

External Threats To Land And Sea In Cox’s Bazar: What Can Be Done?

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ABSTRACT : The present research was undertaken to investigate the external threats to land area and sea to provide some solutions to minimize the effects caused due to these threats. The focus of the research was Cox’s Bazar, a most visited tourist spot and one of the south western districts of Bangladesh. For this research, I mainly used Secondary information gathered from books, journals and research reports along with my own experience of visiting the research area. It is found that unplanned growth of the city, land grabbing, excessive tourist waste, shifts in agricultural activities, harmful activities by Rohingya and industrial activities are main threats in land use pattern. For marine environment and sea area emission of toxic elements into sea by ships and activities related to ship braking, oil spills and lower maritime security are greatest threats caused by external factors. The present research was concluded by proposing some actions for mitigation of effects due to the identified threats.

KEYWORDS – Emission, Environment, External, Land use, Marine, Rhingya, Threats and Tourist.

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I. INTRODUCTION

Cox’s Bazar is the longest sea beach in the world and the most visited tourist destination in Bangladesh. According to (Ahammed 2010)[1], Cox’s Bazar experiences huge growth in tourism since 1990. During the peak season some millions of tourists visit Cox’s Bazar and all hotels, motels and guest houses are totally filled up and even some visitors spend their night inside the vehicle because no seats are available in the hotels. From general observation it is understood that tourism has brought a big change in this area.

Tourism’s unplanned growth has damaged the natural and socio-cultural environments of many tourism destinations. These undesirable side-effects have led to the growing concern for the conservation and preservation of natural resources, human well-being and the long-term economic viability of communities (Ahammed 2010)[2]. There are external threats which are the reason for reduction of tourist and destruction of the land and sea area which are still unidentified.

A major reason for rising interest has been the increasing evidences that tourism development leads not only to positive, but also has the potential for negative outcomes at the local level. Different recent studies show that tourism development is usually justified on the basis of economic benefits and challenged on the grounds of social, cultural, or environmental destruction. Furthermore, the economic benefits traditionally associated with tourism development are now being measured against its potential for social disruption.

It is generally felt that the impact study and attitudes of residents toward the impacts of tourism are likely to be an important planning and policy consideration for successful development, marketing, and operation of existing and future tourism programs. So the tourism industry’s greatest challenge is that of integrating the needs of all stakeholders in a sustainable management plan that takes into account the environmental, socio-economic, and cultural dimensions (Ahammed 2010)[3]. As it is the heart of the tourism of Bangladesh these threats should be identified and must be dealt with serious care.

II. LITERATURE REVIEW

External threats are activities that occur outside the boundary area but which affect the purpose or resources in a specific area (Burroughs 1993)[4]. The research area of the article is Cox’s Bazar. So threats influenced and caused by factors outside this area are considered as factors of external threats for this research.

According to (Oikya 2016)[5] the coast of Bangladesh is known as a zone of multiple vulnerabilities as well as opportunities. It is prone to severe natural disaster. Natural and man-made hazards such as erosion, water and soil salinity and other forms of pollution made the coastal and marine environment threatened. The major causes of marine environment pollution in Bangladesh are the unregulated operations of a large number of vessels operating for inland and merchant shipping and due to lax application of laws and resources deficiencies

of the concerned governments, pollution by the shipping at the ports and at other marine areas have become the common incident.

In case of Cox's Bazar, lots of external threats that are destroying the land and the world's longest sea beach as well as the sea. Rohingya, land grabber, unplanned infrastructure, tourist waste, human trafficking, maritime terrorism, drug smuggling all of them are potential external threats for Cox's Bazar.

III. RESEARCH AREA

Cox's Bazar is situated in the southeastern coast of Bangladesh along the north eastern coast of Bay of Bengal. The geographical location of Cox's Bazar is in between latitude 21°15' and 22°N and longitude 91°45' and 92°15'E. The Chittagong hill tracks and Myanmar to east, Bay of Bengal to west, the business hub and largest sea port of Bangladesh, Chittagong is situated to west north and Bay of Bengal and Myanmar coast to the south surround the Cox's Bazar district(Hossain, et al. 2003)[6]. The research area contains the world's longest unbroken sea beach. Cox's Bazar is also renowned as one of the most visited tourist attractions in the country. Teknaf, Saint Martin's island and Chera Dip are some of the most visited tourist spots in Cox's Bazar.

IV. SIGNIFICANCE OF THE RESEARCH

To date, little or no research has examined the factors which are acting as external threats on the land and sea of Cox's Bazar. The present research will try to find out the external threats to land and seas in Cox's Bazar and try to propose some recommendations. This research paper will mainly help the future this research will help the researchers to work further because much more work is needed to find out a clear understanding of the issues related to these threats and developing comprehensive solution strategies for mitigating effects due to those threats. This research will also help the policy planners to be updated, at least to some extent, of the threats being felt and encourage to ameliorate the effects of threats and bridge the existing gaps by reviewing the necessary policies and their strict but positive enforcement in the area for a sound, systematic and sustainable management of land and marine environment in Cox's Bazar.

V. METHODOLOGY

This article is basically a review of secondary research conducted in this area. Secondary data from books, journals, government circulars, research reports are used in this article. Information found by browsing different websites are also used for preparing this article. Direct observations, public opinion and opinion of the local administration gathered from visit to research area also helped the author to prepare this article.

VI. STATEMENT OF THE RESEARCH PROBLEM

Various threats from outside Cox's Bazar have damaged the natural and socio-cultural environments of the small township. These undesirable effects of external threats have led to many problems associated with land and sea.

VII. OBJECTIVE OF THE RESEARCH

The fundamental objective of this article is to investigate external threats to Land and Sea in Cox's Bazar and to give some recommendations for limiting the effects caused due to these threats. The specific objectives are:

1. To find the external threats to land in Cox's Bazar
 2. To find the external threats to sea in Cox's Bazar
 3. Try to propose some recommendations to reduce impacts due to these external threats
- To materialize these objectives, some research questions have been set. These include:
1. What are the external threats to land and sea in Cox's Bazar?
 2. What can be done to reduce the impacts due to these threats?

VIII. ANALYSIS AND FINDINGS OF THE RESEARCH

For listing down the external threats an analysis of the secondary data was made. It is found that, human pressure on coastal resources is compromising many of the ecosystem services crucial to the well being of coastal economies and people. The greatest threat to land and sea in Cox's Bazar is development related loss of habitats and services. The significant External threats to land have come about through Rohingya migration from Myanmar, adjacent industrial activity, land grabbing and various human activities. Water-based external threats to sea of the research area include ship building and breaking, industrial actions, siltation, agriculture, surface runoff, septic tanks, excessive tourist and human activities.

Nonetheless, it is found that many threats were still unresolved and many were still un-documented. Though, the actual number, magnitude, and severity of external threats to land and sea in Cox's Bazar remain a subject for continued research but an attempt to list down the factors affecting the research area was made.

8.1 External threats to land in Cox's Bazar

Land is being continuously degraded and lost owing to erosion due to deforestation, non-biodegradable waste dumping, salinity, inundation and other anomalies. There are many factors which are working as external threats to cause degradation and loss of land area in Cox's Bazar.

Unplanned buildings by real estate and businessmen: Lots of tourist from different parts of the country and the world visit Cox's Bazar every year. With the increasing amount of tourist the facilities for accommodation is also increasing. Now-a-days Cox's Bazar is facing a development boom. Lots of multistoried buildings, hotels motels, resorts are being constructed to create accommodation facility for the tourist. According to (Imran Bin Hussain 2017)[7] Cox's Bazar having been a great tourist resort various establishments have developed in the town including 6 big hotels, 30 medium hotels, 50 semi-medium hotels, Jhinuk market for the tourists and the Burmese market dealing in luxury goods from Burma, Thailand and China. The construction of these structures is one of the reasons for the change in land use pattern. Amount of vegetation cover is decreasing for this reason. Huge amount of deforestation is being done for constructing these buildings. Due to deforestation the land surface of the research area is constantly facing new threats. Increased vulnerability to natural calamities and land pollution are the direct effect of this threat.

Land Grabber: Tourism sector has become very successful to generate new income opportunities in Cox's Bazar. As a reason Many People staying outside coxs Bazar are now trying to settle down in this area to have grater income. But these settlers do not have any specific region to live in. So they cut down the slopes and make houses. This phenomenon is the reason for Landslides during monsoon period and mud collapses which is killing many people.

Tourist waste on land: Increased amount of tourist creates huge amount of wastes every day. Tones of plastic bottles and empty packaging are thrown in the beach area by the tourists. But the city lacks ample amount of garbage dumping points which eventually causes land pollution.

Change in land use pattern: Moreover, the pattern of land use has been changed in the coastal areas like Cox's Bazar. Many farmers in Cox's Bazar have shifted to salt production from traditional agriculture. So the agricultural land is depleting day by day.

Rohingya influx: Rohingya intrusion through Myanmar border is also considered one of the greatest external threats to land of Cox's Bazar. They are living in Ukhia camp situated in Cox's bazar and are dependent on forests and land areas for their survival. Though the Rohingyas are provided with enough foods, clothes and other necessary things for living but they are greatly dependent on the local ecosystem. For cooking they are using woods form nearby trees. So deforestation is caused by their action. Moreover they are cutting slopes, changing land slopes for making their houses. But it is found that where people depend most immediately upon local ecosystems for their livelihoods, they also unwittingly become responsible for the degradation of the resources, not realizing the consequences of this dependence (Akhter, et al. 2009)[8].

Industrial activities: Chittagong is one of the neighboring district of Cox's Bazar. The economy of Chittagong is one of the largest and fastest growing in the country. Adjacent industrial activities are also great threats to land surfaces of the research area.

8.2 External threats to sea in Cox's Bazar

Recently through two verdicts on maritime boundary among Bangladesh, Myanmar and India, more than one third of the country's earlier total territorial area was added up to it allowing Bangladesh to exclusively exercise its own sovereign rights on 118,813 sq km of waters extending up to 12 nautical miles of territorial sea and a further Exclusive Economic Zone (EEZ) of 200 nautical miles into the sea which is obviously a vast area and commercial and economic interests together with environmental stakes there, warrant proper protection and Security(Bhuiyan, et al. 2015)[9]. But due to presence of these neighboring countries and sea ports near the research area many sea vessels travel threw the nearby coastal area.

Emission of toxic materials by marine vessels: The major causes of marine environment pollution in Bangladesh are the unregulated operations of a large number of vessels operating for inland and merchant shipping and due to lax application of laws and resources deficiencies of the concerned governments, pollution by the shipping at the ports and at other marine areas have become the common incident (Oikya 2016)[10]. The huge emission of different toxic materials into coastal area near Cox's Bazar can be considered as one of the greatest external threats.

Water Pollution during oil import: Moreover huge amount of oil is imported to Bangladesh using the coastal areas. According to oikya 2016 around 3.5 million tons of crude and refined oil are imported to Bangladesh and Bangladesh is responsible for around six thousand tons to four hundred thousand tons of annual oil pollution in the Bay of Bengal. During transfer process, some oil escapes into the waterways and from the engine room, the oil substances are thrown into water with ballast water (Oikya 2016)[11].

Oil spills from ships: Oil spills can be considered as another factor for coastal water pollution. Repeated oil spills from foreign and local ships in the coastal area near Cox's Bazar are creating a severe threat

to the coastal region and marine ecosystem. Moreover ship and sea vessels travelling dumps garbage and sewages from ships which can be considered as a huge threat.

Ship Breaking Industry: Bangladesh ship breaking industry is a controversial issue for environmental pollution. Ship breaking business is developing in Cox's Bazar by various interest groups. During recycling and breaking of ships huge amount of both solid and liquid waste is discharged into the sea that contains toxic substances. These toxic materials are responsible for temperature rise, water pollution and degradation of marine ecosystem.

Maritime security: Cox's Bazar is facing most of the maritime security challenges from nonconventional threats. Sea-borne robbery issue discussed non-conventional maritime threat issue. Fisherman security issue of Cox's Bazar has been experiencing adversities since many decades. Human and gun trafficking, drug smuggling are some important external threats to maritime security Cox's Bazar.

IX. RECOMMENDATIONS

The land and sea area in Cox's Bazar is constantly facing threats due to external factors like excessive tourist, Rohingyas, settlers, increasing industrials actions, ship breaking, oil spills etc. From the findings of the research some policy interventions and guidelines are recommended for further action of the government and concerned stakeholders. These are as follows:

1. Prevent the deforestation at the coastal green belt by involving coastal communities in its maintenance (Ahammed 2010)[12]. Awareness building programs for protecting environment and encouraging afforestation can be organized by local administration in regular interval.
2. Construction of embankments along the coast is the most expedient means of protecting the coastal areas of Bangladesh from storm surges. Locally available materials, indigenous technology, and the cheap surplus man- power should be utilized in the coastal embankment project. A variety of suitable fruit trees should be planted on both sides of the embankments (KHALIL 1992, 23)[13].
3. The most pivotal measure needed is to find means to manage Coastal Embankment polders in ways that allow tidal water to enter them at appropriate times of the year in order to deposit sediment at sufficient rates to raise land levels in parallel with a rising sea-level and local land subsidence rates.
4. Unplanned development is the reason for flood in Cox's Bazar. Comprehensive and detailed planning of the city should be done. During the planning process the provision for future expansion should be kept in mind. Proper Drainage system should be ensured for reducing the chances of occurrence of flood.
5. Rohingya problems should be addressed in the state level meetings. An identification number can be given to all of them.
6. For ensuring maritime security the law enforcing agencies should be provided with proper support. Strong preventive measures by law enforcing agencies can be taken to reduce human and gun trafficking and drug smuggling. Especially, BGB, tourist police, coast guard are playing a vital role for stop these illegal activities.
7. For reducing marine environment pollution, proper monitoring of district administration and the local bodies should be ensured. Billboards and advertisement for stopping pollution by tourist waste are seen in Cox's Bazar. More advertising and creating awareness by using media are other solutions of this matter. Sea vessels should be checked against fitness to reduce emission of toxic elements.
8. To reduce pollution due to ship breaking the on shore removal of toxic elements should be done in enclosures maintained under negative pressure and filters should be used for outgoing air and wastewater (Rabbia and Rahmanb 2016)[14].
9. Industrial activities in Chittagong and nearby areas should aim to conserve the environment. All the industries should have ETP (Environmental Treatment Plant) for reducing the environmental impact of the emitted materials.

X. CONCLUSION

(Hossain, et al. 2003)[15] Cited that Land is a very important and scarce resource of Bangladesh. Therefore, it should be managed very carefully to ensure the best possible use of this limited resources for the benefit of the maximum number of people and their economic development. The level of urbanization has been raising very rapidly in Cox's Bazar due to Millions of foreigners and Bangladeshi natives visit this coastal city every year and the local community is involved in tourism activities and benefiting from tourism development but significant scope exists to increase their active participation and equitable benefit sharing. As a result, a large number of hotels, guest houses and motels have been built in the city and coastal region. For this reason it is very necessary to take action with the urban economy.

For ensuring our better survival, we have to stop destroying the habitat and the biodiversity. Therefore, to prevent, reduce and control the marine pollution and to protect the land and sea area, it is essential to adopt a

wide-ranging legislation to comply with the international standards and to make a real change. The government has to take initiatives to make the public aware of the marine environment pollution and the consequences of it (Oikya 2016)[16].

If we do not restrict such activities or find alternative solutions, low-level resource gathering activities can quickly turn into wide-scale and, often, irrevocable forest degradation. (Akhter, et al. 2009)[17]. So for mitigating disturbances and problems due to external threats to land and sea area in Cox's Bazar necessary steps should be taken as early as possible.

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