

## **Country Paper of Bangladesh**

### **In the 13th Meeting of the Conference of the Parties to Convention on the Conservation of Migratory Species of Wild Animals (COP13)**

#### **INTRODUCTION**

Bangladesh is situated in the northeastern part of the South Asia. It lies between 20°34' and 26°36' North longitudes and 88°01' and 92°41' East latitudes. The country is bounded by India on the West, North and North-East latitudes. The Bay of Bengal is situated on the southern frontier of the country. The total landmass of the country is about 1,47,570 sq. km. with the population of the 170 million.

Bangladesh is occupying a unique geographical location in the South Asia. Bangladesh is virtually the only drainage outlet for a vast complex river basin made up of the Ganges, Brahmaputra and Meghna river and their network of tributaries. There are three broad physiographic regions in the country. The floodplains occupy about 80 percent, terrace about 8 percent and hills about 12 percent of the land area. Moreover, it is a country dominated by wetland having more than 50 percent of its territory under true wetlands that is estuaries, mangroves namely the Sundarbans, freshwater marshes, swamp and rivers.

#### **WILDLIFE AND HABITAT**

Bangladesh is located in the transitional zone between the South and Southeast Asian flora and fauna biomes, which contributed to its historically rich biological diversity. This unique biodiversity supports 130 species of mammals, 710 species of birds (310 species of migratory birds), 164 species of reptiles, and 56 species of amphibians. Apart from its charismatic animals such as Tiger, Elephants, Hoolock Gibbon, Asian Black Bear, Dolphins etc. Bangladesh is a very important seasonal habitat for migratory birds along the Central Asian and East Asia-Australasian Flyways, forming a key wintering area for the global populations of some of these species for instance, half of the wintering global population of Indian Skimmer, twenty percent global population of the critically endangered Spoon-bill Sandpiper. Particularly the wetlands, floodplains and coastal areas play an important role for migratory bird species.

Notable wildlife species that have already extinct from Bangladesh are the one and two horned Rhinoceros, Gaur, Banteng, Swamp Deer, Nilgai, Wolf, Wild Water Buffalo, Marsh Crocodile, Common Peafowl and Pink Headed Duck. A total of 219 species including fishes, amphibians, reptiles, birds, and mammals are being noted as threatened according to Bangladesh National Criteria. To conserve the wildlife and its habitat, government of Bangladesh has declared 45 Protected Areas (PAs) including 19 National Parks, 20 Wildlife Sanctuaries, 01 Marine Protected Area, 03 Eco-parks and 02 Special Biodiversity Conservation Area. Besides this, government has also notified two Vulture Save Zones exclusively for threatened vulture species. These PAs are distributed into the four major forest typologies of Bangladesh, Tropical Evergreen and Semi Evergreen Forest (Hill Forest), Moist Deciduous Forest, Mangrove Forest, and Coastal Forest. The rich biodiversity is significant to the local context as well as to the international context. Tanguar Haor and three Wildlife Sanctuaries of the Sundarbans have been declared as Ramsar

Sites in 1992. The entire Sundarbans (world's largest mangrove tract) has been also designated as a World Heritage Natural Site in 1997.

## WETLAND BIODIVERSITY

Bangladesh is a country of wetlands comprising a diverse range of water bodies including more than 700 rivers, and canals, beels, haors, baors, ponds and seasonal floodplains. These water bodies cover about 89,187.0 sq.km, which is about 50% of the land surface of the country. About 6.7% of the land area remain always under water, 21% is deeply flooded, which 35% land area experience shallow flooding (Byomkesh et al., 2009). A water areas of different type of wetlands is shown in Table 1. Wetlands are important to us as it is inseparable from our life, livelihood, culture and our heritage. It is the major area of economic activities our rural communities. It contributes significantly to our economy, nutrition and employment. Livelihoods of many people depend on the services of the wetlands. More than 10% country's people depend only on fishing for their livelihoods.

Wetlands types	Area (sq. km)
1. Rivers and streams	4800.0
2. Estuarine and Mangrove Swamps	6102.0
3. Shallow marshes (Beels, Jheels and Haors)	2050.0
4. Inundable Floodplains	57700.0
5. Large water storage reservoir (Kaptai lake)	900.0
6. Pond and tanks	16500.0
7. Baors (Oxbow lakes)	55.0
8. Brackish water Farms (shrimp ponds)	1080.0
<b>Total</b>	

**Table-1: Distribution of Wetlands in Bangladesh (Akonda, 1989)**

Bangladesh possess about 7-8 million hectares of wetlands in different forms for instance, rivers and streams (480,000 hectares), estuarine and mangrove swamps (610,000 hectares), shallow lakes and marshes (120,000-290,000 ha), large reservoirs (90,000 ha), small ponds and tanks (150,000-180,000 ha), shrimp ponds (90,000-115,000 ha) and seasonally submerged floodplains (5,770,000 hectares) (Nishat, 1993). Haors are bowl-shaped depressions between the natural levees of a river subject to monsoon flood every year, are mostly found in the eastern region of the country. There are about 373 haors comprising an area of about 858460 ha. Dispersed of Sunamgonj, Sylhet, Moulvibazar, Hobigonj, Netrokona and Kishoreganj district.

Wetlands always support maximum number of life including wildlife, fisheries, aquatic plants and invertebrates. Most of the wetland in Bangladesh possesses resources for migratory birds especially in the winter season. Around 310 species of migratory birds visited Bangladesh. Huge numbers of migratory birds visit Hakaluki Haor, Hail Haor, Ramsagar and Tangur Haor which is an important Ramsar site.

District	No. of Haor	Area of District (ha.)	Area of Haor (ha.)	% of Haor area per District
Shunamgong	95	367,000	268,531	73.17
Sylhet	105	349,000	189,909	54.42
Hobigong	14	263,700	109,514	41.53
Moulovibazar	03	279,900	47,602	17.01
Kishoregong	97	273,100	133,943	49.05
Netrokona	52	274,400	79,345	28.92
Bramanbaria	07	192,000	29,616	15.37
<b>Total</b>	<b>373</b>	<b>1999,800</b>	<b>858,460</b>	<b>42.93</b>

Tanguar Haor has outstanding conservation value, being a natural freshwater wetland in the country, seasonally harboring up to 60,000 migratory waterfowl along with many resident birds. Tanguar Haor resources especially reeds and swamps support birds and wildlife. Survey (2011) of IUCN has recorded 19 species of mammals, 24 species of reptiles and 8 species of amphibians in this wetland (Alam et al., 2012). The survey (2011) of IUCN has recorded 104 plant species under 88 genera and 51 families in this wetland (Sobhan et al., 2012).

158 species of wildlife were recorded from the Chanda beel; among them 7 amphibian, 21 reptiles, 111 birds and 19 mammal species (Chakraborty *et. al.*, 2005); among the birds 19 were migratory species. Seven species of snails are found in Chanda beel among them 2 has commercial importance (Khan *et. al.*, 2005).

### IMPORTANT BIRD AREAS (IBAs) OF BANGLADESH

- ❖ Madhupur National Park
- ❖ Jamuna-Brahmaputra river
- ❖ TanguarHaor and Panabeel
- ❖ Sundarbans (East, South, West Wildlife Sanctuaries)
- ❖ AilaBeel
- ❖ Ganges-Brahmaputra-Meghna delta
- ❖ HakalukiHaor
- ❖ Muhuri Dam
- ❖ Lawachara National park
- ❖ Hazarikhil Wildlife Sanctuary
- ❖ Hail Haor
- ❖ Pablakhali Wildlife Sanctuary
- ❖ Rajkandi Reserved Forest
- ❖ Rampahar-Sitapahar Wildlife Sanctuary
- ❖ Rema-Kalenga Wildlife Sanctuary
- ❖ Patenga Beach
- ❖ Himchari National Park
- ❖ SanguMatamuhari

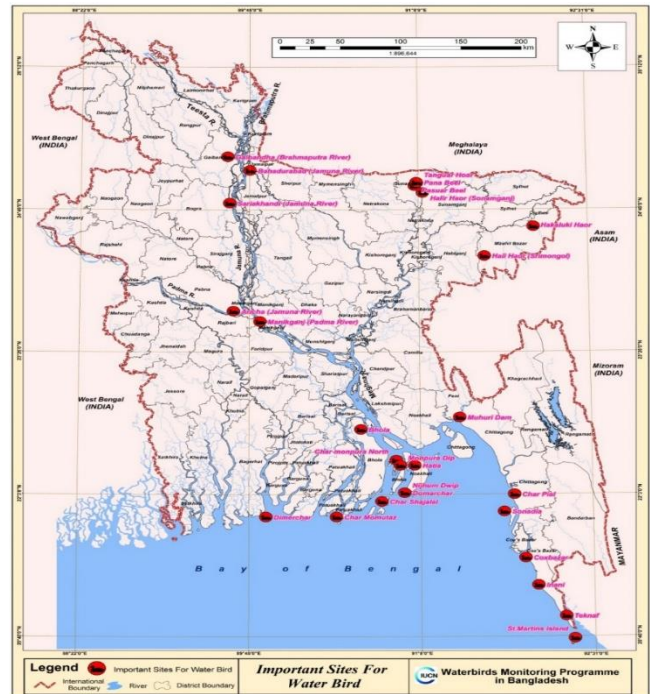
### IMPORTANCE OF WETLANDS IN BANGLADESH

- ✓ Bangladesh has wetlands (freshwater & coastal) of great biological diversity with international ecological importance.
- ✓ Largest portion of migratory waterfowl population uses the wetlands as habitat.
- ✓ These wetlands hold the largest number of threatened birds than any other habitats.
- ✓ The country is within the Central Asian Flyway (CAF) and East Asian-Australasian Flyway Network (EAAF) of migratory birds.

- ✓ Tanguar Haor, Hakaluki Haor, Baikka Beel which are important freshwater wetlands in North-east Bangladesh.
- ✓ Sonadia Island and Nijuhm Dweep are vital coastal habitat for migratory birds in South.

## IMPORTANT SITES FOR MIGRATORY WATER BIRDS

- ❖ Haor (freshwater wetlands) region in northeastern part
- ❖ Coastal mudflats in the South
- ❖ Riverine habitats and islands
- ❖ Some of them are declared as IBAs by BirdLife International
- ❖ Six of these wetlands are part of the EAAF Network Sites  
(*Tanguar Haor, Hakaluki Haor, Hail Haor, Nijhum Dwip NP, Sonadia Island, Ganguirar Char*)

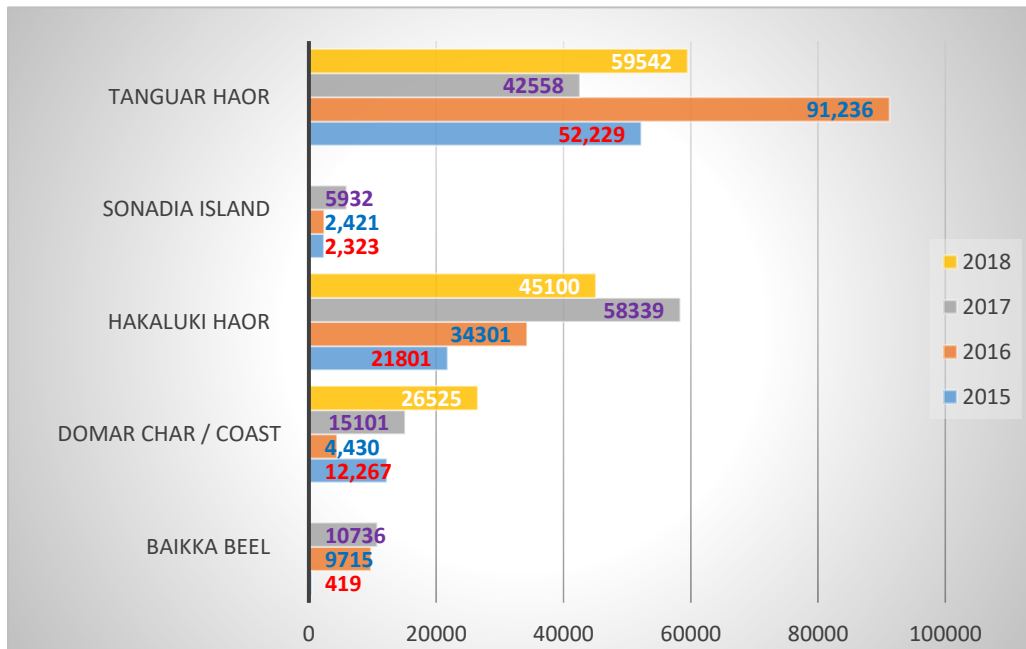


**Figure-1: Important sites for Water Bird**

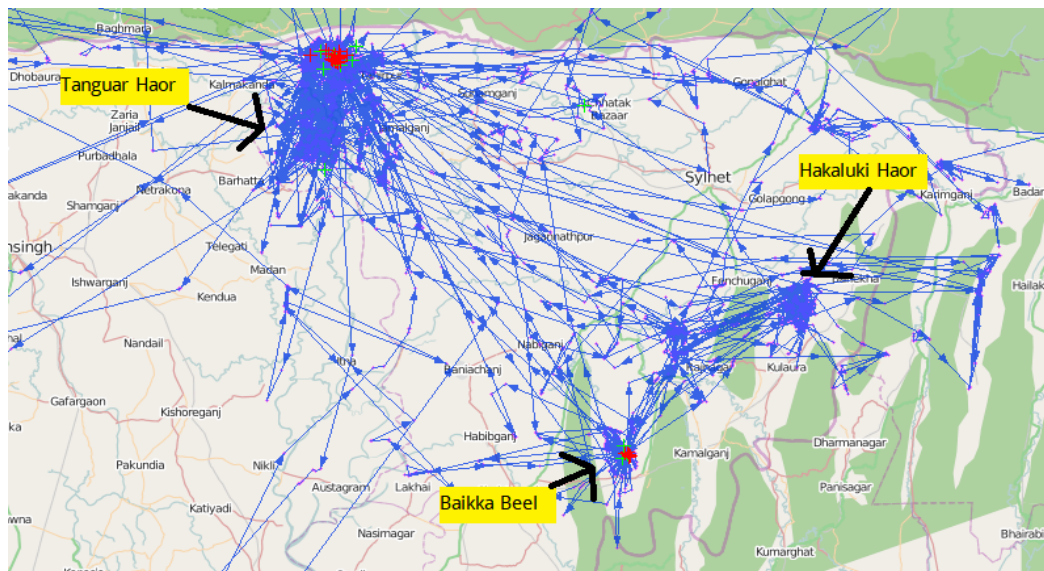
## RSEARCH AND MONITORING

Bangladesh is actively working for the conservation of water birds since 1987. Major activities for bird monitoring in Bangladesh are;

- **Waterfowl Census:** Counting or estimating the population size and density of different species in a given area especially wetland.
- **Bird Ringing:** The fitting of light-weight, numbered to identify separately and used for acquiring information.
- **Sample Collection and Analysis:** The collection of swab samples for testing.
- **Habitat Mapping:** Determining the important wild bird habitats and formatting maps of wild and domestic bird interaction.
- **Satellite Tagging:** Identifying the wetland network in country, migration route and core breeding area in breeding site.



**Figure-3: Total Number of Migratory birds counted**



**Figure-4: Satellite tagging of Migratory Bird**

The relevant inter- governmental conventions for conservation of migratory water bird are;

- Ramsar Convention on wetlands
- Convention on Biological Diversity (CBD)
- Convention on the Conservation of Migratory Species of Wild Animals (CMS)

Some international and national NGOs are directly involved in the conservation of migratory water bird in the Asia-Pacific Region, and these are;

- Bird life International

- International Crane Foundation
- Wetlands International
- International Union for Conservation of Nature (IUCN)
- Bangladesh Bird Club (BBC) etc.

## OTHERS SPECIES CONSERVATION EFFORTS

Sl. No.	Agenda	Remarks
1.	Asian Elephant	<ul style="list-style-type: none"> <li>➤ Bangladesh Elephant Conservation Action Plan (2018-2027) formulated.</li> <li>➤ Transboundary corridor identified</li> <li>➤ Biological fencing established</li> <li>➤ Compensation scheme for HEC mitigation and causality</li> <li>➤ Enrichment plantation in elephant corridors under SUFAL project</li> <li>➤ A Protocol and a Standard Operating Procedure (SOP) drafted for trans boundary elephant management with India and Bangladesh</li> </ul>
2.	Marine Turtle	<ul style="list-style-type: none"> <li>➤ Breeding area already identified.</li> <li>➤ Seasonal breeding protection ensured by the Bangladesh Forest Department</li> <li>➤ Aware local people, stockholder and fisherman.</li> </ul>
3.	Dolphin	<ul style="list-style-type: none"> <li>❖ Declared 03 Dolphin Sanctuaries (Dudhmukhi, Chandpai, Dhangmari).</li> <li>❖ Implemented 'Expanding the Protected Areas System to Incorporate Important Aquatic Ecosystems (EPASIIAE)' project in the Sundarbans.</li> </ul> <p>Drafted following documents:</p> <ul style="list-style-type: none"> <li>➤ Conservation Action Plan for dolphin in Bangladesh</li> <li>➤ Management plan for the Ganges river dolphin in Halda river</li> <li>➤ Community-Based Resource Management Plan of three Wildlife Sanctuaries for dolphins in Sundarbans</li> <li>➤ Proposed 03 New Dolphin Sanctuaries</li> </ul>
4.	Shark and Rays	<ul style="list-style-type: none"> <li>➤ Survey and monitor of sharks and rays species by Wildlife Conservation Society (WCS).</li> <li>➤ Species up listing and enlisting proposal in the schedule of Wildlife (Conservation &amp; Security) Act, 2012 has sent to the MoEFCC by Wildlife Conservation Society (WCS) and Bangladesh</li> </ul>

		<p>Forest Department.</p> <ul style="list-style-type: none"> <li>➤ Formulated a Standard Operating Procedure (SOP) for sharks and rays monitor, illegal trade data collection by Nature Conservation Society (NCS) and Bangladesh Forest Department.</li> </ul>
5.	Spoon-bill Sand Piper, Nordmann's Greenshank, Eurasian Curlew, Great Knot	<ul style="list-style-type: none"> <li>➤ Habitat conservation and species protection programme, regular awareness campaign at Sonadia Island and Nijhum Dwip NP by Spoon-bill Sandpiper Conservation Programme, IUCN Bangladesh and Bangladesh Forest Department.</li> </ul>

## LEGAL ISSUES

Bangladesh Forest Department with the strong support of Ministry of Environment, Forest and Climate Change has already declared 45 Protected Areas (PAs) as reserved forest of Bangladesh under the Bangladesh Wildlife (Preservation) Order, 1973 and Wildlife (Conservation & Security) Act, 2012 and fourteen of them are situated in the wetlands (Sundarbans and coastal forests including Nijhum Dweep).

National policy and legislation relating to migratory water birds and wetlands are;

### Acts:

- ✓ Wildlife (Conservation & Security) Act, 2012
- ✓ Environment Conservation Act, 1995
- ✓ Forest Act 1927, (Amended in 2000)
- ✓ Biodiversity Act, 2017

### Rules/Policies are:

- ✓ Protected Area Management Rules, 2017
- ✓ National Environment Policy, 2018
- ✓ National Water Policy, 1999
- ✓ National Fisheries Policy, 1992
- ✓ Coastal Zone Policy, 2004
- ✓ Ecologically Critical Areas Management Rules, 2016
- ✓ Environment Conservation Rules, 1997
- ✓ Forest Policy, 1994

According to Wildlife (Conservation & Security) Act, 2012 section no. 36 Penalties for killing Elephant is giving below:

**“If any person kills any elephant specified in schedule I without obtaining any licence under section, he shall be deemed to have committed an offence and shall be non-bailable for such offence and shall be punishable with imprisonment for a term which shall not be less than 2 (two) years and shall not exceed 7 (seven) years and also with a fine which shall not be less than Taka 1 (one) lac and shall not exceed Taka 10 (ten) lac and in case of repeating the same offence, he shall be punishable with imprisonment for a maximum term of 12 (twelve) years and with a fine of maximum Taka 15 (fifteen) lac”.**

According to Wildlife (Conservation & Security) Act, 2012 article no. 38 Penalties for killing birds or migratory birds etc. is giving below:

**“If any person kills any birds or migratory birds specified in schedule I and II, he shall be deemed to have committed an offence and for such offence, shall be punishable with imprisonment for a maximum term of 1 (one) year or with a fine of maximum Taka 1 (one) lac or with both and in case of repeating the same offence, he shall be punishable with imprisonment for a maximum term of 2 (two) years or with a fine of maximum Taka 2 (two) lac or with both”.**

Bangladesh Forest Department established Wildlife Crime Control Unit in the year of 2012 under the section no. 31 of Wildlife (Conservation & Security) Act, 2012. Wildlife Crime Control Unit play a vital role to mitigate wildlife crime throughout the country by conduct awareness program and regular monitor of illegal hunting, killing, rescue, selling of migratory birds in winter and others schedules animal.

Bangladesh Forest Department celebrates World Wildlife Day, World Migratory Bird Day, Elephant Day and others international days every year by involving local stockholder and national or international NGOs.