.
 - g. Pollution from multiple land-based sources should be abated.
 - h. Government should encourage the participation of genuine fishers for devolving management plans and enforcement activities. Existing informal local institutions should be legally recognized, and support centres for the artisanal fishers should be opened in all the 47 coastal sub-districts.
 - i. Common action strategies need to be adopted by India, Sri Lanka and Myanmar for the management of transboundary fish *Hilsa* in the Bay of Bengal.

Two recent verdicts from International courts put Bangladesh in an added advantageous position for its territorial jurisdiction over the Bay of Bengal of the Indian Ocean. The country has recently settled her longstanding maritime boundary related disputes with two influential neighbors- Myanmar and India. The Hague-based Permanent Court of Arbitration allotted Bangladesh 19,467 Km² out of total 25,602 Km² disputed area with India, and the Homburg-based International Tribunal for the Law of the Sea awarded 111,000 Km² in favour of Bangladesh's claim of 107,000 Km² in the Bay of Bengal. Bangladesh now administers around 1,18,813 Km² of marine water comprising her territorial sea (12 nautical miles) and Exclusive Economic Zone (extending out to 200 nautical miles). This means that the country has to develop a well-orchestrated action plan for the exploration and exploitation of the marine resources therein. The challenging issues of artisanal fisheries management

deserve proper attention and undertaking a pro-fisher participatory management strategy is a must for the sustainable development of the artisanal fisheries. This is an institutional challenge also. Government policy makers must keep in mind that fisheries governance and livelihood security of the fishers go hand in hand which require coordination and structured linkages both vertically and horizontally. Jurisdiction over more deep sea areas should not end up in politically-driven decision for more commercial trawlers. Before any such decision is taken, its long-term consequences should be carefully evaluated, and especially the livelihood interest of the poor fishers should always be given a priority.

Finally, does the recognition of the fishantry bear an extra impetus for them? It is difficult to be conclusive about the answer to this question, and much more would depend on the capacity of the fishers to raise their voices and the political commitment of the government. The level of changes that the existing government institutions undergo to share power, authority, responsibility and information for managing the fisheries is critical for fisheries management and the fishers' well-being (Pomeroy and Viswanathan 2003). There are some positive lessons that have been learned from the cases of training, extension and support services for the peasantry in Bangladesh. Compared to other professional rural inhabitants, peasants in Bangladesh have been specially recognized and advantaged in the arenas of the constitution, policies, legal institutions, facilities and budgetary allocations. There are specialized service sectors for facilitating means of agricultural production, including special provisions of low-interest loans from the commercial state banks for the peasants. Accordingly, it is logical to expect that recognition of fishantry by the government as a specialized professional and social group would have far reaching effects on their socio-economic betterment and political empowerment.

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