

Coastal Stakeholders' Perception on the Subject of the Tourism and Condition of Environment at the Coastal Area: A Case of Cox's Bazar Sea Beach, Bangladesh

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Abstract—Tourism is responsible for environmental degradation compared to other economic activities in the coastal areas where environment is its primary resource. But proper management and planning can help tourism to contribute in environmental conservation in the coastal areas. In Bangladesh, coastal areas are very famous as a tourist spot and Cox's Bazar sea beach is one of the prominent one. Cox's Bazar, the world's longest unbroken (around 120 km) sandy sea beach is not only for worth visiting but also a lot of places can astonish anyone by her natural beauty, rarity and uniqueness. The objectives of this study are to explore the tourism development trend in coastal areas of Cox's Bazar, to analyse existing environmental conditions of Cox's Bazar coastal area and, finally this study try to understand the perception of coastal stakeholders' regarding tourism and environmental condition in tourism hubs like Cox's Bazar. The main methods of conducting this study are desktop research; data collection through questionnaire survey; data input in SPSS; and data processing and analysis. In the light of the data analysis and discussion, some recommendations are suggested to help and guide future decisions regarding tourism development and conservation of the environment at the coastal areas in Bangladesh.

Keywords: Coastal stakeholders', tourism development, environmental conservation, Cox's Bazar.

1. INTRODUCTION

Tourism is one of the biggest and quickest rising industries in the world with no signs of slowing down in the 21st century [17] and most of time tourism is cited for its negative impact on the environment, but behavioural decision-making can significantly mitigate these impacts if developed properly and based on best management practices [6]. In recent decades, sustainability has become a leading concept in development studies and also became an important part of tourism development practice and research [8]. Adams (2006) pointed that definitions of sustainability often refer to the "three pillars" of social, environmental and economic sustainability.

According to McVey (1993) 'environmental sustainability is related to the capacity of the natural and built environment to handle tourism without damage' [14]. Coastal area is a spatial region where interaction of the sea and land processes occurs. The growth of tourism in coastal areas has reached its pinnacle in recent decades which exert pressures on environmental resources of the coastal areas. Tourism at the coastal areas is associated with a variety of development activities, environmental impacts and coastal management problems. The impacts are classified variously: environmental, economic and socio-cultural, direct or indirect, positive or negative, immediate or cumulative, short-term or long-term [16].

Bangladesh has long coastal areas (around 700 km) with some renowned sandy beach such as Cox's Bazar sea beach, Kuakata sea beach, Patenga. Among these sea beaches, Cox's Bazar Sea is most notable for her unique features. This sea beach is well known as wide and long sea beach and also is considered as the world's longest unbroken (around 120 km) natural sandy sea beach with slopes gentle down to the blue waters of the Bay of Bengal alongside picturesque chain of green hills. Now, Cox's Bazar is most visited local tourist destination in Bangladesh as well as international tourists (Islam 2003) and one of the most beautiful natural sites in South East Asia [11]. This study will only be focused on some portion of total Cox's Bazar sea beach likely Laboni beach and Kolatoli beach. The main sea beach of Cox's Bazar is Laboni Beach that is well appreciated during sunsets and sunrise. At the Laboni Beach where people can witness the sea as it changes its colours twice in a day. Visitors can do sunbathe, surf, jog, cycle, and swim. This place is best for swimming and relaxation. Kolatoli Beach is another prominent beach near to Laboni Beach.

2. OBJECTIVES AND METHODOLOGY

The objectives of this study are to explore the tourism development trend in coastal areas of Cox's Bazar, to analyse existing environmental conditions of Cox's Bazar coastal area and, finally this study try to understand the perception of coastal stakeholders' regarding tourism and environmental condition in tourism hubs like Cox's Bazar. The main methods of conducting this study are desktop research; data collection through questionnaire survey; data input in SPSS; and data processing and analysis. The data has been collected from two sources: primary data and secondary data. However, this study is mainly based on primary data. Secondary data has also been collected to supplement primary data. Questionnaire survey is the main task to know vast information from the respondents. In this study, coastal stakeholders' are the main respondent of the questionnaire survey and the coastal stakeholders' include the local people, tourists, tourism labour force, investors and developers, the government official, NGO official and others. The total numbers of respondents of the questionnaire survey are 108.

3. THE COASTAL ZONE OF BANGLADESH

Bangladesh is situated at the beginning of the Bay of Bengal, and it has a coastline of approximately 700 km. The coastal zone of Bangladesh is shown in Fig. 1. The combined out-fall of the Ganges, the Brahmaputra, the Meghna, which consider among the major rivers in the world, discharges at the Bay of Bengal. The Ganges-the Brahmaputra-the Meghna delta is one of the large and young deltas in the world which is covering most of the Bangladesh and still very active. The coastal zone of Bangladesh covers 19 out of 64 districts, about 153 thanas (sub-districts). 32 percent of the total land area and 28 percent of the population of Bangladesh are comprised by the coastal zone [7, 9-10].

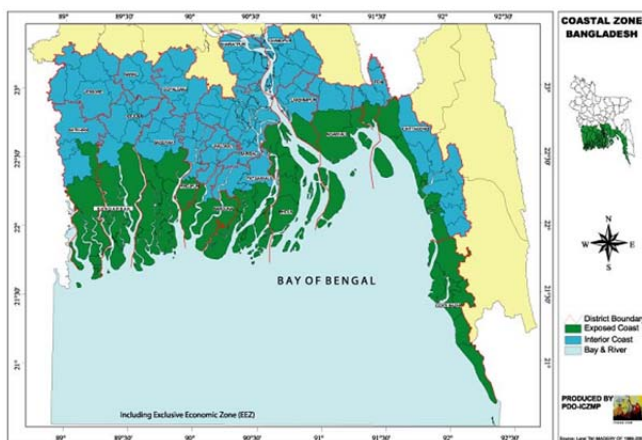


Fig. 1: Map of the coastal zone of Bangladesh [9]

The coastal zone of Bangladesh is very susceptible because of multiples threats likely cyclones, storm surges and floods,

earthquakes, tsunami, and climate change. The Government of Bangladesh (GoB) has recognized the coastal zone as an “agro-ecologically disadvantaged region”. Social and economic development at coastal region have slowed down because of some reasons such as land erosion, scarcity of drinking water, ground water arsenic content, water and soil salinity, water logging, and diverse forms of pollution [9]. There are twelve major issues which have been identified as the main sources of coastal and marine pollution in Bangladesh and the issues are industrial waste, disposal of sewage, management of solid waste, agrochemicals, deforestation, salinity intrusion, rapid urbanization, coastal zone erosion, coastal resources extraction, coastal tourism, land use change and climate change [2].

4. STUDY AREA

Geographical Setting



Fig. 2: Map of Cox's Bazar [3]

Cox's Bazar is the longest unbroken (approximately 120 km) natural sandy beach in the world that is situated in Bangladesh with sloping gently down into the Bay of Bengal against the background of picturesque chain of hills that are covered with deep green forests. It is approximately 440 km from the south of capital city Dhaka and 152 km from the south of business capital city Chittagong [3, 13]. A map of Cox's Bazar is presented in Fig. 2. The Cox's Bazar district is covered around 2491 sq.km which is located in between 20°43' and 21°56' north latitudes and in between 91°50' and 92°23' east longitudes. This district is bounded by the Chittagong district in the north, the Bay of Bengal in the south and west, and the Bandarban district, Arakan (Myanmar) and The Naf River in the east [4].

5. TOURIST ATTRACTIONS IN COX'S BAZAR

Natural beauty of Cox's Bazar depends on the sea and the sea lies along the whole western coast of Cox's Bazar which is extended towards the north-south direction. Cox's Bazar has extended shore land of shallow depth with a very rich biodiversity and a large variety of sea fish. Among the endless gifts of the sea there are 475 kinds of fish such as archaic fish, crabs, snails, shellfish and algae [14]. In Cox's Bazar, the world's largest sandy sea beach is not only for worth visiting but also a lot of places can astonish anyone by her natural beauty, rarity and uniqueness. The beach is very wide, approaches 200-300 metres towards the sea, with almost flat terrain [14-15]. Apart from the sea beach there are also some other tourist attractions near Cox's Bazar sea beach likely Himchari, Moheskhalı Island, Sonadia Island, St Martin's Island etc. Himchari is one of the most attractive places in Cox's Bazar for the tourists located to the south of Cox's Bazar along the sea beach. Himcahri is famous for its dazzling waterfalls [14-15]. Moheskhalı a small island off the coast of Cox's Bazar (268 square km.) and it is well known as the jewel among the attractions of Cox's Bazar. The centre of the island and the eastern coastline is covered with a range of low hills about 300 feet high. The coast on the west and north is a low-lying tract which is fringed by mangrove forest. The island also has an Adinath temple and a Buddhist pagoda which are most attractive spot of the island [3, 14-15]. Sonadia Island is, well known as 'home of turtles', a small island in a crescent shape of only nine square km. This island is located seven kilometres north-west of Cox's Bazar. The western side of this island is sandy, and it is very famous for different types of shells that are available on the beach [14-15]. St Martin's Island is, in the north-east part of the Bay of Bengal, a small island around nine kilometres south of the tip of the Cox's Bazar-Teknaf peninsula. St Martin's Island is the only coral island in Bangladesh with beaches fringed seashells and coconut palms, and has become a very popular tourist spot. This island is also known as 'Narikel Jinjira' (Coconut Island) [3, 14-15].

6. TOURISM DEVELOPMENT IN COX'S BAZAR

During 1950s development of tourism was started in Cox's Bazar and to develop the tourism infrastructure Pakistan government (that time Bangladesh was part of Pakistan) also took some initiative. For developing tourism infrastructure in Cox's Bazar, the Ministry of Public Works was responsible and that time the ministry built a sea beach rest house complex. In 1961, a plan namely 'Development of Cox's Bazar as Health Resort' was developed by the government and this plan government constructed some motels, restaurant, and internal road networks. Apart from this, in 1965 for the development of tourism in Pakistan 20-year master plan was approved by the Government of Pakistan. After the independence of Bangladesh, report, prepared by the Commonwealth Fund for Technical Co-operation, recommended developing the Cox's Bazar as a tourist resort. Owing to the insufficient fund allocation in the 3rd five-year plan 1977-1982 for tourism sector development, this recommendation was not implemented by the government. That time Bangladesh Parjatan Corporation (BPC) invested money from its own sources to develop a world class tourist resort in Cox's Bazar, but the amount was not enough. In 1989, for the development of tourism in Cox's Bazar the government formed a committee, and this committee submitted a report including a detailed plan in 1990. The committee recommended that the various kind of can be implemented on a short, medium and long-term basis. In the short-term, medium-term and long-term the committee recommended 24, 5 and 7 projects respectively. The committee wanted to finish all the short-term projects by 1992, but only nine projects were completed until 2009. In the case of medium term projects, the committee recommended finishing all the projects by 1997 but to date only two projects are finished by the government. For long-term projects, the committee set a target to finish all the projects by 2000 but to date none of the projects has been finished. To implement some of the long-term projects need big budgets but sometimes government did not allocate money for project implementation. According to the information of Cox's Bazar Municipality there are 143 hotels, motels and rest houses operate in Cox's Bazar with trade licences from the municipality [13].

7. ANALYSIS AND DISCUSSION

Demographic Profile of Respondents'

In this study, coastal stakeholders' are the main respondent of the questionnaire survey and the coastal stakeholders' include the local people (including the people who are engaged in non-tourism work like fishing, agriculture and any other occupation), tourists, tourism labour force, investors and developers, government official, NGO official and others. The total numbers of respondents of the questionnaire survey are 108. The demographic information of respondents' has been

found that 43.5 % of the respondents are tourist and second highest is 19.4% who are local people. On the other hand, most of the respondents are male (76.9%), and 52.8% and 38.9% of respondents age belongs to age range 15-29 and 30-44 respectively. The education level of the respondents is well distributed in two headings: 31.4% with Bachelor and above, and 25.9% with higher secondary education. Other 10.2%, 11.1%, 10.2% and 11.1% of the respondents are distributed in illiterate, primary, secondary and technical education categories respectively. From the occupation perspective 28.7% of the respondents are involved in business, 23.1% of the respondents are student, and 16.7% of the respondents are involved in tourism related jobs.

Coastal Stakeholders' View about Tourism development in Cox's Bazar

Coastal stakeholders' view about the tourism development in Cox's Bazar obtained through a questionnaire survey. Most (99.1%) of the stakeholders' are said Cox's Bazar sea beach is a good place for tourism development, and 80.6% of the respondents think that the level of tourism in Cox's bazar is improving gradually. Coastal areas are very fragile and often face various types of negative environmental impacts (both short term and long term) because of tourism development, and Cox's Bazar sea beach is not exceptional. A good number of respondents (68.5%) think that in Cox's Bazar tourism produces long term negatives effects on the environment. However, sometimes tourism can also be provided an incentive for the conservation and restoration of natural resources in the coastal areas. Tourism at coastal areas depends on good environmental condition of the coastal area and without it tourism industries could not be sustained. Almost half of the respondents (49.1%) are agreed that tourism provides an incentive for the conservation or restoration of natural resources in Cox's Bazar coastal area. Tourism development helps to increase the awareness of the local people, as well as visitors about the environment and natural resources of the coastal areas. More than half of the respondents (60.2%) are considered that people, both local and visitors, become more aware of the environment and natural resources of the Cox's Bazar sea beach because of tourism development. However, tourism facilities like construction of hotels and some other kind of facilities related to tourism development are responsible for destroying the natural environment in the coastal areas. Majority of the coastal stakeholders' (82.4%) are agreed with the statement that the construction of hotels and other tourist facilities have been destroying the natural environment in Cox's Bazar. However, tourism helps to conserve the coastal environment in various ways, but also responsible for destroying the whole coastal ecosystem. From conservation or restoration perspective good management of tourism development is very important and in view of environmental management, majority of the respondents (84.3%) thought that tourism is not well managed in Cox's Bazar. Slightly more than half of the respondent stakeholders' (52.8%) are described that the overall level of

tourism in Cox's Bazar is acceptable, and 32.4 % of the respondents thought that the overall level of tourism is high in Cox's Bazar.

Improvement of Environmental Condition in Cox's Bazar

For tourism development in coastal areas, both natural environment and natural resources are very suitable but as well as vulnerable. Vulnerability of the natural environment and resources is not only arising because of tourism but also lack of proper management and maintenance of resources. Coastal stakeholders' were asked about necessary steps to improve the environmental condition at coastal area. A multiple response analysis is carried out based on the field survey data. Table 1 is the case summary of the stakeholders' opinion. It appears from the table 2 that 90.7% of the respondents believed that need more initiative from the government to improve the environmental condition at coastal area. More than 70% of the respondents stated that to improve the environmental condition at coastal area local people consciousness about the environment and control of haphazard development along the sea beach area are essential. Responsible attitude from the tourists also very important to improve the environmental condition at coastal area and 62.6% of the respondents are agreed with that statement.

Table 1: Case Summary of stakeholders' opinion

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Necessary to improve environmental condition ^a	107	99.1%	1	0.9%	108	100.0%

a. Dichotomy group tabulated at value 1.

Table 2: Frequencies of stakeholders' opinion

Necessary to improve environmental condition Frequencies

		Responses		Percent of Cases
		N	Percent	
Necessary to improve environmental condition ^a	More initiative from government	97	25.3%	90.7%
	Local people consciousness	78	20.4%	72.9%
	Initiative from NGOs	57	14.9%	53.3%
	Responsible attitude from tourists	67	17.5%	62.6%
	Control of haphazard development along the beach area	82	21.4%	76.6%
	Any others option	2	0.5%	1.9%
Total		383	100.0%	357.9%

a. Dichotomy group tabulated at value 1.

8. CONCLUSION

Tourism industry is very complex, and its success depends on complementary efforts from the government, the investors, and the indigenous people of tourism sites [1]. It is true that tourism development is responsible for the environmental degradation in coastal areas. However, on the other hand, tourism can support conservation under some circumstances and with associated environmental costs through private reserves, community conservancies, and contribution to public protected areas [5]. In the case of coastal areas, tourism is more sensitive to environmental degradation compare to other economic activities because the environment is its primary resource. With the help of efficient planning and proper management of natural resources, tourism can significantly contribute to environmental conservation and to achieve environmental sustainability in coastal areas [12]. Sound and effective environmental management of tourism facilities can minimise the adverse environmental impact of tourism.

In Bangladesh, the tourism sector is not that much developed but there are lots of opportunities exist to develop this sector. Though there is a couple of various types of tourism development projects, but only few are implemented in due time. Rest of the projects are either still ongoing with limited fund or stopped in the middle way. In the case of Cox's Bazar coastal area, concrete policy and strategy are very important for tourism development whereas this area might have the possibility to degrade by the tourism activities. On the other hand, tourism development can be helpful to preserve or conserve the natural environment because tourism development at coastal areas solely depends on components and quality of the natural environment.

REFERENCES

- [1] Akpabio, I. A., Eniang, E. A. and Egwali, E. C. (2006) 'Socio-economic potentials and environmental implications of coastal tourism at Adiabo, Cross River State, Nigeria', *Environment, Development and Sustainability*, 10(3), 249-265.
- [2] *Bangladesh: National Programme of Action for Protection of the Coastal and Marine Environment from Land-Based Activities*, Bangladesh: Department of Environment, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh.
- [3] Banglapedia (2012a) 'Cox's Bazar', [online], available: http://www.banglapedia.org/HT/C_0432.htm [accessed 07 April, 2014]
- [4] Banglapedia (2012b) 'Cox's Bazar District', [online], available: http://www.banglapedia.org/HT/C_0430.htm [accessed 07 April, 2014]
- [5] Buckley, R. (2012) 'Sustainable tourism: Research and reality', *Annals of Tourism Research*, 39(2), 528-546.
- [6] Carey, J. J., Falk, J. M. and Havens, K. E. (2012) *Sustainable Coastal Tourism: Renewing Sea Grant's Role*.
- [7] Chowdhury, J. U. 'Issues in Coastal Zone Management in Bangladesh'.
- [8] Cohen, E. (2002) 'Authenticity, Equity and Sustainability in Tourism', *Journal of Sustainable Tourism*, 10(4), 267-276.
- [9] Islam, R. (2007) *Pre- and post-tsunami coastal planning and land-use policies and issues in Bangladesh*, RAP Publication.
- [10] Krishnamurthy, R., Kannan, A., Ramanathan, A., Tinti, S., Glavovic, B. C., Green, D. R., Han, Z. and Agardy, T. S., eds. (2008) *Integrated coastal zone management*, Research Publishing Services.
- [11] 'Main Sea Beach, Cox's Bazar', (2012) [online], available: <http://wikimapia.org/1013573/Main-Sea-Beach-Cox-s-Bazar> [accessed 28 September, 2013]
- [12] Orhon, D., Gökçekuş, H. and Sözen, S. (2011) 'Environmental Basis of Sustainable Tourism Along Sensitive Coastal Areas—Principles and Applications' in *Survival and Sustainability*, Springer, 235-241.
- [13] Rahman, M. M. (2010) *Exploring the Socio-economic Impacts of Tourism: A Study of Cox's Bazar, Bangladesh*, unpublished thesis University of Wales Institute.
- [14] Sharma, K. (2011) *Sustainable Tourism Development Through Sustainable Architecture: A Projected Case Study Of Cox's Bazar, Bangladesh*, unpublished thesis The University of Huddersfield.
- [15] Uddin, I. (2011) 'Cox's Bazar', [online], available: <http://bangladeshqueenofnaturalbeauty.blogspot.hk/p/coxs-bazar-world-largest-seabeach.html> [accessed 10 April, 2014]
- [16] Wong, P. P. (1998) 'Coastal tourism development in Southeast Asia: relevance and lessons fo rcoastal zone management', *Ocean & Coastal Management*, 38, 89-109.
- [17] Zhang, J. (2001) 'Analysis of Coastal Tourism with the Aid of Remote Sensing ', in *The 22nd Asian Conference on Remote Sensing*, Singapore.