

Research Article**Fisheries-based ecotourism in north-eastern area of Bangladesh**

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Fisheries and tourism both have great economic potential for Bangladesh. Around the globe, fishing for pleasure has already become popular. Despite being a novel concept, fisheries-based ecotourism presents considerable potential, especially as the tourism sector seeks creative attractions. Northeastern Bangladesh (Sylhet division) possesses a *haor* basin which includes wide a large low land portion with many rivers. This research aims to provide a comprehensive investigation of fisheries based ecotourism focusing on the cultural, environmental and socioeconomic factors in the study region. By combining primary and secondary data, the research assesses the advantages and obstacles of implementing FbE in Sylhet. Qualitative methods were employed to gather insights from local stakeholders, revealing that recreational fishing, fishing competitions, wetland exploration, fish fairs, and fishing festivals with traps and angling are already established traditions in the area. The research also highlights the possible locations and occasions for beginning FbE. The impact of these activities is also found positive in the local community's socioeconomic state. The acceptance level of FbE as an earning tool is also found high. The potentials of this new concept lie between the proper frame working, planning, implementation, developing infrastructures, and promoting the sites and events as tourist attractions.

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INTRODUCTION

Bangladesh is the biggest deltaic country in the world (Mahmuda *et al.*, 2020; Rahman *et al.*, 2021; Tandra *et al.*, 2019). Furthermore, the fisheries and aquaculture subsector plays a critical role in reducing the negative impacts of protein shortfall (Baroi *et al.*, 2019; Islam *et al.*, 2020; Mahmuda *et al.*, 2020). Aquaculture is becoming a more significant method of producing fish because of Bangladesh's diminishing natural fisheries resources and expanding human population (Mahmud *et al.*, 2021; Nasrin *et al.*, 2021; Rahman *et al.*, 2021 & Noor *et al.*, 2024). As per Mou *et al.*

(2023), the fisheries sub-sector contributes 1.24% of the nation's total export earnings, 26.50% of its agricultural GDP, and 3.57% of its overall GDP. A substantial amount of foreign exchange is produced by this enormous output (Biswas *et al.*, 2021, Murshed *et al.*, 2023). The expansion of aquaculture in Bangladesh has coincided with a rise in the usage of different algae and chemicals (Uddin *et al.*, 2020; Rahman *et al.*, 2022). Bangladesh is a beloved child of Mother Nature. Quite few countries of the world have such natural splendors as Bangladesh. Ecotourism is defined as a form of tourism centered on the appreciation and educational exploration of natural resources (Bhuiyan *et al.*, 2010).

Ecotourism may be delineated as encompassing a variety of tourism activities associated with visiting relatively pristine or unpolluted natural environments, with the primary intent of observing, appreciating, and enjoying the landscape, its indigenous flora and fauna, as well as any cultural manifestations—both historical and contemporary—present within the region (Otor, 2013). The International Ecotourism Society (TIES) provides a definition of ecotourism as responsible travel to natural settings, with the objectives of conserving ecosystems, bolstering local communities, and facilitating educational opportunities (The International Ecotourism Society, 2015). Ecotourism is rising in vogue worldwide but has major practical value in developing countries where the needs of non-hip communities may dispute directly with the need to capitalize on the increasing tourism industry (Ecotourism.ca, 2019). In Bangladesh, the fisheries sector plays a pivotal role as a primary and secondary source of livelihood, providing essential employment, sustenance, and economic assistance to the impoverished populace. The sector ranks as the second-largest employer in rural regions, both in part-time and full-time capacities. Additionally, it contributes to 60% of the animal protein intake within Bangladesh (Hossain, 2014). Excepting being a major protein source and assisting crucial ecosystem operations, fishing also contributes recreational advantages (Dugan *et al.*, 2006; Brummett *et al.*, 2013). One of the attractions that lure tourists to various destinations is the recreational fishing opportunities they provide, which are based on natural resources (Holland *et al.*, 1998). Sylhet stands out as one of the most prominent tourist destinations in Bangladesh, offering visitors a diverse array of options ranging from natural attractions to commercial ventures. A substantial portion of Bangladesh's fish supply is sourced from its rivers and the Haor region. Notably, water bodies like Hakaluki Haor, Tanguar Haor, and various rivers in Sylhet are essential in fulfilling the local demand for fish. Fisheries-Based Ecotourism (FbE) presents a pioneering proposition for the tourism sector. It holds significance for established tourism hubs, where innovation and distinctiveness are imperative for maintaining market presence amidst fierce global competition. Additionally, it holds promise for emerging destinations, where tourism development can serve as a means of bolstering endangered indigenous communities and traditions, by promoting them as local attractions (Chen, 2010). This study depicts the potential of Fisheries-Based Ecotourism in northeastern Bangladesh (Sylhet division), considering the presence of wetlands as tourist attractions and the occurrence of fisheries-related events in the region. It also portrays the associated challenges and provides recommendations for leveraging these potentials effectively.

MATERIAL AND METHODS

Study Area

The geographical spots deemed in the present research are located in Habiganj, Sunamganj, Moulvibazar and Sylhet districts of Sylhet division in Bangladesh (Figure 1).



Figure 1: Study area map.

METHODOLOGY

This study is relying on an integration of both primary and secondary data, examined using both qualitative and quantitative methods. A qualitative way allowed us to contemplate our respondents' areas of proficiency more pliability. Primary data were gathered by means of detailed personal questionnaire interviews with tourism and fisheries concerned personnel of the following categories: Government officials, tour operators, social activist, cultural activist, hotel owner, fishermen, boat operators, academics, travel agencies, anglers, personnel from non-governmental organizations. Fifty in-depth interviews were carried out, with ten respondents from each group. Secondary information was acquired by conducting a thorough literature review using online search engines. This review comprehensively addresses diverse themes, encompassing tourism, recreational fishing, ecotourism, fishing tourism, angling, and pertinent legislative documentation within Bangladesh as well as across other nations.—Data analysis involved the utilization of both content analysis and Pralong's method (McComb *et al.*, 2017; Pralong, 2005). More specifically, this research utilized the inductive method for content analysis, a methodology particularly suited for the development of new theories within existing frameworks (Kavallinis and Pizam, 1994). Interview findings were categorized based on the issues stakeholders identified as integral to the promotion and implementation of FbE. The Pralong method was employed to evaluate tourism appeal on multiple dimensions, including scientific, aesthetic, economic, and cultural attractiveness, as well as productivity scale gauging both quantity and quality of attractions. By grading these parameters and juxtaposing them against each other, an analysis was conducted to assess the extent of utilization of spatial and temporal potentialities. This analysis incorporated considerations of aesthetic, scientific, cultural, and economic values, as illustrated in the following equation:

$$\text{Tourism Scale} = (\text{Aesthetic value} + \text{scientific value} + \text{cultural value} + \text{economic value})/4$$

The perceived aesthetic value is contingent upon the inherent and breathtaking vistas offered by an ecotourism destination. Scientific value is ascertained through various factors including natural scarcity, the historical significance of its geography, its status in terms of conservation efforts, and the ecological significance of the ecotourism site. Cultural value is assessed based on factors such as the occurrence of artistic and cultural manifestations associated with the ecotourism location. Economic value is evaluated by considering factors

such as the feasibility and potential for exploitation of the ecotourism site within the tourism sector. The productivity scale was derived using the following equation.

Productivity Scale: $(\text{Productivity Quality} + \text{Productivity Quantity})/2$

Evaluating the quantity and quality of productivity at ecotourism sites will ultimately ascertain the extent to which the potentialities of the location can be effectively utilized in terms of spatial and temporal dimensions. Microsoft excel was used in data analysis. Following the data analysis stage, the main results derived from empirical data were illustrated.

RESULTS AND DISCUSSION

Potential FbE sites and events identified in Sylhet

Tangur Haor: Bangladesh boasts a distinctive ecosystem known as the "Mother Fisheries," which spans approximately 100 square kilometers in the Sunamganj district of the country (Alam *et al.*, 2012). **Hakaluki Haor:** Another crucial wetland ecosystem, covering 180 km² in the Sylhet and Moulvibazar districts of Bangladesh. It serves as a rich habitat supporting diverse species of wetland flora and fauna (Uddin *et al.*, 2013). **Ratargul Swamp Forest:** It is a wetland forest chunk, covering 11 km² in Sylhet District. It hosts a diverse array of native fish species (Choudhury, 2004). **Baikka Beel:** Situated in the Moulvibazar district, this expansive, shallow lake encompasses an area of 40 square kilometers at the southern extremity of the Hail Haor wetland (Bhuiya, 2014). **Lalakhali:** It represents a broad channel situated within the Sharee River vicinity near the Tamabil road within the Sylhet district. **Madhabpur Lake:** This lake is located within the Madhabpur tea estate in the Kamalganj Upazila of the Moulvibazar District (Rahman *et al.*, 2010). **Lakshmi Baor:** It is another wetland swamp forest, covering two km² in Baniachong and Azmiriganj Upazila (subdistrict) of Habiganj district in Bangladesh (The Daily Star, 2017a). **Mayabon:** It is a swamp forest in Guainghat Upazila of Sylhet district (Ahmed *et al.*, 2020). **The Khowai River:** It is a notable river of the Sylhet division. The Habiganj district lies adjacent to the Khowai River in Bangladesh (Rishan and Fagun, 2019). **The Surma River:** The Surma River is characterized by its winding course and dynamic nature, having traversed 215 kilometers within Bangladesh from the Indian border to reach the Sunamganj district (Rahman *et al.*, 2018). **The Kushiya River:** In Bangladesh, the southern arm of the Barak River is referred to as the Kushiya River. Once it merges with a significant tributary from the Surma River, it is commonly known as the Kalni River. The Kushiya holds considerable significance as one of the important rivers in the Sylhet division of Bangladesh (Rahman *et al.*, 2018). **The Manu River:** The Manu River extends from the Tripura border to its junction with the Kushiya River at Manumukh, Sherpur, spanning a distance of 69.88 kilometers. **Fish fair of Habiganj:** Individuals from diverse professions assemble on the final day of the Bengali month of Poush to convene a fish fair at Poil village in the Habiganj Sadar Upazila of Bangladesh. **Fish festival of Moulvibazar:** A three days' fish festival held every year in the Moulvibazar district, which exhibits and sells various kinds of freshwater fish. Fish enthusiasts hailing from different regions of the country gather to partake in the festival. This festival is also held to

mark the last day of Bengali month Poush (The Daily Star, 2017). **Fishing festival of Sylhet:** For the past two centuries, the Polo Bawa Utshob, a fishing festival, has been a venerable tradition observed in the marshy lands of Gowahori village in the Daulatpur union of Bishwanath Upazila, Sylhet district. This event takes place annually on the first day of the Bengali month of Magh (Dhaka Tribune, 2020). **Haor Festival of Sunamganj:** A haor festival is held in Sunamganj every year. The festival starts with a boat rally and dance performances by local artists. This festival aims to celebrate the local culture and raise awareness about the importance of conserving fish and other natural resources in the wetland areas (The Daily Observer, 2014).

Present Status of ecotourism in Sylhet division

In recent years, the tourism industry has experienced substantial growth, establishing itself as one of the largest and most dynamic economic sectors worldwide (The Independent, 2019). In 2016, Bangladesh welcomed nearly 200,000 international visitors for various reasons, and it is projected that by 2027, this number will increase by around 20% (World Travel & Tourism Council, 2017). The sustainability and resilience of eco-tourism in Bangladesh are contingent upon maintaining a steady flow of visitors to the country, while simultaneously safeguarding the integrity of its natural resources from significant harm (Islam *et al.*, 2011). The transformation of Bangladesh into a lucrative eco-tourism destination requires factors such as political stability, governmental endorsement, active engagement of the local community, and robust promotional initiatives on both domestic and international platforms (Shoeb-Ur-Rahman and Shahid, 2012). The Sylhet division boasts numerous tourist attractions, drawing a significant number of visitors from both Bangladesh and overseas annually. Consequently, the division plays a substantial role in contributing to the national revenue derived from the tourism industry. Strategically planned initiatives aimed at enhancing the tourism sector in Sylhet can yield benefits such as employment generation, economic prosperity, infrastructure development, social advancement, and environmental preservation, as well as improvements in healthcare services. Strengthening the tourism sector requires proactive measures to enhance security, formulate pragmatic policies, and develop infrastructure. Whether for sightseeing, relaxation, health retreats, work-related purposes, or recreational activities, tourists consistently recognize the Sylhet region's potential for further tourism expansion, addressing a diverse array of traveler interests (Haque and Islam, 2015).

Potentials of FbE in the aquatic ecosystems and events take place in Sylhet division

Bangladesh's position as a leading fisheries destination is underscored by its ranking as the third-largest in aquatic biodiversity in Asia, following only China and India (Ghose, 2014). Its expansive inland water bodies harbor an impressive array of approximately 260 species of freshwater fish, delineated into inland capture fisheries, inland aquaculture, and marine fisheries (Shamsuzzaman *et al.*, 2017a). These fisheries significantly bolster Bangladesh's economic landscape, contributing a noteworthy 3.69% to its GDP (Shamsuzzaman *et al.*, 2017b). Spanning a combined length of 24,140 kilometers, the country's rivers cover 8% of

its total land area ([The Daily Star, 2018a](#)). The northeastern region of Bangladesh, notably the Sylhet division, is particularly endowed with an abundance of rivers, haors, beels, and other freshwater ecosystems. Sylhet holds the third position in the hierarchy of priorities within Bangladesh's tourism sector. Its wealth of natural and cultural attractions serves as invaluable assets for enhancing tourism throughout the nation ([Rahman *et al.*, 2010](#)). The Sylhet basin, situated in the northeastern region, boasts a distinctive diversity of fish species, setting it apart from other basins. Its captivating topography, defined by hills and depressions, contributes to its appeal and distinctiveness ([Alam *et al.*, 2001](#)). Haors, bowl-shaped depressions primarily located in the northeast, owe their formation to monsoon flooding. These haors cover approximately 24,500 square kilometers in total, with around 411 of them spanning about 8000 square kilometers across districts including Sylhet, Moulvibazar, Sunamganj, Netrokona, Habiganj and Kishoreganj ([The Daily Star, 2018b](#)). Tanguar Haor, Hakaluki Haor, Dekhar Haor, Shanir Haor, Hail Haor are notable haors of the Sylhet division. Sylhet division's major river system is the Surma-Kushiyara river system ([Khan and Das, 2018](#)). Khowai River, Monu River, Saree River, Bodrul River, etc. are the tributaries of this river system. These rivers and haors are harboring a diverse range of native fish species. Moreover, natural fisheries resources contribute a significant proportion of the national production. The Ratargul Swamp forest, Lakshmi Baor swamp forest, and Mayabon Swamp forest are unique wetland forest that harbors many fish species ([Choudhury *et al.*, 2004](#)). Besides, these wetland forests act as natural feeding and breeding ground for the fish species. There are also several beels present in Sylhet divisions. Beels are mainly low depressions that are fulfilled in the rainy season. Tanguar Haor and Hakaluki have already become popular as a destination for tourists ([Muneem and Avi, 2017](#)). The Hakaluki Haor serves

as a biodiverse habitat for fish, birds, and various flora, with a designated portion already established as a fish sanctuary ([The Financial Express, 2019](#)). Tanguar Haor, renowned for its distinctive ecosystem, is home to numerous fish species and serves as a habitat for at least 135 different types of fish ([The Daily Star, 2017c](#)). Every year, in the rainy season, a huge number of tourists from different areas of the nation and abroad pay a visit to these haors by boat journey. They love to enjoy the scenic beauty, observe the lifestyles of fisherfolk and fishing methods. Ratargul Swamp Forest is another popular tourist destination that also hosts a significant number of travelers every year. Although the Ratargul forest area is banned for fishing, in the rainy season, people come to enjoy the scenic natural beauty of this wetland. Lakshmi Baor and Mayabon are two different swamp forests but identical to Ratargul swamp forest. These sites are not that much popular yet. However, these sites are very much potentiality as a tourist destination. River view sites exist for Surma River, Khowai River, Kushiyara River, and Monu River. Madhabpur lake is an emergent freshwater lake in Moulvibazar that is a popular destination. Besides the tourist sites, some events take place in the Sylhet division that has many potentialities to attract more tourists. Fish fair of Habiganj, Fish festival of Moulvibazar, the Fishing festival of Sylhet and Haor festival of Sunamganj are notable one and these are traditional too. From the survey, it was found that these sites and events are many potentials to contribute to both the tourism and fisheries industry as if Fisheries based Ecotourism is initiated with proper planning and guidelines. Furthermore, this study employed the Pralong's method to evaluate the potentiality of these sites, facilitating comparisons between the tourism attractions and productivity scale of ecotourism sites, and subsequently classifying them based on their ecotourism value (Table 1).

Table 1. Results of the evaluation of tourism and productivity scale of aquatic systems in Sylhet Division.

Scale	Sites												
	Tanguar Haor	Hakaluki Haor	Ratargul Swamp Forest	Baikka Beel	Lala Khal	Madhabpur Lake	Lakshmi Baor	Mayabon Swamp Forest	Khowai River	Surma River	Kushiyara River	Monu River	
Aesthetic Value	0.75	0.81	0.56	0.56	0.56	0.38	0.31	0.31	0.81	0.81	0.81	0.81	
Scientific Value	0.71	0.71	0.92	0.82	0.67	0.78	0.78	0.78	0.57	0.75	0.75	0.57	
Cultural Value	0.63	0.44	0.68	0.19	0.25	0.38	0.31	0.06	0.43	0.56	0.43	0.31	
Economic Value	0.40	0.45	0.65	0.55	0.60	0.60	0.45	0.40	0.80	0.80	0.80	0.65	
Tourism Value	0.62	0.60	0.70	0.53	0.82	0.54	0.46	0.38	0.65	0.73	0.69	0.59	
Productivity Quality	0.93	0.93	0.93	0.68	0.38	0.43	0.75	0.75	0.81	0.81	0.81	0.93	
Productivity Quantity	1	1	0.75	0.62	0.63	0.63	0.38	0.38	1	1	1	1	
Productivity Scale	0.96	0.96	0.84	0.65	0.50	0.52	0.56	0.56	0.90	0.90	0.90	0.97	

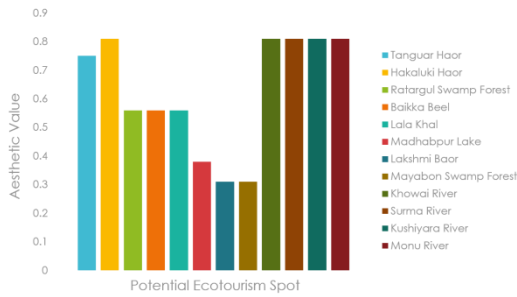


Figure 2: The comparative chart of aesthetic value of potential FbE sites of Sylhet.

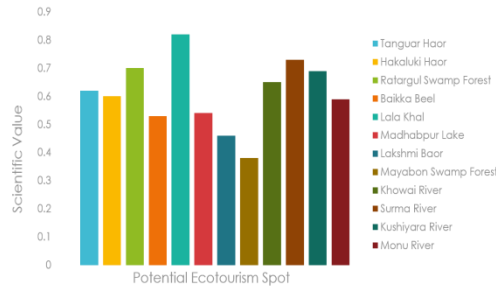


Figure 3: The comparative chart of scientific value of potential FbE sites of Sylhet.

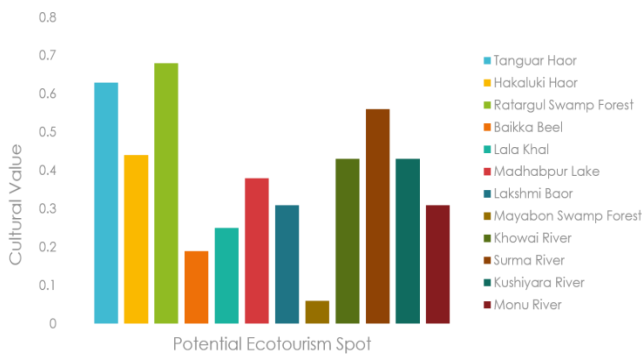


Figure 4: The comparative chart of cultural value of potential FbE sites of Sylhet.

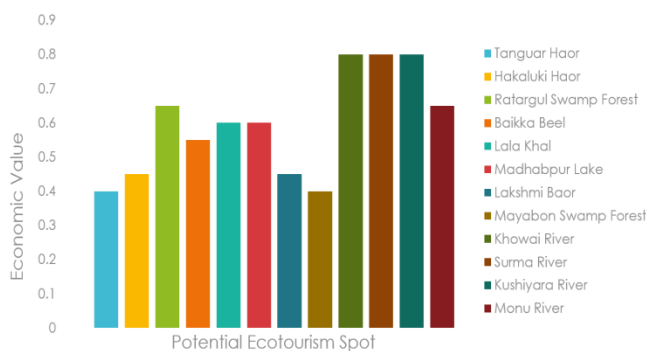


Figure 5: The comparative chart of economic value of potential FbE sites of Sylhet.

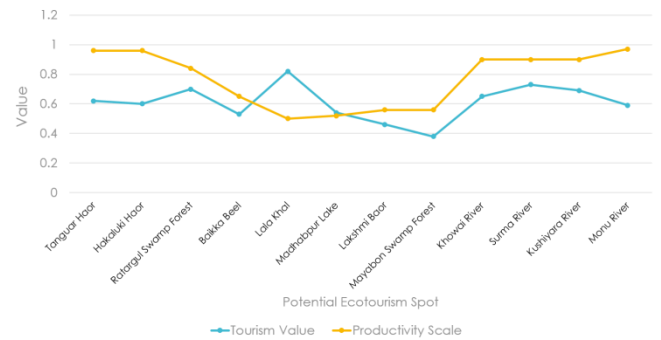


Figure 6: The comparative graph of tourism value and productivity scale of potential FbE sites of Sylhet.

Qualitative interview findings

The introduction of FbE in the Sylhet division presented both possibilities and obstacles, as highlighted by the qualitative interviews. An environmental activist from Habiganj district stated: “Fisheries based ecotourism has existed in Sylhet on a lesser scale. The maximum tourist destination of Sylhet is wetlands. On the other hand, a large number of fishing competitions are held in Sylhet scattered. People love to enjoy this. Moreover, fish lovers come from different parts of the country to participate in these competitions”. A boatman from Sunamganj expressed his thoughts regarding fisheries-based ecotourism and stated: “I have never heard about fisheries-based ecotourism. However, in recent years tourists and foreigners also come here to meet with the fishermen, they love to watch fishing activities and take photographs with their cameras. They rent our boat for exploring the haor. For that reason, local people are also making new modernized boats with some facilities”. Moreover, discussions with various stakeholders during the interviews addressed potential strategies for fishery-based tourism and explored ways in which the aquatic resources of the Sylhet division could be utilized for fishing-related tourism. These conversations can be condensed into the following key quotes:

- An environmental activist from Sylhet stated: “First of all, it is most important to conserve the wetlands properly. To commence FbE in Sylhet, the indigenous fish species should be conserved. Otherwise, it will affect both fisheries and tourism industry.”
- An officer representing the Department of Fisheries in Sanamganj stated: “Fishing competitions are very popular in this region. Tour operators can promote these events and if these events get branded, more tourists will come to join these”.
- One cultural activist from Sylhet stated: “One fish museum can be established in the Sylhet region, it will be able to attract more tourists and will contribute to fisheries-based ecotourism”.

Possible impacts of FbE

From a social perspective, tourism exerts a significant influence on host communities. Within host communities, tourism serves as a catalyst for various social transformations. In addition to providing an avenue for income generation, fishing tourism has the capacity to foster a profound sense of pride and cultural identity among local



inhabitants. Interactions between tourists and residents can cultivate mutual appreciation, deeper understanding, heightened tolerance, cultural insights, educational opportunities, familial bonds, respect, and potentially enduring friendships (Marika, 2013). Moreover, when the indigenous culture serves as the primary draw for tourists, it can serve as a safeguard for preserving traditional practices and handicrafts that might otherwise face the threat of extinction (Zambrano *et al.*, 2020). As one social activist from Sylhet noted, "Fisheries tourism can elevate the recognition of Sylhet's local culture among outsiders, thereby promoting other indigenous products such as Shital Pati and Manipuri Products." Similarly, an academic from Shahjalal University of Science and Technology emphasized, "The development of fisheries-based ecotourism in the Sylhet division holds the potential to alleviate economic distress while concurrently providing avenues for the marketing of fisheries products."

Challenges of FbE

Based on qualitative research findings the research analysis has identified some potential challenges to commence FbE in the Sylhet division. The key concerns to take into account include:

- i. Environmental pollution and the degradation of wetlands, posing a threat to indigenous fish species.
- ii. Reluctance or resistance from local communities, alongside challenges in achieving social and cultural acceptance of FbE initiatives.
- iii. Inadequate security measures, particularly concerning the safety of foreign visitors.
- iv. Absence of comprehensive plans, guidelines, rules, and regulations governing FbE activities.
- v. Insufficient infrastructure development to support and facilitate ecotourism endeavors effectively.
- vi. Limited coordination and collaboration among various stakeholders, including public and private organizations, necessary for the successful implementation of FbE projects.
- vii. Economic viability and financial sustainability of FbE ventures, including concerns regarding revenue generation, cost-effectiveness, and return on investment.
- viii. Limited awareness and understanding of ecotourism principles and practices among local communities, stakeholders, and relevant authorities.
- ix. Potential conflicts between conservation goals and economic development interests, particularly regarding land use and resource allocation.
- x. Regulatory hurdles and bureaucratic barriers, such as complex permitting processes and hindering the implementation of FbE projects.
- xi. Seasonal variations and climate-related uncertainties affecting the feasibility and operational logistics of FbE activities, including fluctuations in water levels, weather patterns, and ecological conditions.
- xii. Socio-political instability and regional tensions, which may adversely impact tourism activities, safety perceptions, and visitor confidence.
- xiii. Challenges related to marketing, promotion, and branding of FbE destinations, including the need for effective communication strategies, branding campaigns, and destination marketing initiatives.

- xiv. Capacity-building requirements for local communities, businesses, and relevant stakeholders to actively participate in and benefit from FbE initiatives, including training programs, skill development, and capacity-building workshops.

Suggestions

In contemporary times, nations worldwide are increasingly directing investment towards the tourism sector as a means to bolster their economies and reap economic dividends. While tourism endeavors hold the potential to generate revenue for the conservation of natural resources, the influx of tourists can also pose significant environmental challenges. Notably, the escalation of erosion and sedimentation, alongside the emergence of social conflicts, are among the predominant adverse impacts associated with mass tourism flows (Basanta *et al.*, 2020). Furthermore, the discharge of solid waste into water bodies and pollution stemming from recreational boat engines can lead to depleted oxygen levels in aquatic environments, thereby compromising the viability of aquatic organisms (Silva *et al.*, 2012).

Informed by comprehensive literature reviews, direct observations, and interviews with pertinent stakeholders, this research analysis offers the following actionable measures or recommendations to foster the integration of fisheries and tourism in the Sylhet division:

- i. Initiatives should be undertaken to disseminate relevant knowledge and information among the local community, empowering them to actively participate in the preservation and sustainable management of their natural resources and tourist attractions. Educational programs, workshops, and awareness campaigns can be organized to promote environmental conservation practices and raise awareness about the importance of preserving ecological integrity.
- ii. Efforts should be made to foster strong relationships and partnerships between local fishers and tourism operators. Collaborative initiatives and dialogue platforms can facilitate mutual understanding, cooperation, and coordination between these key stakeholders, thereby promoting sustainable tourism practices and equitable distribution of benefits.
- iii. The government should play a proactive role in monitoring and regulating the activities of travel agencies involved in tour operations. Stringent regulations, licensing requirements, and periodic inspections can help ensure compliance with environmental standards, safety protocols, and ethical business practices within the tourism industry.
- iv. Investment in transportation infrastructure, including railways, roads, and highways, can facilitate easier access for tourists and improve overall connectivity and mobility within the region.
- v. Efforts should be made to improve the quality and diversity of local food offerings to appeal to a broader range of tourists.
- vi. Measures should be implemented to mitigate pollution from various sources, including solid waste disposal and emissions from recreational activities. Strict regulations, waste management initiatives, and pollution control measures can help minimize

environmental degradation and preserve the ecological integrity of tourist destinations.

- vii. Adequate facilities, such as washrooms, toilet facilities, restaurants, and other amenities, should be established in a proper and hygienic manner to cater to the needs of tourists.
- viii. The local government should establish and enforce specific fare regulations for various modes of transportation, including boats, auto-rickshaws, cars, and other vehicles. Standardized fare structures can promote transparency, fairness, and affordability for tourists.
- ix. The establishment of hotels, motels, resorts, and other accommodation facilities should be undertaken in a manner that minimizes adverse impacts on the environment.

CONCLUSION

The FbE idea is now a widespread practice in the advanced economies, even if it is still a fresh idea for Bangladesh's tourism sector. Moreover, the realization of this initiative within the Sylhet division encounters several hurdles, encompassing the acceptance of fishery-based tourism as a viable livelihood option, the imperative for infrastructure development, the dearth of financial support, the potential risks linked to environmental deterioration, the inadequacy of policies for the promotion and regulation of this sector, and the necessity to harmonize the interests of diverse stakeholders throughout the implementation process. By considering and formulating proper solutions to these problems, the initiation of fisheries-based ecotourism in the Sylhet division will contribute to the National GDP of Bangladesh.

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