

Impact of Pollution on Tourism

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Abstract

Tourism, a significant contributor to the global economy, treads a fine line between exploitation and preservation. As travelers seek out the world's wonders, they inevitably leave footprints - some beneficial, others detrimental. This article unpacks the complex relationship between tourism, the environment, and climate change, exploring the balance we must achieve for a sustainable future. Tourism is an important economic activity of every nation. It is one of the growing industries of Maharashtra. The tourism industry relies on environmental, natural, and cultural resources. Tourism and environmental resources can be seen as two sides of the same coin. In economics, the demand for tourism depends upon the peace and prosperity, safe and security, free from ethnic crisis and terrorism, political and economic stability. The increasing demand (development) of the tourism industry yields both positive impacts on the economy in terms of earning forex, promoting business in tourism zones, and negative impacts on the environment in terms of damaging environment, creating pollution, spoiling atmosphere, degrading environmental values, bringing externality, depleting marine and forest eco-systems, disappearing flora, fauna, and valuable species, lessening and exploiting resources, dumping wastes, and above all importing dangerous viruses. In recent years, cultural and tourism economists advocated that eco-tourism and medical tourism for attracting tourists from both local and international. Environmental management is limited more by lack of adoption than by lack of technology. In developed nations, such effects are outweighed by the impacts of recreational use and by political pressures from tourism property developers. These interactions deserve research in both natural and social sciences. Research priorities include more sophisticated recreation ecology as well as legal and social frameworks for conservation tourism.

Keywords Water Pollution, air pollution, Solid waste, Sewage and Aesthetic pollution

Introduction

There has been an exponential growth of tourism. Research data indicates that in 1950 there were more than 25 million tourist arrivals and at the end of 1970 the number of tourist flow was 166 million. In 1990 it had grown to 450 million. Since 1990 to 2018 the tourist count tripled reaching 1.5 billion. By 2030, 2 billion tourist arrivals are projected.

The negative environmental impacts of tourism are very significant. It includes depletion of local natural resources as well as pollution and waste problems. Tourism habitually exerts pressure on natural resources by means of over consumption. It puts colossal stress on local land use which can lead to soil erosion, increased pollution, natural habitat loss, and effects on endangered species. These effects are gradually destroying the environmental resources on which the tourism industry depends.

Raju. G.P (2009) remarked that forest and marine habitats are being destroyed and some of the wildlife they contain is being driven to extinction under the pressures of hunting, logging, agriculture and fishing. Where areas have been officially reserved for nature conservation, many developing country governments lack sufficient funds to manage and protect them. These areas are being destroyed because they are not fully valued for their role as nature's generic reservoirs of the World's biological resources.

Sarkar (2009) discussed the negative environmental impact on the nature-based tourism resources in the Cameron Highlands in Malaysia. He found that there are two major impacts in the highland. One is environmental impacts such as growing tourism superstructure construction, littering, deforestation, trampling and noise pollution and other one is socio-cultural impacts such as loss of cultural heritage, loss of traditional livelihood and influence of urban culture as the major threatening factors affecting in the highland region. To eradicate these problems from Cameron Highland region, the authority should incorporate sustainable and responsible tourism practices, or else, Cameron would face the consequence of mass tourism what Ooty, Shimla and Darjeeling have already experienced in India

A useful classification of ways the environment may be defined is given by Attfield (2003) as:

- 1 'the surroundings'. This is the most common meaning and is associated with an individual's surroundings for the duration of their life or a society for the duration of its existence;
- 2 'objective systems' of nature, for example, mountains, rainforests, coral reefs, seas and rivers, which encompass society but precede and succeed it; and
- 3 'perceived surroundings' of an individual or animal that lend a sense of belonging and home.

Impact of Tourism in India

Tourism industry in India has several positive and negative impacts on the economy and society. These impacts are highlighted below.

Positive impacts

1. Generating Income and Employment: Tourism in India has emerged as an instrument of income and employment generation, poverty alleviation and sustainable human development. It contributes 6.23% to the national GDP and 8.78% of the total employment in India. Almost 20 million people are now working in the India's tourism industry.

3. Source of Foreign Exchange Earnings: Tourism is an important source of foreign exchange earnings in India. This has favourable impact on the balance of payment of the country. The tourism industry in India generated about US\$100 billion in 2008 and that is expected to increase to US\$275.5 billion by 2018 at a 9.4% annual growth rate.

4. Preservation of National Heritage and Environment: Tourism helps preserve several places which are of historical importance by declaring them as heritage sites. For instance, the Taj Mahal, the Qutab Minar, Ajanta and Ellora temples, etc, would have been decayed and destroyed had it not been for the efforts taken by Tourism Department to preserve them. Likewise, tourism also helps in conserving the natural habitats of many endangered species.

5. Developing Infrastructure: Tourism tends to encourage the development of multiple-use infrastructure that benefits the host community, including various means of transports, health care facilities, and sports centers, in addition to the hotels and high-end restaurants that cater to foreign visitors. The development of infrastructure has in turn induced the development of other directly productive activities.

6. Promoting Peace and Stability: Honey and Gilpin (2009) suggests that the tourism industry can also help promote peace and stability in developing country like India by providing jobs, generating income, diversifying the economy, protecting the environment, and promoting cross-cultural awareness. However, key challenges like adoption of regulatory frameworks, mechanisms to reduce crime and corruption, etc, must be addressed if peace-enhancing benefits from this industry are to be realized.

Negative impacts

1. Depletion of Natural Resources: Tourism development can put pressure on natural resources when it increases consumption in areas where resources are already scarce.

(i) **Water resources:** Water, especially fresh water, is one of the most critical natural resources. The tourism industry generally overuses water resources for hotels, swimming pools, golf courses and personal use of water by tourists. This can result in water shortages and degradation of water supplies, as well as generating a greater volume of waste water. (www.gdrc.org/uem/eco-

tour/envi/index.html). In dryer regions like Rajasthan, the issue of water scarcity is of particular concern.

(ii) Local resources: Tourism can create great pressure on local resources like energy, food, and other raw materials that may already be in short supply. Greater extraction and transport of these resources exacerbates the physical impacts associated with their exploitation. Because of the seasonal character of the industry, many destinations have ten times more inhabitants in the high season as in the low season. A high demand is placed upon these resources to meet the high expectations tourists often have (proper heating, hot water, etc.).

(iii) Land degradation: Important land resources include minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Increased construction of tourism and recreational facilities has increased the pressure on these resources and on scenic landscapes. Direct impact on natural resources, both renewable and non renewable, in the provision of tourist facilities is caused by the use of land for accommodation and other infrastructure provision, and the use of building materials (www.gdrc.org/uem/eco-tour/envi/index.html)

Forests often suffer negative impacts of tourism in the form of deforestation caused by fuel wood collection and land clearing e.g. the trekking in the Himalayan region, Sikkim and Assam.

2. Pollution

Tourism can cause the same forms of pollution as any other industry: air emissions, noise, solid waste and littering, releases of sewage, oil and chemicals, even architectural/visual pollution (www.gdrc.org/uem/eco-tour/envi/index.html).

(i) Air and Noise Pollution: Transport by air, road, and rail is continuously increasing in response to the rising number of tourist activities in India. Transport emissions and emissions from energy production and use are linked to acid rain, global warming and photochemical pollution. Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO₂) emissions related to transportation energy use. And it can contribute to severe local air pollution. Some of these impacts are quite specific to tourist activities where the sites are in remote areas like Ajanta and Ellora temples. For example, tour buses often leave their motors running for hours while the tourists go out for an excursion because they want to return to a comfortably air-conditioned bus.

Noise pollution from airplanes, cars, and buses, as well as recreational vehicles is an ever-growing problem of modern life. In addition to causing annoyance, stress, and even hearing loss for humans, it causes distress to wildlife, especially in sensitive areas (www.gdrc.org/uem/eco-tour/envi/index.html).

(ii) Solid waste and littering: In areas with high concentrations of tourist activities and appealing natural attractions, waste disposal is a serious problem and improper disposal can be a major despoiler of the natural environment - rivers, scenic areas, and roadsides.

In mountain areas of the Himalayas and Darjeeling, trekking tourists generate a great deal of waste. Tourists on expedition leave behind their garbage, oxygen cylinders and even camping equipment. Such practices degrade the environment particularly in remote areas because they have few garbage collection or disposal facilities (www.gdrc.org/uem/eco-tour/envi/index.html).

(iii) Sewage: Construction of hotels, recreation and other facilities often leads to increased sewage pollution. Wastewater has polluted seas and lakes surrounding tourist attractions, damaging the flora and fauna. Sewage runoff causes serious damage to coral reefs because it stimulates the growth of algae, which cover the filter-feeding corals, hindering their ability to survive. Changes in salinity and siltation can have wide-ranging impacts on coastal environments. And sewage pollution can threaten the health of humans and animals. Examples of such pollution can be seen in the coastal states of Goa, Kerela, Maharashtra, Tamil Nadu, etc.

3. Destruction and Alteration of Ecosystem

An ecosystem is a geographic area including all the living organisms (people, plants, animals, and micro-organisms), their physical surroundings (such as soil, water, and air), and the natural cycles that sustain them. Attractive landscape sites, such as sandy beaches in Goa, Maharashtra, Kerela,

Tamil Nadu; lakes, riversides, and mountain tops and slopes, are often transitional zones, characterized by species-rich ecosystems. The threats to and pressures on these ecosystems are often severe because such places are very attractive to both tourists and developers. Examples may be cited from Krushedei Island near Rameswaram. What was once called paradise for marine biologists has been abandoned due to massive destruction of coral and other marine life. Another area of concern which emerged at Jaisalmer is regarding the deterioration of the desert ecology due to increased tourist activities in the desert.

Moreover, habitat can be degraded by tourism leisure activities. For example, wildlife viewing can bring about stress for the animals and alter their natural behavior when tourists come too close. Safaris and wildlife watching activities have a degrading effect on habitat as they often are accompanied by the noise and commotion created by tourists.

ENVIRONMENTAL IMPACTS OF TOURISM AT THE GLOBAL LEVEL

1. Loss of biological diversity The effects on loss of biodiversity can be listed as : a) It threatens our food supplies, opportunities for recreation and tourism, and sources of wood, medicines and energy. b) It interferes with essential ecological functions such as species balance, soil formation, and greenhouse gas absorption. c) It reduces productivity of ecosystems. d) It destabilizes ecosystems and weakens their ability to deal with natural disasters such as floods, droughts, and hurricanes, and with human-caused stresses, such as pollution and climate change. Tourism, especially nature tourism, is closely linked to biodiversity and the attractions created by a rich and varied environment. It can also cause loss of biodiversity when land and resources are strained by excessive use, and when impacts on vegetation, wildlife, mountain, marine and coastal environments and water resources exceed their carrying capacity. This loss of biodiversity in fact means loss of tourism potential. Introduction of exotic species which tourists and suppliers can bring in species (insects, wild and cultivated plants and diseases) that are not native to the local environment can cause enormous disruption and even destruction of ecosystems (WWF, 1992; WWF, 1994).
2. Depletion of the ozone layer -The ozone layer, which is situated in the upper atmosphere (or stratosphere) at an altitude of 12-50 kilometers, protects life on earth by absorbing the harmful wavelengths of the sun's ultraviolet (UV) 267 radiation, which in high doses is dangerous to humans and animals. For example, one of the reasons scientists have put forward for the global decrease of amphibian populations is increased exposure to UV radiation. Ozone depleting substances (ODSs) such as CFCs (chlorofluorocarbon) and halons have contributed to the destruction of this layer. The tourism industry may be part of the problem; direct impacts start with the construction of new developments and continue during daily management and operations. Refrigerators, air conditioners and propellants in aerosol spray cans, amongst others, contain ODSs and are widely used in the hotel and tourism industry. Emissions from jet aircraft are also a significant source of ODSs. Scientists predict that by 2015 half of the annual destruction of the ozone layer will be caused by air travel (UNEP, 1997; UNEP, 1998).
3. Effects of other industries on tourism - Impacts from other industries often have a dramatic effect on the environment and can seriously affect tourism. Oil spills, like the oil tanker disasters can cause severe short-term damage to tourist attractions. In that case, local marine and land species and the tourism potential of the area can be badly affected. Agricultural runoff or industrial discharges can cause water pollution and may cause algae blooms. In spite of improved control of sewage from tourism developments, the Mediterranean sea floor is increasingly carpeted with these quick-growing invaders, many rising 30 inches or more above anchoring runners. They appear equally adept at colonizing rock, mud, and sand in a virtually continuous swath that can extend from the beach out to a depth of about 150 feet, smothering coral reefs, fish and other sea flora and fauna in the process. Destructive practices

such as blast fishing, fishing with poisonous chemicals like cyanide, directly destroy corals. They can also destroy a major attraction for tourists (UNEP, 1992).

Conclusion

- a. Protection and Preservation Tourism can significantly contribute to environmental protection, conservation and restoration of biological diversity and sustainable use of natural resources. Because of their attractiveness, pristine sites and natural areas are identified as valuable and the need to keep the attraction alive can lead to creation of national parks and wildlife parks. In Hawaii, new laws and regulations have been enacted to preserve the Hawaiian rainforest and to protect native species. The coral reefs around the islands and the marine life that depend on them for survival are also protected. Hawaii now has become an international center for research on ecological systems and the promotion and preservation of the islands' tourism industry was the main motivation for these actions.
- b. Regulatory Measures Regulatory measures help offset negative impacts; for instance, controls on the number of tourist activities and movement of visitors within protected areas can limit impacts on the ecosystem and help maintain the integrity and vitality of the site. Such limits can also reduce the negative impacts on resources. Limits should be established after an in-depth analysis of the maximum sustainable visitor capacity. This strategy is being used in the Galapagos Islands, where the number of ships allowed to cruise in this remote archipelago is limited, and only designated islands can be visited, ensuring visitors have little impact on the sensitive environment and animal habitats (UNEP, 1998; UNEP, 1997; www.unipie.org/tourism).

References

1. Website of Maharashtra Pollution control board(www.mpcb.gov.in)
2. "India's top 10 richest temples". www.indiatvnews.com. 10 September 2013. Retrieved 14 December 2019.
3. "The Combined Diary", Installment 156, Sunday, 11 March 2007". www.avatarmeherbaba.org.
4. "Census of India 2001: Data from the 2001 Census, including cities, villages and towns (Provisional)". Census Commission of India. Archived from the original on 16 June 2004. Retrieved 1 November 2008.
5. Hall M.C. (2001), "Trends in Ocean And Coastal Tourism: The End of The Last Frontier?", *Ocean & Coastal Management*, 44, pp. 601-618.
6. Adam, D. (2007) 'Flights Reach Record Levels Despite Warnings over Climate Change', *Guardian*, May 9, p. 3.
7. Allaby, M. (ed.) (1994) *The Concise Oxford Dictionary of Ecology*, Oxford: Oxford University Press.
8. Belle, N. and Bramwell, B. (2005) 'Climate Change and Small Island Tourism: Policy Maker and Industry Perspectives in Barbados', *Journal of Travel Research*, 44: 32-41.
9. Butler, R. (1997) 'The Concept of Carrying Capacity for Tourism Destinations: Dead or Merely Buried?', in Cooper, C. and Wanhill, S. (eds) *Tourism Development: Environmental and Community Issues*, pp. 11-22.
10. Department for International Development (1997) *Tourism, Conservation and Sustainable Development: Comparative Report*, Vol. 1, London: DFID. Douthwaite, R. (1992) *The Growth Illusion*, Bideford, Devon: Green Books. Doyle, T. and McEachern, D. (1998) *Environment and Politics*, London: Routledge.