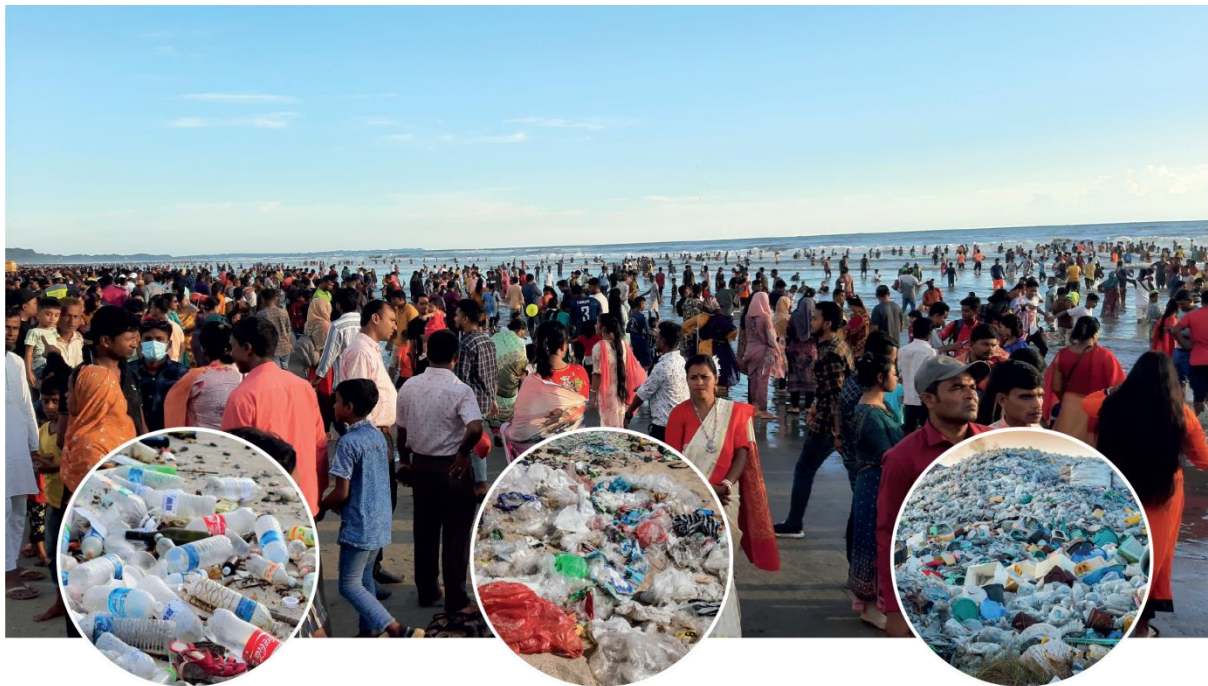


Need for Pollution free Marine Tourism in Bangladesh

Lt Cdr S M Anisur Rahman, (H3), BN



Marine tourism has become increasingly popular in recent years as people seek to escape their busy lives and explore the beauty of our oceans. Our country has a long coastline along the Bay of Bengal. Marine tourism has great potential as the country has natural beauty, varied marine life, and cultural significance. In 2021-22 our GDP in arts, entertainment, and recreation was BDT 60,737 million, which was only 0.16% of our total GDP with a growth rate of 13.72% (BBS GDP report 2021-22). This arts, entertainment, and recreation sector mainly includes coastal and marine tourism contributions. The particular sector growth rate indicates Bangladesh has enormous potential to develop coastal and marine tourism. But, apart from infrastructure development, pollution is affecting our marine tourism industry for further growing up, making the beaches unattractive to tourists. The presence of plastic waste, toxic chemicals, and other pollutants is affecting the water quality and making it unsuitable for swimming and other water-based activities.

Major Marine Tourism Spots in Bangladesh

Bangladesh has a long coastline extending from Teknaf to Patuakhali. The famous Cox's Bazar lies in between these two places. It is the home of the world's longest unbroken sea beach (120 km), which slopes down into the blue water of the Bay of Bengal. Apart from this beach area, other attractive tourist places in Chattogram Division are Inani Beach, Himchori, Sonadia Island, Moheshkhali Island, Teknaf, Kutubdia Island, and Saint Martin's Island. Teknaf lies at the southern tip of Bangladesh territory. Two major marine tourist attractions around the Chattogram city area are Parki and Patenga Sea Beach.

St. Martine Island is a beautiful coral island situated 100 km away from Cox's Bazar sea beach and 9 km from Teknaf. Attractions of this island are coral reefs, coconut groves, sea crabs, turtle shells, pearls, etc. The Ministry of Environment, Forest and Climate Change on 4 January

2021 declared an area of 1,743-sq km adjacent to St Martin's Island in the Bay of Bengal as a marine protected area in light of the Wildlife (Conservation and Security) Act. Sonadia is a crescent-shaped island about 7 km northwest of Cox's Bazar. The area of the island is about nine sq km. Sandy western coast, dry fish processing, and colonies of red crabs are the main attractions of this island. In the winter season, a significant number of migrating birds also come here.

Sundarbans, the largest mangrove forest in the world and one of the UNESCO world heritage sites, is situated in the Khulna Division. Khulna has two other important coastal and marine tourist spots; Katka Beach and Dublar Char. The Kuakata sea beach, locally known as Shagor Konnya (Daughter of Ocean), is located in the Barisal Division. Islands such as Monpura, Nijhum Dwip, Char Kukri Mukri, and Sandwip are marine tourism destinations. The famous marine tourism spots of Bangladesh with their activities are shown in the following table:

Division	Marine Tourism Spots	Marine Tourism Activities
Chattogram	Cox's Bazar Beach, Himchori and Inani Beach, Parki Beach, Patenga Beach, St. Martin's Island, Maheshkhali Island, Sonadia Island, Hatiya Island, Sandwip Island, Nijhum Dwip, Teknaf	Sightseeing, surfing, fishing, trekking, hiking, swimming, festivals, local handicrafts, shopping, seafood, SCUBA diving, snorkeling, boat cruising, seafood
Khulna	Sundarbans mangrove forests, Katka and Dublar Char	Sightseeing, boat cruising, fishing, swimming, seafood
Barisal	Kuakata Sea Beach, Manpura Island, Char Kukri Mukri	Sightseeing, festivals, local handicrafts, shopping, fishing, swimming, seafood

Table 1: Famous Marine Tourism Spots in Bangladesh

Contribution to GDP

Presently, Bangladesh's tourist industry economy is about BDT 500 million. In addition, between 2009 and 2018, Bangladesh received US\$ 1157 million from the travel sector. It also created 2.23 million jobs (Akter et al., 2022). But the alarming fact is that, if we only count the number of tourists for marine tourism, it is increasing every year except few exceptions like the year 2020-21 (COVID-19 pandemic). But the rate decreases when

we compare the number of inbound with outbound tourists (Table 2). This comparison unveils the need for improvement, which is mainly related to the environment and infrastrucure.

Year	Number of Tourists		Growth (%)	
	Inbound Tourists (Arrivals)	Outbound Tourists (Departures)	Arrivals	Departures
2008	4,67,000	8,75,000	61.6	-62.4
2009	2,67,000	22,54,000	-42.8	157.6
2010	3,03,000	19,13,000	-42.94	-15.13
2011	1,57,000	21,27,000	12.95	11.19
2012	1,60,000	22,73,000	1.91	6.86
2013	1,04,000	14,60,000	-35	-35.77
2014	1,34,000	-	28.85	-
2015	1,26,000	-	-5.97	-
2016	1,82,000	-	44.44	-
2017	2,37,000	-	30.22	-
2018	2,67,000	-	12.66	-
2019	3,23,000	-	120.97	-
Average growth (2008-2019) (%)			12.66	10.40

Table 2: Inbound and Outbound Tourists of Bangladesh (Akter et al. 2022)

Marine Tourism and Coastal Pollution Relationship

Marine tourism and coastal pollution are closely related issues that significantly impact our oceans and coastal communities. Marine tourism provides economic benefits to coastal communities, but it also contributes to the problem of coastal pollution.

Marine tourism activities, such as boating and recreational fishing, generate significant waste, including sewage, oil, and plastics. This waste can harm aquatic wildlife and ecosystems, including coral reefs and sensitive habitats, and pollute our oceans. In addition, many tourist activities, such as souvenir shopping and resort development, can destroy essential habitats and the degradation of coastal environments, negatively impacting the tourism experience.

On the other hand, coastal pollution, including litter and sewage discharge, can have a negative impact on the quality of the marine environment and the overall appeal of marine tourism. Polluted

beaches, contaminated waters, and the presence of litter can deter tourists and reduce their enjoyment of the marine environment. It can lead to a decline in tourism activity and a loss of income for coastal communities.

Plastic Pollution a Major Concern

A survey (Rakib et al., 2022) was conducted along Cox's Bazar Coastline to count and categorize marine litter.

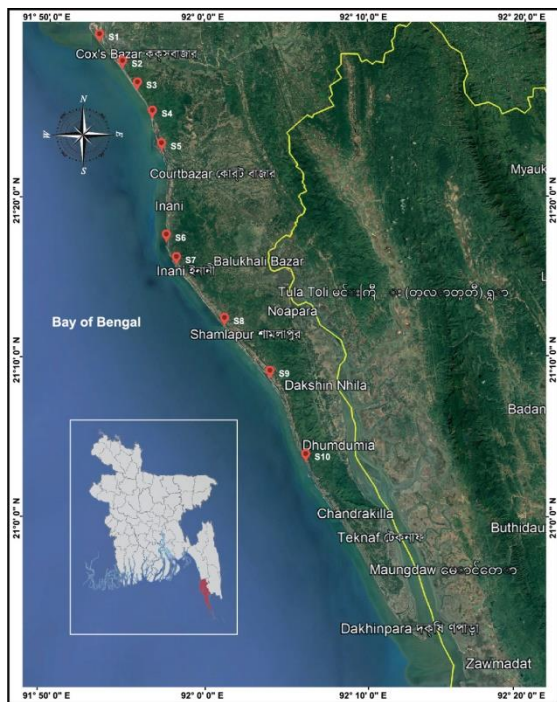


Figure 1: Sampling Station

Ten sampling stations (Figure 1) were selected based on tourism activities, and litter was collected and counted weekly over a period of 12 weeks from November 2020 to January 2021. The study found 54,401 marine litter items, with plastic litter being the most abundant material in all sampling sites (Figure 2). Straws were the most dominant litter type (12.3%), followed by polythene bags (9.3%). The study concludes that significant quantities of plastic debris are being mismanaged from various activities on beaches and through beach visitors, coastal inhabitants, and beach vendors.

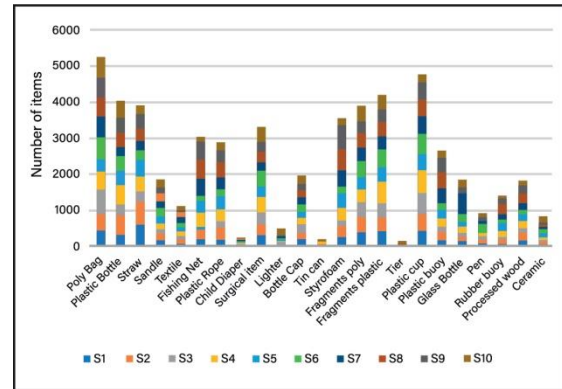


Figure 2: Beach Litter Items Found along Cox's Bazar Coastline

Challenges and Moving Ahead

To combat marine pollution and promote marine tourism, more emphasis should be put on the following activities:

Awareness and Motivation: An awareness and motivation program can help improve marine pollution due to tourists by educating them about the harmful impact of their actions and motivating them to adopt more sustainable behaviors. It can involve providing information about the effects of marine pollution on the environment and marine life and promoting responsible tourism practices such as reducing waste, using eco-friendly products, and supporting local conservation efforts. Additionally, the program can encourage tourists to participate in beach cleanups and other volunteer activities to reduce marine pollution. By increasing awareness and motivation, tourists can be empowered to take actions that contribute to protecting and preserving marine ecosystems.

Effective Waste Management Facilities: Waste management facilities can help enhance beach tourism by providing visitors with a clean and safe environment. Effective waste management ensures that litter and other waste are correctly disposed of, reducing the risk of pollution and environmental degradation. This can be achieved by providing sufficient waste bins and ensuring that they are regularly emptied and maintained. Moreover, waste

management facilities can also promote sustainability by implementing practices such as recycling and composting and by educating visitors about the importance of reducing waste and adopting more sustainable behaviors. By creating a culture of environmental responsibility, waste management facilities can protect the natural beauty and resources of the beach, making it a more attractive and enjoyable destination for tourists. Ultimately, this can increase tourism revenue and support local businesses and economies.

Planned Infrastructure Development:

Planned infrastructure development can help to improve beach tourism in several ways. Firstly, it can provide necessary amenities such as public restrooms, showers, and changing areas, improving visitor comfort and convenience. This can encourage more people to visit the beach and spend longer periods there. Secondly, planned infrastructure development can also provide improved access to the beach, such as parking facilities and pedestrian walkways, making it easier and safer for visitors to reach the beach. Thirdly, infrastructure development can also support recreational activities such as beach sports, water activities, and other attractions that can increase visitor engagement and enjoyment. Fourthly, infrastructure development can contribute to preserving and protecting the beach environment by implementing measures such as dune restoration, beach nourishment, and erosion control, which can help maintain the beach's natural beauty and ecological health.

Controlled Tourism: Controlled tourism involves limiting the number of visitors to an area and managing their behavior through education and regulations to reduce the negative impact of tourism on marine ecosystems. This approach promotes sustainable and responsible tourism practices, such as reducing waste and supporting local conservation efforts and supporting the development of conservation initiatives. Controlled tourism helps to minimize the pressure on the marine environment and reduce marine pollution, creating a more sustainable and responsible approach to beach and marine tourism.

Conclusion

Bangladesh strongly depends on foreign currency reserves to manage its economy. The country has the world's longest unbroken sea beach and one of the largest mangrove forests, which can be a significant source of earning foreign currency. Only a healthy, pollution-free environment with adequate infrastructure and controlled marine tourism can ensure such growth. Along with the mentioned activities, Bangladesh needs a proper implementation plan that must be formulated based on intergovernmental coordination and cooperation to protect and maintain healthy marine tourism. All public and private sector stakeholders, including government policymakers, should take a holistic approach to sustainable and pollution-free marine tourism in Bangladesh.

Writer: Lieutenant Commander S M Anisur Rahman, (H3), BN is the Director (Admin) of BIMRAD. Email: anis972@gmail.com