



# BANGLADESH NATIONAL CONSERVATION STRATEGY



## LEGAL ASPECTS

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## 1.1. GENERAL

In the review processes of the draft Bangladesh National Conservation Strategy, this report aims to identify the scope, gaps, and constrains of existing legal and policy frameworks in Bangladesh related to environment, natural resource management, climate change and sustainable development with a view to provide some policy guidance for necessary amendments/enactments at regulatory regime within the framework of Bangladesh National Conservation Strategy. In this policy assessment process, the report, will take into consideration of the related provisions of international treaties and conventions on the environmental conservation, natural resource management, climate change and sustainable development in order to explore the right national approaches within the context of Bangladesh.

## 1.2 METHODOLOGY AND STRUCTURE OF THE REPORT

Considering a specific country context, an appropriate legal and policy framework with effective monitoring and compliance mechanism can help to reduce environmental damage and to promote environmental sustainability, sound natural resource management and sustainable development. However, to explore the appropriate legal and policy frameworks, it needs to identify the scope, gaps, and constrains of existing legal and policy frameworks and based on such assessment further steps needs to be taken to amendments/enactments of legislations and policies. So, this report, takes three-step methodology for exploring the appropriate legal and policy approaches within the framework of the National Conservation Strategy, as follows:

- Assessing the existing legal and policy frameworks
- Identification of the policy gaps, and
- Recommending the strategy for policy reforms

In accordance with the selected methodology, this report will review the existing policies and legislations at the outset and thereafter it will identify the scopes, gaps and constrains. This report will be concluded with some policy recommendations with strategic approach to reform the existing policies and legislations.

## 2.1 LAWS AND POLICIES REGULATING ENVIRONMENT AND ECOLOGY

The Constitution of Bangladesh was adopted in 1972, and part three of the Constitution guarantees the basic human rights including the Right to Life<sup>1</sup>, which has been extended to include Right to Environment through judicial interpretation in 1997.<sup>2</sup> Consequentially, under the right to a safe environment, some Public Interest litigations (PILs) were filed before High Court Division of the Supreme Court of Bangladesh and environmental harm was frequently discussed and elaborated on by the higher judiciary in such PILs, which also influenced to develop further environmental laws in Bangladesh. Recent amendment to the Constitution of Bangladesh incorporated the provisions on environment and natural resource management, which states that, the State shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens.<sup>3</sup> However, this provision is incorporated in part two of the Constitution within Fundamental Principles of State Policy.

In 1995, the GoB adopted a comprehensive environmental law called the Bangladesh Environment Conservation Act, which provides directions and legal bindings for conservation of the environment, improvement of environmental standards and control and mitigation of environmental pollution. It established the Department of Environment (DoE), and outlined the structures and functions of DoE including to issuing environmental clearance certificate, taking legal actions for environmental pollution and damage, declaring ecologically critical area etc. The Act also provides the standards for management of water, air and soil and defines certain environmental damages and offences and prescribes punishment for them.<sup>4</sup> Subsequently the Ministry of Environment and Forest (MoEF) has adopted a number of Rules under this Act, including the Environment Conservation Rules of 1997 and also established environmental courts in Bangladesh.

The Environment Conservation Rules, was adopted in 1997, which provided detail guidelines for the implementation of the Act of 1995. The Rules provided detail guidelines for management of ecologically critical areas (ECA) in Bangladesh. It provided also detail provisions for Environmental Quality Standard (EQS) for air, water and soil management in Bangladesh. It also categorized all the industries and development projects in different categories for the purpose of obtaining Environmental Clearance Certificate and Environmental Impact Assessment (EIA). It provided guidance for controlling emissions from transport that injurious to health and environment and also outlined the detail processes

<sup>1</sup> Article 31 of the Constitution of Bangladesh, 1972

<sup>2</sup> The appellate Division (1997) 49 DLR (AD)

<sup>3</sup> Article 18A, the Constitution of the People's Republic of Bangladesh, 1972; Fifteen Amendment-2011

<sup>4</sup> Sec. 7 & 15, of the Bangladesh Environment Conservation Act, 1995

for issuing of Environmental Clearance Certificate.<sup>5</sup> Moreover, Environment Court Act 2000 (amended in 2010) established the environmental courts at the district levels and defines the jurisdiction of the courts and nature of offences and punishments. However, monitoring and compliance mechanisms remain very weak in the basic environmental regulatory regime due to comprehensive legislative approaches and inadequate institutional structures in particular for mitigation and management of environmental damage and also for addressing the environmental damages.

The Environment Policy, was adopted back in 1992, which provides policy guidelines for fifteen sectors including agriculture, industry, health and sanitation, energy, water land, forest and biodiversity, fisheries and livestock, food, coastal and marine environment, transport, housing, population, education, awareness, science and research and identifies the relevant institutions that are to implement the Policy. The Policy emphasizes the need for amending the existing laws and regulations, formulating new laws and implementing the same for protection of environment, conservation of natural resources and control of environmental pollution and degradation. The Policy also suggests that the government of Bangladesh ratifies all concerned international laws/ conventions/ protocols, which Bangladesh considers ratifiable, and amend/modify existing national laws/ regulations in line with the ratified international laws/ conventions/ protocols. However, The Policy does not address the climate change related issues, which is one of challenges for environment and natural resource management and development process in Bangladesh.

## 2.2 LAWS AND POLICIES REGULATING WATER RESOURCES

The Bangladesh Water Act, is adopted recently in 2013 and provided a comprehensive framework for water resource management in Bangladesh. It provided regulatory provisions related to integrated development, management, abstraction, distribution, use, protection and conservation of water resources. It also outlined the institutional structures for water resource management and suggested to form the 'National Water Resources Council (the Council)' as to the highest decision making authority. The Council is structured further with an Executive Committee, which is made responsible to maintain normal flow of water, to protect water zones, to tackle crisis of drinking water and to issue Clearance Certificate for any development project relating to water resources. Under the Act any area facing critical situation can be declared as 'Water Stress Area' and can be demarcated the water zones for efficient use of water resources.<sup>6</sup> In terms of regulating water pollution, the Act, provided specific reference of the Bangladesh Environment Conservation Act, 1995, which sets out the standards for water quality maintenance. The Embankment and Drainage Act, was adopted in 1952, which provides regulatory provisions related to maintenance, protection and preservation of embankments.<sup>7</sup>


The Bangladesh Water Development Board Act, 2000 was enacted for the development and efficient management of water resources. The Water Development Board is established under the Act, with the power to control the flow of water in all rivers, channels and underground aquifers. The Board can develop standards and guidelines for the operation

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<sup>5</sup> Rule 3, 4, 7, 12 & 15, of the Environment Conservation Rules, 1997

<sup>6</sup> Sec. 7, & 17 of the Bangladesh Water Act, 2013.

<sup>7</sup> Section 3(d) The Embankment and Drainage Act, 1952



and maintenance of all water management structures; construct dams, barrages, reservoirs, embankments, regulators or other structures.<sup>8</sup> To ensure the development and balanced use of water resources, the Water Resources Planning Act, 1992 was enacted. Under the Act the Water Resources Planning Organisation is established and outlined the structures and functions.<sup>9</sup> To ensure the development and balanced use of water resources, the Water Resources Planning Act, 1992 was enacted. Under the Act the Water Resources Planning Organization is established and outlined the structures and functions<sup>20</sup>. Some other related laws regulating water resource management exists in Bangladesh including to Water-course Act, 2000, The National River Protection Commission Act, 2013, the Sand Quarry and Earth Management Act, 2010, Bangladesh Oceanographic Research Institute Act, 2015, River Research Institute Act, 1990.

On the other hand, the Ground Water Management Ordinance, 1985 was adopted with a view to manage the ground water resources for agricultural production, but unfortunately this ordinance does neither regulate the reasonable use of ground water nor address the issues of ground water pollution. Groundwater is a common pool resource that was abundant and easily recharged in the monsoon in the past, and only became an economically important resource in Bangladesh since the 1980s with human consumption and agriculture competing to extract using tube wells. It has been left legally as an open access resource. There is abundant evidence of declining groundwater tables in several parts of Bangladesh, mainly the western side of the country and also affecting Dhaka area. In the northwest "groundwater mining" likely results in reduced wetland water levels and drying up of surface public water bodies in the dry season. In addition the ground water that is available in the shallow and deep aquifers in parts of the country has deadly arsenic contamination as a result of greater seasonal variation in water tables associated with high levels of dry season abstraction. It is reported that 59 districts of Bangladesh out of 64 is faced with arsenic contamination.<sup>10</sup> Therefore, this ordinance needs to be revised to regulate ground water abstraction.

In addition to these legislations, some of the Policies also provided important guidance on water resource management in Bangladesh. National Water Policy adopted by GoB in 1999 and the objective of the policy is to ensure progress towards fulfilling national goals of economic development, poverty alleviation, food security, public health and safety, a decent standard of living for the people and protection of the natural environment. But unfortunately the policy has no reflection on climate change impacts on water sector. The Coastal Zones Policy was adopted in 2005 and the goal of the Policy is to ensure integrated coastal zone management to create conditions, in which the reduction of poverty, development of sustainable livelihoods and the integration of the coastal zone into national processes can take place. The Policy identified climate change in section 4.8.3 and suggests some programmes for adaptation to climate change, including: a) Existing institutional arrangements for monitoring of climate change in Bangladesh will continue. Steps will be taken to support upgrading of technology and institutional strengthening for enhancing their capacity for generation of better data and more accurate long-term prediction and risk related to climate change; b). Implementation of adaptive measures identified in relation to climate change for coastal zone and resources shall be gradually undertaken; c). Efforts

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<sup>8</sup> Sec.5 & 6 of the Bangladesh Water Development Board Act, 2000.

<sup>9</sup> Section 3, Ibid

<sup>10</sup> Ibid

shall be made to continuously maintain sea-dykes along the coastline as first line of defense against predicted sea-level rise; d) an institutional framework for monitoring/detecting sea level rise shall be made and a contingency plan for coping with its impact. The laws and Policies related to water resource management lack with the approach of coordination and integration and needs to amend to ensure the coordination and integration within the sector and other related sectors, like agriculture, fisheries, forest and son on.

Policies and laws regarding wetlands and waterbodies have often been general in order to appear all-embracing but as a result are unclear or contradictory regarding what categories of physical space (water and land) they refer to. In 2000, a law with the long title "Mega city, Divisional Town and District Town's municipal areas including country's all the municipal areas' playground, open space, park and natural water reservoir Conservation Act, 2000"<sup>11</sup> was enacted to protect the playgrounds, open spaces and natural water bodies of the metropolitan cities, divisional headquarters and municipal towns from being used for other purposes. For convenience it is known as the Open Space Act, 2000. The Open Space Act, 2000 defined natural wetland as '*Natural wetland*' means- *the place declared as the flood flowing land as river, canal, beel, pond, stream, fountain indicated in master plan by the government gazette or government, and flowing water and the land which conserve the rain water should be included here*'.<sup>12</sup> The Environment Conservation Act, 1995 defined water reservoir through an amendment in 2010 as '*the place which is marked as river, canal, beel, haor, baor, dighi, pond, water-fall or water body in Government land record or any water body, flood plain area, flowing water and land which reserve rain water which is declared as such in gazette notification by the Government, local government or any government organization*'.<sup>13</sup>

On the other hand, The Haor Development Board Ordinance, 1977<sup>14</sup> defined 'haor'<sup>15</sup> as low lying areas popularly known as such and referred to the ones scheduled to the Ordinance. The Ordinance proposes for the establishment of a Haor Development Board<sup>16</sup> to prepare projects and schemes for the development of scheduled haors and to execute such projects and schemes. This Ordinance fails to consider the special needs of the two crore people living around the *haors* who are literally arrested by water for more than half of the year because this Ordinance does not have any provision for participation of these people in management of Haor. The Open Space Act, 2000 and Environment Conservation Act, 1995, provided definitions of wetland or water reservoir with some similarities. Open Space Act, defined the wetland for the purpose of urban areas and hence the same is not applicable beyond the urban areas. Therefore, it is needed to adopt a clear and comprehensive definition of wetlands and their physical constituents for regulating fresh water resources in Bangladesh.

## 2.3 LAWS AND POLICIES REGULATING FISHERIES

There are two basic laws in Bangladesh for regulating freshwater fisheries and marine

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<sup>11</sup> Act No. 36 of 2000, it also called as Open Space Act, 2000

<sup>12</sup> Section 2 (f) of the Open Space Act, 2000

<sup>13</sup> 2 (a), the Environment Conservation Act, 1995

<sup>14</sup> Ordinance No, IX of 1977

<sup>15</sup> Article 2 (1) of the Haor Development Board Ordinance, 1977

<sup>16</sup> Article 3 of the Haor Development Board Ordinance, 1977

fisheries, respectively the Protection and Conservation of Fish Act, 1950<sup>17</sup> amended in 1995, and the Marine Fisheries Ordinance, 1983.<sup>18</sup> The Protection and Conservation of Fish Act, defined 'fishery' to mean "any water body, natural or artificial, open or closed, flowing or stagnant (such as river, haor, baor, beel, floodplain, canal etc.) where activities for growing fish, or for conservation, development, demonstration, breeding, exploitation or disposal of fish or of living organisms related to such activities are undertaken, but does not include an artificial aquarium of fish used as a decorative article, pond or tank.

However, the Protection and Conservation of Fish Act, deals primarily with inland capture fisheries and regulates some of the concerns for gradual depletion of fishery and fish resources. In accordance with the mandate of this Act,<sup>19</sup> the Protection and Conservation of Fish, Rules, 1985<sup>20</sup> was adopted and prohibited the erection of fixed engines in rivers, canals, khals and beels, construction of dams and embankments other than for irrigation, flood control or drainage purposes, destruction of fish by explosives in inland or coastal territorial waters or by poisoning/depleting water. The Rules also prohibited the catching of certain fish species during their spawning season.<sup>21</sup> All of these rules being set centrally and lacking clear mechanisms for implementation other than through enforcement by law enforcement agencies.

On the other hand, the Marine Fisheries Ordinance, 1983<sup>22</sup> was adopted in order to provide framework for the management, conservation and development of marine fisheries in Bangladesh. The Marine Fisheries Ordinance, 1983 regulates marine fisheries within the territorial waters and economic zone of Bangladesh as specified in accordance with the Territorial Waters and Maritime Zones Act, 1974<sup>23</sup> and the other marine water over which Bangladesh has or claims to have jurisdiction with respect to the management, conservation and development of marine living resources.<sup>24</sup> The Ordinance of 1983, has defined fishery as one or more stocks of fish that can be treated as a unit for the purpose of conservation and management.<sup>25</sup> In accordance with section 28 of the Ordinance of 1983, Government can declare any area of the Bangladesh fisheries waters to be a *marine reserve* where special measures are necessary as follows:<sup>26</sup>

- a) to afford special protection to the aquatic flora and fauna of such areas and to protect and preserve the natural breeding grounds and habitats of aquatic life, with particular regard to flora and fauna in danger to extinction; or
- b) to allow for the natural regeneration of aquatic life in areas where such life has been depleted; or
- c) to promote scientific study and research in respect of such areas; or

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<sup>17</sup> Bengal Act XVIII of 1950

<sup>18</sup> Ordinance No. XXXV of 1983

<sup>19</sup> Section 3 (1) of the Protection and Conservation of Fish Act, 1950, provided the authority to the Government to make further rules for the purposes of the Act.

<sup>20</sup> Notification dated 16 October, 1985

<sup>21</sup> Management of Natural Resources: Access and Justice Issues, BELA, 2002, p.3.

<sup>22</sup> Ordinance No, XXXV of 1983

<sup>23</sup> Act No. XXXVI of 1974

<sup>24</sup> Section 2 (a), the Marine Fisheries Ordinance, 1983

<sup>25</sup> *Abid* Section 2

<sup>26</sup> *Abid* Section 28,

d) to preserve and enhance the natural beauty of such areas.

The Fisheries Policy, 1998 provided the broader framework of inland and marine fish and fisheries management in Bangladesh and addressed the concerns of the traditional fisher folks and their involvement in management and conservation process. The policy stated that, the Fishermen Societies along with the local government will be engaged in the execution of fish conservation besides the authorities presently engaged<sup>27</sup>, but gave no place for fishers in decision making. It also suggested to give priority to the genuine fishers to obtain *khas* water bodies and requires the government to take necessary steps to develop the standard of lifestyle of the fishers.<sup>28</sup> All of which was consistent with the past and present policies regarding access to public waterbodies (jalmohals), even if practice often differs. Moreover, the Policy suggests for establishing fish sanctuaries in order to increase fish production and to conserve biodiversity. It also suggested that Department' of Fisheries will be liable for the care and management of the declared fish sanctuaries with the help of fishers societies and bodies of local government.<sup>29</sup> Under its various projects, the Department of Fisheries established a number of fish sanctuaries. Since the concept has no legal sanction, the sanctuaries are confronted with serious problems after the completion of the relevant projects as the local groups may or may not retain formal use rights over those waterbodies/sanctuaries, lack support to coordinate with the other agencies for example on pollution control, and often lack any benefit from protection and source of income to manage sanctuaries if they lose exclusive access to adjacent waterbodies managed for fishing.

While the fish and fisheries related laws deal with the conservation aspects of fisheries, the management (leasing out etc.) of fisheries is regulated by land related directives. Ministry of Land is responsible for management of all the fisheries designated as *Jalmohals* and all other public land and waterbodies in the country in accordance with the land related laws. The Public Water body Management Policy 2009 (the current MoL policy for jalmohals), provides that the public water body would be leased out to the real fisher folks with due preference in order to promote biological management of fisheries along with revenue collection. The policy also defined fishers and fisheries, however, which is found some other laws strewn. Fishers are defined as those persons who catch fish from natural source and sell fish for means of livelihood<sup>30</sup> and provided further that if there is any person, who is not a real fisher involved with registered community based organizations then it is not eligible for applying for obtaining lease of the waterbodies.

A detailed procedural mechanism of leasing is adopted in the The Public Waterbody Management Policy 2009, however, biological factors have taken little space in the Policy. The policy provides administrative redress regarding the conflicts in relation to leasing procedure. A decision of lower tier can be brought to higher tier and finally land tribunal takes the final authority to dispose of the disputed issue. There are two things to be considered here, firstly, decision of the land tribunal cannot be challenged before any formal judicial forum and secondly, disputes regarding assessment of CBOs performance cannot be challenged since no forum is suggested. So, the policy adopted, creates new

<sup>27</sup> Section, 6.9 of the Fisheries Policy, 1998

<sup>28</sup> Section 12.1 of the Fisheries Policy, 1998

<sup>29</sup> Section 6.2 of the Fisheries Policy, 1998

<sup>30</sup> Section 2(a) of the Water Policy, 2009



avenues of undue influence. But overall leasing period and sole authority of management remains the same. Existing governance mechanisms of waterbodies aim at harnessing of revenue instead of ecological and biological management. Management ought to facilitate the traditional lives and livelihoods of poor fishers within the context of conservation of natural resources. Therefore, existing governance mechanisms need to be revised.

## 2.4 LAWS AND POLICIES REGULATING FOREST RESOURCES AND BIODIVERSITY

The Forest Act, 1927, is the basic law governing forests in Bangladesh, and enacted to consolidate the law relating to forests, the transit of forest-produce and the duty livable on timber and other forest-produce. This Act provides for four types of forests, namely: reserved forest, protected forest, village forest and social forest. Chapter II of the Act governs the regime of reserved forest. For constituting any land as reserved forest it must be the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce of which the Government is entitled; and the land must either be forest-land or waste-land or any land suitable for afforestation.<sup>31</sup> The declaration proposing to constitute reserved forest must be done through a Gazette Notification specifying the situation and limits of such land, and the appointment of a Forest Settlement Officer. A series of procedural activities including settlement of rights or claims over forestland needs to be performed and documented to finalize the reserved forest status and constitution. Any activity within the reserved forest is prohibited, unless permitted by the Forest Department.<sup>32</sup>

Chapter III of the Forest Act, 1927, deals with village forest and social forestry. A village forest is where the Government assigns to any village community the rights of Government to or over any land which has been constituted a reserved forest<sup>33</sup>. When any land assigned to the Government by voluntary written agreement of the owner for the purpose of afforestation, conservation or management is called social forestry<sup>34</sup>. The Forest department has introduced different types of social forestry, like- woodlot, agroforestry, strip plantation, coastal afforestation. The provisions for the constitution of protected forest are procedurally less cumbersome than those of reserved forest. The government may declare any public forest which has not been 'reserved' as protected forest<sup>35</sup>. The government may prohibit some activities in the protected forest by making Rules<sup>36</sup>. The Act provides elaborate provisions for imposition of duty on timber and other forest produce and transit thereof.

The Social Forestry Rules, 2004, describes in details about social forestry. It specifies parties of social forestry, namely: Forest Department, owner of the land, beneficiary and private organization and determines their duties and responsibilities<sup>37</sup>. The Rules provides procedures for selecting beneficiaries and private organizations and their responsibilities. It suggests a management committee and an advisory committee for social forestry and

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<sup>31</sup> Sec.3 of the Forest Act, 1927.

<sup>32</sup> Sec.26 of the Forest Act, 1927.

<sup>33</sup> Sec.28 of the Forest Act, 1927.

<sup>34</sup> Sec.28A of the Forest Act, 1927.

<sup>35</sup> Sec.29 of the Forest Act, 1927.

<sup>36</sup> Sec.32 of the Forest Act, 1927.

<sup>37</sup> Rules 4 and 26-19 of the Social Forestry Rules, 2004.

determines their formation and responsibilities<sup>38</sup>. It provides for tenure of social forestry and ratio of income generated from social forestry among the parties<sup>39</sup>.

Section 13 of the Wildlife (Protection and Safety) Act, adopted in 2012, makes provisions for designating wildlife sanctuaries, taking into account the importance of forest, biodiversity and wildlife protection and preservation within government-owned forests and wetlands. This section also authorizes protection for traditional livelihoods (Section 13 (3)). However, restrictions can be imposed on fishing and boating within the declared sanctuary with due consultation with the co-management committee (Section 16 (2)). The Act also sanctions the co-management of natural resources within declared sanctuaries, ensuring the effective participation of local communities for the utilization of resources, and their protection and management. It also authorizes the formation of co-management committees (Section 21). In accordance with section 17, the government can establish National Park on government forest land, or on any other land with natural worth, in order to protect and conserve the wildlife and environment. Section 18 of the Act also provides for the declaration of Community Conservation Areas, Landscape Zones or Corridors, Buffer Zones, and Core Zones. Finally, this Act allows for the declaration of Special Biodiversity Protection Areas. Forestry Co-Management Gazette circulated in 2009 provides the provisions on formation of co-management institutions and community participation in the co-management processes of protect forest resource management in Bangladesh. Section 2 and 3 of the Gazette provided clear options for formation of co management council and co management committee and community representation in the co management council and co management committee. Section 3.2 of the Gazette identified the responsibility of the co management committee, which will regulate and manage daily activities and prepare annual action plan, mobilize necessary fund and appoint local people to manage and implement various activities. It also identified the responsibility of co management for Revenue collection, adaptation of various activities for sustainable economy, fund collection and expend it in the reserve forest.

Section 2.2 of the aforementioned Gazette, provides provisions on profit sharing stating that goods and services produce or collected from reserve forest shall be distributed to the beneficiaries who were involved in the management of that area. In addition Section 3 of the Gazette suggested for distribution of benefit from the reserve forest to the stakeholder and the revenue collected from entry fee shall be expended for the conservation of biodiversity and community development. The Gazette also provides administrative resolution to the conflicts related to co-management processes. Section 2.2 of the Gazette stated that, if there is any conflict or dispute within co-management committee or in management process co-management council shall take effective measure to resolve it. On the other hand, if there is any dispute in overall execution process or in local stakeholder co-management committee shall take effective measure to resolve it (Section 3).

National Forest Policy, adopted in 1994 and states that, government shall endeavour to preserve soil, water and biodiversity, the natural forests of the hilly areas and the catchments of the rivers within the country and shall be declared as protected areas, game sanctuaries and national parks as appropriate. The National Biodiversity Strategy and Action Plan (NBSAP) provides a framework for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising

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<sup>38</sup> Rules 9-14 of the Social Forestry Rules, 2004.

<sup>39</sup> Rules 15 and 20 of the Social Forestry Rules, 2004.

out of the utilization of genetic resources of the country. It emphasizes the need for cross-sectoral linkages, reflecting the fact that biodiversity conservation in Bangladesh is closely inter-woven with the socio-economic development of the country. The NBSAP also provides a framework for securing necessary environmental conditions to reduce poverty, ensure sustainable development and respond to the implementation of elements of the country's Poverty Reduction Strategy Paper (PRSP).

The major objectives of the aforementioned NBSAP are: (i) to conserve, and restore the biodiversity of the country for well-being of the present and future generations; (ii) to maintain and to improve environmental stability for ecosystems; (iii) to stop introduction of invasive alien species, genetically modified organisms and genetically modified organisms. According to the NBSAP, threats to biodiversity in Bangladesh arise from loss of habitat due largely to deforestation and inappropriate water and agricultural management, over-harvesting of resources, efforts to increase agricultural productivity, and natural disasters. Underlying causes are predominately related to issues of land tenure and users' rights, and institutional capacity constraints. Although the strategy considers various threats to biodiversity in Bangladesh, there is no estimation about the nature and extent of threats that GMOs could pose to the conservation of biodiversity in Bangladesh. Of the sixteen strategies developed to shape and direct the actions towards achieving the goals and objectives of the NBSAP, strategy 4 focuses on the adoption of national measures and standards to deal with invasive alien species and genetically modified organisms.

## 2.5 LAWS AND POLICIES REGULATING AGRICULTURE

The Irrigation Act, adopted in 1876 states in its preamble that the objective of the legislation is to make provision for the construction, maintenance and regulation of canals, for the supply of water and for the levy of rates for water so supplied, in Bangladesh. Part III of the law contains provisions regarding maintenance of canals and embankments. Section 33 gives power to a canal officer to enter upon any land as he may think necessary for the purpose enquiry regarding a projected flood-embankment, or with the maintenance of an existing flood-embankment. The Agricultural and Sanitary Improvement Act, 1920 was enacted to consolidate and amend the law relating to the construction of drainage and other works for the improvement of the agricultural and sanitary conditions of certain areas in Bangladesh. The Collector (Deputy Commissioner) is responsible to undertake any work for the improvement, or for the prevention of the deterioration, of the agricultural or sanitary condition of any area.<sup>40</sup>

Some other relevant legislations for regulating agricultural related activities and land management include, the Canals Act, 1864, the Bangladesh Irrigation Water Rate Ordinance, 1983, the Agricultural Pests Ordinance, 1962, the Pesticides Ordinance, 1971, the Seeds Ordinance, 1977, the Plants Quarantine Act, 2011, the Agricultural Development Corporation Ordinance, 1961, the Bangladesh Agricultural Research Institute Ordinance, 1976, the Bangladesh Agricultural Research Council Act, 2012.

Moreover, the Policies related to agriculture provide some important guidelines for agriculture resource management in Bangladesh. National Agriculture Policy, adopted in

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<sup>40</sup> Sec.3 and 29 of the Agricultural and Sanitary Improvement Act, 1920.

2013 and considered irrigation as an integral part of agriculture. In para 8 Policy provide guidance about small irrigation and provides guidance to increase irrigation area through modern irrigation, extraction, and water supply system in restricted and adverse areas like char, haor, hilly area, barind tract, drought and salinity prone areas. Integrated Small Irrigation Policy, 2014 is a very recent Policy document describes the government policy on small scale irrigation. The Policy is aimed to ensure food security through determining sources of irrigation water and efficient use of water then reducing costs of irrigation.

## 2.6 LAWS AND POLICIES REGULATING LAND AND LAND USE

The major laws on public land management are the Bangladesh State Acquisition and Tenancy Act, 1950 and the Land Reforms Ordinance 1984. These Acts contain substantive mechanisms, but procedural mechanisms are provided by three policies, namely: Policy for Distributing *Khas* Land among the Landless 1987, Policy for Distribution and Administration of Non Agricultural *Khas* Land 1995 and Agriculture *Khas* Land Management and Settlement Policy 1997. The State Acquisition and Tenancy Act 1950 is a framework legal document which was adopted to abolish the Zemindari System (Permanent Settlement of 1793). This law is the basis for all subsequent laws on public lands which declared that "So far as agricultural lands are concerned, they shall be held by one class of people to be known as maliks or raiyats which means that there shall be no intermediary between the State at the top and malik or raiyats to be regarded as the tillers of the soil at the bottom". However, it gave a definition of khas land that was of no practical use: "***khas land***" or "*land in khas possession*" in relation to any person, includes any land let out together with any building standing thereon and necessary adjuncts thereto, otherwise than in perpetuity.<sup>41</sup>

The Land Reform Ordinance 1984 in section 7 stated about settlement of khas land for homestead purpose. In rural areas if any khas land fit for being used as homestead is available, the Government shall, in settling such land, give preference to landless farmers and laborers. The maximum limit of such allotment will be five katha for each family and the family can inherit the land but cannot transfer it. The Act was silent about the procedure to distribute such land. In 1987 Bangladesh's Land Ministry launched the Land Reforms Action Programme, an initiative to distribute khas and unoccupied state owned land to landless families. On 1st July 1987 the government adopted the "Policy for Distributing Khas Land among the Landless". The policy had the objective of equal distribution of land and income with maximum output from the land. It projected to give work to the landless so that rural economy could gear up.

Although a policy for distribution of Agricultural Khas land was formulated in 1987, there was no policy for Non agricultural *Khas* land until the Policy for Distribution and Administration of Non Agricultural *Khas* Land was adopted in 1995. This policy has defined the Non-agricultural Khas land as : Non-agricultural Khas land shall include: the land of four metropolitan areas, every municipality area, every thana sadar, all agricultural land inside the above mentioned area, any land outside the above mentioned that are not agriculture land. Section- 3(d) of the policy provides very little access of poor to the Non-agricultural Khas land. It only allows the land to be distributed among the family who have become destitute by natural disaster or any family legally resettled by the government. This was

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<sup>41</sup> Section 2 (15), The State Acquisition and Tenancy Act 1950

despite Section-7 of the Land Reform Ordinance 1984 specifying that the government shall give preference to landless farmers and labourers during allotment of non-agricultural khas land. However, this issue of targeting overlooks a fundamental flaw in these policies.

The aforementioned policy focuses on allocating lands perceived as being unused to individuals (poor) for private exclusive use, it makes no allowance for recognizing community use of such lands which are typically part of wetlands and riverine areas. Allocation of such lands to individuals may undermine long established customary use rights and the diverse environmental functions and human uses of wetlands. This is apparent in floodplain wetlands such as haors in the northeast and the Pabna basin where khas lands were distributed in the 1980s as part of a political process but were not used by the "recipients" since the lands were actually marshy or underwater and not suitable for agriculture. But this has more recently been abused by investors making deals with those who were allocated such lands so that the investors can establish aquaculture enterprises, when in fact the allocated khas lands are an integral part of larger common pool wetland resources and have been traditionally used by the poor to collect aquatic plants and catch fish from long before the khas land legislation up until recent aquaculture enclosure<sup>42</sup>.

But the policy of 1995 did not consider the landless farmers and labourers for the allotment of non-Agricultural Khas land. In 1997 another policy named "Agriculture Khas Land Management and Settlement Policy 1997" was adopted to eliminate corruption related with the distribution of khas land so that real landless people can get the land. This policy directed that all khas land available in 61 districts will be given to the landless people. The policy defined agricultural khas land as "any cultivable khas land is agricultural khas land if it is not situated within the metropolitan, municipal or thana sadar area"<sup>43</sup>. It reshuffles the national khas land management committee but was silent about civil society representation. Maximum limit of allotment is given as 2 acres (but after 1998 gazette notification now the maximum limit of allotment is 1 acre of land except in char (accreted island) areas where it is 1.50 acres). It redefined the landless people as "any family who have no homestead or agricultural land but depends on agriculture"<sup>44</sup>. So two more criteria given in 1987 policy were removed. But the 1998 gazette notification added one more criteria: "any family who have 10 shotangsho [decimals] land for homestead purpose but have no land for agriculture priority list of is also landless people". Under the policy now the selection process will be conducted by Thana khas agricultural land management and distribution committee. Previously under 1987 it was conducted by Upzilla land distribution committee. In 14<sup>th</sup> September 2000 gazette notification a new decision from the GoB is adopted. In any area, if any khas land is left after distributing it to all landless people of that area' the remaining land will be distributed to the adjacent union or Upzillas landless people.


The Government has enacted Economic Zone Act in 2010. The act provides legal basis for the establishment of economic zones in all potential areas including backward and underdeveloped regions with a view to encouraging rapid economic development through industrialization. The development of Economic Zones is expected to help investors find a place with various facilities that are conducive for industrial development. The Act promotes

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<sup>42</sup> Sultana, P. 2012. Implications of floodplain aquaculture enclosure, *Journal of Environmental Planning and Management* 55(9): 1159-1174,

<sup>43</sup> Agriculture Khas Land Management and Settlement Policy 1997, Article 9.0

<sup>44</sup> Ibid, Article 10.0



Economic Zones in the Private sector, Government led EZs or in a combination. In this connection, Bangladesh Economic Zone Authority (BEZA) has been established. The mandate of the BEZA is to identify local potential zones, acquire lands and build the zones with necessary facilities. BEZA may seek public Private Partnership (PPP) to build and effective utilization of such zones.

## 2.7 LAWS AND POLICIES REGULATING ENERGY AND MINERAL RESOURCES

The Bangladesh Petroleum Act, was adopted in 1974 and provided provisions for the exploration, development, exploitation, production, processing, refining and marketing of petroleum. It was recognized that, the Government has exclusive right to explore, develop, exploit, produce, process, refine and market petroleum within the territory, continental shelf and economic zone of Bangladesh. It also empowered relevant authorities to plan, promote, organize and implement programmes for exploration, development, exploitation, production, processing, refining and marketing of petroleum. Some other relevant laws include the Bangladesh Petroleum Corporation Ordinance, 1976, The Petroleum Act, 1934, The Mines Act, 1923. However, GoB recently developed some legislations, policies and plans to promote alternative energy in Bangladesh. The Bangladesh Energy Regulatory Commission (BERC) Act was adopted in Bangladesh in 2003, which established the Bangladesh Energy Regulatory Commission (BERC). This Act established the structures and functions of the BERC and the functions of the BERC identified in this Act, include to promote energy efficiency of institutions and to monitor and verify institutions' energy use through energy audits. It also monades to promote the standards and security for efficient energy use in Bangladesh.

Renewable Energy Policy of Bangladesh, was adopted in 2008 and provided guidance for promoting renewable energy and for establishment of related institutional structures and regulatory frameworks and also mechanisms for technical and financial supports for promoting renewable energy in Bangladesh. The Policy of 2008, identified the major sources of renewable energy are including to solar, wind, biomass, hydro, geothermal, tidal wave etc. and set the goal for generating renewable energy constituting 5% of total generation by 2015 and 10% by 2020. This Policy also set the objectives to harness the potential of renewable energy resources and dissemination of renewable energy technologies in rural, peri-urban and urban areas and GoB committed to facilitating public and private sectors for renewable energy investments. The Policy suggests to establish the Sustainable Energy Development Agency (SEDA) in accordance with the statutory law of the country and to regulate the activities related to renewable energy in Bangladesh. The National Energy Policy previously adopted in 1996, which also committed to promote rational use of energy sources and environmentally friendly development of renewable energy.

In addition to these legislations and relevant policies related to energy discussed above, there are some other policies and plans exist in Bangladesh, which can also be useful to promote alternative energy use. The Private Sector Power Generation Policy, 1996, the Private Sector Infrastructure Guidelines, 2004, the Remote Area Power Supply System (RAPSS) Guidelines 2007, Policy Guidelines for Small Power Plants (SPP) (1998, Revised 2008), the Guidelines for the Implementation of Solar Power Development Program, 2013, Action Plan for Energy Efficiency and Conservation, 2013, the National Sustainable Development

Strategy, 2010-2021, the Climate Fiscal Framework, 2014, the 7th Five Year Plan, 2015 (2016-2020) also provide some scopes to address the provisions related to low- carbon climate resilient development in Bangladesh.

## 2.8 LAWS AND POLICIES REGULATING TRANSPORT, INDUSTRY AND WASTE

Transports including land and water, sector can also play a vital role to promote the low-carbon climate resilient development in Bangladesh. There are about fifteen laws and regulations exist in Bangladesh. The Vehicles Act, was adopted in 1927, and supplemented by adopting The Motor Vehicles Ordinance, enacted in 1983, which established the Bangladesh Road Transport Authority outlining the basic structure and functions. The Railways Act, was adopted in 1890 and The Bangladesh Inland Water Transport Ordinance, was adopted in 1958. The Inland Shipping Ordinance, was enacted in 1976 and the prevention of Interference with Aids to Navigable Waterways Ordinance, was adopted in 1962. However, all these legislation needs to be amended to address relevant provisions for reducing GHGs.

The National Land Transport Policy, adopted in 2004, which stated that services and infrastructure in the water sector will be studied so that an analysis can be made of potential opportunities for integration, and competition where appropriate. Investment decisions in the road and rail sector should take account of the inland water transport strategy, and vice versa. So, this provision suggests to have a comprehensive study, which also can identify the strategy for low-carbon approaches to transport sector in Bangladesh. INDC of Bangladesh suggests for modal shift from road to rail, including underground metro systems and bus rapid transit systems in urban areas, which co-benefits will include reduced congestion, improved air quality and improved traffic safety. However, existing policies and legislations don't provide specific provisions to facilitate to implement the INDC.

The Bangladesh Environment Conservation Act, 1995 and the Rules enacted thereunder provide guidelines for industrial regulations, waste management and environmental conservation. The Environment Conservation Rules of 1997, determined the environmental standards and specifies waste discharge quality standards for all industrial units and projects. A single emissions standard is given for each of the parameters for classified industries, which include to fertilizer factories, integrated textile mill and large processing units, pulp and paper factories cement factories, industrial boilers; nitric acid plants; distilleries; sugar production, leather tanneries, food processing and oil refineries. The Brick manufacturing and Brick Kilns Establishment (Control) Act, adopted in 2013, which prohibits brick manufacturing without taking license from the Deputy Commissioner (DC). Reduction of the use of soil is encouraged and collecting soil for raw material from agricultural land or hill or hillock is prohibited under this Act. Use of fuel wood as fuel in brick kilns for burning bricks is strictly prohibited. To control air pollution, the Act prohibits use of coal as fuel beyond the prescribed standard for burning bricks. The Act imposes prohibition on establishment of brick kilns in several places like residential, preserved or commercial area; City Corporation, Municipality or Upazila headquarters; Public or privately owned forests, sanctuary, gardens or wetlands; agricultural land; Ecologically Critical Area; and areas adjacent to these areas. The Act penalizes all the above mentioned prohibited acts and prescribes procedures for trial and punishments of those offences. GoB is now developing detail Rules under this Act.

Some other legislations related to management of industry and waste exist in Bangladesh including to the Factories Act, 1965 and the Factories Rules 1979, the Boilers Act 1923, the Nuclear Safety and Radiation Control Act 1993, Bangladesh National Building Code, 2006, the Ship Breaking and Recycling Rules, 2011. The Industrial Policy of 2005 provided some important guideline for environment friendly industrial regulations in Bangladesh. The Policy suggests to provide all necessary assistance for producing environment-friendly product in Bangladesh and to arrange for incentives to be given for research and development, acceptance and transfer of environmentally friendly appropriate technology. At the same time, it also called to develop market-oriented institutional structure in overall technological development and access to technology.

## 2.9 LEGISLATIONS, POLICIES AND STRATEGIES RELATED TO CLIMATE CHANGE AND DISASTER MANAGEMENT

GoB prepared the National Adaptation Programme of Action (NAPA) in 2005<sup>45</sup>. NAPA identified vulnerable areas and fifteen projects as future adaptation strategy. NAPA was updated in 2009 and identified thirty-eight adaptation measures. The NAPA process has been advanced through the adoption of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) of 2008 (reviewed in 2009)<sup>46</sup> which provides the climatic contexts, analysis of socio-economic realities, and outlines policies for promoting the well-being of vulnerable groups and elaborates a set of programmes based upon broad areas of interventions. BCCSAP, 2009, identified forty-five adaptation and mitigation measures based on the six pillars: (1) food security, social security and health, (2) disaster management, (3) infrastructure, (4) research and knowledge management, (5) reducing greenhouse gas emissions and a conversion to low-carbon development, (6) capacity development.

The GoB, furthermore adopted a legislation called the Climate Change Trust Fund Act in 2010 with the view to establish the Bangladesh Climate Change Trust Fund (BCCTF) to fund activities to address the adverse impacts of climate change. The Fund is financed from the national budget of Bangladesh. The GoB also created the Bangladesh Climate Change Resilience Fund (BCCRF), originally called the Multi-Donor Trust Fund, in 2009 to implement the six pillars identified in the BCCSAP. This fund became operational in 2010<sup>47</sup>. Moreover, Bangladesh is also taking necessary initiatives for accessing the fund from Green Climate Fund (GEF) and the Economic Relations Division (ERD) of Ministry of Finance, is acting as the National Designated Authority (NDA) of Bangladesh to GCF. NDA has also initiated a process to get Bangladeshi institutions accredited as National Implementing Entity (NIE) to GCF and identified fourteen national entities, those have the high potential to be eligible to fulfill the criteria set by the GCF board to gain accreditation.

The recently developed Disaster Management Act, adopted in 2012<sup>48</sup> recognized the impacts of climate change and provided guidance for setting up an institutional mechanism for

<sup>45</sup> MoEF, 2005, National Adaptation Programme of Action (NAPA), Ministry of Environment and Forest

<sup>46</sup> MoEF, 2009, Bangladesh Climate Change Strategy and Action Plan (BCCSAP) Ministry of Environment and Forests

<sup>47</sup> BCCRF Operational Manual adopted in 2011

<sup>48</sup> Act, No. 34, 2012, The Act is adopted in Bangla and there is no official translation of it in English yet.



disaster management, reducing vulnerabilities, rehabilitation, and providing humanitarian assistance to the victims of both disasters and climate change impacts. In addition to these plans, strategies, and legislations, the Renewable Energy Policy 2008, the Energy Efficiency and Conservation Master Plan (E&CC Master Plan), the Road Map of National Adaptation Plans (NAPs), the National Sustainable Development Strategy, the Perspective Plan (Vision 2021) and the Sixth Five Year Plan, the National Disaster Management Plan provided some guidance for mitigation and adaption measures needed for Bangladesh.

Government of Bangladesh (GoB) signed the Paris Agreement and now preparing to ratify the Agreement in accordance with the Constitutional provisions regarding ratification of international treaties, which needs to be submitted initially to President, and then before Parliament to be approved by majority vote.<sup>49</sup> Nevertheless, GoB developed the Intended Nationally Determined Contributions (INDC), and submitted to UNFCCC, well before adoption of the Paris Agreement. GoB developed the INDC of Bangladesh with a view to take necessary mitigation actions to reduce its growing emissions of GHGs and to play its role in global efforts to limit temperature rise to two degrees or preferably 1.5 degrees' above pre-industrial levels agreed in Paris Agreement.<sup>50</sup> The INDC of Bangladesh takes both unconditional and conditional emissions reduction goals for the power, transport, and industry sectors, alongside further mitigation actions in some other sectors, which Bangladesh intends to carry out with subject to required technical and financial supports. INDC of Bangladesh also outlined the adaptation goals and measures through identification of existing measures already taken and also for future needs including the long-term vision for adaptation, drawing synergies with mitigation measures. It also provides a qualitative description on support needs for taking actions for mitigation and adaptation efforts. Now, the challenge for GoB is to implement the INDC, in accordance with the Paris Agreement through enacting new legal and policy frameworks or/and amending existing frameworks. However, in order to amend the existing legislations and policies, and/or adopt new policies and legislations, it is important to examine the scope, gaps and constrains of existing provisions.



<sup>49</sup> The Constitution of the People's Republic of Bangladesh, 1972, Art. 145A and 75,

<sup>50</sup> GoB, INDC, 2015

## CASE STUDIES ON SECTORAL CONFLICTS AND DISPUTES


The policies, laws and the regulations related to public land management is ad-hoc basis and facing sectoral conflicts and contradictions in terms of legal and institutional structures, functions and the mandates for land management. Such inconsistencies results to deprive the community from accessing the public lands and related resources. On the other hand management of water and resources is also facing same problems of sectoral conflicts and contradictions of ownership and managements approaches. Current management approaches of water and water resource management, particularly in fisheries management in Bangladesh aims at harnessing of revenue instead of ecological and biological management, which does not facilitate the traditional lives and livelihoods of poor community rather create obstacles to access to public waters. While the fish and fisheries related laws deal with the conservation aspects of fisheries, the management (leasing out etc.) of fishery is however regulated by the Land related laws. Ministry of Land is responsible for management of all the fisheries designated as Jalmohals and all other land and waterbodies in the country in accordance with the land related laws. Some cases are discussed below to have an understanding on the conflicts related to land and water policies and legislations:

### PUBLIC LAND RELATED CASE

The concerned authority of land management allotted the Government owned Khas Land to Shrimp Cultivators in Sudharam, P.S. of Noakhali District in contravention of the provision of the Khas Land Management Policy, Land Management Manual, and the Constitution of Bangladesh. It deprived thereby the landless people. The number of laws and policies related to land management sometimes creates confusion regarding the mandates of the concerned institutions and leads to taking wrong decisions and causing harm to interest of community people. In this case High Court Division of the Supreme Court of Bangladesh cancelled the allotment and ordered to allot the khas lands to landless people. [Writ Petition No. 1162/1998, HCD]

### PUBLIC WATER RELATED CASE

A large portion of the river Fuldi, close to village Sonar Kandi under Gazaria Police Station of Munshigonj District was unlawfully leased for a period of 99 years. The villagers have been using the river in their agriculture for irrigation and drainage. Local people earned their livelihood by carrying out various income generating activities in and around the river including ferry service, traditional fishing, waste disposal, water transport and other usual utilisation like many other rivers of the country. In this case the petitioners claimed that the respondents had been acting collusively with mala fide abuse of power with intention to deprive the petitioners and the general public of the locality from their livelihood and



environmental protection as the leased land forms part of natural water flow of the river Fuldi. It was also alleged that such leasing violated the notification of the Ministry of Land dated 5 September 1995 prohibiting leasing of open fisheries for protecting the rights of the poor fisher community and ensuring their livelihood. The case is still pending before High Court Division of the Supreme Court of Bangladesh. [Writ Petition No. 4685 of 2002] revealing another fundamental problem in land and water conflicts at the snail's pace at which cases progress when they go into the legal process where dispute resolution depends as much on the willingness of those involved to pay the costs associated with repeated hearings and long delayed decisions as on any right or wrong in their position.

## **PUBLIC FISHERIES RELATED CASE**

A community-based organization (CBO) of local fishers was managing the Mashakura beel fisheries under Pirgacha Upazila in the district of Rangpur on payment of yearly lease to the government under a project. As per the project document, the government was supposed to assess the performance of the CBO and if the performance is found satisfactory, the lease shall be renewed in favour of the CBO after the expiration of the ten years lease. The government deviated from the MoU and instead of assessing the performance of the CBO opted for open leasing of the fishery through tender. On appeal from the CBO, Bangladesh Environmental Lawyers Association (BELA), an NGO filed a petition with the CBO chair as the petitioner and eight public agencies were made respondents in this case. A rule has also been issued to show cause as to why the notification that listed the fishery for leasing out should not be declared illegal and why the government actors shall not be directed to take action for assessment of CBO performance and for settling the fishery with the CBO. The case is pending before High Court Division of the Supreme Court of Bangladesh. [Writ Petition No.4185 of 2013].

## **DISASTER MANAGEMENT**

In 2010, a case filed by Bangladesh Environmental Lawyers Association and sought for directions upon the government by the court to declare the Cyclone Aila affected areas as "distress areas" to indicate their vulnerability and to support the repair and reconstruction of damaged embankments and rehabilitation of displaced persons. It is widely believed that Cyclone Aila is an example of more frequent extreme hazard events to be expected in the future. The High Court Division of the Supreme Court of Bangladesh passed an interim order directing the respondents to provide necessary supports to the victims of Aila including food, drinking water winter cloths and so on as soon as possible. This case reflects the inadequacy of coordinated efforts of responsible public agencies even the related disaster management laws and policies provided guidance for dealing with the victims of disasters. Moreover, this case is still pending, which also indicates that legal processes do not deliver timely decisions or rulings, which is crucial for the disaster affected people of Bangladesh. [Writ Petition No. 5732 of 2010]

## 4.1 KEY FINDINGS AND RECOMMENDATIONS / WAY FORWARD

The previous sections of this technical report, identified and reviewed the relevant provisions of the existing legislations, policies, and some relevant strategies and plans related to Water Resources, Fisheries, Forest and Biodiversity Resources, Agriculture, Land and Land Use Energy and Mineral Resources, Transport, Industry and Waste and Change and Disaster Management in Bangladesh. Thereafter, it discussed some of the court cases involved with sectorial legislative and policy approaches on natural resource and disaster management and identified the nature of the sectoral conflicts and disputes. This review and assessment process identify the following key issues to address at regulatory regime of environment, natural resource management, climate change and disaster as follows:

- Policies, laws and the regulations related to public land and water management are ad-hoc and sectoral.
- Sectoral conflicts and contradictions in terms of legal and institutional structures, functions and mandates deprive local communities from secure access to public lands and related resources.
- Absence of legislative and policy frameworks for land zoning resulting uncertainty in compliance of the sectoral laws and policies.
- Current management approaches to waterbodies in Bangladesh still aim at generating government revenue instead of ecological sustainability and secure livelihoods for poor users, instead they create obstacles to fair access to public waters for traditional users.
- Sectoral approaches of policies and laws undermine one another; e.g. laws related to fisheries focus on general conservation, but access (leasing) of fisheries is regulated by land related laws and policies set by Ministry of Land.
- The basic elements of community based resource management including community access to resources, community participation in decision making processes, and secure benefits for local communities particularly the poor are not yet institutionalized in Bangladesh with appropriate legal and policy mandates.
- The concept of common natural resources (e.g. common property institutions) does not exist in laws and policies, which are inflexible and focus on allocating exclusive rights of use to individuals (khas land) or cooperatives (water bodies).
- Policies and their implementation create space and opportunities for local elites to capture common natural resources.

- There is no clear decision or policy on whether rural people have a right to flood protection or suitable water for their traditional/preferred livelihood activities (e.g. legal cases over failure to repair cyclone damaged embankments and release of saline water for shrimp farming affecting crop cultivation did not result in recognition of any rights or norms).
- Sectoral laws and policies, those are adopted recently, addressed the issue of climate change. The energy related policies and legislation including on renewable energy adopted recently addressed broader contexts of promoting low emission development, but needs to be adopted specific legislations on institutional arrangements. But the key legislations and policies on transport and industry do not provide any specific directions for reducing GHGs from transport and industry sectors.
- Laws and policies related to forest, agriculture and water sectors, which can address the mitigation and adaptation measures together for climate resilient development processes, do not address the issues in the sectoral policies and legislations at all.
- Compliance and Monitoring Mechanisms within the legal and policy frameworks are very fragile which fail to promote the transparency and accountability in the conservation regime.
- Access to justice and dispute resolution mechanism found very complex in terms of judicial, administrative and alternative dispute resolutions (ADRs).

Recently adopted some of the multilateral treaties and conventions including the Paris Agreement on Climate Change, Transforming Our World: the 2030 Agenda for Sustainable Development, Sendai Framework for Disaster Risk Reduction, have provided required guidance for promoting environmental sustainability, sound natural resource management and sustainable development. In particular, Sustainable Development Goal (SDG) No. 15.9, specifically calls for integration of biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.<sup>51</sup> In terms of climate change, newly adopted The Paris Agreement on Climate Change notes the importance of ensuring integrity of ecosystems to address climate change, and promotes ecosystem-based climate adaptation.<sup>52</sup> The Sendai Framework calls for adopting ecosystem approaches to Disaster Risk Reduction (DRR) that can build up the disaster resilience of communities through sustainable use and management of ecosystems.<sup>53</sup> Moreover, the Special Rapporteur on Environment and Human Rights will present a thematic report focused on the linkages between human rights and biodiversity and conservation in March 2017<sup>54</sup> and

<sup>51</sup> UN Resolution [A/RES/7/1] – Transforming our world: the 2030 Agenda for Sustainable Development, 25 September 2015. SDGs 13, 14 and 15 call for action on climate change, biodiversity and desertification, while other SDGs highlight the importance of planet issues to achieve goals on poverty, food security, gender, water, energy, sustainable economic growth, infrastructure, cities, sustainable consumption and production.

<sup>52</sup> Article 7.9, of the Paris Agreement

<sup>53</sup> UN General Assembly, Sendai Framework for Disaster Risk Reduction 2015-2030.

<sup>54</sup> UN Human Rights Council [A/HRC/31/53] Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, para. 67.

previously adopted Convention on Biological Diversity in 1992, provided necessary guidance for the States to act for environmental sustainability and to promote sustainable development.

However, States need to act globally and in particular at the national levels to promote the sustainable development taking into account the rapid socio-ecological changes. Considering a specific country context, an appropriate legal and policy framework with effective monitoring and compliance mechanism can help to reduce environmental damage and to promote environmental sustainability, sound natural resource management and sustainable development taking into account the climate impacts. As such policy makers of Bangladesh need to understand the critical aspects of international policy regime of environment, conservation and climate change so that they can take necessary policy initiatives at the national level. In particular, required legal and institutional frameworks need to be developed with monitoring-reporting-verification, auditing, oversighting and communication mechanisms, which would promote the transparency and accountability in conservation governance regime in Bangladesh to protect its citizens from vulnerabilities and also to promote sustainable development. Prior to initiate such effort, to develop the transparent and accountable national conservation regime, clear strategies should be identified. A further comprehensive study can be initiated immediately to review all existing relevant policies and legislations with a view to identify the policy gaps, to develop strategies for addressing such policy gaps, and to develop policy reforms action plans for developing a transparent and accountable conservation regime in Bangladesh. However, as to immediate actions within the National Conservation Strategy Framework GoB Bangladesh can take initiatives:

- to remove the inconsistencies identified in this report from the existing sectoral policies and legislations related to environment, natural resource management, climate change and disaster management and sustainable development; and
- to establish an integrated and coordinated policy and legal framework to ensure sustainable use and management of environment and natural resource considering the climatic impacts

