

## Factors Affecting Potential of Ecotourism and Its Sustainable Development in Assam, India - A SWOT Approach

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### Abstract :

Ecotourism is one of the fastest-growing and most notable fields of tourism today. From a variety of viewpoints, ecotourism has a significant influence on the development of a place. As a result, it will be feasible to enhance and improve a region's economic, social, and environmental position by enhancing and developing sustainable ecotourism. Assam is one of India's last unspoiled gems, with a territory that is rich in both nature and culture. Forests, hills, lakes, and rivers abound in the region, creating a plethora of enthralling eco-destinations where visitors may experience natural beauty and learn about local cultures. With seven national parks and many wildlife sanctuaries, Assam can give travellers peace and tranquilly in the middle of nature, as well as eco-tourism hotspots. In this study, first, the SWOT components (Strengths, Weaknesses, Opportunities, and Threats) are determined through interviews with visitors, local people, and specialists, as well as field observation and consideration of similar works in the literature research, in order to fulfil the aim. Then, using a SWOT analysis and speaking with specialists, some realistic and beneficial tactics are established. The study's main contribution is to provide a SWOT analysis for categorising strategies into distinct groups. According to this paper, the three strategies "Encouraging investors and entrepreneurs to establish ecotourism centres in the region," "Establishing and improving hygienic units and medical clinics in the region," and "Improving and diversifying tourism services and products to attract tourists and increase their satisfaction" will have the greatest impact on achieving sustainable development in the region.

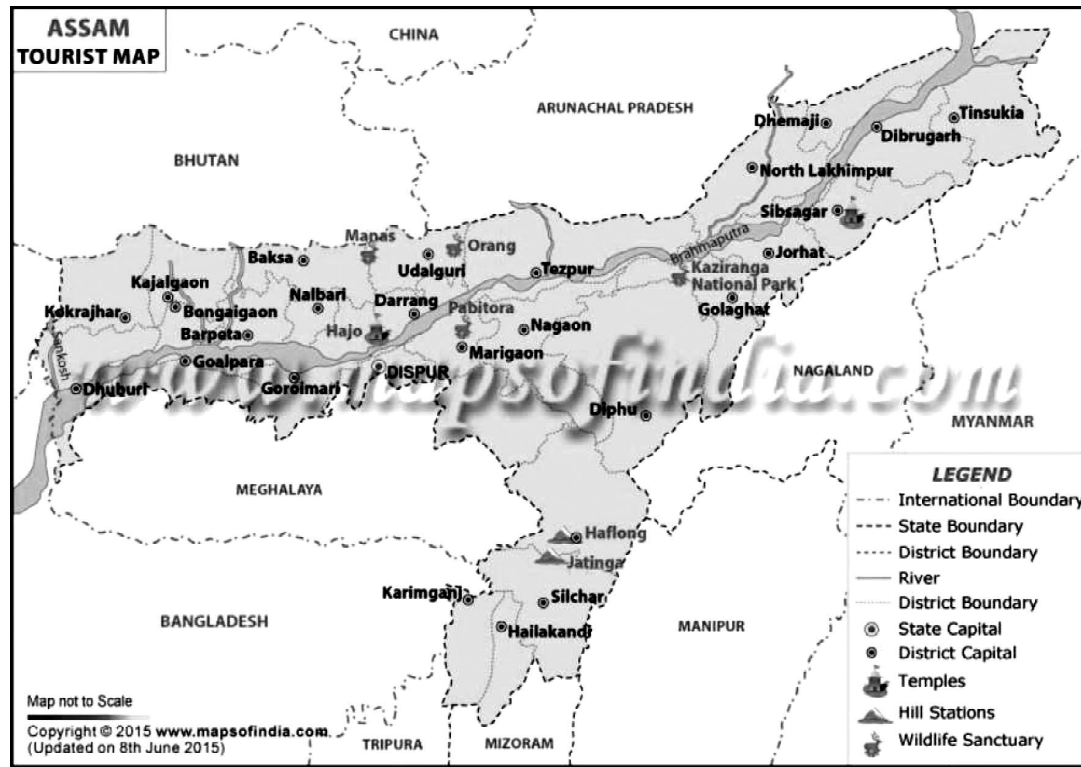
**Keywords:** *Eco-tourism, Sustainability, SWOT analysis, Strategies for Tourism Development.*

### Introduction :

The term "ecotourism" is a relatively new phenomena in the tourism sector, making up just a small portion of the sector. Ecotourism is defined as environmentally conscious travel to relatively untouched natural areas for the purpose of enjoying and appreciating nature (as well as any corresponding past and present cultural traits that encourage conservation, have minimal negative visitor impacts, and allow for beneficially active socioeconomic participation of local people (Ceballos-Lascurain, 1996). Ecotourism may have a range of both beneficial and bad effects on the environment, culture and socioeconomic situation of a location, just like any other type of tourism. In its ideal state, ecotourism offers visitors a high-quality encounter with nature, raises money and support for conservation initiatives, has no negative influence on the environment and promotes the financial well-being of the host communities. While there is indication that the proclaimed advantages of ecotourism may be attained, there are just as many instances when ecotourism has failed to achieve its stated goals. The effects of ecotourism have been quite unpredictable. Ecotourism aims to bring together sustainable travel, society, and environmental protection. This means that those who enact and engage in ecotourism activities should adhere to the following ecotourism principles: reduce adverse environmental effects; promote environmental and cultural consciousness and respect; offer rewarding experiences to both guests and hosts; offer additional substantial economic benefits; provide financial benefits and empower local people; and increase sensitivity to host countries' ideological, environmental, and social issues (Das, 2011). Therefore, if its guiding principles are taken into account in a sustainable manner, ecotourism is a notable method for preserving the environment and generating revenue for local populations. It may have a significant influence on both the preservation of natural resources and economic growth. Ecotourism has been recognised by conservationists as a useful strategy for safeguarding local people and natural resources. Typically, ecotourism engages with living elements of the natural world and primarily emphasises environmentally sustainable travel, human development, and socially responsible tourism (Surendran, 2011).

### Eco-tourism diversity in Assam :

Because of its natural beauty and pleasant environment, Assam, the most notable state in North East India, is considered to be a popular destination for visitors. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura are the states that border this one. Bangladesh and Bhutan also shared borders with Assam. The state covers an area of 78,438 sq km or 2.39% of the total territory of India. (Economic Survey of Assam, 2010–11) The plains and the hills are the two main natural geographic divisions of the state. The Brahmaputra and Barak valleys are part of the plain.



*Figure 1 : Assam Tourist Map*

Source: [mapsofindia.com](http://www.mapsofindia.com)

There are several options for those who enjoy adventure and water sports in the Nameri National Park, Dibru-Saikhowa, and Bhalukpong in the Sonitpur region, which is well known for ecotourism and highly well liked by environment enthusiasts. Majuli, located in the Brahmaputra delta and encompassing around 2860 square kilometres, is said to be the world's biggest river island. It serves as a key hub for pilgrimage, the spread of Hinduism's Vaisnavism religion, heritage preservation and ecotourism. The expansion of wild life tourism in Assam has benefited greatly from the Joypur Rain Forest, Dihing-Patkai, and Dibru-Saikhowa, among other highly rich sources. The biodiversity in the Assamese hills and plains is renowned, and the state's forests and hills are home to a wide variety of valuable, attractive, and medicinal woods, bamboos and other plants. According to Gogoi et al. (2011), Kaziranga National Park in Assam is a popular travel destination for both local and international visitors because of its rich bio-diversity resources. However, ecotourism development in Kaziranga

has received special attention since it fosters community involvement, decreases pollution, and lessens confrontations between humans and animals (Khound 2011). To preserve biodiversity, ecotourism development is urgently needed. It's also critical to support livelihood opportunities in other Assamese destinations. Hence, this study aims to comprehend many aspects of ecotourism in Assam.

#### **Aim of the study**

The main goal of this research is to evaluate the present state of ecotourism at a location or destinations specifically Assam, where it is being pushed as a regional development strategy. To do this, a SWOT analysis will be used to investigate the interactions and effects between tourism, the environment and community. Hence, the stated objectives of this study are:

1. To identify and prioritize various factors affecting the potential of Ecotourism in Assam.
2. To integrate SWOT analysis to understand the strength, weakness, opportunity and threat in context to Ecotourism of Assam.
3. To provide strategies using pair wise matrix for sustainable development of Ecotourism in Assam.

#### **Research Methodology :**

In order to conduct a SWOT analysis of Assam's ecotourism, this article will conduct a thorough analysis of secondary data, including published and unpublished documents from the Department of Forestry and Directorate of Tourism, Government of Assam, newspapers, books, various journals, etc. From literature review various factors related to ecotourism were identified and was discussed with 15 tourism experts to rank the factors using weighted mean method. After the identification of factors, SWOT analysis was implemented to study about the internal and external environment of tourism industry of Assam in detail. Taking these factors into account, a Likert scale—a widely used technique for grading the respondents' ideas—was used in the construction of the questionnaire. The proposal for ecotourism in the Assam was made up of Likert-type questions with ranking responses (very high, high, moderate, low and very low). Proximity from cities, potential for tourism, recreational amenities, landscape view and natural risks (such as floods, landslides, and wildfires) were among the ranking factors. The intrinsic and advantageous characteristics that foster or support the expansion of ecotourism were the grounds of strength. The weaknesses were obstacles to the growth of ecotourism and sustainable environmental assets in the future. Opportunities existed that the local government, commercial sector, and stakeholders in the community could use to their advantage in order to promote ecotourism and local natural resources

sustainably. Threats should be halted or reduced since they were impeding the development of sustainable natural assets and ecotourism. Finally, a pairwise matrix containing the following S-O (strengths-opportunities), S-T (strengths-threats), W-O (weaknesses-opportunities), and W-T (weaknesses-threats) was used to identify anticipatory strategies for the sustainable development of Assam’s ecotourism.

**Factors affecting potential of ecotourism :**

The different variables were rated in accordance with the mean value obtained from a Likert-scale survey of tourism professionals. It was shown that raising small enterprises’ awareness of the need to grow eco-tourism in Assam is the most important aspect needed. Another crucial element is the promotion of ecotourism destinations, with the exception of a few sites like Kaziranga National Park, are mostly unknown to the public. It is also crucial to include the neighbourhood community and diverse stakeholders. The various factors along with the priority ranking are stated below:

**Table 1: Factors influencing eco-tourism in Assam**

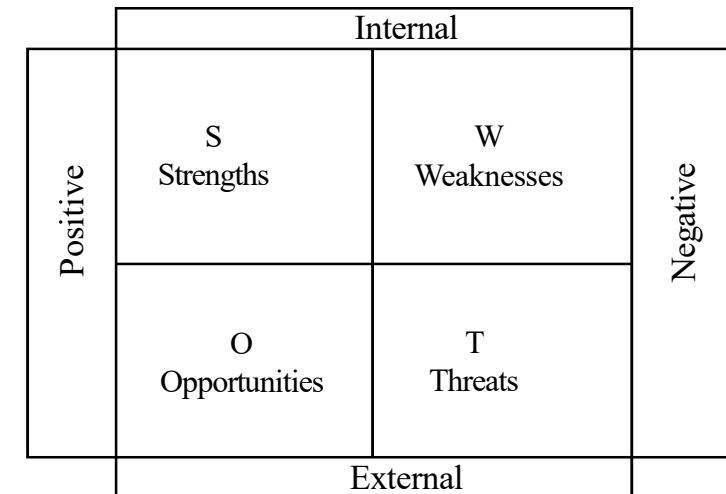
Code	Important Factors Affecting Potential of Ecotourism	MEAN	RANK
F1	Creating small businesses in the field of tourism.	3.46	I
F2	Campaigns to increase public awareness on the ecotourism	3.42	II
F3	More involvement of local people and authorized office on effective monitoring	3.35	III
F4	Increasing the quality of tourist accommodation in terms of service delivery.	3.34	IV
F5	Natural hazard (heavy flood, earthquake, landslide)	3.05	V
F6	Tourist guide and proper information of destinations mainly local culture, traditional foods, dominant plant and wildlife (brochure, sign, etc.	2.90	VI
F7	Effectives security for international tourist	2.88	VII
F8	Necessary services such as camping sites, eco homestays etc.	2.80	VIII
F9	Rubbish and plastic left in environment	2.78	IX
F10	Developing management and strict law enactment to alleviate the activities such as arson tree branch cutting, littering etc.	2.62	X

(adapted from Fallahzade & Hajabbasi, 2012; Heshmati, Arifin, Shamshuddin, & Majid, 2012).

The SWOT (strengths, weaknesses, opportunities, and threats) method implements prioritised strategies in achieving sustainable development goals at the community scale and is a viable and adaptable technique for outcome on ecotourism based on interdisciplinary evaluation of ecotourism. It is a holistic, integrated analytical technique for including several disciplines in the planning process. SWOT is therefore frequently used in the management of ecotourism when making decisions. More opportunity tactics can be discussed based on SWOT outcomes. SWOT is a good method for identifying and ranking ecotourism development strategies, nevertheless (Sahani, 2021).

**SWOT analysis on ecotourism :**

Large corporations created SWOT analysis or the SWOT Matrix in the midst of the 1960s to pinpoint the critical elements needed to reach the objective. In actuality, it is a way for choosing a strategy to decide on a short-term or long-term approach to a variety of difficulties and challenges, as well as the order in a variety of events. This model can be created for a company, a partnership, or a specific geographic area. Two matrices of internal and external elements make up this structure. External factors are connected to opportunities (O) and threats (T) of a territory or system, whereas internal variables are linked to weaknesses (W) and strengths (S) of a set, a location, or an issue.



**Figure 2: SWOT Analysis**

Source: www.wikipedia.com

With its deep woods, uneven terrain, flora and wildlife, the magnificent Brahmaputra and its tributaries, wild life reserves, and several endangered species of mammals, Assam primarily caters to nature-centric tourism. Few locations around the world can compete with what the state has to offer tourists in terms of natural beauty and biological diversity. The essence of tourism in Assam is nature tourism, interpreted in terms of wildlife sanctuaries

**Table 2: SWOT Analysis.**

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> <li>➤ Unique and attractive landscape.</li> <li>➤ Low cost of tourism services and facilities in the region.</li> <li>➤ Environmental services like adequate water resources, wildlife, fish etc.</li> <li>➤ Local market for handicrafts and handlooms.</li> <li>➤ The hospitable and friendly behaviour of the people in this region.</li> <li>➤ Moderate climatic conditions</li> <li>➤ Easy public access to main roads, airport, market, hotel, hospital, customs, electricity facilities.</li> <li>➤ It is pleasant for international visitors.</li> <li>➤ Has an array of types of tourism available like wildlife, religious, cultural, tea, adventure etc.</li> <li>➤ Suitable tourism infrastructure to develop rural tourism.</li> <li>➤ Diversity and plurality of natural, cultural, and tourist destinations.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of attention or involvement by local people to the eco-tourism industry.</li> <li>➤ Unsuitable accommodation and recreation facilities due to the government's lack of planning and investment.</li> <li>➤ Improper environment and swage structures.</li> <li>➤ Lack of planning and management talents to use sustainable resources.</li> <li>➤ The inability of people to speak in an international language such as English.</li> <li>➤ Lack of trained experienced workforce.</li> </ul>
OPPORTUNITY	THREAT
<ul style="list-style-type: none"> <li>➤ Increasing the incentives for sponsorships and private businesses in the area to invest, such as the success of the local tourist industry.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Due to pollution, damage to natural and historical features, and decreased tourism, the region's economic power has decreased and little preparation to stop the</li> </ul>

<ul style="list-style-type: none"> <li>➤ Create an indigenous handicraft and handloom market.</li> <li>➤ The potential for international engagement in introducing and developing the region's tourism attractions.</li> <li>➤ Enhancing local workforce training and educating residents about welcoming tourists.</li> <li>➤ With the success of tourism in the area, prevent rural to urban migration and boost employment.</li> </ul>	<p>abuse of the ability of some seasons' bearing areas because due to a lack of spatial planning process.</p> <ul style="list-style-type: none"> <li>➤ Degradation of regional handicraft's authenticity as a result of visitors' customs combining with it.</li> <li>➤ Cultural Issues Caused by the blend of Native Culture with Tourism.</li> <li>➤ Resistance to make handmade goods after economic growth.</li> </ul>
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**7. STRATEGIES FOR SUSTAINABLE TOURISM DEVELOPMENT**

**7.1 Strength-Opportunity (S-O) Strategy**

- Enhancing visitor and tourist amenities and infrastructure.
- Hiring educated individuals to instruct the locals to better welcome tourists via the identification and utilisation of additional attractions or the region, such as natural attractions, handicrafts, and so forth.
- Requesting private sector companies to make investments in developing tourism in this area.
- Encourage locals to get involved in creating the region's tourism amenities and infrastructure.
- Interaction and collaboration between the local community, governmental, and non-profit tourism-related groups to advance the tourist sector.

**7.2 Strength-Threat (S-T) Strategy**

- Attracting public support for the creation, marketing, and preservation of high-quality indigenous handicrafts.
- Making plans to safeguard the environment and employing the appropriate methods to do so.
- Educating the community about the benefits of tourism on local life by creating educational programmes and encouraging cultural growth within the community.

### 7.3 Weakness-Opportunity (W-O) Strategy

- Planning for the construction of residential and recreational amenities due to the region's strong potential to attract more tourists.
- Increasing the effectiveness of national and international tourism advertising.
- Promote tourist education by holding various gatherings with locals.
- Creating and developing a green destination that is suitable for visitors.

### 7.4 Weakness-Threat(W-T) Strategy

- Promote tourism by utilising the research that has been done in this area.
- Increasing the number of religious and cultural activities in the area to draw tourists and lengthen their stay.
- The municipal council and governor's office are hosting seminars on investment and the tourism business, and they are urging investors to provide amenities for visitors like classic resorts in small towns and the outdoors.
- Fostering strong communication and collaboration between village councils, residents, and local authorities to advance the tourist sector.

### 8. Conclusion :

In this study, we used a SWOT matrix technique to examine the plans for Assam's integrated management of natural resources and ecotourism development. The results indicate that the primary effects of unmanaged ecotourism include increased disputes in local communities and landscape use/cover change as a result of campaigning pressure, trash disposal, plant elimination, soil disruption, and water pollution. The major causes of this condition include insufficient field surveillance, bad administration, and a lack of public leisure and welfare services, both in cities and in the surrounding areas. The preservation of environmental assets should be rigorously taken into consideration based on strategic solutions, concurrent with the building of required infrastructure for the growth of ecotourism. In order to encourage and grow legitimate ecotourism operations, local governments, the commercial sector, and local stakeholders must work together. Therefore, regular patrols, stringent enforcement of preservation measures, and restrictions on degrading activities like plant eradication, arson fires, waste dumping, and plastics disposal in the environment are essential to the preservation of pristine landscape and threatened native species. These tactics can assist governments in striking a balance between the growth of ecotourism and the preservation of natural resources on a local level. It is advised that further research be done on a number of areas relevant to the development of sustainable ecotourism, such as legal reform, public education, training, ethical development, and religious tourism in Assam.

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