The Sundarbans, the largest single mangrove wetland ecosystem in the world, stretches across the south western border of Bangladesh into India. This is one of the most biologically productive regions in the world, recognized internationally for possessing unique ecological diversity and housing significant nursery grounds for many commercially important marine species.

The hilsa shad comprises the largest single fishery in Bangladesh's marine waters, employing about 2 percent of the country's total population and contributing 1 percent to total GDP.

The waters surrounding St. Martin's Island form the only coral reef ecosystem of Bangladesh. This is under heavy pressure from resource use, including intensive tourism, but also from considerable sediment loads.

The marine and coastal waters of Bangladesh are characterized by a rich ecological diversity including mangroves, estuaries, mud flats, protected bays and islands. Home to a large fisheries sector upon which the livelihoods of millions depend, the waters of Bangladesh are also an important habitat for marine wildlife such as migratory birds, cetaceans and turtles as well as coral reefs.

These valuable resources are at threat from over fishing, destruction of habitats, pollution, sedimentation and climate change. Establishing Marine Protected Areas (MPAs), as proposed under international conventions and promoted by United Nations programmes and organizations, helps prevent the degradation of important ecosystems and to conserve critical habitats and aquatic resources. This contributes to their sustainability for the well-being of those who rely on them.

The fisheries sector in Bangladesh contributes about five percent of total GDP. It also plays an important role supporting the livelihoods of some 12 million people either directly or indirectly involved in fishing and related activities. Fisheries products are estimated to account for 63 percent of total protein intake and generate important foreign exchange. Furthermore, healthy mangrove forests, such as those of the uniquely diverse and outstanding Sundarbans, also have a great potential to offer protection from storm surges.

The Wildlife (Conservation and Security) Act 2012 defines all national parks and wildlife sanctuaries, including the three Sundarbans Wildlife Sanctuaries, also listed as World Heritage and Ramsar sites. Currently there are 28 protected areas, seven of which encompass parts of the marine environment. Meanwhile, ‘Ecologically critical areas’ (ECA) which have typically suffered intense ecological destruction, can be declared under the Environmental Conservation Act of 1995. There are four ECAs in the marine zone, the best-known are St. Martin’s Island and the Teknaf Peninsula in the southeast of the country. In a move linking MPA development with fisheries management, Bangladesh has also recently declared ‘hilsa-closed seasons’. Four have been established in two of the country’s most productive fishing grounds: the ‘Middle Ground’ and ‘South Patch’ areas.
**MPAs face serious challenges**
Recent years have seen increased attention paid to marine resource conservation in Bangladesh. However, significant challenges still exist to their management and sustainability.

**Human impacts lead to degradation and depletion of natural resources**
- Over exploitation of artisanal fisheries and indiscriminate fishing techniques
- Pollution from upstream sources including industrial, municipal and agricultural waste as well as oil
- Discharge of ballast and bilge water from marine vessels
- Upstream development activities involving the use of sluice gates and barrages that affect water flow and natural siltation processes
- Plans for a deep sea port inside a protected area and growing tourism
- Illegal fishing by fishers from neighboring countries

**Poor governance limits MPA effectiveness in Bangladesh**
- The single sector agency approach in protected area management leads to unilateral actions based on departmental priorities, overlapping and redundant activities, as well as a failure to coordinate efforts among relevant agencies
- Lack of clear legislation and definitions create challenges in protected area management
- Government does not have the manpower or resources to manage and monitor MPAs or to enforce marine regulations
- Lack of technical capacity is a serious issue facing the management of protected areas throughout the country
- Weak coordination among relevant agencies

**Recommendations for improving MPA management and effectiveness**
- Formation of a National Committee for MPAs
- Effective partnerships formed between government agencies and local stakeholders with a co-management approach encouraged and implemented
- An MPA framework developed and adopted as policy guidance document
- An inventory taken of data/information and habitat profiling for proposed MPAs
- Roles, responsibilities and guidelines developed and defined for relevant stakeholders to establish, manage and enforce MPAs
- Capacity building for relevant agencies managing/enforcing MPAs
- Sustainable resource harvest mechanisms developed
- Monitoring protocols for MPAs established and applied

**For more information:**
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