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ENVIRONMENTAL EDUCATION AND SUSTAINABLE TOURISM: A MODEL TO FIT THE TOURISM GROWTH IN COX'S BAZAR

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## **ABSTRACT**

To deluge with pleasure, to quench thirst of the eyes, to relish the flawless holiday and to lost with wild waves of the sea the first name we will think 'Cox's Bazar- The Tourist Capital of Bangladesh'. To deliver the real taste of world's longest unbroken sea beach for the present and future tourists, there is a mammoth opportunity to represent as a Sustainable Coastal Tourism Zone to the world. Water Management, Waste management, Maintenance of the beach, Prevention of Erosion etc. will play the critical role as a driver of SCZ. The ultimate objective of the study is to develop a relationship between Sustainable Tourism and Environmental Education which will fit the sustainable tourism growth in Cox's Bazar and joins hand in hand to groom future tourism entrepreneur who will establish Cox's Bazar as SCZ with the help of other stakeholders. Environmental Education must be nurtured from root level to the last day of life to provide the best fruit of sustainable development. This study focuses on the guidelines of the way and contents of different level of EE. Environmentally educated society can carry the sustainable tourism development of Cox's Bazar in its highest and stable pick of growth.

**KEYWORDS:** Environmental Education (EE), Future Entrepreneur, Green Infrastructure, Sustainable Tourism Development (STD), Sustainable Coastal Zone (SCZ)

# INTRODUCTION

A dream of –An Eye-catching and Sustainable world's longest sea beach with the opportunity to quench of thirstiness and the need of almost every tourist, our journey to work with environmental education and sustainable tourism towards the growth of tourism in cox's bazar starts on. In the southeast of the country there has a 120 km long beach of soft silvery sand, reputed to be the world's longest, in a Riviera-like setting with crescent-shaped low hills overlooking the Bay of Bengal is known as cox's Bazar the 'Tourist's capital'.

Nearly two million people visit Cox's Bazar in the peak season from November to March. Visitors are mainly Bangladeshi nationals and originate from all parts of Bangladesh. The basic intent of visitors includes walking along the beach, 'sea bathing' and shopping from the Rakhaine stalls. The beaches of Shoibal, Labonee, Shugondha, Himchari and Innani are particularly heavily visited. Labonee beach is reportedly one of the most heavily visited tourist destinations in the country with daily maximum visitor numbers as high as 30,000 (*The Daily Star, 30 Sep 2009*).

Environmental education (EE) refers to an organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behavior and ecosystems in order to live sustainably.

According to the UNESCO, Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action.

According to The Tblisi Declaration Environmental education is: A process aimed at developing a world population that is aware of and concerned about the total environment and its associated problems, and which has the knowledge, attitudes, motivations, commitments, and skills to work individually and collectively toward solutions of current problems and the prevention of new ones.

In Bangladesh, Environment education has been a recent phenomenon which is necessary not only to develop sustainable environment but also to fight with the upcoming climate turmoil. The aim of environmental education is to teach and educate the public about the function of natural environments and, particularly, how human beings can manage their behavior and ecosystems in order to live sustainable.(MojcaArsenijevic and Marko Bohanec)

With the holistic view of, sustainability, environmental education, pillars of sustainable tourism, costal tourism growth and its impact on economy, society, culture and most importantly on environment, In this paper, we will focus on a model which fits the sustainable tourism growth in cox's bazar and at the same time the model will be an illustrator for environmental education and sustainable tourism.

#### LITERATURE REVIEW

According to Arjen E. J. Wales (2012), Environmental education is obviously related to nature conservation education, but there is an important difference in that it transcends issues of nature, biodiversity, and ecology to also and foremost include issues of environmental degradation, environmental health, pollution, and so on that have a lot to do with the way we live, produce, and consume.

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According to William B. Stapp, et al. (1997), Environmental Education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.

IUCN, UNEP & WWF (1980), a new ethic, embracing plants and animals as well as people is required for human societies to live in harmony with the natural world on which they depend for survival and well-being. The long-term task of environmental education is to foster or reinforce attitudes and behaviors compatible with this new ethic.

UNESCO-UNEP (1996), In order to change unsustainable production and consumption patterns and lifestyles, it (is) essential to give great emphasis to the role of education for sustainable development, including environmental economics as well as environmental awareness.

UNWTO defines tourism as, 'tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities'.

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The World Tourism Organization defines sustainable tourism as tourism which leads to management of all resources in such a way that economic, social and aesthetic needs can be filled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems (WTO Report 2002:7).

It is widely agreed that education and training are important to the achievement of sustainable tourism (Cater & Goodall, 1992; Ham Sutherland, & Meganck, 1991; Johnson, 1998) and sustainable development (UNESCOUNEP, 1996). According to Stephen Gough & William Scott (1999), a number of target groups for sustainable tourism education and training suggest themselves, including employees and managers in the hospitality, travel and construction industries, government officials in host countries, potential tourists at their point of origin and, of course, children at school who may assume these or other roles in the future.

With 8th highest population in the world (CIA, 2012), Bangladesh has one of the largestprimary education systems in the world but it is still largely unprepared to meet disaster challenges.

As Papanek (1995, p.29) states: 'ecology and the environmental equilibrium are the basic underpinnings of all human life on earth...and design must be the bridge between human needs, culture and ecology'

According to BGPSD (1995), clearly environmental education far transcends the boundaries of formal education the business, commercial and professional communities and the voluntary sector have vital roles in continuing environmental education and training. Sustainable development involves society as a whole.

Sheikh Saleh Ahammed(2010)in his article on Impact of Tourism in Cox's Bazar, Bangladesh stated that on environmental aspect, the residents did not significantly mention any positive side but informed some negative sides like hill cutting, forest clearance and unplanned growth of structures along the beach.

MojcaArsenijevic and Marko Bohanecon their study of Environmental Education and Ecotourism: A Case Study of Protected Areas in the Alps found that Implementation of environmental education to the society can be successfully achieved by lifelong learning, where all age groups are involved as well as special target groups (e.g. primary school children) and are taught by either official educational programs, workshops, media, past time activities, advertisements or some other way.

So far, no rich study has been conducted on the environmental education and sustainable tourism of the tourism growth of cox's bazar to understand the importance of environmental education of tourism and the relation of sustainable tourism with the variables of tourism growth.

### **OBJECTIVES OF THE STUDY**

Major objectives for this study, are to define the relationship between Environmental Education and Sustainable Tourism in the Perspective of developing future entrepreneur who will carry the businesses of sustainable tourism in cox's Bazar. Along with, we develop a model which fit the Sustainable Tourism Growth in Cox's Bazar. With these objectives we have also some other associated objectives such as to identify the main principles of Environmental Education along with its Tourism related vision particularly for the Cox's Bazar. We also focus on Environmental education content and the level from where this education should be started.

# METHODOLOGY OF THE STUDY

For developing this article we emphasized on the secondary sources of data. We collected most of the information by analyzing and discussing several resourceful documents. We also collected data from other sources like journals, periodicals, books, acts, websites, and annual papers. We develop a model on the basis of our knowledge regarding the Environmental Education and its perspective in sustainable Tourism growth. Then we modified our model by the Tourism specialists.

### Developing Environmental Education in Cox's Bazar

Costal tourism is the most vulnerable form of tourism for developing countries such as Bangladesh where temperature is growing day by day and causes raised in sea level. On the other hand illiterate people both host community and tourists pollute the environment of Beach area. From this eyes view environmental education is the crying need for protecting the tourism and sustainable Tourism growth of cox's Bazar. For these reasons, environmental education has a great influence on cox's Bazar. We see that environmental education creates expertise in the local level for policy making for the cox's Bazar Tourism. It also creates civil societies for providing proper education. Environmental education and communication also encourage and empower the community to conserve the integrity and diversity of nature, and to ensure that natural resources are used in an equitable and ecologically sustainable manner. According to Van Hemert et al, The educational process itself becomes sustainable when the participants take responsibility and lead the process themselves. Environmental education should not be confined to schools, but is an important tool for managers, civil servants, community groups and NGOs alike, enabling them to implement policies to protect the environment. Moreover, our model indicates connectivity between political influences and environmental education which in long run will create an educated society to ensure a strong backbone of tourism industry. The literacy rate of Cox's Bazar is considered to be the lowest within the country's coastal districts. The literacy rate for those over sevenyears old is about 41% (BBS 2009). On the other hand, the literacy rate for the age of 15 and over is about 31%. It is the scenario of overall education but the condition of Environmental education is more disastrous. So for developing the environmental education for sustainable Tourism Development of the cox's Bazar as a tourist destination we should start work from the grass root level and continue to highest level of formal and informal education. By observing the present situation of cox's bazar we identify the severallevels of Environmental Education.

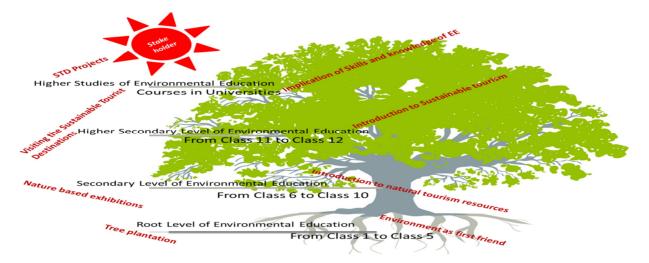


Figure 1: Different Level and Contents of Environmental Education (EE)

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Before determining the course content in different level at first, we should identify the academic standard for different level. Academic standard is the specification of what students should know and be able to do and how well they must perform in maintaining sustainability in the tourist zone of Cox's Bazar. They include content, performance, and proficiency standards. After determining the academic standard, we will need to prove the necessity of this standard among students, parents, educators and citizens. For achieving this academic standard, we will go for public education because this is the only way to cover all the people in a program.

After developing academic standard, we will need to go for setting the different courses and the course curriculum for different level of education with the assistance of local school authorities. When local school authorities go for developing curriculum they take in account several crucial perspective like Application of Basics, Ability to think, Skills in communication, Production of quality work and which must be needed one connection with the community.

**Table 1: Level and Contents of Environmental Education** 

Level	Contents		
	Theoretical	Practical	Interactive
Primary Level (1-5)	Environment as first friend, Overview of Environment, Elements of Environment	Tree plantation, Class room cleaning	123 Seeseampur, Mena Cartoon
Secondary Level (6-10)	Knowledge of Environmental processes and systems, Impact of biodiversity Human activity and ecosystem, Introduction to natural tourism resources	Nature based exhibitions, Involvement in nature& environmental quiz competition	Story telling illustrating different cosmologies
Higher- Secondary Level (11-12)	Environmental issues, Investigation skills, Environmental monitoring system, Different environmental investigation issues, Environmental story of our place, Sustainable tourism	Case study, Visiting the Sustainable Tourist Destinations, Behaving as a eco tourists in the destination	Sustainable Tourism documentary
Higher Studies	Application of decision and action skills, Personal and civic responsibility to tourist destinations, Problem-solving strategies	Eco-gardening project, Case study on a global issues, Training, Information transfer processon EE	Formal presentations Formal communication with stakeholders

For creating a balance between sustainable tourism development and Environmental Education, the following prospectus of course curriculum can be helpful as guidelines-



Table 2: Possible Courses of Sustainable Tourism Development and Environmental Education

#### Sustainable Tourism and Cox's Bazar

Tourism development can have both positive and negative impacts on destinations. Sustainable tourism development attempts to find a balance between these impacts to create an improved quality of life for the host community and the destination. From our perspective Sustainable tourism is a form of nature saving, community beneficial and way of economy generation which provides a quality experience for visitors while improving the quality of life of the host community and protecting the quality of the environment by ensuring the continuity of the natural resources upon which it is based and the continuity of the culture of the host community with satisfying experiences for visitors by maintaining balances of the needs of the tourism industry, supporters of the environment, and the local community. According to Choi and Sirakaya (2005), 'sustainable tourism is defined as an alternative form of tourism that improves the quality of life of the host community while providing a high quality experience for the visitors and maintaining the quality of the environment on which both the host community and the visitors depend.' Some of the sustainable coastal tourism principles are following-

- Be ecologically bearable in the long term, as well as economically viable, and ethically and socially equitable for local communities.
- be integrated with the natural, cultural and human environment
- consider its effects on the cultural heritage and traditional elements, activities and dynamics of each local community
- encourage the participation of all actors, both public and private and should be based on efficient co-operation mechanisms at all levels: local, national, regional and international
- promote measures that permit a more equitable distribution of the benefits and burdens
- support quality criteria both for the preservation of the tourist destination and for the capacity to satisfy tourists

The model on the positive impact of sustainable tourism deals with the four pillars of sustainability: Economical, Environmental, Social and Political.

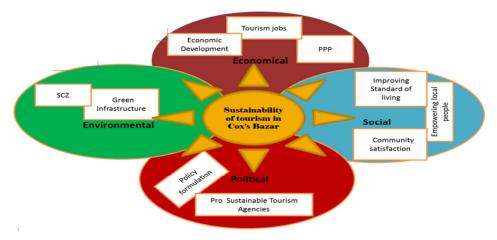


Figure 2

<u>Environmental</u>: The sustainability of tourism in Cox's Bazar depends on the holistic approach of 4 pillars. The environmental impact concerns with the Sustainable Coastal Zone (SCZ) and Green Infrastructure. If these two issues work together in an appropriate way then it will be easier to maintain the environmental negative impact in Cox's Bazar.

**Economical:** Cox's Bazar is one of the major destinations which generate the lion share of tourism revenue of Bangladesh. So, sustainability of the Cox's Bazar ensures both economic development and tourism jobs for that region. Sustainability will also help to introduce Public Private Partnership (PPP).

<u>Social</u>: Sustainability of tourism and society are interdependent. As Cox's Bazar is a sea beach based tourism destination for that the society has to play a major role to get the benefit like community satisfaction and improving standard of living and local people will get the empowerment if sustainability is ensured.

<u>Political</u>: When Cox's Bazar will develop its sustainable tourism it will be able to influence the policy making decision and pro sustainable tourism agencies like DMO, coastal zone authority etc. will come to play their active role to maintain the sustainability.

### A Model That Fit the Tourism Growth in Cox's Bazar

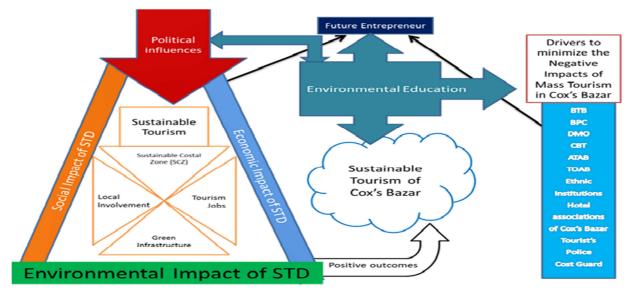


Figure 3: A model Fit the Tourism growth of Cox's Bazar

The model shows that the 4 pillars of the sustainable tourism where political influence plays the major role to set the carrying capacity of Cox's Bazar. Sustainable Tourism Development(STD) of Cox's Bazar brings positive environmental, social and economic impacts which facilitate the tourism growth of Cox's Bazar by creating tourism jobs, green infrastructure, local involvement and SCZ.

The model also illustrates that environmental education which starts from grass route level of the education to higher studies level and also includes all the stakeholders of the tourism and which has connectivity with the political factors.

In the environmental education circulates the life blood of modern world 'INFORMATION' which helps to maintain the sustainable tourism and minimizing the mass tourism in Cox's Bazar. The ultimate result of environmental education in Cox's Bazar is to match the tourism growth rate with sustainability.

The grooming of the future entrepreneur who will carry the sustainability of tourist capital of Bangladesh where Environmental education can create the foundation to be an entrepreneur who will be also co-operated by the stakeholders of tourism like (BTB,BPC,DMO,CBT) and the overall process of sustainability.

# Findings of the Study

A massive havoc can cause in any time for a slight mistake in the environment for the sensitivity of the coastal tourism. From our study, we can see that Cox's Bazar is a perfect example of environmental degradation for the impact of mass tourism. As mass tourism is the integral part of the tourism of cox's bazaar and generate the most tourism revenue of the country. For that reason, mass tourism cannot be avoided in cox's bazaar but has to be handled with different mechanisms. The visibility of EE in Bangladesh as well as in Cox's Bazar is almost invisible in every level of Education. Host community is not aware about maintaining the balance and resources of the environment and how to cope up with STD.

DMO is absolutely unaware about assigning the responsibility to the different partners of tourism. Tourists also have no knowledge about how to adapt with the local culture and the biodiversity of the beach. It is quite clear from our study that EE is not in a favorable position to maintain the sustainability and positive growth in the Cox's bazaar. It is illustrated in the model of sustainability outcomes that EE plays as the life blood to bring the positive impact of sustainable tourism in cox's bazar.

The most important outcome of the study that we have found is to groom the future entrepreneur who will be ready to take the challenges of maintaining sustainability by reducing the negative impact of mass tourism and ultimately to fit the tourism growth by understanding the importance of sustainability which will put the best afford notto give the opportunity ever to let the growth of Cox's Bazar in its decline stage.

### Recommendations of the Study

As cox's Bazar is a vulnerable site for climate change, the responsibilities covers a holistic approach to maintain the growth of tourism and sustainable destination.

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Table 3: Responsibilities for all the Stakeholders of Tourism in Cox's Bazar

Partners for STD & EE	Duties & Responsibilities		
DMO	Provide training to tourism suppliers Setting the criteria for developing sustainable superstructure Monitoring the standard of environmental education and sustainable issues of Cox's Bazar Establishing tourism information center on STD & EE		
Hotel Association of Cox's Bazar	Ensuring proper waste Management Briefing the hotel owners about maintaining biodiversity of sea- beach		
Host community	Sending children to the Education Center Establishing a Forum to create awareness among the locals importance of education and sustainability Co-operate with other stakeholders to keep up the ecological balance & growth		
Visitors/ Tourists	Being informative by visiting the information center of DMO Respecting the local culture & behaving environment friendly way Contributing to the local economy by buying their product		

Sustainable tourism with the positive growth in cox's bazar can't be achieved without environmental education from the grass root level. Moreover, to attain sustainable tourism in cox's bazar a proper national policy must be planned and implemented. The duties and responsibilities of different stakeholders to achieve the EE & STD in Cox's bazaar, different electronic and print media can come forward to build strong positive relationship for working hand in hand.

### **CONCLUSIONS**

To keep the appeal alive for the domestic & foreign tourists of Cox's bazar, world's longest unbroken sandy beach EE & STD must work in a positive and effective way. But it is unfortunate that finding dead living things in the shore is a day to day phenomenon. So it is high time to focus on the sustainability and EE for the tourist capital of Bangladesh. In short, future entrepreneurs are the ultimate carrier who will integrate the process of environmental education through which sustainability of Cox's bazar with the acceptable tourism growth can be maintained and effectively planned.

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