



Towards Sustainable Development of Coastal Fisheries Resources in Bangladesh: An Analysis of the Legal and Institutional Framework

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Received 21 September 2016
Accepted 31 January 2017

Abstract

The coastal fisheries resources area of Bangladesh is located between the inland and marine fisheries area, but there is no legislation that limits the boundary of coastal fisheries region. The aim of this paper is to examine the regulatory regimes that govern the coastal fisheries resources in the country, especially the policies, laws and institutional mechanisms. We identified that the existing fishing practice in the coastal waters is not an inconsistency with the present legal norms. The legal definition of Bangladesh fisheries water excludes the coastal area below at 18.29 m depth, and jurisdiction over shallow areas to regulate fishing activities is not clear. Conflict of the jurisdiction of authority has led to a confusion regarding the implementation of regulations on licensing and registration of vessels as well as the prescribed fishing practices and use of fishing gears. Besides that, institutional setup for sustainable use of coastal and fishery resources are existing, but the enforcement efforts by the different sectors are uncoordinated, competing and sometimes even adversarial. We conclude that, government must enact a comprehensive legal framework for the proper management and utilization of its resources for the purposes of the sustainable development of the country and well-being of its population.

Keywords: Artisanal fisheries, national fisheries policy 1998, the protection and conservation of fish act 1950, the marine fisheries ordinance 1983, department of fisheries.

Introduction

The littoral area of Bangladesh encompasses the second important delta of the world, just afterward the Amazon (Department of Environment, IUCN, Bangladesh Center for Advanced Studies, 2006). The coast of Bangladesh is 710 km long (CZPo, 2005). Being a coastal rich country, people living near the coast have always relied on the wealth from the Bay of Bengal (BoB) (FAO, 2014). The coastal and marine zone of Bangladesh is one of the world's richest ecosystems having high biodiversity and characterized by higher productivity and unique mangrove influences (Islam, 2003). Coastal fish and fisheries are one of the major parts of the total country fisheries production contributing 60% of our daily animal protein, and also contributing to the economic development (Bangladesh Economic Review, 2016). About 5,08830 people of coastal area are directly dependent on fisheries (FRSS, 2016). About 475 coastal and marine species and 36 shrimps are available in the BoB (DoF, 2016).

A recent report on coastal fisheries in Bangladesh shows that catch per unit fishing effort is falling, and several species of marine shrimp and fish

stocks are in decline (Hussain & Hoq, 2010). At present coastal fisheries are facing many problems such as overfishing, indiscriminate killing of juveniles, pollution, disease defectives and insufficient fish conservation laws, inadequate knowledge etc. (Planning Commission, 2015). Noncompliance with fishing rules and regulations and the attempts of coastal fishers to support their livelihoods by any means possible, result in increasing fishing pressure, use of destructive fishing methods and gears, and a tendency to fish whatever is available, including larvae and juveniles (Murshed-e-Jahan, Belton, & Viswanathan, 2014). This causes serious damage not only to coastal fishery resources but also creates conflict between fishers and other resource users (Hussain & Hoq, 2010; Islam, 2004).

There is no any specific specialized policy and law for management and regulation of coastal fisheries in Bangladesh but some common laws for fisheries by which the fisheries of the coastal area is regulated. For fisheries management, a number of laws, rules and policy are in place but the implementation of these laws and policies often face conflicts as well as non-compliance by the stakeholders that result in poor governance (Islam,

2016). Coastal and marine fisheries of Bangladesh are not being well managed, one of the reasons include the laws are not properly implemented (Rahman, Chowdhury, & Sada, 2003). This paper seeks to broadly understand the major features of important fisheries related policies and laws that govern coastal fisheries exploitation and conservation. It also investigates implementation realities of the legal and institutional framework for developing a proper legal and policy framework for utilization and conservation of coastal fisheries resources.

Materials and Methods

A combination of participatory and qualitative methods has been used for primary data collection from February 2016 to April 2016. A total of 150 individual interviews have been conducted, using a semi-structured questionnaire consisting of questions regarding coastal zone, coastal fisheries resources, legal issues, legal authorities, fishery policies, acts and ordinances in Bangladesh etc. Interviews lasted about 50 minutes on an average and occupation of interviewees ranged from fishermen of both sexes from boat and gear owner to the moneylender. Fifteen government officials were also selected as interviewee from different tiers of the Department of Fisheries (DoF) (Marine Fisheries Office, Chittagong) and Bangladesh Fisheries Research Institute (BFRI) (Marine Fisheries Station, Cox's Bazar) who were directly involved in the sustainable conservation of coastal fisheries resources of Bangladesh. Key informant interviews have been conducted two to three times with each person, each time lasting about 30 minutes. A total of 12 key informants has been interviewed on a number of core issues covered by the in-depth interviews. The interview data were written down instead of using tape recording in order to avoid uncomfortableness of the interviewee from tape recording. In case of contradictory information, further assessment was carried out.

A Concise Description of Coastal Region of Bangladesh

The coastal land zone extends over 32% of the country, and includes 147 upazila under 19 districts comprising 26% population of the entire country (Figure 1) (CZPo, 2005). It covers an area of 47,150 km² with a population of 38.5 million resulting in an average population density of 817 persons per km² (BBS, 2011). The delineation of the coastal zone is based on salinity, cyclonic storm surge and tidal amplitude. Because of the diversity of conditions across the coastal zone, it is useful to subdivide it into four areas as South West (Ganges Tidal Floodplain–West), South Central (Ganges Tidal Floodplain–East), South East (Young Meghna Estuarine Floodplain) and East and Hill (Chittagong Coastal Plains) (Brammer, 2014). The world's largest uninterrupted stretch of mangrove ecosystem, the Sundarbans, has been declared world heritage site in 1997, whereas coral ecosystems are found around St. Martin Island in the coastal area of Bangladesh (Hoq, 2007).

An Overview of the Coastal Fisheries Resources

The BoB of Bangladesh is blessed with rich coastal and marine ecosystems, hosting a wide range of biodiversity, such as fishes, shrimps, mollusks, crabs, mammals, seaweeds, etc. (Table 1) (FAO, 2014). The fisheries sector plays a very important role in the national economy by contributing 3.69% to the Gross Domestic Product (GDP) of the country and almost one-fourth (23.12%) to the agricultural GDP (FRSS, 2016). The coastal and marine fisheries resources of Bangladesh keep a crucial role in the economy of the country contributing about 16.28% of the total fisheries production of 3.68 million metric ton (MT) during 2014-15 (Figure 2) (FRSS, 2016). The newly settled maritime boundary with neighboring states Myanmar and India up to 200 nautical miles from the coastline comprising of 11.88



Figure 1. Map of the coastal Zone of Bangladesh (Source: Chowdhury, 2015).

Table 1. Coastal and marine fisheries resources of Bangladesh (source: FAO, 2014)

Category	Number of species (reviewed by)		
	Hossain 2001	Islam 2003	Ahamed <i>et al.</i> 2012
Bony fish	475	475	442
Cartilaginous (soft-boned) fish	50	–	–
Shrimp	25	24	56 ^a
Crab	15	50	16
Lobster	5	–	3
Mollusc (Oyster)	301 (6)	301 (3)	336
Algae/Seaweed	56 ^b	20-22 ^c	168
Coral	13	–	66
Starfish/Echinoderms	3	–	4
Whale/Dolphin	11	–	–
Squids (Cuttlefish)	–	7 (2)	–

^aShrimp/Prawn; ^bAlgae; ^cSeaweed.

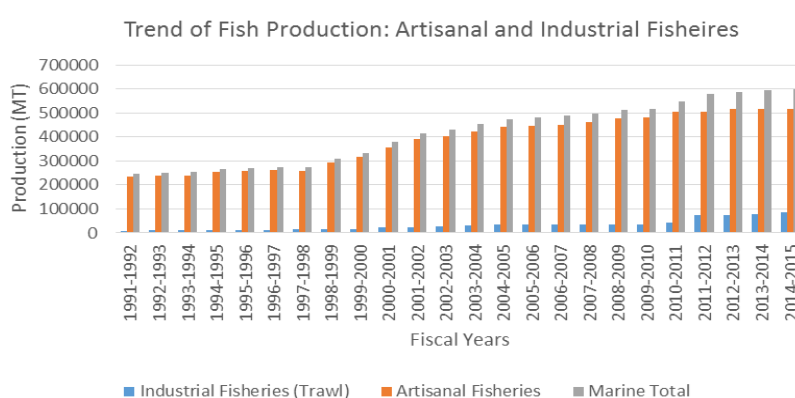


Figure 2. The yield of artisanal and Industrial fisheries production in Bangladesh from 1991-1992 to 2014-2015 (Source: DoF, 2015).

million hectares of maritime waters, which has huge potential for marine fisheries in artisanal, industrial and coastal sub-sectors (MoFA, 2014). A large part of the coastal area is suitable for shrimp farming particularly of black tiger shrimp (*Penaeus monodon*) identified by the government as a priority area. Hilsa is the largest single fishery in the open waters of Bangladesh both in inland and marine sectors.

The Legal, Institutional and Policy Framework for Sustainable Coastal Fishery

Legal and Policy Framework

It is difficult to find out the existence of coastal fisheries in term of legal identification, though it possesses identical features. This predicament also applied to finding regulatory issues in the term to having a separate legal arrangement (Ehsanul, 1999). There is a conflict between the jurisdiction of inland laws and marine laws in the application in the coastal areas (Figure 3). There are some inland laws, marine laws and legal authorities, which are being applied to coastal fisheries, directly or indirectly, in our country (Ehsanul, 1999). All of these legal instruments are namely The Protection and Conservation of Fish Act 1950 and Rules 1985; The Marine Fisheries

Ordinance 1983 and Rules 1983, and National Fisheries Policy 1998. The legal guidelines which have direct and indirect nexus and relating to coastal fisheries are discussed below.

The Protection and Conservation of Fish Act, 1950 and Rules 1985

By the Protection and Conservation of Fish Act, 1950, the national government is empowered to make rules and regulations. The law has the provision for punishment for violation of any rules of this Act. Under section 3 and 4, a person shall be punishable with rigorous imprisonment for a term, which shall not be less than one year and may extend to two years, or with fine, which may extend to five thousand takas or with both. Under first clause of section 4 a person shall be punishable with rigorous imprisonment for a term which shall not be less than three years but not exceeding to five years with fine not exceeding ten thousand taka and under second clause of section 4A a person shall be punished with rigorous imprisonment for a term which shall not be less than one year and may extend to three years, or with fine which may extend to five thousand takas or with both.¹

In endeavor of the powers conferred by using

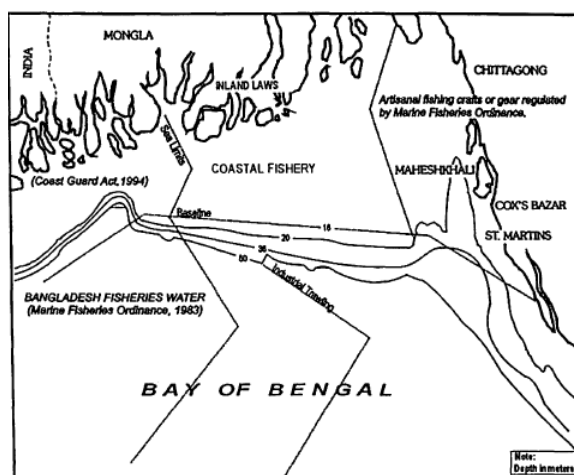


Figure 3. Coastal fishery jurisdictions in Bangladesh (source: Ehsanul, 1999).

section 3 of the Protection and Conservation of Fish Act, 1950, the government has made this rule named the Protection and Conservation of Fish Rules, 1985, control the licensing of fishing in marine waters. The rules contain 11 sections about various measures of protection and conservation and 2 schedules specifying waters in which the catching of certain fish species is prohibited without a valid licence, specifying fish species of which the catching or sale in certain periods is prohibited, and containing a form of a licence for catching of carps in the defined prohibited waters. Regulation 3 prohibits the erection of fixed engines in rivers and canals. No fish shall be destroyed by making use of poison or explosives (regs. 4 and 5). Licenses issued under regulation 8 shall be issued only for purposes of pisciculture. Some of those rules are directive, a few of them mandatory and some of them are prohibitory. Under this provision, the government has made some rules regarding the use of fixed engines, development of dams and embankments, use and manufacture of fishing net, prohibition of the use of any the destructive and explosive for catching fish, prohibited season and size of catching fishes.¹ However, the jurisdiction of this instrument is limited from the 18.29 m depth line to the limit of territorial waters. This excludes shallow waters where shrimp fry catching occurs (Hoq, 2007).

The Marine Fisheries Ordinance, 1983 and Rules 1983

Under the provisions of the ordinance, the Marine Fisheries wing of the DoF is authorized to handle concerns in terms of marine fisheries exploitation, licensing and monitoring of fishing vessels, management, and conservation of marine fisheries, supervision and development of marine fisheries. There are some provisions regarding native fishing vessel including the provision of giving license of the domestic fishing vessel and prohibited activities. Though these provisions do not mention

directly about the application in coastal fishery but these can be used indirectly in the case of coastal fishing. This ordinance has also mentioned some prohibited activities.¹

In exercise of powers conferred by section 55 of the Marine Fisheries Ordinance, 1983, the government has made this rule named The Marine Fisheries Rules, 1983, and amended in 1993. Those rules have described the process to file an application for license in case for domestic vessel and foreign fishing vessel, format of license, amount of fee for the application of license, conditions for application for license, time for which the license shall be granted, size of net which shall be used for fishing, area of fishing, prohibited method of fishing.¹ Allowed fishing areas are determined according to the type of fishing gear used, for example, for fishing with set bag nets, up to 40 meters depth in marine waters at the high tide.

National Fisheries Policy, 1998

National Fisheries Policy was adopted in 1998, where objects of this policy, legal status and range of application of the national fisheries policy have been defined. This policy has described the strategy for procurement of fish for releasing purpose in the open freshwater bodies; fish culture and management policy in closed water bodies; coastal fisheries and aquaculture policy; marine fisheries resource development, exploitation, and management policy. The policy encouraged optimum utilization of coastal and marine resources to meet the demand for animal protein, to promote economic growth, and to earn foreign currency through export of fish and fishery products. Under this policy, natural water bodies and marine biodiversity shall be protected. Prohibition on fishing shall be imposed on trawlers in coastal marine areas below the 40 m depth line. The regulation shall be imposed on the use of the set bag net (locally called *behundi*) which is responsible for the destruction of juvenile shrimps and other fish species

(Article 8.2.2). Estuaries, rivers, and canals get highly populated with shrimp fry through larval migration. To protect the shrimp population, catching of certain species of shrimp (*bagda*, *chaka*, *harina*) from the breeding ground shall be prohibited (Article 8.2.3).

Prohibited Activities in Coastal Water Fishery

As there is no any specific law and legal authority to regulate coastal fishery issues in Bangladesh, the coastal region is regulated by both inland and marine laws. Some activities have been prohibited in the coastal regions in relation to the aforementioned inland and marine laws which can be also applicable to the coastal fishery. Some of those are as follows:

The Protection and Conservation of Fish Act of 1950 & Rules, 1985

The following activities are prohibited according to the provisions of the protection and conservation of

fish act of 1950 and rule 1985 (Table 2). The act mainly states about the illegal methods of fishing, fish species that cannot be caught during a particular season, mesh size of the fishing nets, prohibition regarding carrying, transporting and possessing for sale of fishes below the recommended size. The DoF enforces the law through its local administrative units having the territorial jurisdiction over the water bodies where the violation takes places.

The Marine Fisheries Ordinance 1983 & Rules 1983

There are some prohibited activities under the Marine Fisheries Ordinance and Marine Fisheries Rules which can be applied indirectly in the coastal area are presented in Table 3.

Institution Relating to Fish and Fisheries

The fisheries sector is characterized by complex institutional and governance issues, engaging a mix of

Table 2. Prohibited activities of the Protection and Conservation of Fish Act 1950 and Rules 1985 (source: DoF, 2016)

Prohibitions	Sections and Rules	Power to Responsible Person
Erection or use of fixed engines	Rule 3	The Act delegates power to take
Destruction of or any attempt to destroy fish by explosives, gun, bow and arrow in inland waters or within coastal territorial waters	Rule 5	legal action to the following persons:
Destruction or any attempt to destroy fish by poisoning the water or the depletion of fisheries by pollution by trade effluents or otherwise in inland waters	Rule 6	•Magistrates do not blow the rank of the second class.
Catching or destruction of certain species of fish during specified period	Rule 7	•Police officials not below the rank of Sub-Inspector of police.
Selling, offering or exposing for sale of certain fish species below specified size during a specified period	Rule 9	•FD officials not below the rank of Deputy Ranger in the Sundarbans.
Operation of any kind of fishing net in violation of laws and using nets having mesh size below the size prescribed by law	Rule 12	•Fishery officers not below the rank of Upazilla Fishery Officer (UFO).
The government is also empowered to formulate rules for imposing prohibition regarding the following matters : Manufacturing, importing, marketing, carrying, transporting or possessing of such fishing nets, traps, gears and other contrivances as specified and	Section 3.iv	
Any attempt to destroy the fishes drying or dewatering of any fishery	Section 3.g	

Table 3. Prohibited activities of the Marine Fisheries Ordinance 1983 and Rules 1983 (source: DoF, 2016)

Prohibitions	Sections and Rules	Power to Responsible Person
Catching of fish by local mechanized and non-mechanized fishing vessels in areas outside the zones declared for such purpose by the government	Section 3.2	Under the provisions of the ordinance, the marine fisheries wing of the Department of Fisheries is authorized to deal with matters relating to marine fisheries exploitation, licensing and monitoring of fishing vessels and enforcement of the rules of the Ordinance. The Marine Fisheries Rules amended in 1993, provide for licensing and monitoring of artisanal mechanized fishing boats. Verification of license, approved fishing gears, fishing log, fishing area and period of fishing and mandatory landing of shrimp and fish are usually undertaken during an inspection by the Inspectors of the Marine Fisheries Office. The Bangladesh Navy inspects trawlers and mechanized boats at sea to verify legal documents and fishing gears.
Catching of fish by fishing vessels with an invalid fishing license	Section 13	
Use or attempt to use any prohibited methods of fishing as prescribed under any rule made under MFO	Section 26.c	
Destruction of any fish, fishing appliances, explosives, poison or other noxious substances or any other thing with intent to avoid seizure	Section 44	
Fishing operations in violations of conditions imposed while issuing fishing license	Rule 7	
Catching of species and quantities of fish not mentioned in the fishing license	Rule 7.c	
Use of fishing methods or gear against the manner stated in the fishing license	Rule 7.c	
Catching of fish using trawl net below the 60 mm mesh size at the cod end	Rule 14.b	
Catching of fish using large mesh driftnet below the 200 mm mesh size	Rule 14.c	
Catching of fish using set bag net below the 30mm mesh size at the cod end	Rule 14.e	
Fishing operation employing set bag net beyond the 40 mm depth at its highest tide of marine water and	Rule 15.2	
Fishing operation with drift net for catching ilisha and fishes beyond the 40 m depth at its highest tide of marine water	Rule 15.3	

formal and informal institutions, public, private and civil society sector agents, and involving arrange of linkages across sectors and areas of responsibility. Several organizations and institutions are involved in fisheries development and management in Bangladesh (Figure 4). Ministry of Fisheries and Livestock (MOFL), Government of Bangladesh is the main administrative agency responsible for formulating fisheries policy and development strategies. Under MOFL there are four agencies namely (i) Department

of Fisheries (DoF), (ii) Bangladesh Fisheries Research Institute (BFRI), (iii) Bangladesh Fisheries Development Corporation (BFDC) and (iv) Marine Fisheries Academy, each with specific functions and responsibilities for development and management of the coastal fisheries sector (Table 4).

Ministry of Fisheries and Livestock (MoFL)

The Ministry of Fisheries and Livestock (MoFL)

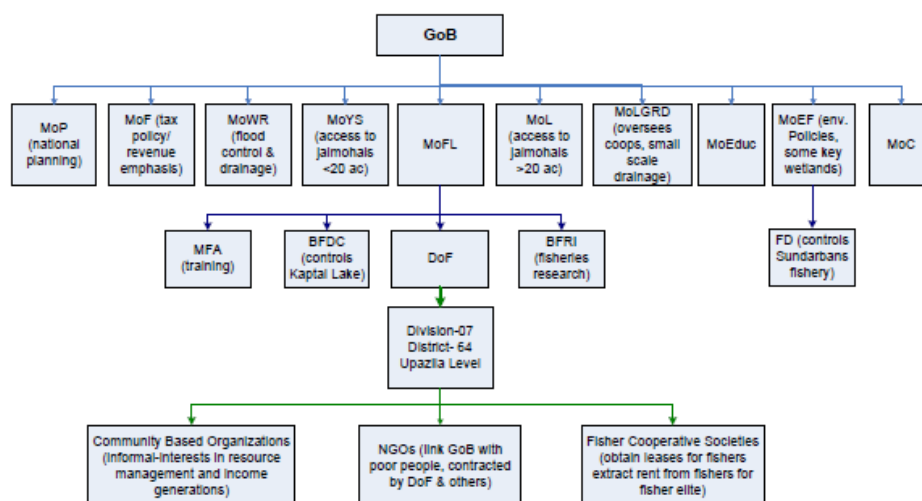


Figure 4. Institutional links in the fisheries sector (source: Ali, 2003).

Table 4. Governmental agencies involved in fisheries management and conservation

Ministries	Institutions	Activities
Ministry of Fisheries and Livestock (MoFL)	Department of Fisheries (DoF)	Extension, management, project implementation, training and human resource development, enforcement of laws and regulations, conservation, quality control, registration & certification, fishing licenses, fisheries awareness building and motivation, support to policy formulation, administration, etc. Marketing, production, training, etc.
	Bangladesh Fisheries Development Corporation (BFDC)	Marketing, production, training, etc.
	Bangladesh Fisheries Research Institute (BFRI)	Fisheries and other aquatic animal-related research and training
	Fisheries and Livestock Information Department (FLID)	Fisheries and livestock-related information dissemination
Local Government, Rural Development, and Co-operatives	Upazila Administration	Management of water bodies less than 20 ha, field level supervision and management of fisheries resources, etc. Fisheries components of integrated rural development
	Rural Development Board	Fisheries components of integrated rural development
	Directorate of Co-operatives	Registration and Supervision of fishermen co-operatives
	Bangladesh <i>Jatiya Matshyajibi Samabay Samiti</i> (BJMSS)	Development of fishermen co-operatives and facilitate of procuring ice plants and import of gears
	Bangladesh Samabay Bank Ltd.	Financing fishermen's co-operatives
Ministry of Shipping	Mercantile Marine Department	Registration of fishing vessels, boats, and crafts
Ministry of Planning	Fisheries Section	Planning and approval of fisheries sector projects and monitoring and evaluation of different projects

was formed in 1985 when the Fisheries Division and Livestock Division were carved out of the Ministry of Agriculture. A Minister appointed through the heads MoFL. A Joint Secretary, a Deputy Secretary, three sections and a small planning cell are responsible for the following: preparation of schemes and coordination of national policies in relation to fishiness; prevention and control of fish diseases; control, management and development of government fisheries and conservation of fish and other population of aquatic organisms of economic importance; all matters relating to marine fisheries like permission, licensing and monitoring of operations of fishing vessels, including factory ships; fishing and fisheries beyond territorial waters (including deep sea fishing), fish harbor, fish quality testing, laboratories and other ancillary organizations; and utilization of coastal land for brackish water shrimp culture.

Department of Fisheries

After the independence of Bangladesh in 1971, the Central Fisheries Department of former Bangladesh (East Pakistan) was merged with the DoF of Bangladesh in April 1975¹. Later on, in 1984 Central Marine Fisheries Department was merged with the DoF as a Marine Fisheries wing. The Department of Fisheries is overseen by the Ministry of Fisheries and Livestock. Its Director General is assisted by three Directors and two Principal Scientific Officers (equivalent to Director). It has more than 1500 technical officers and supporting staff at various levels of its hierarchy. Bangladesh's administration divides the country into 7 divisions, 64 districts and 485 upazila or sub-districts, and the Department of Fisheries has departments at each level headed by a Deputy Director, District Fisheries Officer and Upazila Fisheries Officer, respectively. Besides, DoF has fish inspection and quality control stations, marine fisheries stations, fisheries training centers, farms, and hatcheries. The Department's mandate includes assisting the Ministry of Fisheries and Livestock to formulate policies, acts and so on.

General Institutional Arrangements

Although DoF can be seen as a key element in the institutional environment, many other institutions are directly or indirectly involved in or impact upon the fisheries sector, its resource base, and associated livelihoods. Figure 4 provides a simplified outline of key formal institutions; to these must be added the many informal processes and interactions, customary or newly emerging, which constitute the wider institutional environment. At the macro level, many formal institutions have an impact on the sector, broadly grouped into those with an overarching role across sectors, such as the Ministries of Finance and Planning, and those with a more direct impact such as the Ministry of Land, and Ministry of Water

Resources. Many other ministries, such as those concerning health, social welfare, and education also have relevance to fisheries communities and their livelihoods.

Reason to Enact Separate Law for Coastal Area

There are some laws indirectly relating to our coastal fisheries, but those laws can not ensure the proper utilization, and management of coastal fisheries resources because of the following factors: inconsistency with other policies; lack of inter-sectorial coordination; lack of regulatory and institutional capacity; outdated environmental laws as well as ignorance about these laws; non-punitive approach of laws and lack of public awareness. As a result, production of fish is reducing day by day; huge number of fish has been enlisted to endangered species; many coastal areas of Bangladesh are already declared as a protected area, such as Himchari, Nijhum dwip, the Sundarbans, Sonadia, Teknaf, St. Martin Island because of their vulnerable situation (Islam, 2004). Already, the near-shore fisheries areas of the Bay of Bengal are believed to be overexploited which reflected in the fact, as catch per unit fishing effort is falling and several species of marine shrimp and fish stocks are in decline (Hussain & Hoq, 2010). Mainly, use of some destructive gears such as set bag nets, monofilament gillnet is blamed for destructive fishing, particularly fishing of undersized fishes. Another reason of this overexploitation is the extensive shrimp fry collection. It is estimated that during wild collection of 1 million *P. monodon*, an estimated annual loss of 75.75 million non-target fin and shellfish larvae occurs (Quader, 2010). Particularly, in hilsa sanctuaries fishers often-violent ban season prohibitions and continue to use a banned monofilament gillnet. Hence, Murshed-e-Jahan *et al.* (2014) argued that the noncompliance with fishing rules and regulations are increasing fishing pressure, use of destructive fishing methods and gears, and a tendency to fish whatever is available, including larvae and juveniles. Pollutants from the point and nonpoint sources often find their ways to be in the coastal region of Bangladesh. Some point sources are ship breaking activities in Chittagong, municipal wastes of Khulna City (about 120-130 tons of wastes) (Hossain, 2006), and municipal wastes from Chittagong City through Karnaphuli river. The coastal population of Bangladesh has doubled since the 1980s, now reaching more than 16 million (approximately 10% of the total population), most of which are experiencing both poverty, and vulnerable to rapid experimental changes (Fernandes *et al.*, 2016).

Principles Should be for Coastal Laws

As it is the demand of the time that, there should be separate laws for the coastal area, therefore,

following principles should be considered at the time of making laws for the coastal area: sustainable development of resources; equal distribution of resources; prevention of harmful impact on the natural environment; adoption of precautionary measures; recovery of destroyed natural environment; "Polluter pays" and "user pays" development of remote areas; protection of ecologically fragile areas, threatened ecosystems, and also habitats and species; compatibility of various kinds of coastal zone use; priority in the development of the kinds of activities dependent on the coastal zone; unrestricted access to the shore. Undeveloped coast is a non-renewable natural resource; conservation of these resources are possible through implementation of a sustainable development concept, development of the coastal zone is not restricted to recreational users, landowners, and local authorities; economic interest in the coastal zone is much more widely spread than this.

Conclusion and Recommendation

The vast coastal and marine resources of Bangladesh is known as one of the highly productive areas of the world (Afroz & Alam, 2013). The overall objective of this research is to criticize the elements that are instrumental in formulating the rights and rules, which provide the legal, institutional and policy framework for the implementation coastal fisheries resources. The existing laws defining the country's coastal fishery and regulating the exploitation of resources are flawed; thus prone to legal circumvention. The Marine Fisheries Ordinance, 1983 has a lacuna in demarcating the area from an 18.29 m depth line to the limits of the territorial sea where destructive fishing practices are very common. The Protection and Conservation of Fish Act, 1950 is the act currently in practice for regulating inland fishing practices and may have questionable application to the area. In spite of possessing institutional setup for sustainable use of coastal fishery resources, conflict of jurisdiction and overlapping of functions of authority has led to confusing situations regarding the appropriate departments to implement fishery regulations. However, the government of Bangladesh has been taking some important initiatives such as enactment of laws, formulation of new policies and action plans for sustainable development of coastal fisheries.

The study also provides a set of recommendations for an appropriate legal and policy framework for conservation and development of living coastal fisheries resources in Bangladesh. These recommendations include effective ban the production of current jal (monofilament gillnet), elimination of corruption, effective ban on the use of illegal fishing gears, increase manpower to laws enforcing agencies, increase fishers' awareness about the benefits of abiding laws, need for introduction of

juvenile's preservation fish act and amendments in existing laws, need for institutional harmonization, strict enforcement of current laws, awareness in fishermen obeying laws as well as need for public awareness. At present, there is now separate policy and law for coastal fisheries. So, government badly need to implement new acts, rules and regulations must be given preference relating to coastal and marine fisheries in the country in the legal system. In the case of developing a comprehensive legal framework, cultural, social and economic barriers of the targeted communities need to consider. Better coordination among executive agencies by removing gaps and problems could be another imperative step. Removing institutional weakness by appropriate logistic support is also required. In every policy making, the concerned community should be consulted with. Finally, ensuring good governance at each step is a fundamental requirement for sustainable utilization and management of coastal living resources for achieving far-reaching development objectives for people's wellbeing in the era of blue economy.

Acknowledgements

The study was a part of the first author's PhD study funded by the China Scholarship Council (CSC). Finally, we acknowledge two anonymous referees and editor for valuable suggestions that highly improved earlier versions of this paper and completing my study. The views and opinions expressed herein are solely those of the authors.

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