

Socio-Economic Impact of Ecopark: A study on Sitakunda Ecopark

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Abstract: Recently, Bangladesh Government has taken initiative to establish ecoparks at different places of the country. The first ecopark has been inaugurated at Chandranath Hill and surrounding areas, located in Sitakunda upazila of Chittagong. Two other ecoparks are to be established in the Madhabkunda and Muraichara forest areas located respectively in Kulaura and Baralekha upazilas of Maulvi Bazar district. These locations are rich with natural evergreen and semi-evergreen tree species along with plantation forests. A Safari park is being developed since 1998-99 in the Dulahazra forest area of Cox's Bazar district. To retain the natural beauty and conserve biodiversity in and around Sitapahar forest area, near the famous hydroelectric dam of Kaptai, another National Park similar to that of the Madhupur Sal forest is being developed since 1999. Another ecopark site is being developed in the Sameshchura Sal forest of Sherpur district. Recently, the Government of Bangladesh has started developing ST MARTIN'S ISLAND as an ecopark with an aim to promote tourism. This study help us to evaluate the socio-economic impact of Sitakunda Ecopark and its contribution to the economic development.

Keywords: Economic Impact, Ecopark

Introduction:

Tourism is one of the fastest growing and single largest industries in the world. The contribution of tourism industry in the global as well as individual perspective is really amazing. Many countries in the world depend upon tourism as a main source of foreign exchange earnings. According to the World Tourist Organization (WTO), while 448.5 million tourists moved throughout the world during the year 1991, about 593 million tourist arrivals were recorded during 1996 registering a 4.6% increase over 1995 and 32.22 percent growth in five years. The World Tourism Organization recorded a total number of 763 million international tourist traffics in 2004 which is 10.58% higher than previous year and earned US\$ 623.00 billion which shows an increase of 18.89% over 2003.

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[1]Tourism continues to surge as a world economic force, contributing nearly \$5.5 trillion to the world's economy in 2004. The increasing trend of tourist arrivals and earnings is continuing. In 2005, the world tourist arrivals rose to 808 million. The World Tourism 2020 Vision forecasted that this figure will be 1,006.4 million in 2010 and the same will reach to 1,561.1 million in 2020. In this context, Ecopark also positively contributing to our national economy. As ecotourism industry in Bangladesh has failed to undertake adequate and effective promotional activities due to policy guidelines, resource constraints, and they lack of marketing orientation, hence, a study on this area is essential to uncover the economic impact of ecopark. It is also expected that the findings and analysis of this study will help formulate appropriate guidelines and thus motivate effectively more potential foreign tourists to visit Bangladesh as well as to contribute the economy of the country. At the same time, this study may be helpful for the policy-makers of the country to devote their attention to the issue of the segments of the ecotourism/ecopark market that they wish to attract.

Literature Review:

At present, tourism is an innovative movement helping travelers to increase their knowledge about natural resources, the cultural identity of hosts and ways of preserving them. A recent estimate suggests that over 20 million people in the world depend on mineral resource extraction on an informal basis for their living, a figure that is immensely more than those employed by the formal mining industries. Indeed, employment in the formal mining sector is steadily declining (ILO, 2002).

Global awareness increasing about the importance of tourism development, its benefit and its possible effects on the society. Tourism provides economic, social as well as cultural development on the society. In 1990s tourism has been shaped as a culture industry (Western. D.1993). The international ecotourism society defines ecotourism as responsible travel to natural areas that conserves the environment and improves the well being of local people (IES, undated). [2]

Ecotourism refers to tourism that is based on the natural environment but that seeks to minimize the harmful impacts and better still, seeks to promote conservation.[3] It focuses on local cultures, wilderness adventures, volunteering, personal growth and learning new ways to live on our vulnerable planet. Appropriate ecotourism management includes some programs that minimize the adverse effect of traditional tourism on the natural environment, and enhance the cultural integrity of local people.

TAT defines tourism as visit to any particular tourism area with the purpose to study, enjoy and appreciate the scenery natural and social as well as lifestyle of the local people, bases on the knowledge and responsibility for the ecological system of the area. [4]Institute of Eco-tourism (Sriakharinwirot University, Bangkok, Thailand) defines eco-tourism as 'nature based', sustainable managed, inclusive of social and cultural aspects, and educational to tourist (Pleumarom, 1997).

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Eco-tourism has been defined as 'environmentally friendly' tourism, and classified by the International Eco-tourism Society (1991) as: "responsible travel to natural areas that conserves the environment and sustains the well-being of local people". In addition, the World Conservation Union (1996) defined it as "visitation to relatively undisturbed natural areas, has low negative visitor impact and provides for beneficially active socio-economic involvement of local populations". [5] This report evaluates Eco-tourism in relation to natural environment and contribution to sustainable community socio-economic development through active involvement. Eco-tourism is one kind of sustainable tourism, both environmentally and culturally, which has the capability to ensure economic and social benefits to the whole society. On the other hand when tourism is carefully managed development of the natural environment for the holiday market. [6]

Eco-tourism has emerged from western environmentalism and mostly geared to the demands of western travelers who are well educated and genuinely interested in culture and environment. In Asia, however, domestic and regional tourist has been exploding. (Ghimire, 1996) [7]

The concept of ecotourism is widely misunderstood and in practice, is often simply used as a marketing tool to promote tourism that is related to nature. Critics claim that as practiced and abused often consists in placing a hotel in a splendid landscape, to the detriment of the ecotourism. According to them, ecotourism must above all sensitize with the beauty and the fragility of nature.

The above literature shows that there is not plethora research work based on tourism industry in Bangladesh. It is evident that lack of consciousness, security & information is the main problem with the tourists of Bangladesh. Thousands of places are very outstanding and comparable with international tourist places but unfortunately it never be focused through proper channels towards local and international tourists to attract to visit here. This is why researchers tried to focus important tourist places towards all kinds of tourists, policy and decision makers, readers and stakeholders for the sake of availing the opportunity to develop the tourism industry in Bangladesh.

Objectives of the study:

In the light of development of tourism industry in Bangladesh particularly, the main objective of the study is to observe the Sitakunda Ecopark and try to explore the impacts i.e. ,social, economic & environmental and also focuses the attention to the contribution of Ecopark in Bangladesh.

This study also briefly analysis the background of Sitakunda Ecopark and try to make some recommendations based on the analysis of the study.

Methods and Techniques:

In general the definition, principles and characteristics of Ecopark facilities have been analyzed. The contributions of Ecopark depend on diversity of the ecotourism of that locality. Here, secondary data and very few primary data are used through observations, using different web sites, magazines, e-books, thesis and scientific reports, which are gathered from archival records. In addition, the study reviewed of all the tourism related websites for updated information. On the other hand, the researcher also reviews several foreign and local research works as well in the field.

Conceptual framework of the study:

As the study is based on Ecopark so we have to know the definition of Ecopark. The definition of Ecopark is given below:

Ecopark a recreational park established in any natural habitat that does not disturb or affect BIODIVERSITY or the community of that area. The concept of ecopark is of recent origin. The objective of establishment of an ecopark is for the recreation of visiting people from home and abroad, as well as creating a centre for the dissemination of knowledge to people of all age groups about the habits and habitats of the plant and animal populations living there, and at the same time creating awareness about the need of conservation of biodiversity.[8] Such ecoparks have been established in different countries in recent years to attract people for tourism, education, and research.

The principles of Eco-park:

From the analysis of different research papers, some principles of Ecopark are evaluated. These are discussed below:

- 1) It should provide long-term benefits to the resource, to the local community and industry.
- 2) It should not degrade the resource and should be developed in an environmentally sound manner.
- 3) It should promote understanding and involve partnerships between many players, which could involve government, non-governmental organizations industries, scientists and locals. (Both before and during operations)
- 4) It should involve education among all parties, local communities, government, non-government organizations, industry and tourists (before and after the trip). It should provide first-hand, participatory and enlightening experiences.
- 5) It should encourage all-parts recognition of the intrinsic value of resources.

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- 6) It should involve acceptance of the resource in its own terms, and in recognition of its limits, which involve supply- oriented management.
- 7) It should promote moral and ethical responsibilities and behavior towards the natural and cultural environment by all players.

There is often interest in assessing the local or regional economic impacts of a project, program or policy. However, economic impacts are easily misrepresented. This primer explains the definitions of economic impact and the variables that are related to economic affairs.

There are many definitions of **Economic Impact**; some of them are given below:

Economic Impact is the effect that an event, policy change, or market trend will have on economic factors such as interest rates, consumer confidence, stock market activity, or unemployment. Events such as regulatory changes, supply shortages or natural disasters can have a significant economic impact due to the way that they affect business activities.[9]

Economic impacts are effects on the level of economic activity in a given area. They may be viewed in terms of: (1) business output (or sales volume), (2) value added (or gross regional product), (3) wealth (including property values), (4) personal income (including wages), or (5) jobs. Any of these measures can be an indicator of improvement in the economic well-being of area residents, which is usually the major goal of economic development efforts.

Impacts of Ecopark

- **Environmental impact of Ecopark**

Areas with high-value natural resources, like oceans, lakes, waterfalls, mountains, unique flora and fauna, and great scenic beauty attract tourists and new residents (in-migrants) who seek emotional and spiritual connections with nature. Because these people value nature, selected natural environments are preserved, protected, and kept from further ecological decline. Lands that could be developed can generate income by accommodating the recreational activities of visitors. [10]Tourist income often makes it possible to preserve and restore historic buildings and monuments. Improvements in the area's appearance through cleanup or repairs and the addition of public art such as murals, water fountains, and monuments (part of making a community ready for tourism) benefit visitors and residents alike. Ecopark is generally considered a "clean" industry, one that is based on hotels, restaurants, shops and attractions, instead of factories. Ecopark can also degrade an environment. Visitors generate waste and pollution (air, water, solid waste, noise, and visual). Natural resource attractions can be jeopardized through improper uses or overuse. Providing tourist services

can alter the landscape's appearance. For instance, visual pollution may occur from billboard proliferation. As tourism develops, demand for land increases, especially for prime locations like beachfronts, special views, and mountains. [11]

- **Economic Impacts of Ecopark:**

Ecopark is one of the largest and dynamically developing sectors of external economic activities. Ecopark increases employment opportunities. Additional jobs, ranging from low-wage entry-level to high-paying professional positions in management and technical fields, generate income and raise standards of living. Particularly in rural areas, the diversification created by tourism helps communities that are possibly dependent on only one industry.[12] Its high growth and development rates, considerable volumes of foreign currency inflows, infrastructure development, and introduction of new management and educational experience actively affect various sectors of economy, which positively contribute to the social and economic development of the country as a whole. According to recent statistics, tourism provides about 10% of the world's income and employs almost one tenth of the world's workforce. All considered, tourism's actual and potential economic impact is astounding. Many people emphasize the positive aspects of tourism as a source of foreign exchange, a way to balance foreign trade, an "industry without chimney" — in short, manna from heaven. But there are also a number of other positive and negative sides of tourism's economic boom for local communities, which not always considered by advocates of tourism perspectives. Therefore in this paper I will consider the main social and environment impacts of tourism at the country level.

- **Social Impacts of Ecopark:**

Socially ecopark has a great influence on the host societies. Ecopark can be both a source of international amity, peace and understanding and a destroyer and corrupter of indigenous cultures, a source of ecological destruction, an assault of people's privacy, dignity, and authenticity.

Here are possible positive effects of ecopark:

- i. Increasing self-esteem of hosts and tourists
- ii. Reducing negative perceptions and stereotypes
- iii. Developing positive attitudes towards each other
- iv. Learning about each other's culture and customs
- v. Developing friendships
- vi. Psychological satisfaction with interaction
- vii. Developing pride, appreciation, understanding, respect, and tolerance for each other's culture.

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So, social contacts between tourists and local people may result in mutual appreciation, understanding, tolerance, awareness, learning, family bonding respect, and liking. Residents are educated about the outside world without leaving their homes, while their visitors significantly learn about a distinctive culture. Local communities are benefited through contribution by tourism to the improvement of the social infrastructure like schools, libraries, health care institutions, internet cafes, and so on. Besides, if local culture is the base for attracting tourists to the region, it helps to preserve the local traditions and handicrafts which maybe were on the link of the extinction. [13]

Contribution of Ecopark:

Ecopark can provide direct and indirect financial benefits, it also play an important role in forest conservation. Contribution of ecopark in forest conservation, biodiversity conservation and sustainable development are as follows:

- a) Voluntary payment of higher entrance fees when the revenue is proven to support conservation efforts.
- b) Donation of a portion of revenue used for conservation projects managed by reliable environmental organization.
- c) Training of park rangers to be able to professionally guide and serve tourist.
- d) Selection of responsible tourists who are highly motivated to protect nature and conserve wildlife.
- e) Provision of knowledgeable guide who understand park interpretation and wildlife conservation. (sumarwoto, 1997).

Ecotourism in Bangladesh:

Ecotourism is the only way to develop sustainable tourism in any country. However, ecotourism is a very innovative concept in South Asian country especially in Bangladesh. Sustainable tourism allows visitors to enjoy an attractive phenomenon, communities, of region in such a way the local culture and environment remains unimpaired. [14]

Bangladesh is the home of Royal Bengal Tigers, leopards, Asiatic elephant, monkeys, gibbons, otters and mongooses. Reptiles including the sea tortoise, mud turtle, river tortoise, pythons, crocodiles, gharials and a varieties of snakes. There are more than 600 species of birds, including the paradise Flycatcher and the most spectacular kingfisher and fishing angles (IUCN, 2000). The climate of Bangladesh is subtropical and tropical and there are six main seasons, namely: grishmo or summer, Barsha or Monson, Shorot or Fall, Hemonto or Fall, Sheit or Winter and Bashonto or Spring.

Table 2 : Foreign Exchange Earnings of Bangladesh from Tourism & Other Travels

Month	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Jan	273.80	297.50	259.00	457.00	450.42	653.71	561.13	749.28	649.24	495.98
Feb	218.10	260.60	327.00	393.70	502.73	554.11	624.04	585.06	579.46	496.98
Mar	196.10	336.20	355.90	425.90	468.50	538.94	471.90	527.79	518.90	565.97
Apr	219.00	312.50	241.10	309.40	335.56	411.62	387.22	459.35	473.85	427.37
May	240.50	282.70	226.30	305.00	347.95	452.02	449.95	423.06	538.21	342.11
Jun	221.70	313.00	288.00	279.70	301.23	394.96	366.17	509.52	417.71	473.03
Jul	207.10	267.50	302.30	303.60	296.98	398.14	346.63	461.98	453.03	320.97
Aug	170.50	251.50	232.00	285.90	354.61	424.16	363.72	417.30	439.32	431.37
Sep	193.40	245.90	217.30	293.10	334.14	362.29	342.54	464.46	350.65	368.06
Oct	187.00	205.00	265.10	247.90	332.67	327.95	359.68	415.67	361.99	525.26
Nov	234.80	277.70	224.20	250.42	324.45	444.50	440.25	519.39	461.28	477.14
Dec	291.80	262.50	371.80	415.94	444.65	568.25	551.96	591.66	518.60	638.46
Total	2653.8	3312.6	3310.0	3967.56	4493.9	5530.6	5265.1	6124.5	5762.2	5562.7
% Change	1.02	24.82	-0.08	19.87	13.27	23.07	-4.80	16.32	-5.92	-3.46

Sources: Bangladesh Bank

The bangle region has a multi-faced folk heritage, enrich by its ancient animist, Buddhist, Hindu, and Muslim roots. Weaving pottery and terracotta sculpture are

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some the earliest form of artistic expression. The world heritage committee has included the Sundarban in World Heritage List. Largest unique sea beach in the world, situated in Cox's Bazar, in one of the most attractive tourism place in Bangladesh.

Under Bangladesh Forest Department, 23 Protected Areas, 5 Eco-parks & 1 Safari Park (below table). The Safari & Eco-park project, Nishorgo-USAID Support Project, Sundarban Biodiversity Project, Forestry Sector Project have taken initiative step for the implementation of Ecotourism Project.[15]Some of the protected area and eco-parks of Bangladesh specified below.

Table 3: The protected area and eco-parks of Bangladesh:

Sl.	Protected Areas	Forest type	District	Area (ha)	Established (Extended)
1.	Bhawal National Park	Sal Forest	Gajipur	5,022	1974 (1982)
2.	Madhupur National Park	Sal Forest	Tangile	8,436	1962 (1982)
3.	Ramsagar National Park	Sal Forest	Dinajpur	27	2001
4.	Himchari National Park	Hill Forest	Cox's Bazar	1,729	1980
5.	Lawachara National Park	Hill Forest	Maulvibazar	1,250	1996
6.	Kaptai National Park	Hill Forest	Rangamati	5,464	1999
7.	Nijhum Dweep National Park	Coastal mangrove	Noakhali	16,352	2001
8.	Medha Kachapia Nat. Park	Hill Forest	Cox's Bazar	395	2004
9.	Satchari National Park	Hill Forest	Habiganj	242	2006
10.	Rema-Kalenga Wildlife Sanctuary	Hill Forest	Habiganj	1,795	1996
11.	Char Kukri-Mukri Wildlife Sanctuary	Coastal mangrove	Bhola	40	1981

12.	Sundarbans (East) Wildlife Sanctuary	Mangrove Forest	Bagerhat	31,226	1960 (1996)
13.	Sundarbans (West) Wildlife Sanctuary	Mangrove Forest	Satkhira	71,502	1996
14.	Sundarbans (South) Wildlife Sanctuary	Mangrove Forest	Khulna	36,970	1996
15.	Pablakhali Wildlife Sanctuary	Hill Forest	Rangamati	42,087	1962 (1983)
16.	Chunati Wildlife Sanctuary	Hill Forest	Chittagong	7,761	1986
17.	Teknaf Game Reserve	Hill Forest	Cox's Bazar	11,615	1983
18.	Banskhali Eco-Park	Hill Forest	Chittagong	1,200	2003
19.	Madhob-Kunda Eco-Park	Hill Forest	Maulvibazar	253	2000
20.	Kua-Kata Eco-Park	Coastal mangrove	Patuakhali	5,661	2000
21.	Sita-Kunda Eco-Park	Hill Forest	Chittagong	403	2006
22.	Madhu-Tila Eco-Park	Sal forest	Sherpur	100	1999
23.	Bangabandhu Sheikh Mujib Safari Park	Hill forest	Cox's Bazar	900	1997

Visitors Guide to Bangladesh's Protected Area.

A Study on Sitakunda Ecopark:

The context and background of the park:

The first ecopark in Bangladesh, along with a botanical garden, was established in 2001 under a five year (2000-2004) development project on 1,996 acres of Chandranath Hills at a cost of Tk. 3.57 corer in Sitakunda. The ecopark was

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established to facilitate biodiversity conservation, natural regeneration, new plantations and infrastructure development, as well as promoting nature based tourism to generate income. The park, 405 hectares (1,001 acres), and the garden, 403 hectares (996 acres), under the Bariadhala Range of Chittagong Forest Division, are rich with natural Gymnosperm tree species including *Podocarpus nerifolius* and species of *Gnetum* and *Cycas*. The park is reported to be able to receive 25,000 visitors in a single weekend. With the botanical garden included, the number of visitors can reach up to 50,000. [16] According to the *International Journal of Biodiversity Science and Management*, however, "ignoring the dependence of local people on park resources created conflicts between local communities and the park authority" and "prohibition on the extraction of forest products from the park make the livelihoods of surrounding villagers vulnerable".

Sitakunda ecopark is situated 35 km northern side of Chittagong city and eastern side of Dhaka-Chittagong trunk road. It has given the status of ecopark by Government of Bangladesh since last decade. The size of Sitakunda ecopark is approximately 9.71 sq km that represents the natural environment. It covers the area of 800 hectares (1996 acres) of mainly hilly and land area with two divisions: one is 1000 area of land as Botanical garden and another is 996 acres area considered as ecopark.

Apart from Sitakunda Eco Park there are a few Eco Parks in Bangladesh. Such as:

- Madab Kundo Eco Park at Maulabi Bazar in Sylhet
- Murai Coda Eco Park at Maulabi Bazar in Sylhet etc.

Botanical garden and eco park



Botanical Garden & Eco Park is situated in the historical Chandranath reserve forest block's of evergreen forest which decorated by nature's own hand & located in Sitakund Upajilla of Chittagong district. It is 35 km north of Chittagong city & remains in the east of Dhaka-Chittagong highway & railway.

Advancing from Chittagong through Dhaka-Chittagong highway leaving behind Pahartoli, City Gate, Kattoli & Kumira you will experience the Chandranath temple above the hill at the east & having the Sitakund Botanical Garden & Eco Park right beside it. 2 km south of Sitakund Upajilla center & by the side of Fokirhat Bazar there is a colourful gate with signboard which indicates direction and introduces you to the Botanical Garden & Eco Park. In side Botanical garden and ecopark you see a display map, from here you can get full description. The Chandranath Temple is 5 kilometers way from here you can go there by Jeep, Micro, and Car or on foot.

The Eco Park is truly fantastic by calm & quiet hills, various kinds of animals like Deer, Bear, Monkey etc, chirp, natural spring and delighting sight of evergreen trees. At the evening when the sun set on the west, the twilight makes the environment so amazing.

Nursery: Right beside the main gate of Botanical garden and eco park, there is a central permanent nursery and its office. The nursery has various kinds of species Foreign and Bangladeshi plants like arjan (*Dipterocarpus alatus*), Telsur (*Hopea odorata*), Chapalish (*Artocarpus chaplasha*), Chundul (*Tetrameles nudiflora*), Koroï or the Moluccan albizia (*Albizia falcataria*), Jarul (*Lagerstroemia speciosa*), Toon (*Toona ciliata*), Jam (*Syzygium cumini*), Jalpai (*Elaeocarpus robustus*), various kinds of Bamboo etc.

Orchid House: The Botanical garden has a marvelous orchid house. Here has approximately 50 or up beautiful species of orchid.

Shahasharadhara & Suptodhara: There are many spring in Chandranath reserve forest. Two of these spring are located in Botanical garden and eco park. They are named as Shahasharadhara and Suptadhara. Water fall nicely from Shahasharadhara every time. But from Suptadhara water fall lightly at winter season. At rainy season these two spring look very glamour's.

Picnic Corner: Botanical garden and Eco Park has full facility with drinking water, rest house and toilet for picnic.

The present governance and management of the park:

Sitakund Upazila (Chittagong district) with an area of 483.97 sq km, is bounded by Mirsharai upazila on the north, Pahartali thana on the south, Fatikchhari, Hathazari and Panchlaish upazilas on the east, Sandwip upazila and Sandwip channel on the west.

Sitakund (Town) municipality consists of 9 wards and 23 mahallas. It has a population of 36650; male 50.50%, female 49.50%.

Administration: Sitakund thana was established in 1899 and was turned into an upazila in 1983. The upazila consists of one municipality, 9 union parishads, 63 mouzas and 93 villages.

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Religious institutions: Mosque 280, Mazar 8, temple 49, Buddhist temple 3, most noted of which are Shah Mosque, Baro Awlias Mazar, Kalu Shah Mazar, Dal-Chal Miar Mazar, Sitakunda Shankar Math, Ramkrishana Asram, Bholananda Giri Asram, Labanakhya Mandir, Chandranath Mandir, Shambunath Mandir.

Population: 335,178; male 55.34%, female 44.66%; Muslim 84.91%, Hindu 14.40%; Buddhist, Christian and others 0.69%.

Literacy: Average literacy 41.1%; male 59.42% and female 48.72%.

Educational institutions: cadet college 1, college 4, high school 24, junior school 3, primary school 73, madrasa 10, military academy 1. Noted educational institutions: Sitakunda Degree College (1968), Sitakunda Government High School (1913), Sitakunda Alia Madrasha (1886), Faujdarhat Cadet College (1958).

Cultural organizations: Co-operative society 120, club 151, cinema hall 2, press club 1, public library 1.

Main occupations: Agriculture 15.3%, forestry 2.77%, fishing 3.27%, agricultural labourer 8.61%, wage labourer 2.64%, industry 3.27%, transport 2.84%, commerce 13.88%, service 32.76%, renting house 1.01%, construction 1.01%, others 12.64%.

Land use: Total cultivable land 12140.83 hectares, fallow land 1604 hectares; single crop 25.46%, double crop 57.95% and treble crop land 16.59%.

Value of land: The market value of the land of the first grade is approximately Tk 15000 per 0.01 hectare.

Main crops: Paddy, betel leaf, ginger, turmeric, onion, chilli, bean and vegetables.

Main fruits: Mango, jackfruit, papaya, guava, coconut, betel nut, bungi (kind of melon) and watermelon.

Poultry: 439.

Communication facilities Roads: pucca 112 km and mud road 256 km; railways 37 km, rail station 6, ferry-ghat 5.

Traditional transport Bullock cart (nearly extinct).

Manufactories: Cement factory 3, jute mill 10, textile mill 17, re-rolling mill 51, shipyard 66, rice and flour mill 10, saw mill 34, brick field 26, Glass factory 1, Gass 14, Steel mill 3, others 45.

Cottage industries Goldsmith 25, tailoring 150, pottery 82, blacksmith 26, bamboo & cane work 84, bidi factory 6.

Hats, bazars and fairs: Hats and bazars are 19, most noted of which are Barabkunda Hat, Mohantar Hat, Suklal Hat, Fakir Hat, Baro Darogar Hat.

Fair 3 (Shiva Chaturdashi Mela, Boishakhi Mela and Chaitra Sankranti Mela).

Main exports: Bean, melon, rubber and betel leaf.

NGO activities: Operationally important NGOs are YPSA, Ever Bright Foundation, Verc,Care, Brac, Asha, Grameen bank.

Health centres: Upazila health complex 1, infectious disease hospital 1, family planning centre 11 and veterinary treatment centre 1.

The trend of visitors:

Visitor exports are a key component of the direct contribution of Travel & Tourism. In 2012, Bangladesh generated BDT7.7bn in visitor exports. In 2013, this is expected to grow by 3.2%, and the country is expected to attract 391,000 international tourist arrivals.

By 2023, international tourist arrivals are forecast to total 537,000, generating expenditure of BDT12.8bn, an increase of 4.9% pa.

Travel & Tourism is expected to have attracted capital investment of BDT37.3bn in 2012. This is expected to rise by 0.5% in 2013, and rise by 6.0% pa over the next ten years to BDT67.4bn in 2023.

Travel & Tourism's share of total national investment will rise from 1.5% in 2013 to 1.5% in 2023.[17]

Different components of Travel & Tourism

- Leisure travel spending (inbound and domestic) generated 73.2% of direct Travel & Tourism GDP in 2012 (BDT241.9bn) compared with 26.8% for business travel spending (BDT88.5bn).
- Business travel spending is expected to grow by 7.4% in 2013 to BDT95.1bn, and rise by 5.6% pa to BDT164.8bn in 2023.
- Leisure travel spending is expected to grow by 7.1% in 2013 to BDT259.0bn, and rise by 6.1% pa to BDT467.3bn in 2023.
- Domestic travel spending generated 97.7% of direct Travel & Tourism GDP in 2012 compared with 2.3% for visitor exports (ie foreign visitor spending or international tourism receipts).
- Domestic travel spending is expected to grow by 7.3% in 2013 to BDT346.2bn, and rise by 6.0% pa to BDT619.4bn in 2023.
- Visitor exports are expected to grow by 3.2% in 2013 to BDT7.9bn, and rise by 4.9% pa to BDT12.8bn in 2023.

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Findings of the study:

Visitors Impacts assessment:

While analyzing various reports, books and journals, some comments in line with ecopark impact have been experienced.

Positive Impacts		Negative Impacts	
1.	Conservative, superstitious and illiterate society is modernizing with positivism.	1.	Crime (drug addiction, child and woman trafficking, hotel – killing) has increased.
2.	Literacy rate and academic institutions are increasing day by day in the area.	2.	Traditional culture / life style is fading.
3.	Modern ideas, values and behavior are being introduced in the local community.	3.	Price-hike of the essentials and local community is suffering much.
4.	Living standard of the local community has improved.	4.	Seasonality of jobs during off-season the large number of local staffs loses jobs.
5.	Income-generating activities are increasing. Income and financial capacity is risings.	5.	Land valuation is so high. So land grabbing is common. Poor people are selling land at high prices and occupying the govt. <i>khas</i> land.
6.	Cultural exchange between host community and tourists from home and abroad.	6.	Vandalism is serious problem
7.	Money circulation is going on in local economy. So economic activities increases.	7.	Passage of tourism vehicle have adverse effects on vegetation.
8.	Employment opportunity/ job creation for local community has increased.	8.	Soil compaction caused by trampling

Challenges for eco-park impact Assessments

There are several challenges to measuring the impacts of ecopark. They have been discussed in more detail elsewhere (Wall and Wright 1977), but some of them apply to all forms of impact assessment and include[18]:

- The difficulty of establishing a base level against which to measure change;
- The difficulty of disentangling human-induced change from natural change;
- Spatial and temporal continuities between cause and effect;
- The complexity of environmental interactions—primary impacts induce secondary impacts and tertiary impacts and so on.

Other challenges are more specific to tourism and include:

- The diversity of activities involved;
- The diversity of environments in which tourism occurs;
- The mobility of tourists so that impacts occurs en route as well as on-site;
- Cumulative impacts.

Furthermore, there are three main methods by which impact assessments are undertaken:

- After-the-fact analyses
- monitoring of change through time
- Simulation

Each of these three requirements differ with respect to costs of time and money, produce results with differing characteristics and, consequently, different degrees of managerial utility.

Recommendations

Ecopark is a subsection of ecotourism. It is an industry of providing services. It could not isolated from other sectors; rather it depends on some combined effort of other service sub-sectors like hotel, motels, transports, foods, security, guide etc. these facilities are the infrastructures of tourism which is still far behind from satisfactory level. Bangladesh is blessed with huge natural beauty which constitutes major part of tourism & ecotourism industry. Proper maintenance of these beauties along with assuring other logistic facilities can make this section most lucrative sector. For this concentration are made on some areas:

1.1 Infrastructural Development

1.1.1 Transportation Facilities:

Since Bangladesh is a plain country, road transport is very popular. The road transport carries about 70% of the country's total passenger and cargo.

1.1.2 Accommodations for Tourists:

For tremendous progress in ecotourism industry, a parallel linkage development in accommodation facilities in utmost necessity. The hotel business in Bangladesh is being flourished centering major tourists spot like Cox's bazaar and other important tourism city. If proper accommodation facilities are ensured for tourists then it increased the visitors to ecopark.

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1.1.3 Security for Tourists:

Security is another important aspect for the development of tourism industry. For ensuring safety and security of tourists, a new wing of Bangladesh Police has started to serve. According to The Daily Star (August 18, 2009), a total of 77 Police personnel under the command of an Assistant Superintendent of Police (ASP) will serve as tourist police at Cox's Bazar. Moreover, mass people of Bangladesh have to come forward to ensure the security of foreign tourists.

1.1.4 Tourist Operation and Tourist Guide:

There are so many tour operator businesses in Bangladesh. They arrange different tour packages. Some mentionable tour operator is The Guide Tour Ltd., Himalayan Travel and Tourism, Journey Plus, Ras Holiday, River and Green Tours, Saint Martin Tourism Ltd., Speed Holidays, Unique Tours & Travels and Mangrove Tourism. Availability of tourist operator and guide may encourage tourists to tour around the country. Availability of tour operation and guide may encourage people for tourism.

1.1.5 Diversified Food Culture:

Availability of food according to tastes of different countries and their choices is one of the major pre-requisites to attract international tourists. But in Bangladesh, ecoparks do not attract the foreign tourists on the lack of supply of diversified food.

1.2 Assurance for Good governance

1.2.1 Making Policy Implementations easy:

Good governance which is related to government interaction and dealing with business by means of regulatory affairs is rather a great problem for the sustainable tourism development in Bangladesh. The rules and regulations, enacted with the view of facilitating and helping tourism, rather acts as a regulatory and problem creating mechanism.

1.2.2 Removing Bureaucratic barriers and Corruption:

Bureaucratic barriers has made the progress of Bangladesh slower and in some sectors, growth is almost negative. Corruption is pervasive. Getting any approval, giving speed money is must. Discriminatory power of the Government officials encourages them to be corrupt and whimsical.

1.2.3 Decentralized and Quick Decision Making:

For development of tourism industry, decentralized and quick decision is to be ensured. One of the most formidable challenges to tourism industry in Bangladesh is centralizes and slow decision making process.

1.2.4 Most Easy and Shortest Permission Procedure for Private Entrepreneurs:

In starting new ecopark business, most easy and one stop permission procedure can encourage private entrepreneurs to invest in this sector. Entrepreneurs must not have to take permissions from a number of different ministries and departments.[19]

Conclusion

The establishment of Sitakunda Ecopark can improve the living standard of the local communities and meet the demands from the thrust of local and foreign tourists. But further establishment need to be in the sectors of accommodation facilities, security, amusement facilities, well equipped transportation, extension of areas etc. some conclusions are drawn from the following studies:

- There need to be establishing hotel and motel for improvement of the accommodation facilities of the tourists.
- Small number of household currently participates in ecotourism sector in Bangladesh. There is a small scope for increasing local participation through tourism.
- Ecotourism can increase the job facilities of local people such as hotel & motel restaurants owners, shopkeepers, transportations, daily labors, guides, and can contribute to their economy.
- Lack of literacy about the concept of ecotourism creates barriers to this sector. By increasing proper knowledge to the households who directly participating in this sector may increase the revenue to this sector.

References

- [1] Afroze, R. **Ecotourism and green productivity in Bangladesh. pp.36-45.** Available at (http://www.apo-tokyo.org/gp/e_publi/gplinkeco/07chapter5.pdf). Downloaded on 2 March 2011)
- [2] Alpizar, R Fransisco (2002), "*Eassys on Environmental Policy-Making in Developing Countries: Application to Costa Rica*", *Economic Studies #117*, Department of Economics, School of Economics and Commercial Law, Goteborg University, Sweden.
- [3] *An Evaluation Study as Tourism in BD.* Rajib Kanti Das, Jaba Chakroborty
- [4] *Bureau of Economic Analysis*
- [5] BBS. (2001), Population Census 2001, Sylhet Zilla series ,Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, Bangladesh FORUM, a monthly publication of The Daily Star, volume 2, issue 9, November 2007
- [6] *Ecotourism, Change impacts and Opportunities-* Geoffrey Wall-Professor of Geography and Recreational and Leisure Studies. University of waterloo.

Socio-Economic Impact of Ecopark: A study on Sitakunda Ecopark

- [7] ***Ecotourism Potentiality of Bholagong Stone Quarry-*** a Thesis report on Dept. of Forest & Environmental Science. Shahjalal University of Science & Technology.
- [8] Economic Development Research Group: ***Measuring Economic Impacts of Projects and Programs*** (<http://www.edrgroup.com/images/stories/Transportation/econ-impact-primer.pdf>)
- [9] ***Economic Impact"***. Greyhill Advisors. Retrieved 8 October 2011.
- [10] ***"Economic Impacts from Coal, Natural Gas and Wind"***. National Renewable Energy Lab. Retrieved 30 September 2011.
- [11] ***Identify Appropriate Conservation Strategies and Their Importance for the Local People in BD.-***a Thesis of Syeda Sakera Rahman.
- [12] ***Measuring Economic Impacts of Projects & Programs-*** GLEN WEISBROD, Economic Development Research Group-BURTON WEISBROD, ECONOMICS DEPARTMENT, NORTHWESTERN UNIVERSITY.
- [13] Mathieson, Alister and Geoffrey Wall, 1982. ***Tourism: Economic, Physical and social Impact***, London.
- [14] Murphy, Peter. 1985, ***Tourism: A Community Approach***. NEWYORK: Methuen.
- [15] ***National Trust for Nature Conservation: SHIFTING PAEADIGMS IN PROTECTED AREA MANAGEMENT***, Edited by- Siddhartha B, Bajracharya, Phd, Ngamindra Dahal.
- [16] Shoemaker, Darryl j. 1994, ***Cumulative Environmental Assessment- Department of Geography Publication Series No: 42***. Waterloo: University of Waterloo.
- [17] Wall, Geoffrey, 1982, ***Cycles and Capacity: Incipient Theory or Conceptual Contradiction?-Tourism Management 3***: 188-192
- [18] Wood, Robert E 1980, ***International Tourism and Cultural Change in Southeast Asia, Economic Development and Cultural Change***, 28: 561-581
- [19] Wall, Geoffrey and Cynthia Wright, 1977- ***The Environmental Impact of Out hood***.
- [20] Wikipedia, the free encyclopedia