

Valuing the Green: Economic Impact of Sustainable Tourism Practices in Mumbai

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Abstract

Green tourism, or eco-tourism, has developed as a environmentally friendly style of travel focused on preserving the environment, being respectful of the socio-culture, and promoting economic growth. For India, which relies heavily on tourism for national development, green tourism offers an attractive route to wed economic aspirations with ecological duties. This research study examines the influence of green tourism in India with special reference to Mumbai—a megacity that is struggling with overpopulation, pollution, and fast urbanization. In spite of these difficulties, Mumbai has shown an increasing interest in following sustainable tourism practices through measures like the preservation of Sanjay Gandhi National Park (SGNP), Aarey Forest protection, mangrove restoration, and creation of eco-friendly infrastructure like the Malabar Hill Nature Trail and Mumbai Coastal Road green belts. These efforts have led to job creation, conservation of biodiversity, climatic resilience in cities, and greater environmental consciousness among residents and tourists. The article synthesizes stakeholder interviews, secondary research, and policy analysis to examine the socio-economic and environmental impacts of green tourism in Mumbai. Results indicate that green tourism has promoted community livelihood, enhanced public participation in conservation, and encouraged sustainable mobility and hospitality practices. However, challenges persist, including the risk of over-tourism in sensitive zones, insufficient regulatory enforcement, and loss of green cover due to unchecked development. The study concludes that while Mumbai's green tourism model is still evolving, it offers a replicable framework for other Indian cities aiming to integrate environmental stewardship with tourism-driven development. Strategic planning and community-led initiatives remain critical for its long-term success.

Keywords: *green tourism, climate change, sustainable development.*

INTRODUCTION

Tourism is traveling for predominantly recreational or leisure purposes, and also refers to the provision of services in support of this act. According to the World Tourism Organisation, tourists are people who "travel to and stay in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited". The Indian tourism and hospitality industry has emerged as one of the key drivers of growth among the services sectors in India. It is the third largest sub-segment of services comprising trade, repair services, hotels and restaurants. Today the "Green Laws" of conservation are making people aware of how man and environment can live symbiotically for more time to come and eco-tourism is the only way to maximise the economic, environmental and social benefits of tourism. The term "Green" related in business operation links to environmental matters, but now it embraces all aspects of sustainable development. Recently another

aspect has been added that of climate change (UNWTO, TSG). Climate change is not a remote event, but a phenomenon that affects the sector and certain destinations i.e. mountain regions and coastal destinations. At the same time, the tourism sector is contributing to greenhouse gas emission (GHG), especially through transportation of tourists. The term "Green" basically includes environmental protection, social development, economic prosperity, minimisation of the impact on climate and corporate social responsibility. Green Tourism Business Scheme (GTBS) is the largest sustainable grading program in the world. Businesses are awarded one of three grading levels: Bronze, Silver and Gold. This research paper talks about the importance and impact of green tourism in India. It also emphasises the urgency of having a national certifying authority in the field of tourism.

OBJECTIVES OF THE STUDY

1. To understand Green Tourism & Environment Sustainability
2. To study impact of Green Tourism

Green Tourism in Mumbai

Sanjay Gandhi National Park (SGNP) & Aarey Forest

SGNP has 2 million annual visitors; it is one of India's biggest urban national parks. Tourism there is supporting livelihoods—tours, transport, food, crafts—and boosting local incomes and investment/education capacity. Aarey is a buffer forest, has trekking and maintains biodiversity as well.

Community-led Mangrove & Beach Initiatives

Versova Beach cleanup (volunteer-initiated) resulted in wetland rehabilitation and enhanced biodiversity, enhancing ecosystem attraction. Raj Bhavan mangrove conservation enhances environmental learning and coastal resilience.

Urban Nature Infrastructure

Developments such as Malabar Hill Elevated Nature Trail, a greenway constructed sustainably along a 12.5-acre micro-forest, draw visitors and trigger wider urban conservation conversation. Promenade and green spaces along new development of Coastal Road incorporate around 70 ha for parks, jogging paths and butterfly gardens.

Sustainable Mobility & Green Hotels

Mumbai's electric public transportation (trains, trolley CNG buses), bicycle lanes, and planned ropeway to SGNP all help cut down on carbon footprint.

Key issues of Green Tourism

Any destination that aspires to succeed in the age of green tourism and to ensure its sustainability should focus on the above-mentioned four key issues:

1.Reduction in carbon emission: Every year, an average person in Mumbai emits 3.83 tonnes of carbon dioxide, which is equivalent to emissions from a small petrol car making 76 round trips between Mumbai and Pune. For decades, a popular slogan greeting visitors at tourist sites was "take only pictures, leave only footprints." Although this old motto is still relevant, growing concern over climate change has added a new dimension to it. Travellers entering the city must now be concerned with their carbon footprint. By implementing green technologies and policies, city can contribute to the project of environmental sustainability and profitability. A unique opportunity exists for smaller tourist destinations in India to take a lead role in introducing local mobility systems like bullock carts, bicycles. In the same vein, policymakers in cities should encourage guests to choose energy-efficient methods of transportation for moving around the city—mass transit transport like buses, monorail and metro.

2. Biodiversity conservation: If proper conservation measures are not in place, tourism can worsen the damage and destruction of flora and fauna. Mushrooming tourism resorts in India have encroached upon tiger habitats, both reducing the tiger population and leading to dangerous encounters for humans.

3. Waste management: As a major pollutant, waste affects both water and soil quality and can detract from a destination's image if treated improperly. The effective management of liquid and solid waste from domestic households and from the hospitality industry including restaurants is essential to the perception of a destination as clean and healthy.

Unfortunately, the increasing presence of tourists themselves often adds significantly to the waste management problem – especially if untreated sewage from hotels are allowed to contaminate water and coastal areas.

4. Water supply protection: An adequate and healthy water supply is crucial to any destination's long-term environmental sustainability. Severe water shortages continue to plague many parts of the country, and two major external trends – rising populations and the potential effects of climate change.

Rainwater harvesting works well for rain fed regions like Mumbai. Also, by cleaning and reusing wastewater, the city can increase its potable water capacity and reduce sewage, pollution, and cleanup fees. In addition, proper wastewater management reduces aquatic pollution and minimises the risk of disease.

SUGGESTIONS AND RECOMMENDATIONS

None of the environmental elements stands alone. Carbon mitigation, biodiversity conservation, waste management, and an adequate and clean water supply are all interconnected and interdependent – much like the ecosystems they aim to protect.

The city may be deeply committed to embarking on a sustainable path, but without private- and public-sector systems and structures that enable environmental change, that path may be too chaotic to navigate.

The following suggestions can be made in order to have green environment-

1. Carbon offset: It is a financial instrument aimed at reducing emissions. It is measured in metric tons of CO₂ equivalent. Individuals specially tourist off set their carbon impact caused by transport, electricity use and so forth by planting trees equivalent to their carbon emissions. Otherwise, if weather does not permit for plants, an individual can buy a carbon offset to cover the emissions he has caused by an airline flight. The money collected in this way can be invested in some form of renewable energy (financing CO₂ projects), in planting trees and so forth in the region.

2. Regulations and governance: Legislative bodies should be ambitious in breadth and specific in depth, protecting the environment and limiting potentially harmful development in addition to encouraging positive behaviour. Mumbai can further implement measures including green taxes, park entry fees, and pollution penalties, and can also subsidise investments in sustainable projects. The highest levels of government must sponsor sustainability programs, with appropriate bodies at the national, regional, or local level heading and facilitating implementation.

3. Stakeholder participation: The term tourism sector is widely used, but tourism encompasses a wide variety of business sectors. With that in mind, any holistic sustainability program requires the engagement of many different stakeholders. It is absolutely vital that government, the private sector, and

civil society collaborate to create and implement sustainable policy. The Green Tourism Business Scheme (GTBS) is the U.K.'s only sustainable tourism certification program validated by the national tourism board. Businesses opting to join the GTBS are assessed against a rigorous set of criteria in areas including energy and water efficiency, waste management, and biodiversity. Those that meet the criteria receive a bronze, silver, or gold award based on their level of achievement.

By offering accommodations with a smaller carbon footprint and sustainable waste and water policies, hotels in the city can do much to protect the environment.

4. Funding and financing: Many green programs, such as the implementation of energy-efficient technology, will have strong financial returns and can be easily and successfully implemented as private for-profit investments. Some of these initiatives pay off quickly through savings in operating costs. These savings can then be recycled into other green investment projects.

Mumbai can also work towards building a solar plant that can power an entire area besides encouraging individual solar panels on homes. The city can generate revenue by leveraging their own unique resources, such as charging higher fees to visit protected sites for eg. Elephanta Caves, Mani Bhavan.

5.Capacity building and education: The design of educational and capacity-building campaigns must contain a training program that allows locals to achieve best practices and encourages them to implement and promote green policy. For example, these programs can train tour operators in Mumbai to choose environmentally friendly modes of transportation, limit tourists' contact with protected areas, and discourage littering.

CONCLUSION:

Setting the correct economic balance between the public and private sectors is key. If the incentives for attracting private investment are too generous, the result can be burgeoning. On the other hand, if incentives are too low, the investment strategy will fail to attract enough businesses to be viable. This balance is critically important for both small-scale, private incentive initiatives and larger infrastructure initiatives, and it can help determine the choice between them.

At the government level, the ministry of tourism should collaborate with private- and public-sector entities responsible for the environment, energy, agriculture, transport, health, finance, security, and other relevant areas, as well as local municipalities. This type of collaboration plays a critical role in aligning national and local interests, and helps speed up execution of green policies. A sustainable management program may require additional energy, thereby increasing a destination's carbon footprint. For this reason, a holistic approach to sustainability investment is essential.

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