# Is the Massive Industrial Establishment in the Southeastern Coastal Area of Bangladesh a Threat to Natural Ecosystems and Local Livelihood?

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## Abstract

Bangladesh has been an agricultural economy since achieving independence in 1971. However, in recent decades, there has been a shift towards growth in the industrial and service sectors, as the country aims to move from a least-developed country to a middle-income country. This has resulted in a push for the industrial sector's growth, but there is a scarcity of land in urban areas to accommodate new establishments. To address this issue, Bangladesh has initiated an ambitious project to establish the largest Economic Zone in Chattogram, the southeastern coastal area of the country. However, the project has brought about the destruction of mangrove forests, agricultural and grazing lands, streams, and canals, reducing the water flow in many waterbodies. This has led to the decline of both forest and agro-diversity, negatively impacting the livelihoods of local people who rely on agriculture and natural ecosystems. While those whose lands have been acquired by the economic zone authority have been compensated and able to explore alternative livelihoods, the majority have been affected. Unfortunately, there have been no reconciliatory efforts to help the local people sustain their livelihoods. Therefore, all stakeholders involved in the industrial development project, including local communities directly affected by the project, should make concerted efforts to reclaim, restore, and reinvigorate the previously existing natural ecosystems. These efforts, to whatever extent possible, will help reintroduce various ecosystem services, improving the livelihoods of local people and environmental sustainability. The present work aims to explore the scope, opportunities, and constraints of this endeavor.

### Background

Until the end of the 1970s, Bangladesh's economy relied heavily on agriculture, contributing about 33% to the GDP in 1980. However, between 1980 and 2001, the agricultural sector's share in the economy reduced, while the industrial and service sectors expanded. This shift indicates a transition from an agriculture-based to an industry-based economy since the early 1990s.

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However, there is a lack of land availability in urban areas, where most facilities for industrial growth are located. This severely limits the expansion of the industry sector in cities and towns. Developing industries in rural areas requires significant costs for building land and infrastructure and providing essential facilities for the growth of the industrial sector. Unfortunately, in a land-scarce country like Bangladesh, this often means destroying natural ecosystems to make way for the necessary infrastructure and facilities.

As part of my studies, I am researching the environmental impact of Bangladesh's largest Economic Zone, which houses multi-product industrial complexes in the coastal area of greater Chattogram. The Bangabandhu Sheikh Mujib Shilpanagar (BSMSN) is the largest industrial area in the country, spanning over 136.86 square kilometers and situated 60 km away from the city of Chattogram. Unfortunately, the development of this industrial zone has caused damage to the mangrove forest ecosystems and the destruction of other ecosystems such as natural watercourses, agriculture, and grasslands. As a result, the area has experienced a significant decline in biodiversity and deterioration of the environmental conditions.

### **Methods of fieldwork**

As part of my research, I surveyed to evaluate the impact of development activities on the local environment and communities. The survey primarily focused on the effects of these activities on the ecosystems and biodiversity of the affected area. Before joining RCC, I conducted questionnaire surveys among the communities residing in and around the Economic Zone to gain a better understanding of the relationship between resource depletion and people's livelihoods. The objective of the survey was to assess the effects of the destruction and degradation of natural ecosystems on the study area and the livelihoods of the surrounding people.

For my research project, I am focusing on the communities residing in the Sitakunda-Mirsarai area of the Economic Zone. Most of these people are farmers and fishermen, and their livelihoods depend on the resources extracted from various water bodies such as the Bay of Bengal, rivers, canals, mangrove forests, coastal plantations, and farmlands. My study examines cases of displacement of these people from their natural ecosystems due to development projects, which

often lead to the destruction of the ecosystems that provide goods and services to the local people. I aim to publish my findings in academic journals and share them with community leaders and the development partners of the industrial project to benefit the communities.

At present, I am working on organizing and summarizing the data related to the status of biodiversity and physical features. Additionally, I am articulating the feedback gathered from the local community members I interviewed during my surveys. I anticipate presenting the initial results of my fieldwork during the upcoming workshop.

### My expectations from the workshop

I hope to gain a deeper understanding of certain issues and get answers to my queries through this workshop.

Firstly, I have realized that environmental issues are not only limited to the impact on ecology, but they also greatly affect humans. To ensure that environmental justice is achieved, it is important to consider different meanings and values associated with these issues. I am hoping that by engaging in the workshop discussions, I will gain a better understanding of these meanings and values.

Secondly, I am keen to learn more about the field of environmental humanities, which focuses on dealing with environmental issues by taking into account their context, subjectivity, and multiple perspectives. I am interested in understanding how this approach can complement the major fields of my research, the environmental sciences, which are primarily rooted in natural sciences and scientific methods.

Finally, I am aware that scholarship in the environmental humanities often uses case studies to ensure a holistic integration of multiple themes, perspectives, and ways of representation. In the science and policy sphere, there is a growing effort to connect local and regional case studies to global scales. I am curious to learn how this can be achieved in the context of my study.

I am looking forward to the active participation of the RCC community during the workshop. I aim to stimulate discussions that can help me find answers to my queries, which may eventually aid me in developing articles for publication. These articles will combine scientific facts with issues of human dimensions.