



# ECO-TOURISM AND ENVIRONMENTAL SUSTAINABILITY: A CASE STUDY ON DUARS REGION, WEST BENGAL

<sup>1</sup>Kumarjeet Chatterjee,<sup>2</sup>Swagta Mondal,

<sup>1</sup>Assistant Professor, <sup>2</sup>Assistant Professor

<sup>1</sup> & <sup>2</sup> Seacom Skills University, Kendradangal, Bolpur, Birbhum

## **Abstract :**

Tourism is a rapidly booming service sector with huge potential for expansion, and it has thus become one of the most pressing concerns of not only the states but the entire global community. In the present day tourism has evolved into an important component of the global economy and a substantial workforce in international trade. It has a significant and revolutionary influence on the world economy. It has long been considered the world's most important export business. The primary differentiation among ecotourism and different sorts of the travel industry is now and again unclear and antagonistic. Because of the many perspectives and standards used to describe ecotourism, conflicts emerge. While beginning ecotourism industry, assess the inspirations of clients (are they given to the preservation ethic or not?), as well as the presence and degree of natural, social, and financial repercussions. Ecotourism is eventually determined to describe, as well as a challenging phenomenon to implement and analyze. Ecotourism should be considered as a way of merging resource preservation and local development goals in a synergistic manner through tourism. The present study reflects the impact of ecotourism on physical and socio-cultural environment of Duars region and its approach to environmental sustainability. The primary data has been collected through simple random sampling while secondary data has been acquired and analyzed from Govt. websites along with it. This study shows that Duars is not only potential for ecotourism but also could be epicenter of tourism industry in near future. But at the same time the sustainability must be maintained with promotion of ecotourism and promoting sustainable development through social as well as economic sustainability.

**Key words-** Ecotourism, Environmental Sustainability, Duars

## **1. Introduction:**

In addition to other sources West Bengal is notable for its numerous and distinctive tourism resources. This state provides a wide range of tourist attractions, from the Darjeeling Himalaya's snow-capped mountain peaks to the beaches and surf of the Bay of Bengal, from a rich historical past and centuries-old culture to modern widespread adoption, from the abundance of bio-diversity to calm yet vibrant existence. The history

of tourism in North Bengal is rich and famous. Although its qualities have varied over time, North Bengal's tourism sector is not a recent development. Darjeeling was a favourite holiday location for British rulers. They used to stay in this hill station for the summer and the winter. Additionally, it is well known that the religious sector is the first to arrange tourism. But after 19 years of independence, in 1966, the Indian Tourism Development Corporation (ITDC) was established, and the North Bengali landscape for organised tourism started to take shape. After that, a number of initiatives were started by the West Bengal State Government to aid the North Bengal tourism industry. At the time, tourism was not a particularly frequent or significant event, but by 1995–1996 the North Bengal tourism industry had blossomed and established its own framework.

### **1.1 Tourism to Eco-Tourism**

According to the Oxford English Dictionary, tourism is "travel for pleasure; moreover, the thought and practise of travelling, the business of luring, housing, and entertaining tourists, and the business of organising tours" (2005). Contrarily, ecotourism is a low-impact, frequently low-volume substitute for conventional commercial (mass) tourism that entails visiting delicate, pristine, and typically unexplored natural areas. It means travelling sustainably to wilderness areas that benefit the local populace and safeguard the ecosystem.

The basic distinction between ecotourism and various segments of the travel industry is occasionally ambiguous and confrontational. Conflicts arise as a result of the various standards and views used to define ecotourism. Assess the inspirations of clients (are they given to the preservation ethic or not?) as well as the presence and degree of environmental, social, and financial repercussions when starting an ecotourism industry (for instance, as a protection methodology, an undertaking, or as a component of ecological schooling effort).

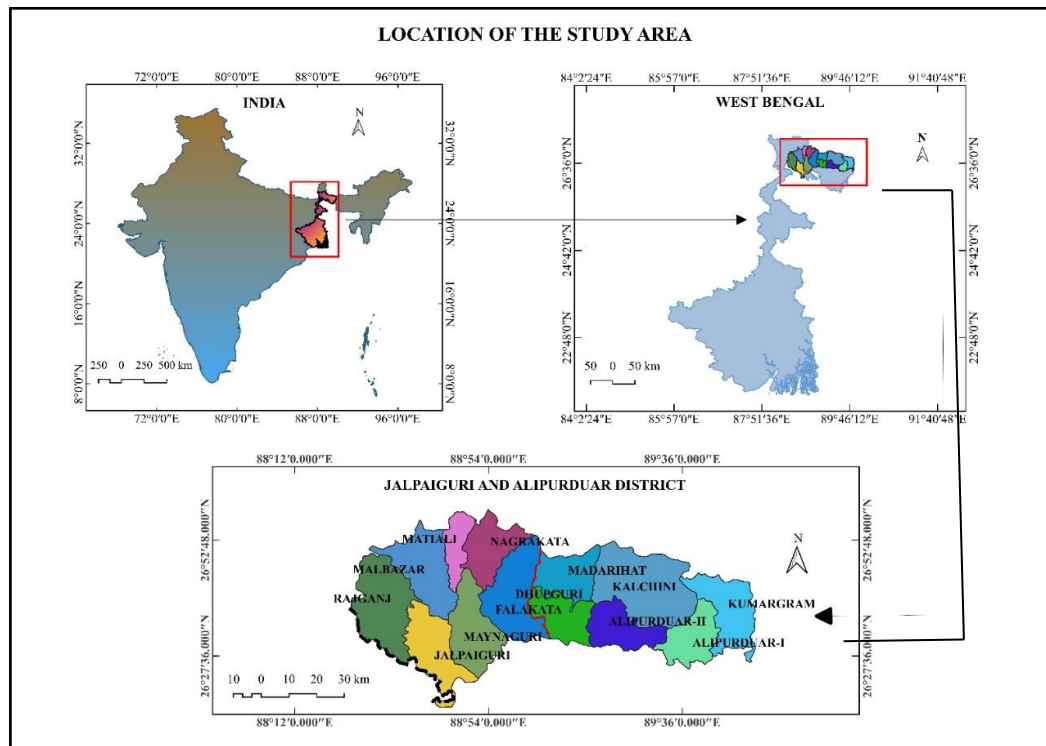
The concept of ecotourism is ultimately decided, and it is a difficult phenomenon to apply and study. It is important to think of ecotourism as a strategy to combine tourism with local development and resource protection objectives. To avoid conflicts between the expansion of the tourism industry and the preservation of the environment and biodiversity, vigilance must be taken in this situation. Eco-tourism differs from traditional tourism in that the tourist is conscious of his or her surroundings and, in most circumstances, contributes to their long-term sustainability.

### **1.2 Location and Extent of the Study Area:**

From the east bank of the River Tista to the northern region of Assam, Duars occupies a sizable area of territory at the foot of the Eastern Himalaya. His research has been concentrated on the western portion of the Duars, which includes the West Bengal districts of Jalpaiguri and Alipurduar. The Duars region has recently grown to become a highly popular travel destination. Mostly in North East of India and to the North of West Bengal, it is one of the most significant foothill destinations. Today, tourism has developed into the Duars' most viable sector. The choice of the study region was made for a number of diverse reasons. Like –

1. It is possible to reach this section of North Bengal from any location inside the state.
2. In current history, the region has gained recognition for its tourism sector.
3. Several research initiatives are currently being carried out to enhance the contribution of the tourism industry to the economic growth of this region of West Bengal.

4. The development of ecotourism has been given significant attention at the administrative level.



**Figure No.1.2.1: Location of Study Area**

## 2. Review of Related Literature:

In 1971, **Bhattacharya** talked on the region's accessibility in North Bengal. He discussed the region's limits. As with Nepal, Bhutan, Bangladesh, and Sikkim, he claimed that it has both national and international borders. As a result, he advised building a sizable airport in North Bengal in consideration of the region's road and rail systems.

**Thangamani (1976)**, the properties of foreign visitors to India are depicted. He has considered factors including the duration of the stay, the cost, the use of the amenities, the user's background, and other economic activity. He also noted the critical significance that foreign exchange plays in India's rising G.D.P. In his report, **Banerjee (1982)** noted some significant problems with Darjeeling tourism. The area has been disrupted by the tourism industry's rapid expansion as a result of the building of numerous hotels by blasting through the mountain wall.

In the Corbett National Park, **Kayastha and Rai (1986)** demonstrated the concepts of ecotourism and ecological sustainability. The author focused particularly on the fauna element of flora and fauna. They draw attention to a number of factors, including infrastructure expansion and amenities and facilities.

**Das (2006)** conducted an in-depth analysis of Darjeeling's tourism sector. He claims that the tourism sector is one of the primary sources of income in Darjeeling. Tea, wood, and tourism are the three main industries for making money. That said, the most significant industry is tourism, with the forestry industry on the verge of collapse. He claims that the Darjeeling tourism industry's future is not so promising because an increase in hotels and visitors may lead to natural contamination. For this reason, he gave the authorities some wise suggestions on how to stop it from happening again.

### 3. Statement of the Problem:

This research project, however, had some restrictions. Examples include:

- The absence of the necessary quantity of secondary information.
- The proprietors of nearby businesses have offered very little assistance.
- Due to security concerns, several trekking routes are no longer accessible.

### 4. Objective of the Study:

- I. To evaluate the direction and function of ecotourism in the environmental sustainability of the Duars.
- II. To assess the plans and programmes put in place and maintain Duars' ecotourism potential.

### 5. Methodology of the Study:

The study region was chosen and marked on the map at the pre-field stage, and geographical data were gathered from a variety of sources, including government agencies, newspapers, and other sources. All significant tourist destinations were located and carefully visited during the field investigation. Through a thorough field survey, primary data were created by interviewing a chosen group of tourists and hoteliers using well-designed questions. Finally, during the post-field study, data and other material obtained from the worries and those generated by the field interviews were gathered, collated, and evaluated using computer software and methods such as Arc GIS and Erdas Imagine to determine the actual scenario.

### 6. Analysis of data-

#### 6.1. Eco-Tourism in the Duars Region:

According to Surgeon Renni's book "Bhutan and the Story of the Door War," published in 1866, "the door" functioned as the entryway from plain land to Bhutan, and the name "Duars" was formed from it. The Duars area in Assam spanned the Tista River to the Manas River. The Duars region is split into two sections: the Western Duars is located in the Jalpaiguri district and the Eastern Duars is located in Assam. The Jalpaiguri district is mostly within the Duars area. From beginning to end, the Duars area is stunning. The Duars in West Bengal resemble an emerald when they are covered with a green carpet. The discussion that follows will thus centre on the eco-tourism assets and the importance of the Duars region to the tourism industry. Everyone involved is aware that eco-tourism is one of the most innovative segments of the whole tourism business in the modern world. The ecological, social, cultural, and economic settings of the modern world have a great deal of potential to be revitalised by this emerging business. An ecotourism resort will fail without the necessary resources.

#### 6.1.1 Status of Duars region in Eco-tourism and Environmental Sustainability:

- The Duars region's infrastructure might be developed using the ecotourism resource. The construction of infrastructure must be done in a way that is ecologically beneficial, maintaining native flora and animals, utilising the least amount of fossil fuels feasible, and blending in with the local environment.
- The ecotourism resource in the Duars region helps the host communities, especially those who live in or close to protected and conserved forest areas, to the fullest extent possible.

- The ecotourism options available in the Duars region are highly informative. It assists in educating visitors about the importance of ecological or environmental protection.
- The Duars region's ecotourism resource helps to preserve the biological and cultural variety of the area for the long run.
- The ecotourism resource in the Duars region promotes overall regional development.
- Ecotourism in the Duars region benefits the economy of the whole country. The influence of tourists on the national GDP is the same whether they are domestic or foreign.

### 6.1.2. Impact of Eco-Tourism on Local Residents:

Traditional tourism is no longer widely used, and most tourists now concentrate on ecotourism, which will undoubtedly provide them with a memorable experience by travelling to exciting and naturally beautiful locations. The creation of local jobs, which has been shown to offer acceptable employment options for locals and give them the right platform to promote their local culture in every way imaginable, is another economic benefit. It has been determined that the beneficial effect of ecotourism has manifested as natural security exercises while taking into account the ecological impact on the local society. Aside from that, it is a well-known fact that the travel business has an adverse effect on the environment, necessitating certain corrective actions so that common resources can be improved to their full potential and used as a tool for society's growth. The present study looks at how local people feel about ecotourism and visitors. The information was acquired through a field research in which 150 locals were questioned. The initial survey conducted in the research region served as the basis for the analysis that follows -

#### • Economic Impact of Ecotourism on Local Community-

According to the data acquired, it has been shown that the majority of respondents make between 30,000 and 45,000 INR each month. It may be said that 39% of the population, or the majority, lives in a family with an annual income between 30,000 and 45,000 Indian Rupees. Respondents are more likely to spend more on travel, tourism, and leisure activities when their average monthly income is higher. On the other side, 7% of respondents make more than 45,000 INR every month. According to information taken from primary sources, India's per capita income is rising. This offers enough support for the expansion and development of the whole travel and tourism sector. The remaining 19% of respondents had an income of up to INR 15,000, while 35 percent of respondents earned between INR 15000 and INR 35000.

Income	Frequency	Percent
<15000	28	19
15000-30000	52	35
30000-45000	59	39
>45000	11	7
<b>Total</b>	150	100

Table 6.1.2.1: Income of Locals from Eco Tourism

(Source: Collected during field survey)

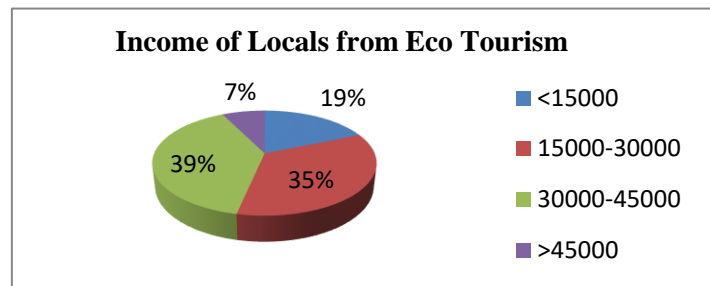


Figure 6.1.2.1: 1

#### • Awareness of Local People regarding Ecotourism

The majority of respondents, according to information gleaned from primary sources via a questionnaire, are aware of the concept of eco-tourism. The majority of respondents, or 73%, said that they were completely aware with the concept of eco-tourism. They also noted that eco-tourism aims to save the environment as much as possible while simultaneously preserving the interests of the local community. In other words, responsible tourism is another name for eco-tourism. Locals also emphasised that eco-tourism is now a significant part of the tourism industry since it helps to safeguard natural resources while disseminating knowledge. The respondents said that conserving the environment, natural resources, and societal economic value is eco-shared tourism's objective.

Response	Frequency	Percentage
No	40	27
Yes	110	73
<b>Total</b>	150	100

Table: 6.1.2.2: Awareness of Locals about Eco Tourism

(Source: Collected during field survey)

#### 6.2 Planning and strategies for Promoting Ecotourism in Duars:

It is the sector with the quickest growth rate, and the government has identified it as one of the thrust sectors. In response to the pattern of tourist flow and profile of the visitors visiting the state, various plan initiatives were undertaken to promote and increase tourism in the state. The demand for products and services expanded along with the number of tourists to the state, which led to greater job and income-generating possibilities as well as the development of infrastructure.

Ecotourism typically incorporates a social component in its beliefs and practises, while being essentially a nature-based tourism concept (Fennell, 2015). It is seen favourably when locals participate directly or indirectly in community-based ecotourism (CBE), as communities may be crucial to fulfilling ecotourism's environmental objectives. Ecotourism can help local residents change their attitudes toward biodiversity preservation and reduce their reliance on common resources like wood, non-timber forest products, fuel wood, grain, covering materials, and other woodland products by fostering direct connections between people and protection.

The government plays a significant influence in several sectors, including zoning, prioritising an area's requirements, licencing, regulating, policy-making, and providing financial incentives. Additionally, it is crucial in the key segments:

- Creating support programmes for community participation through bottom-up methods. Fragmentation of authority by giving communities more control over making decisions rather than making those decisions for them.
- Serve as a mediator and facilitator when bringing together regional authorities, towns, companies, non-governmental organisations, and governmental organisations.
- Providing easy access for tourists to the area through both solid infrastructure and distribution channels, ensuring that the tourism-related product is easily accessible on the market.
- Making certain that the public has access to the most recent information available so they may make informed decisions.
- Creating a space where everyone may openly express themselves, regardless of gender, caste, religion, political affiliation, or level of education or income. They ought to be granted equitable participation in the planning and growth of the tourism industry.

### 6.2.1 Planning and Schemes Implemented by the Government-

- By upholding the fundamental principles of environmental, social, and economic sustainability, the West Bengal government will seek to make tourism more sustainable.
- The optimum use of the available resources will be made in order to create a long-term beneficial and responsible balance. a) Economic Sustainability
- Conservation and management of natural resources will be highlighted in relation to environmental sustainability. Actions will be taken to lessen air, land, and water pollution while also maintaining biodiversity and our natural heritage through afforestation and the avoidance of uncontrolled tree cutting. The Tourism Department will support eco-friendly tourism initiatives across the state with the assistance of local residents and tourism stakeholders.
- Social Sustainability - Through community involvement, the creation of local livelihood possibilities, and the enhancement of employment standards, tourism will be encouraged. Social sustainability is represented by the requirements for safety and quality around tourism sites.

For effective plan execution, the effective steps are prioritised:

- a. Locations that could be suitable for ecotourism:
- b. Financial backing
- c. Strengthening capacity
- d. Education and awareness e. Information technology application f. Benefit-sharing

## 7. Conclusion

According to one definition, eco-tourism is ethical travel to untouched areas with an abundance of natural resources, as well as a practise that helps the local population save the environment while simultaneously enhancing their socioeconomic standing. Eco-tourism enables the maintenance of indigenous tribes and traditions in addition to the preservation of the natural environment. From a socioeconomic perspective, it has been shown that ecotourism money helps the local economy as a whole and also helps local government agencies and communities by helping them build the physical infrastructure that supported ecotourism and increased the social well-being of the local community. However, regardless of the socioeconomic structure, it was imperative that every person of the neighbourhood, For the endeavour to be sustainable over the long run and from a socioeconomic perspective, people must profit from it. The economic benefit of such an undertaking should go to the local community in order to ensure long-term success. Ecotourism performs better than conventional tourism in terms of visitor arrivals as well as economic, social, and environmental advantages.

In conclusion, it can be said that the growth of tourism and environmental protection may be accomplished by careful project planning and execution by government organisations, tourism officials, and the general public. In many parts of the world, eco-tourism will continue to thrive as a successful way of life in the future.

## 8. References-

1. Anal, A. K. S. (1976): Tourism Industry in Bihar, Decan Geography, Volume – XIV, No. 26, Pp. 05 – 09.
2. Chakraborty, I. (2000): Potential and Stratigies for Domestic Tourism in Maharashtra, Geographical Review of India, Volume – 62, No. 4, Pp. 300 – 350.
3. CHEIA, G, 2013. ECOTOURISM: DEFINITION AND CONCEPTS. [PDF].
4. Clements, T. and Milner Gulland, E.J., 2015. Impact of payments - for environmental services and protected areas on local livelihoods and forest conservation in northern Cambodia. Conservation Biology, 29(1), pp.55-57.
5. Dejene, S.W., Seyoum, H. and Ready, R.U., 2014. ecotourism potential and its role for sustainable development and livelihood in Awash National Park, Ethiopia. Int J Sci Res, 3(12), pp.512-528.
6. Fennell, D., 2014. Ecotourism. Routledge.
7. Hanafiah, M.H., M.F. Harun and Jamaluddin M.R., (2010). Bilateral Trade and Tourism Demand. World Applied Sciences Journal, 10 (Special Issue of Tourism & Hospitality), pp.116-118.
8. Hunt, C.A., Durham, W.H., Driscoll, L. and Honey, M., 2015. Can ecotourism deliver real economic, social, and environmental benefits? A study of the Osa Peninsula, Costa Rica. Journal of Sustainable Tourism, 23(3), pp.319-327.
9. Jafari, J., (2001). The socio-economic costs of tourism to developing countries. Annals of Tourism Research, 1(2), 129-148.
10. Khan, N.A. (2001): Development of tourism in India, Anmol publications, New Delhi- 110002.  
Kumar, K. and Singh, J. (2007): Sitamata Wildlife Sanctuary Socio Ecological Problems – A Geographical Analysis, Annals of the Rajasthan Geographical Association, Volume – XXIV, Pp. 8 – 13.