



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Sustainable Tourism Development in the Sundarbans of West Bengal

Sangeeta Das

Assistant Teacher, O P Jindal School

Abstract

The current research explores the sustainable tourism development in Sundarbans with specific attention to the environmental, economic and socio-cultural components. The Sundarbans is the biggest mangrove environment in the world and is also a UNESCO World Heritage Site of huge ecological and tourist importance. The report highlights the current state of tourist development, the involvement of local communities, government efforts, eco-tourism practices and the barriers to sustainability in the area.

It also discusses the effects of tourism on the protection of biodiversity, livelihood generating and regional development. Climate change, natural calamities, pollution and unplanned tourist activities are recognised as the key hazards to sustainable tourism in Sundarbans. The research highlights the necessity of community engagement, environmental knowledge, responsible tourist behaviours and good policy implementation to achieve sustainable tourism in the long run. The results may help the policymakers, tourist planners, academics and environmental organisations to promote balanced tourism development and ecological protection in the Sundarbans area.

Key Words: Sustainable Tourism, Eco-tourism, Sundarbans, Biodiversity Conservation, Climate Change, Community Participation, Environmental Sustainability, Tourism Development.

1 INTRODUCTION

Background of the Study

Tourism is one of the world's fastest expanding businesses and plays an important role in economic growth, job creation, cultural exchange and environmental awareness. The notion of sustainable tourism has grown in worldwide relevance in recent decades owing to increased worries about environmental degradation, climate change, loss of biodiversity, and socio-cultural repercussions of mass tourism. Sustainable tourism is tourism that balances economic development, environmental preservation, and social well-being while ensuring that natural and cultural resources are protected for future generations.

The Sundarbans is the biggest mangrove forest in the world and a UNESCO World Heritage Site. It is situated in the southern section of West Bengal, India. Internationally, the area has been recognised for its unique biodiversity, rich biological resources and the existence of the endangered Royal Bengal Tiger. The Sundarbans is also home to a large number of flora and fauna species and is one of the most environmentally sensitive locations in the world. Apart from its ecological value, the Sundarbans has huge tourist potential on account of its natural beauty, animals, rivers, islands and the cultural legacy.

Tourism has risen considerably in the Sundarbans over the years and contributes to the local economy via job possibilities, revenue creation, transportation services, hotel enterprises, handicrafts and eco-tourism activities. The tourism related activity provides an opportunity to the local community to improve their lives and socio-economic situations. But unplanned tourist growth, over exploitation of natural resources, pollution, deforestation and excessive human activity have posed major risks to the delicate environment of the Sundarbans.

The area is also very sensitive to consequences of climate change, including as sea-level rise, cyclones, coastal erosion, saline intrusion and loss of biodiversity. Ecological balance and livelihood systems of the Sundarbans have been badly disrupted by natural catastrophes like Cyclone Amphan and Cyclone Aila. In this situation, sustainable development of tourism is the only way to strike a balance between the expansion of tourism and protection of the environment and the welfare of the community.

Therefore, the present research aims to explore the current situation, potential, difficulties and methods of sustainable tourism development in the Sundarbans area of West Bengal. The research also looks at the influence of government policies, local communities, eco-tourism practices and environmental conservation measures on tourist sustainability in the area.

Significance of the Study

The current research on sustainable tourism development in Sundarbans has environmental, economic, social, intellectual and policy importance. The Sundarbans is one of the most environmentally sensitive and biodiversity rich places in the world. The tourist operations in the region have beneficial and bad affects on the ecosystem as well as on the local residents. Therefore, it is important to know the idea and practices of sustainable tourism in this area to achieve balanced development and ecological protection.

The research is of environmental significance as it deals with protection of mangrove forests, biodiversity, animals and ecological balance. Tourism growth may lead to environmental concerns like pollution, degradation of habitat, development of waste and demand on natural resources. The study underscores the need for sustainable tourist methods that do not harm the environment while conserving the delicate ecology of the Sundarbans.

The research is relevant from the economic point of view since the tourism has become a key source of livelihood and revenue production for the indigenous inhabitants of the Sundarbans. Many people make their living from tourist related businesses such as transport, hotel services, handicrafts, guiding, fishing and eco-tourism programs. The research looks at the contribution of sustainable tourism to job creation, poverty reduction and socio-economic development of local communities with the assurance of long-term economic sustainability.

The research highlights the contribution of tourism to the improvement of living standards of local population and preservation of local traditions, customs and cultural heritage socially and culturally. It also looks at the role of local communities and stakeholders in tourist development and environmental protection. Successful adoption of sustainable tourism techniques in the area requires community engagement.

The research is also crucial in perspective of climate change and catastrophe management. The Sundarbans area is especially susceptible to the impacts of sea-level rise, cyclones, floods, coastal erosion and saline intrusion. It may also contribute to climate resilience, environmental awareness and adaptation measures to preserve the area from ecological risks via sustainable tourist practices.

From an academic point of view, the research adds to the current literature on sustainable tourism, eco-tourism, environmental management and regional development. It offers important information for academics, students, policy makers, tourist planners and environmental organisations engaged in tourism sustainability and conservation studies.

The results and suggestions of the research will be useful to the government agencies, tourist departments, local authorities and non-governmental organisations in formulation of effective policies and strategies for promotion of eco-friendly tourism and sustainable development in the Sundarbans. The research further advocates responsible tourist practices that may save natural resources and enhance the quality of life of local communities for the future generations.

Objectives of the Study

- 1.To examine the present status of sustainable tourism development in the Sundarbans region of West Bengal.
- 2.To analyze the environmental, social, and economic impacts of tourism in the Sundarbans.
- 3.To study the contribution of tourism towards the livelihood and socio-economic development of local communities in the Sundarbans.
- 4.To identify the major challenges affecting sustainable tourism development in the Sundarbans region.

- 5.To evaluate the effectiveness of government policies and tourism initiatives in promoting sustainable tourism in the Sundarbans.
- 6.To investigate the role of local communities and stakeholders in promoting eco-tourism and sustainable tourism practices in the Sundarbans.
- 7.To examine how sustainable tourism practices contribute to the conservation of biodiversity and ecological balance in the Sundarbans.
- 8.To suggest suitable strategies for enhancing sustainable tourism development while minimizing environmental degradation in the Sundarbans.
- 9.To study the influence of climate change on tourism sustainability in the Sundarbans region.
- 10.To review existing literature and secondary data related to sustainable tourism management in the Sundarbans.

Research questions:

- 1.What is the present status of sustainable tourism development in the Sundarbans region of West Bengal?
- 2.What are the major environmental, social, and economic impacts of tourism in the Sundarbans?
- 3.How does tourism contribute to the livelihood and socio-economic development of local communities in the Sundarbans?
- 4.What are the major challenges affecting sustainable tourism development in the Sundarbans region?
- 5.How effective are government policies and tourism initiatives in promoting sustainable tourism in the Sundarbans?
- 6.What role do local communities and stakeholders play in the promotion of eco-tourism and sustainable tourism practices in the Sundarbans?
- 7.How can sustainable tourism practices help in conserving the biodiversity and ecological balance of the Sundarbans?
- 8.What strategies can be adopted to enhance sustainable tourism development while minimizing environmental degradation in the Sundarbans?
- 9.How does climate change influence tourism sustainability in the Sundarbans region?
- 10.What lessons can be drawn from existing literature and secondary data regarding sustainable tourism management in the Sundarbans?

2 REVIEW OF RELATED LITERATURE

Review of Empirical Studies (2022–2026 Scopus Indexed Studies)

Barman et al. (2025) researched the economic impacts of sustainable tourist development in the coastal regions of Sundarbans in West Bengal. The research revealed that tourism is a major contributor to local job creation, income improvement and socio-economic development. However, considerable issues were noted in terms of uneven distribution of tourist gains and environmental concerns.

Das (2022) studied on sustainable tourism, livelihoods and local economies in Sundarbans including India and Bangladesh. The research revealed that tourism offers alternative income generating alternatives and minimises dependent on forest resources. The author emphasised the need of community engagement and eco-tourism techniques for sustainable development.

Jamal, Ghosh, Hazarika and Sen (2022) examined the interlinkages between livelihood, conflict and tourism in the Sundarbans area of West Bengal. The results indicate that tourism has good impacts on family income and rural lives but also generates socio-economic inequities and environmental constraints in ecologically sensitive places.

Rajoana and Saxena (2022) explored the function of “Bagh Bidhwa” women entrepreneurs in tourist operations in Sundarbans. The research showed that women’s involvement in tourist entrepreneurship leads to empowerment, income generating and social inclusion. The study also underscored the importance of community-based tourism as a support to disadvantaged groups.

Rahman and Hossain (2023) spoke about the prospects and problems of sustainable tourist development in the Sundarbans area of Bangladesh. The research revealed that environmental vulnerability, inadequate infrastructure, insufficient policy execution and climate change are important hurdles to sustainable tourist development.

Roy, Datta and Bera (2022) studied the economic benefit of conservation in the Sundarbans mangrove environment. The research stressed that biodiversity protection and sustainable tourism are interlinked. Researchers said eco-tourism may provide financial assistance for environmental conservation and ecosystem preservation.

Alam, Alam and Kalam (2022) examined the opportunities and problems of sustainable tourism in south Asian nations. The research emphasised climate change, environmental degradation and legislative constraints as the key barriers to tourist sustainability in the environmentally sensitive coastal locations like the Sundarbans.

Reports by UNESCO (2023), WWF India (2024) and the Ministry of Tourism, Government of India (2023) together highlighted the ecological importance of the Sundarbans and the significance of promoting sustainable tourism practices, biodiversity conservation, climate resilience and community participation for long-term tourism sustainability.

Identified Research Gap

Review of linked literature indicates that there are a number of research on eco-tourism, biodiversity protection, livelihood development and climate change consequences in the Sundarbans. However, the following gaps in research were identified:

Most prior research concentrate on either environmental conservation or tourist development, but few studies investigated the integrated link between sustainable tourism, biodiversity conservation and socio-economic development.

With the use of modern literature throughout 2022-2026, very few secondary research studies were carried out on sustainable tourism development in the Indian Sundarbans area of West Bengal.

Existing research mostly focused on ecological conservation and few studies explored the efficacy of government tourist policies and community’s engagement in sustainable tourism management.

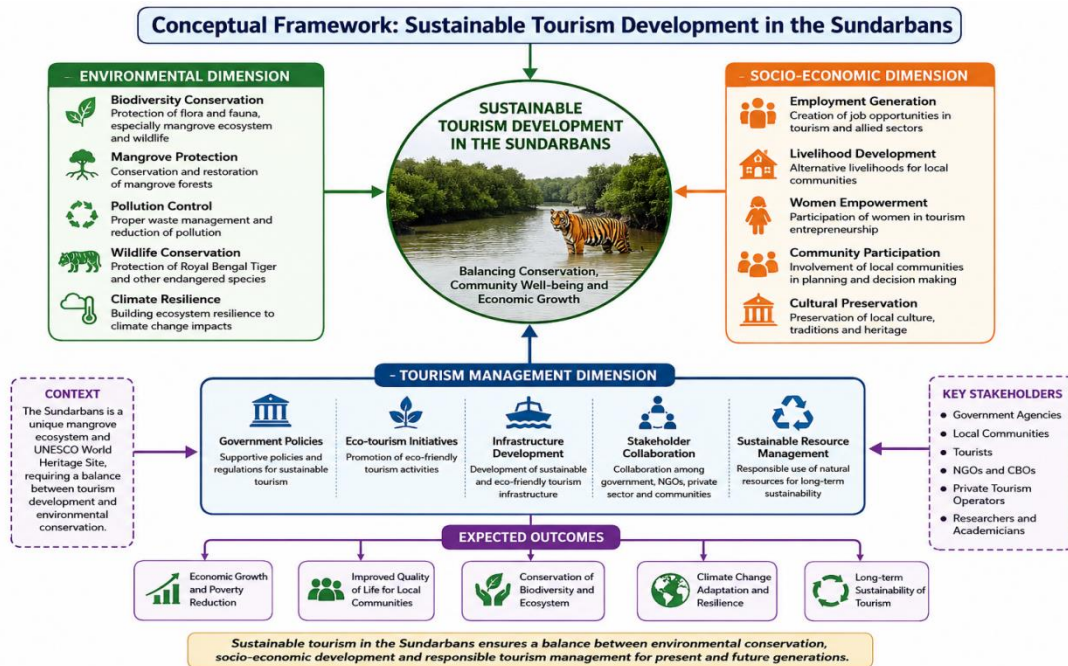
There is a dearth of research about the effect of climate change in determining the sustainability of tourism in the Sundarbans area.

Few studies have examined the long-term viability of tourist infrastructure and eco-tourism projects in ecologically sensitive mangrove environments.

Research on women’s engagement and community-based tourism concepts for sustainable livelihood development of the Sundarbans is limited.

The current study tries to fill up these research gaps by offering a complete secondary analysis of sustainable tourism development in the Sundarbans of West Bengal with respect to its environmental, socio-economic and policy aspects.

Conceptual Framework



The conceptual framework shows that the sustainable growth of tourism in the Sundarbans relies upon the combination of environmental sustainability, socio-economic development, and successful tourist management methods. These factors together contribute to long term ecological protection and sustainable livelihood development of the area.

3 RESEARCH METHODOLOGY

Research Design

The current study named “Sustainable Tourism Development in the Sundarbans of West Bengal” has utilised the secondary research design. The research is descriptive and analytical. Secondary data were collected from published research articles, government reports, journals, books, tourism reports, institutional publications, newspapers and genuine online sources related to sustainable tourism, eco-tourism, biodiversity conservation, climate change and socio-economic development in the Sundarbans. The purpose of the research was to analyse the available material and to interpret the results on sustainable tourist development of the Sundarbans area.

Population

The study population included the available secondary sources on sustainable tourism development, eco-tourism, biodiversity protection, tourist policies, climate change and socio-economic status of the Sundarbans area of West Bengal.

Sample

The sample of the study included selected secondary data sources such as:

- Research articles published between 2022–2026
- Government reports
- Tourism policy documents
- UNESCO reports
- Forest Survey reports
- Newspaper articles
- Institutional publications
- Online databases and authentic websites

The selection of a total of 15 secondary sources for further research was based on the relevance, authenticity and availability of material on sustainable tourist development in the Sundarbans.

Sampling Technique

Purposeful sampling was used in this research to pick relevant secondary sources. The sources were chosen for their relevance to the study subject, publication time, dependability and contribution to sustainable tourism literature.

Scale Used

As the research was based on secondary data analysis, no standardised psychological or attitude assessment was given directly to respondents. The study used:

- Content analysis techniques
- Comparative analysis
- Descriptive analytical framework

The study was carried out based on issues such environmental sustainability, socio-economic development, tourist policy, biodiversity protection, climate change effects and community engagement.

Reliability and Validity of the Scale

The secondary sources were legitimate and trustworthy to make the research reliable and valid. Peer-reviewed journal papers, government publications, UNESCO reports, Forest Survey reports and institutional publications were utilised to assure content quality and data trustworthiness.

The researcher cross-checked the material from several sources to guarantee consistency, correctness and impartiality in interpretation. Recent articles from 2022-2026 were added to retain the present relevance of the research.

Procedure of Collection of Data

All the data for the research were acquired from secondary sources. Relevant information on sustainable tourist development in the Sundarban was acquired from:

- Research journals
- Government tourism websites
- UNESCO reports
- Ministry reports
- Forest Survey publications
- Newspapers
- Academic databases
- Online articles and institutional websites

The data acquired were thoroughly evaluated, sorted, organised and interpreted in line with the aims and research questions of the study.

Procedure of Analysis of Data

The collected secondary data were analyzed using:

- Descriptive analysis
- Thematic analysis
- Comparative interpretation
- Content analysis

The researcher classified the data into key categories such as tourist development, environmental repercussions, socio-economic contributions, biodiversity protection, climate change, government policies, and sustainable tourism initiatives. Statistical tables, charts and qualitative interpretations were also employed to methodically display and analyse the data.

4. DATA ANALYSIS AND RESULTS

Research Question 1: Present Status of Sustainable Tourism Development

The data demonstrates that tourism in the Sundarbans has increased dramatically due to the growing interest in eco-tourism, biodiversity protection, and mangrove ecosystems. Government programs have also developed tourist infrastructure and marketed the area as an important eco-tourism destination. However, tourist growth is still unequal with outlying islands missing basic infrastructure and services.

Research Question 2: Environmental, Social, and Economic Impacts of Tourism

Tourism has produced jobs, raised revenue and stimulated local enterprise. It has also facilitated cultural interchange and environmental awareness. However, tourist activities have led to pollution, habitat disturbance and ecological strain on the vulnerable mangrove ecosystem, indicating a need for better environmental management.

Research Question 3: Contribution to Livelihood and Socio-Economic Development

Tourism offers alternative income sources including eco-guiding, hospitality, handicrafts, transport and homestays. With the socio-economic empowerment of women, their involvement in tourist firms has expanded. Sustainable tourism has helped to reduce the dependency on forest resources and boosted local earnings.

Research Question 4: Challenges Affecting Sustainable Tourism Development

Key issues include climate change, storms, coastal erosion, low infrastructure, poor sanitation, insufficient healthcare facilities and poor communication networks. Policy implementation shortcomings, absence of local engagement also hampers sustainable tourist growth.

Research Question 5: Effectiveness of Government Policies and Tourism Initiatives

Government policies and eco-tourism programs have enhanced tourist marketing, infrastructure and conservation. In practice execution is patchy with minimal coordination, poor monitoring and little resources.

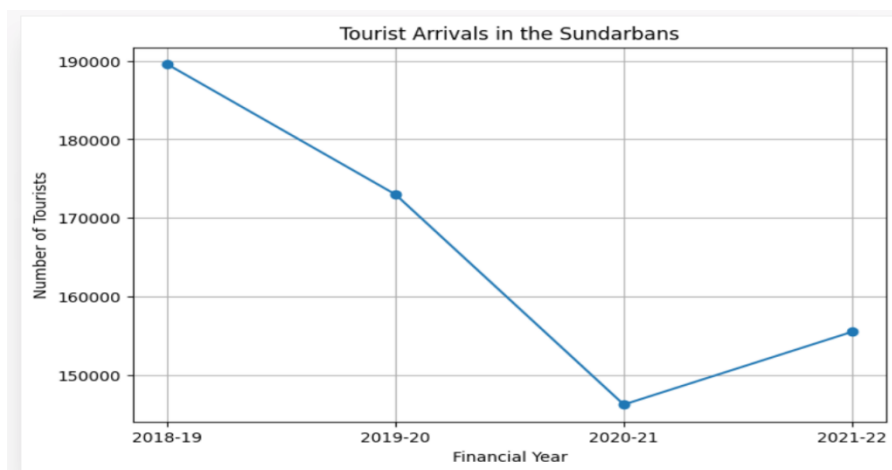
Research Question 6–10: Communities, Conservation, Strategies, Climate Change, and Lessons

Local communities, NGOs and other stakeholders have a major role to play in the promotion of sustainable tourism and conservation. Eco-tourism encourages biodiversity conservation via awareness, conservation financing and ethical tourist practices.

- Improve infrastructure.
- Waste management.
- Community engagement.
- Skill development.
- Environmental education.

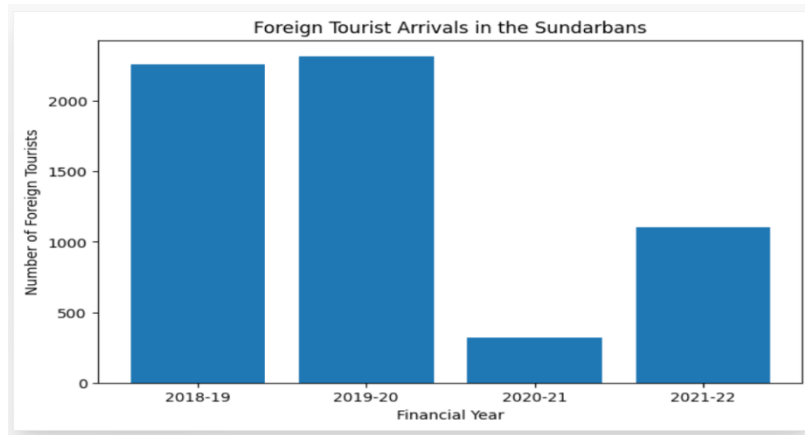
Climate change is the biggest danger to the sustainability of tourism and requires climate resilient planning and catastrophe preparation. In summary, sustainable tourism in the Sundarbans has the potential to foster economic growth, preserve the environment, and empower communities, provided that it is backed by robust legislation, stakeholder involvement, and the safeguarding of the ecosystem.

Fig.1: Tourist Arrivals in the Sundarbans



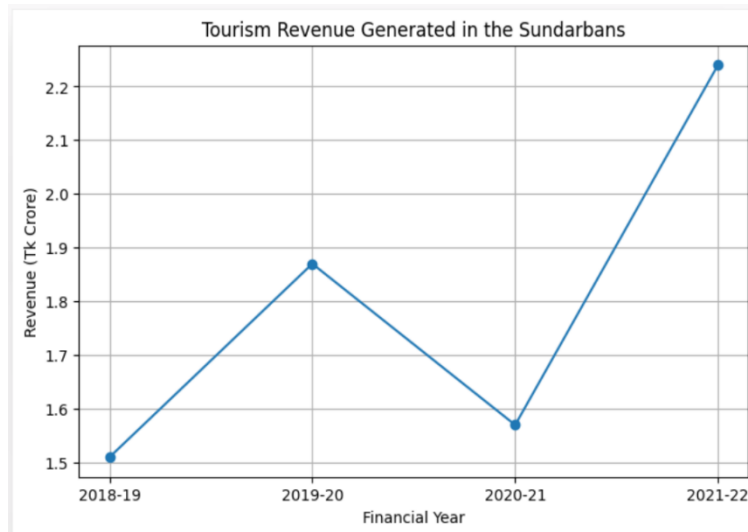
Source: *The Daily Star* (2024). Tourism statistics of the Sundarbans.

URL: <https://www.thedailystar.net/node/3543691>

Fig.2: Foreign Tourist Arrivals in the Sundarbans

Source: *The Daily Star* (2024). Revenue generation from tourism activities in the Sundarbans.

URL: <https://www.thedailystar.net/node/3543691>

Fig.3: Tourism Revenue Generated in the Sundarbans

Source: Government of West Bengal. (2024). *Sundarban Tourism Destination Guide*.

URL: <https://wbtourism.gov.in/destination/place/sundarban>

5.FINDINGS AND CONCLUSION

Findings of the Study

1. Present Status of Sustainable Tourism Development

- Tourism in the Sundarbans has increased significantly due to eco-tourism awareness and biodiversity attractions.
- Government initiatives have improved tourism infrastructure and accessibility.
- UNESCO World Heritage status has enhanced global recognition.
- Development remains uneven, with many remote islands lacking basic facilities.
- Tourism is largely seasonal and dependent on environmental conditions.

2. Environmental Impacts of Tourism

- Tourism promotes awareness of biodiversity conservation and mangrove protection.
- Eco-tourism supports environmental education and conservation efforts.
- Uncontrolled tourism causes waste generation, pollution, and ecosystem degradation.

- Wildlife habitats, including those of the Royal Bengal Tiger, face increasing disturbance.

3. Economic Contributions and Livelihood Development

- Tourism generates employment in boating, guiding, hospitality, handicrafts, and cultural activities.
- It provides alternative livelihoods and reduces dependence on forest resources.
- Women's participation in tourism-based enterprises has increased.
- Economic benefits are often unevenly distributed, with limited gains for local communities.

4. Challenges Affecting Sustainable Tourism Development

- Climate change, cyclones, flooding, and coastal erosion threaten tourism sustainability.
- Poor infrastructure, inadequate services, and weak tourism planning remain major barriers.
- Human-wildlife conflicts and poverty continue to affect local communities.
- Lack of trained personnel and environmental monitoring limits sustainable growth.

5. Effectiveness of Government Policies and Initiatives

- Government programs have promoted eco-tourism, conservation, and infrastructure development.
- Awareness campaigns and eco-friendly tourism initiatives have improved destination visibility.
- Gaps exist between policy formulation and implementation.
- Limited resources and weak coordination reduce policy effectiveness.

6. Role of Local Communities and Stakeholders

- Community participation strengthens conservation and sustainable tourism practices.
- NGOs and self-help groups support skill development and awareness programs.
- Local involvement in tourism decision-making remains insufficient.
- Greater inclusion of marginalized groups is needed.

7. Sustainable Tourism and Biodiversity Conservation

- Eco-tourism supports biodiversity conservation and environmental awareness.
- Tourism revenue can contribute to conservation projects.
- Responsible tourism practices help protect ecosystems.
- Excessive commercialization may threaten conservation goals.

8. Strategies for Enhancing Sustainable Tourism

- Strengthen eco-tourism policies and environmental regulations.
- Improve infrastructure, waste management, and disaster preparedness.
- Promote community-based tourism, homestays, and local entrepreneurship.
- Encourage stakeholder collaboration and scientific environmental monitoring.

9. Influence of Climate Change on Tourism Sustainability

- Rising sea levels, cyclones, and erosion pose serious threats to tourism.
- Climate change affects biodiversity, livelihoods, and tourism infrastructure.
- Adaptation measures such as mangrove restoration and resilient infrastructure are essential.
- Climate-sensitive tourism planning is necessary for long-term sustainability.

Recommendations

1.Strengthen Eco-Tourism Policies

- Enforce strict environmental regulations and monitoring.
- Promote conservation-oriented tourism over mass tourism.

2.Improve Tourism Infrastructure

- Develop transportation, sanitation, healthcare, communication, and disaster management facilities.
- Ensure infrastructure is eco-friendly and climate-resilient.

3.Promote Community-Based Tourism

- Increase local participation in tourism planning and management.
- Support homestays, handicrafts, eco-guiding, and cultural tourism.

4.Enhance Capacity Building and Skills

- Provide training in hospitality, eco-guiding, digital marketing, and disaster preparedness.
- Improve employment opportunities for local residents.

5.Increase Environmental Awareness

- Conduct awareness programs on biodiversity conservation and responsible tourism.
- Educate tourists and stakeholders on sustainable practices.

6.Establish Effective Waste Management

- Reduce plastic use and promote recycling.
- Implement proper waste collection and disposal systems.

7.Regulate Tourist Activities

- Control tourist inflow in ecologically sensitive areas.
- Encourage eco-friendly boating and transportation.

8.Conserve Biodiversity and Mangroves

- Support mangrove restoration and wildlife conservation programs.
- Integrate tourism development with environmental protection.

9.Adopt Climate Change Adaptation Measures

- Develop cyclone-resistant infrastructure and coastal protection systems.
- Include climate resilience in tourism planning.

10.Strengthen Stakeholder Collaboration

- Improve coordination among government agencies, NGOs, researchers, local communities, and tourism operators.
- Encourage participatory and sustainable tourism governance.

Conclusion

The research on sustainable tourism development in the Sundarbans stresses the great ecological, cultural and economic value of the area and describes it as one of the most significant eco-tourist destinations in India. The results from secondary study show that tourism has contributed favourably towards local livelihood generation, social economic development, environmental awareness and biodiversity protection. tourist-related activities have provided jobs for local people, including eco-guiding, hotel services, handicrafts, transportation and community-based tourist projects.

But the report also points to various environmental and developmental issues connected with the rise of tourism in the Sundarbans. Increasing tourist activities, environmental degradation, climate change, coastal erosion, pollution, insufficient infrastructure and poor policy implementation are still threatening the delicate mangrove ecology and sustainability of tourism in the area. Because of the Sundarbans' ecological sensitivity, rigorous planning and prudent tourist management is needed to balance tourism development with environmental protection.

The research also indicates that sustainable tourism may be a successful instrument for conservation and rural development only if local populations are actively involved in tourist planning and benefit sharing activities. Positive impacts have been observed due to government initiatives, eco-tourism policies, conservation programs, and stakeholder collaboration. But stronger implementation mechanisms, environmental regulations, climate-resilient infrastructure, and community-centered approaches are needed for long-term sustainability.

The research highlights that the future of tourism in the Sundarbans relies on the adoption of ecologically responsible, socially inclusive and economically sustainable tourist practices. A balanced strategy combining ecological preservation, community empowerment, policy support and sustainable resource management is important to conserve the unique biodiversity and cultural legacy of the Sundarbans while assuring sustainable tourist development for future generations.

Barman, P., Golder, P., Patra, J., Gupta, T., Sadhu, M., & Naskar, M. (2025). *Assessing the economic implications of sustainable tourism development in the coastal areas of Sundarbans, West Bengal. The Bioscan, 20(2)*, 976–980.
<https://doi.org/10.63001/tbs.2025.v20.i02.S2.pp976-980>

REFERENCES URL: <https://thebioscan.com/index.php/pub/article/view/3720>

Das, S. C. (2022). *The Sundarbans: Sustainable tourism, livelihoods and economies involving Bangladesh and India. International Journal of Business Ecosystem & Development, 10(1)*. <https://doi.org/10.24052/IJBED/V010N01/ART-03>
URL: <https://ijbed.org/details&cid=202>

Jamal, S., Ghosh, A., Hazarika, R., & Sen, A. (2022). *Livelihood, conflict and tourism: An assessment of livelihood impact in Sundarbans, West Bengal. International Journal of Geoheritage and Parks, 10(3)*, 383–399.
<https://doi.org/10.1016/j.ijgeop.2022.07.004>
URL: <https://www.sciencedirect.com/science/article/pii/S2577444122000442>

Rajoana, J., & Saxena, G. (2022). *Role of Sundarbans bagh bidhwa entrepreneurs in tourism. Annals of Tourism Research, 97*, 103486.
<https://doi.org/10.1016/j.annals.2022.103486>
URL: <https://www.sciencedirect.com/science/article/pii/S0160738322001372>

Rahman, M., & Hossain, S. (2023). *Sustainable tourism development in Bangladesh: Challenges and opportunities to promote the Sundarbans. Journal of Sustainable Tourism and Entrepreneurship, 4(1)*. <https://doi.org/10.35912/joste.v4i1.1660>
URL: <https://goodwoodpub.com/index.php/JoSTE/article/view/1660>

Roy, K., Datta, R., & Bera, S. (2022). *Valuing conservation of the Sundarbans mangrove forest ecosystem. Trees, Forests and People, 10*, 100278.
<https://doi.org/10.1016/j.tfp.2022.100278>
URL: <https://www.sciencedirect.com/science/article/pii/S2666719322000851>

United Nations Educational, Scientific and Cultural Organization. (2023). *The Sundarbans*. UNESCO World Heritage Centre.

URL: <https://whc.unesco.org/en/list/452/>

United Nations World Tourism Organization. (2023). *Tourism and sustainable development goals*. UN Tourism.

URL: <https://www.unwto.org/sustainable-development>

World Wildlife Fund India. (2024). *Sundarbans and biodiversity conservation*. WWF India.

URL:

https://www.wwfindia.org/about_wwf/priority_species/bengal_tiger/sundarbans/

Government of West Bengal. (2024). *Sundarban tourism destination guide*. West Bengal Tourism.

URL: <https://wbtourism.gov.in/destination/place/sundarban>

Ministry of Tourism, Government of India. (2023). *Eco-tourism initiatives in India*. Government of India.

URL: <https://tourism.gov.in/eco-tourism>

Forest Survey of India. (2023). *India state of forest report 2023*. Ministry of Environment, Forest and Climate Change, Government of India.

URL: <https://fsi.nic.in/forest-report-2023-details>

Alam, J., Alam, Q. N., & Kalam, A. (2022). *Prospects and challenges for sustainable tourism: Evidence from South Asian countries*. arXiv.

<https://doi.org/10.48550/arXiv.2211.03411>

URL: <https://arxiv.org/abs/2211.03411>

Business Standard. (2022, March 10). *Bengal govt making efforts to improve tourism infrastructure in Sundarbans*.

URL: https://www.business-standard.com/article/current-affairs/bengal-govt-making-efforts-to-improve-tourism-infrastructure-in-sundarbans-122031000676_1.html

The Indian Express. (2022, March 14). *Sundarbans to get revamped tourism infrastructure with houseboats, eco-friendly hotels*.

URL: <https://indianexpress.com/article/lifestyle/destination-of-the-week/sundarbans-to-get-revamped-tourism-infrastructure-with-houseboats-eco-friendly-hotels-7819416/>