

## TOURISM AND ITS IMPACT ON ENVIRONMENT: A CRITICAL REVIEW

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### Abstract

*This paper examines the impact of tourism on environment. Conservation of natural resources is one concern, but the immediate concern is to tackle the harm caused by the increasing number of tourists. Environmentalists have insisted on solutions like burning or burying of paper and taking away non degradable polybags to ensure proper disposal of wastes. But such solutions are always easy to suggest and difficult to implement. Even the children there are taught from an early age to keep their surroundings clean and they don't hesitate to pick up the odd piece of garbage on the road and put it in the bin. This realization and seriousness is the need of the day. If this can be achieved then we sure will be able to preserve our country's rich tourism from degradation. Given this backdrop, this paper brings the review in the field of tourism and environmental degradation and suggestions to overcome the issue.*

**Keywords:** Tourism, environment, degradation, waste disposal, pollution

### Introduction

Tourism is travel for predominantly recreational or leisure purposes. According to The World Tourism Organization definition tourists as 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”. In context of globalization international tourism is the largest and most rapidly expanding industry in the world. Many of the most popular tourist destinations depend heavily on the natural environment for their appeal.

According to the World Tourism Organization, 698 million people traveled to a foreign country in 2000, spending more US\$ 478 billion. International tourism receipts combined with passenger transport currently total more than US\$ 575 billion - making tourism the world's number one export earner. Tourism involves the movement of people from their homes to other destinations and accounts for about 50% of traffic movements; to give an indication, the ICAO reported that the number of international air passengers worldwide rose from 88 million in 1972 to 344 million in 1994. From 594 million international travelers in 1996, numbers are forecast to leap to 702 million by next year, and from 698 million international travelers in 2000, numbers are forecast to leap to 1,018 million by 2010 and 1.6 billion by 2020.

One consequence of this increase in air transport is that tourism now accounts for more than 60% of air travel and is therefore responsible for an important share of air emissions and the role of air travel within the industry is also likely to expand and cause

considerable environmental damage and to have knock-on effects on the tourism industry itself. Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO<sub>2</sub>) 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. Currently, aircraft account for around 3% of all emissions globally. The International Panel on Climate Change expects this to increase by up to 7% by 2050. Because emissions from other sectors are also expected to increase, this figure masks the increase in real terms: the actual tonnage of carbon emitted, driven by air traffic increase of 5% per year, will increase by over 75% by 2015. Thus, the problems of environment is growing that has to be brought down to achieve sustainable development.

#### **Tourism and Environment: A Literature Survey**

This section brings the review of literature in the field of tourism and its impact on environment. Discussion would bring some insights to the field of environmental research.

Gabriel Simon Thattil and NimiDev.R. (2005) stated that the lure of emerald green backwaters, swaying palms, uninhibited cottages, rustic charm, exotic wildlife, Ayurvedic health resorts and endless beaches have beckoned throngs of tourists to the South Indian State of Kerala. Kerala's tourism potential lies in its rich culture and unparalleled natural bounty. They again stated that the State of Kerala has a favorable location, climate, rich resources, both natural and human.

Gossling, S., et al (2005) studied the eco-efficiency of tourism. This paper has shown that tourism is not necessarily environmentally more beneficial than other economic activities. The paper uses case studies and indicates that eco-efficiency depends on the source and destination of the vacation, tourists' culture, and the environments chosen for vacation. For the purpose of this article environmental damage per unit of value generation has been chosen as the basis for calculations. It has mentioned that short travel distances are a precondition for sustainability and their analysis reveals that distance and mode of transport are the most important factors influencing eco-efficiency in tourism. Overall, the paper concluded that the eco-efficiency concept can be used to analyze the combined environmental and economic performance of tourism. The concept can help to assess the relative importance of different tourism sectors in terms of environmental impacts and financial value generation. These results provide insights of how to improve its environmental performance in the economically most feasible way. The eco-efficiency concept has also proved to be applicable on very different levels, including day-visits, journeys and destinations. It may be used to evaluate the eco-efficiency of destinations/markets, to identify problematic aspects of a journey (transport, accommodation, or activities), and to reveal differences between different forms of tourism (e.g., adventure-, nature-, eco-, cultural-, beach tourism) or tourist types (e.g. elderly rich, young adventurers, etc.).

Mohan Lal (2005) reported that the design, planning and management of tourism environment requires more than the simplistic adoption of codes and guide lines or industry self-regulation, through valid these strategies should be. Instead, a sustainable tourism industry requires a commitment by all the parties involved in the planning process to sustainable development principles.

Sunil K Kabia (2005) in his study stated the relationship between tourism and environment. He highlighted that tourism relationship with the environment is complex. Given its scale and global extent, it is inevitable that tourism has important environmental impacts. These impacts are related to resource consumption, as well as to pollution and waste generated by tourism activities, including impacts from transports. At the same time, beaches and mountains, rivers, forest and biodiversity make the environment a basic resource upon which the tourism industry depends to thrive and grow and threats to the environment threaten the viability of the tourism industry. Moreover, tourism can contribute to the environmental protection also.

Coombes et al (2008) highlights the biodiversity implications on tourism due to climate change. The climate change impacts on tourism will heighten due to deterioration of coastal vegetation and disturbance of nested birds. This study finds that overall levels of vegetation and diversity are likely to decline; although only by a small amount, if future visitor numbers increase due to warmer and drier weather conditions. The study was conducted in three stages in order to evaluate the biodiversity implications of changes in visitor use due to climate change. First, it assessed levels of visitor use across the different habitats at Holkham and Cley. Second, the authors reviewed the literature to determine the impacts that visitors have on biodiversity for different intensities of use. Finally, the study combined visitor impacts with information regarding the levels of use that habitats receive to assess visitors' current and future impacts on biodiversity. The paper anticipated that the lower levels of trampling observed in saltmarsh protect it from the reduction in biodiversity seen in dunes. It is revealed that greater visitor numbers are likely to increase levels of noise which further disturb shorebirds even if visitors do not directly pass through areas where plover are present.

Daniel, S., J. Dawson and B. Jones (2008) studied the climate change vulnerability of the US Northeast winter recreation- tourism sector. The objective of this study was to provide a broad perspective on the potential vulnerability of the Northeast winter recreation and tourism sector to climate change by examining whether a reliable snow-based recreation product remained viable under a range of climate change scenarios. It examined the vulnerability of the two largest winter recreation industries, snowmobiling and alpine skiing, to four climate change scenarios in the twenty-first century. The majority of the 15 locations examined in this study were projected to have marginal or non-existent snowmobile seasons in 2040-2069 under both lower and higher emission

scenarios. Consequently, the loss of snowmobiling activity and related tourism would appear unavoidable in the following locations if the climate change scenarios projected for 2040-2069 were realized: western New York, north-central Pennsylvania, southeastern New York, south-central Pennsylvania, eastern Pennsylvania, western Massachusetts, southern New Hampshire, and northeastern New York.

Vijaya Kumar and R.Babu (2008) identified that the unstructured development of tourism has brought out adverse impacts on the natural environment which is being the foundation for the tourism industry in Munnar. Over construction (unauthorized) on the rolling grass land ecosystem, lack of waste management techniques, deforestation, maximum utilization of resources, the profit motive, absence of holistic approach of tourism infrastructure development and land use pattern, lack of awareness among the tourism promoters, lack of visitor management technique, exceeding carrying capacity and disappearance of species diversity etc. adversely affect the aesthetic value and quality of this mountain environment that raise the question of sustainable development of tourism in this hill station.

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 lacks 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.

Frick (2010) studied about the impacts of tourism development in the Bulgarian. Black Sea Coast from a political-ecological perspective. The rapid construction of mass-tourism infrastructures in Saint Vlas suddenly brought about changes on the town's social, economic and environmental conditions in the mid-2000s. In many destinations, mass tourism has exploited the natural and social resources and the situation is no different in Saint Vlas. Most locals currently feel that tourism development has so far been a good thing and even though they do not have any role in decision-making. However, those locals

confine complains with the corruption in decision-making bodies. As a result of which, illegal constructions had made much negative impact on the environment.

JussiRamet and Anne Tolvanen (2010) reported that tourism is one of the fast growing industries globally, and within tourism, the nature based tourism is considered to be growing most rapidly. The impacts of tourism are highly diverse. From an ecological standpoint, tourism poses a threat to sensitive environments. Hence, sustainable tourism is a highly contested issue, involving differing values and complex power relations within and between stakeholders and hence may be necessary to identify which principles of sustainability will be achieved through community control and which will be implemented by government.

Vasenina, K. (2013) examined the water pollution impacts due to tourism industries. Water pollution is increasing with domestic, agricultural and industrial activities. Factories are dumping chemicals and waste into the rivers, lakes and oceans. One of the major threats to the environment is nutrient pollution. It is pollution that is being caused by excessive amounts of nutrient in the water. Nutrients might be coming from agricultural runoff into the water. Excess of nutrients might results in hypoxia. Hypoxia is a low oxygen phenomenon. Concentration of dissolved oxygen in the water is so low, that it cannot longer support life. Hypoxia then results in the occurrence of dead zones. Dead zones are areas on the water with no life. Dead zones have been first notice on the Earth in 1970, and they have immensely increased since that time. Here is a recent article that was written about dead zones in the Gulf of Mexico. It mentions that this summer the area of dead zone in the Gulf of Mexico was 5,840 square miles. Disposal of chemicals in the rivers is not sustainable at all and very harmful to the environment. The example of such disposal is China. Water quality standards should be set, and water recycling measures should be taken by all the businesses. It should a rule for a business to recycle water before it decided to dump it into the river. Recycled water will reduce pollution and benefit the environment.

Ai Vuong (2016) examined the Vietnam's tourism and its impact on environment. Given the recent massive fish die-off in Central Vietnam, environmental issues in the country are under more scrutiny than ever. The extent of the impact on the fishing industry and local people is still unknown as scientists, corporations, and civil society are struggling to give a satisfactory explanation. Although the cause of the coastal calamity remains a mystery, the tourism industry has taken note. Tourism in Vietnam relies heavily on exotic, alluring natural sites; without these lush landscapes, the industry will be extremely handicapped. Each month, hundreds of thousands of tourists visit the enchanting limestone karsts of Halong Bay, the mesmerizing terraced rice paddies of Sapa, the mystifying caves of PhongNha, or the jeweled beaches of PhuQuoc. Unfortunately, the expansive, rapid development of hotels, resorts, and cruises, among other projects trying to accommodate

large-scale numbers of visitors, have precipitated monumental environmental effects. The above studies give various problems of tourism led environmental degradation all over the world. This review would help the researcher to bring more research and pave way for sustainable eco-tourism in India.

### Conclusion

Conservation of natural resources is one concern, but the immediate concern is to tackle the harm caused by the increasing number of tourists. Environmentalists have insisted on solutions like burning or burying of paper and taking away non-degradable polybags to ensure proper disposal of wastes. But such solutions are always easy to suggest and difficult to implement. Even the children there are taught from an early age to keep their surroundings clean and they don't hesitate to pick up the odd piece of garbage on the road and put it in the bin. This realization and seriousness is the need of the day. If this can be achieved then we sure will be able to preserve our country's rich tourism from degradation.

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