

Ethical Investments Considered as a Vital Tool to Maintain the Environmental Health and Sustainability of Gangtok: A Tourist Destination of Sikkim

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ABSTRACT

Tourism serves a pivotal role in economic growth, but the environment and local communities are frequently threatened by its rapid expansion. This study explores the function of green investments in maintaining tourist destinations, with an emphasis on Gangtok, Sikkim. Gangtok, a growing tourist destination, requires a delicate equilibrium between social progress, environmental preservation, and economic growth. The research uses a case study approach and incorporates tourism's cost and benefit analysis. Secondary data about the growth of tourism was gathered from various sources. Data regarding the growth of tourism, environmental indicators, and economic parameters are examined to comprehend the present circumstances and possible hazards. The results demonstrate the importance of green investments in preserving the viability of tourism sites. Green investments include projects like waste management systems, eco-friendly infrastructure, renewable energy projects, and community-based tourism initiatives. In addition to slowing down environmental deterioration, these initiatives enhance Gangtok's allure as a sustainable travel destination. The study investigates the financial gains from green investments, including higher income, better infrastructure, and the creation of employment. By evaluating the degree to which local communities participate in and profit from tourism-related activities, the social dimension is investigated. The development of sustainable tourism includes community involvement, cultural preservation, and responsible tourism practices. The case study reveals Gangtok's present environmental situation, many environmental impacting factors, and the potential benefits of implementing green investments. It emphasizes how crucial it is for local communities, businesses, and government agencies to work together to create a comprehensive and functional sustainability framework. The results can be used by policymakers to create focused plans for encouraging green investments in tourism locations, guaranteeing a healthy balance between environmental preservation and economic growth.

Introduction:

One industry that is essential to many places and has the potential to make an enormous contribution to economic development is tourism. However, the quick expansion of tourism frequently brings with it environmental problems that jeopardize the viability of well-liked travel spots. The adoption of green investments becomes apparent in this context as an essential strategy to strike an equilibrium between the need for environmental preservation and the economic benefits of tourism (Morrison, 2023).

The capital of Sikkim, Gangtok, is the subject of this case study because it is an excellent illustration of a tourism destination that needs to combine sustainability with visitor appeal. Situated amidst the Eastern Himalayan range, Gangtok is widely recognized for its breathtaking scenery, diverse culture, and abundant wildlife (Ahuja, 2015). The fragile biological balance in the area is coming under a mounting strain as tourism rises.

Green investments are being investigated as a potential option due to the crucial importance of safeguarding Gangtok's distinctive ecology and the increased public awareness of sustainable practices. Financial contributions to programs and projects that advance social responsibility and environmental sustainability are referred to as "green investments" (Shrawan Kumar Acharya, 2012). These include a variety of initiatives, such as waste management plans and renewable energy projects, as well as environmentally friendly infrastructure and locally focused tourism.

This case study's goal is to evaluate the factors affecting the environment of Gangtok and to minimize those through green initiatives to support Gangtok's continued viability as a tourism destination. It explores the particular initiatives carried out, the cooperation between local government, companies, and communities, and the effects of these investments on the local economy, environment, and general tourist experience (Shiqin Xu, 2023).

This study proposes to provide insight into the costs and benefits related to incorporating green investments into the tourism industry by a thorough analysis of legislation, efforts, and results. The results can be a useful guide for other tourism locations facing comparable sustainability issues, providing a model for striking a balance between tourism-driven economic expansion and environmental preservation (Nimi Markose, 2022). This study aims to inspire practical methods for protecting the most valued tourist locations worldwide by examining the case of Gangtok and adding to the larger conversation on sustainable tourism (Sikkim, 2024).

Review of Literature:

Inquiries into the tourism sector have been conducted quickly in the modern era. The present study aims to investigate the function of green finance in improving tourist growth through carbon emission mitigation in China, based on climate significance. Based on research topicality, Data Envelopment Analysis was utilized in the study to infer the study model's efficiency in the study context. Our research showed that travelers were encouraged to visit climate-supporting visit stations by China's local tourism destination, which is well-known for its health and wellness tourism. The study's findings supported the notion that it is crucial to use green finance to mitigate climate change in a popular Chinese tourist destination. Empirical findings demonstrated that, by resolving associated problems, green finance directly reduced climate change and boosted tourism growth in Chinese environments. Based on these conclusions, the study produced useful recommendations for Chinese officials, green finance organizations, and climate change policymakers about the growth of the tourism industry (Shiqin Xu, 2023).

In recent years, environmentally friendly ventures have gained a lot of attention, prompting organizations and companies in sectors like oil and tourism to consider sustainable options. The UNWTO outlines six goals for green investments in the travel sector: strengthening profit margins, satisfying customer preferences, reducing reputational risk, future-proof investment plans, securing sustainable energy sources, and involving local community members in decision-making processes. Investing in green tourism requires ongoing engagement and work, with the return on investments leaving a lasting impact on the environment, people, and tourists (Sikkim, 2024)

Sustainable development discourse centers on striking a balance between economic and environmental concerns; responsible tourism (RT) activities play a part in this "greenification" of economies. Kerala, India is leading the way in the application of RT. With an emphasis on sustainable responsible tourism for the growth of green tourism, this study examines RT efforts at various stages of development. The bottom line approach (TBL) for green economic development drives the research. According to the study, while the second and third phases of RT deployment showed greater promise, the first phase was not successful. Future research ought to be carried out in other culturally remote locations to implement effective strategies for the worldwide growth of sustainable tourism. (The Sikkim Model of Sustainable Development, 2021).

Ecological issues brought about by globalization highlight the necessity of environmental management. The development of sustainable tourism, the identification of national park goals, and employee pro-environmental behavior are all positively impacted by corporate social responsibility (CSR) perception and attitude, according to a study that examined the relationship between CSR perception and attitude and sustainable tourism development in Chinese tourism enterprises. The association between sustainable tourism development and environmental perception and attitude toward CSR is mediated by national park aim identification and pro-environmental staff conduct. (Li, 2022)

Objectives:

- To identify the factors affecting environment of Gangtok.
- To minimize the factors affecting the environment of Gangtok, by applying Ethical Investmentstechniques.
- To analyse the future of Gangtok, after implementation of Ethical Investmentstechniques

Research Methodology:

1. Study Area:

Gangtok which is located in southeast Sikkim in the lower Himalayas at an elevation of 1,780 meters (5,840 feet) also the state capital and the administrative center of the East Sikkim district. The latitude of Gangtok, is 27.33° N 88.62° East, with an average height of 1437 meters (4714 feet). The town is perched on one slope of a hill, with the palace, which is located at an elevation of almost 6,000 feet (1,828 m), The snow-capped peaks of the Himalayan range, which include the third-tallest peak in the world, Kanchenjunga, stand to the east of the city.

2. Data Source:

Mainly based on secondary data sources gathered from different journals, articles, book chapters, and also from different websites.

3. Population Size:

As the article is based on Gangtok in North Sikkim, the footfall of tourists and the residents will be considered as the population.

4. Data Collection:

- Data Type – Secondary data (articles, journals, book chapters, websites)

5. Finding & Analysis:

This article is focused on COST & BENEFIT analysis to find out the green initiatives taken in Gangtok to sustain the environment and tourism industry. As tourism is focused on the tourists and the residents' behaviour, and their intentions to adopt and maintain green practices in the city, so here an assessment has been done on the cost and benefit analysis to provide the prospect of green investments to sustain the environmental quality in future.

5.1 Social Cost:

Gangtok is enormously affected by social cost of tourism (Centre, 2024). Gangtok is a small hill city, but due to heavy tourist fall, the local people started to lose their traditional values, customs, lifestyles. Additionally, unnecessary crowd and congestion hampers the peace of community people. Sometimes tourists are also cheated and harassed by the local people. Due to high demand of tourists, local land are also captured by the hotel owners for permanent constructions, which is a big threat for city.

5.2 Environmental Cost

Environment is a big concern for Gangtok's tourism, Vigorous construction of hotels, betterment of transportation system continuously degrading the environment through air pollution, noise pollution. Deforestation and the extensive usage of limited water and land leading to a threat for the wildlife, and also a big loss of natural beauty. High carbon emissions affecting the air quality and also the uncontrolled foot fall of tourists directly contributes to the increase in waste pollution (Simona Rai, 2022).

5.3 Economic Cost:

Due to the permanent construction of roads, airports, hotels, shopping malls, restaurant, an inflation (Chamling, 2000) is seen in the property value of Gangtok. Local communities feels it so difficult to cope up with this changes. As Gangtok is a tourism oriented destination, so the employability remains high in the peak seasons, but in the rest of the times of year many people remain unemployed, which hugely affects the city's as well as the state economy.

Along with these costs, benefits also possess in Gangtok like –

- Gangtok attracts lots of international tourists every year and generates foreign currency through them, which boots up the under developed community services and facilities.
- Cultural exchange is also takes place through tourists and preservation of local culture, is possible by arrangement of different local festivals seasonally.
- Though environmental degradation possess heavily in Gangtok, still govt. is benefitting through these roads, airport, restaurant, and hotels by generating a good amount of income tax. Local people are getting more job opportunities through these business.
- To boost the tourism sector of Gangtok, preservation and conservation of natural resources, and wildlife are taken into serious consideration.

6. Suggestions:

Gangtok can sustain its tourism and the environment by adopting the green initiatives (Li, 2022) highly required for the city's future. All the different costs incurred due to tourism can be replaced by adopting green mechanisms for future sustainability (Morrison, 2023).

6.1 Green Initiatives:

Gangtok is a small hill station, surrounded by hills and natural beauty, As tourism is the main industry in Gangtok, still to maintain the nature and wildlife of Gangtok, tourist footfalls must be controlled in fragile areas. It will be easier to track the limited number of tourists in fragile areas and the demand for permanent construction like - hotels, resorts, malls, hospitals, banks will also get lower at the same time. Not only that controlled number of tourists will also create less carbon emissions comparatively than the uncontrolled number of tourists.

Ropeways, lifts in different places, and malls will create a huge difference in the transport system. Sikkim is the only state without rail connectivity till today, so the railways are essential for Gangtok to control further road constructions and vehicles. Automatically it will help to lower the carbon emissions coming out of vehicles and will enhance the air quality (Shrawan Kumar Acharya, 2012). Liquid fuels like- petrol and diesel can be replaced by hydro fuel which is safer for nature.

Ban on plastic will create a remarkable difference in Gangtok pollution level. The entire plastic whether it is good or bad should not be used in the city. As a result, bio degradable items like jute bags, carry bags will get popularity again and it will lessen soil degradation.

Being a fragile area, Gangtok has limited drinking water source, so rainwater conservation and maximum utilization of natural springs, and lake water must be there without polluting those resources. Excessive tourist fall in Gangtok, will directly lead the waste pollution and to control it proper sewage treatment, and reuse of waste water technique is utmost needed.

People should concentrate more on organic foods, fruits rather than non-vegetarian foods, which will require less time to cook along with that solar cooking systems must be implemented to reduce the usage of biofuel, gaseous fuel, and electricity (Ahuja, 2015). The entire city's electricity can be replaced by the solar power to sustain electric power for future generations.

Seasonal flowers, bushes can be planted and used as the road dividers, which not only beautify the entire hill city but also level up the greenery, enhance the air quality by increasing the oxygen level.

Preference must be provided to local delicacies instead of multi-cuisine dishes in different eateries to promote and preserve the traditional culture and customs in front of tourists.

These green initiatives can bring a revolutionary transformation in Gangtok's tourism to sustain the environment and natural beauties for future generations.

7. Conclusion:

Examining green investments as a means of preserving the sustainability of tourism spots— with a particular emphasis on Gangtok, Sikkim—reveals both obstacles and encouraging possibilities. Due to Gangtok's special status as a rapidly developing tourist destination in the Himalayas, environmental preservation and tourism growth must be carefully balanced. The case study emphasizes how crucial it is to implement sustainable practices in order to protect the natural and cultural assets of the area.

The review emphasized a number of important points like tourism growth, role of green investments, present sustainable initiatives, etc. Gangtok's burgeoning tourist population puts the area's delicate ecology in jeopardy and strains the city's already limited infrastructure. Responsible development management is essential to avoiding negative effects on the environment and nearby populations. Gangtok is committed to striking a balance between economic growth and environmental and social responsibility, as seen by the number of sustainable tourist projects it has started. To correct flaws and maximize impact, these programs must be continuously evaluated to ensure their efficacy. The role of green investments: Gangtok's tourism industry has a lot of room for green investments. Reducing the ecological footprint of tourism activities can be greatly aided by waste management systems, biodiversity protection programs, and renewable energy projects.

The study highlights the importance of green investments in Gangtok's tourism industry for sustainability. It suggests that financial contributions and collaboration among stakeholders can create a sustainable tourist model that preserves the area's natural beauty and cultural diversity while supporting the local economy. The sustainability of Gangtok depends on

continuous monitoring, adaptive management, and cooperation among stakeholders sustainable tourism practices

References:

- Ahuja, S. K. (2015, September). *Sikkim frontrunner in setting up Green Hydrogen Smart City; picks up Greater Gangtok City for it*. Retrieved February 2024, from Asian Community News: <https://www.asiancommunitynews.com/sikkim-frontrunner-in-setting-up-green-hydrogen-smart-city-picks-up-greater-gangtok-city-for-it/>
- Centre, B. F. (2024, February Tuesday). *Tourism Cost & Benefits*. Retrieved from Barcelona Field Study Centre: <https://geographyfieldwork.com/TourismProsCons.htm>
- Chamling, P. K. (2000, June 17-18). *The Challenge of Gangtok*. Gangtok, Sikkim, India. Retrieved from <https://documents1.worldbank.org/curated/pt/749601468050707801/pdf/465850WSP0Box31th0meeting010gangtok.pdf>
- ICLEI. (2024, February Tuesday). *Closing the Loop: Innovation for Increased Efficiency in the Food-Water-Energy Nexus I*. Retrieved from ICLEI: https://e-lib.iclei.org/publications/IFWEN_Gangtok_FINAL.pdf
- Li, X. (2022, June 10). *Green Innovation Behavior Toward Sustainable Tourism Development: A Dual Mediation Model*. *Frontiers in Psychology*, 13. doi:10.3389/fpsyg.2022.930973
- Morrison, O. (2023, July 19). *Green Investments in Tourism: Unlocking Opportunities and Experiences for Sustainable Growth (World Tourism Day 2023)*. Retrieved from solimar International : <https://www.solimarininternational.com/green-investments-in-tourism-unlocking-opportunities-and-experiences-for-sustainable-growth-world-tourism-day-2023/>
- Nimi Markose, B. V. (2022, January 24). *Sustainability Initiatives for Green Tourism Development: The Case of Wayanad, India*. *Journal of Risk and Financial Management*, 15(2). doi:10.3390/jrfm15020052
- Shiqin Xu, H. W. (2023, April 3). *The role of green financing to enhance tourism growth by mitigating carbon emission in China*. *PMC PubMed Central*, 30(21), 59470–59480. doi:10.1007/s11356-023-26089-z
- Shrawan Kumar Acharya, S. B. (2012, January 1). *Carbon Intensive Urbanization, Climate Variability and Urban Vulnerabilities in Hill Areas: A Case of Gangtok Urban Region, Sikkim*. *Journal of International Development & Cooperation*, 18, 93-112.
- Sikkim, E. (2024, February Tuesday). *ENVIRONMENTAL INITIATIVES*. Retrieved from ENVIS Sikkim: <https://sikennis.nic.in/WriteReadData/Publication/Environmental%20Initiatives%20of%20Sikkim%2015%20Aug%202016.pdf>
- Simona Rai, E. I. (2022). *Urbanization and Solid Waste Management in Gangtok, Sikkim*. *J. Himalayan Ecol. Sustain. Dev.* Retrieved from <https://envirsc.uok.edu.in/Files/ab1ac1f1-07e3-42a2-85bc-83717ef39155/Journal/5be78f54-4044-4e5e-95aa-4360edb56ab1.pdf>
- The Sikkim Model of Sustainable Development*. (2021, November). Retrieved February 6, 2024, from Invest India: <https://www.investindia.gov.in/team-india-blogs/india-goes-green-sikkim-model-sustainable-development>