



TOURISM AND ENVIRONMENTAL DEGRADATION: A THREAT TO WORLD'S ECONOMIC DEVELOPMENT

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ABSTRACT

Nowadays tourism plays an important role in the economic development of our world. The development of tourism has two sides-on the one side it conserves the environment and on the other it became threat to the environment. The objective of this paper is to understand the negative impacts of tourism on environment. A quality environment both natural and manmade is an essential ingredient of tourism that is without it the existence of tourism is not possible. But the relationship of tourism with environment is very complex. Many of these negative impacts are connected with the construction of general infrastructure and tourism facilities. These impacts upon the environment can gradually destroy the environmental resources on which it depends. To reduce environmental degradation caused by tourism, we must emphasise the importance to sustainability and eco-friendly approaches, because sustainability plays an important role in the economic development of a region. Then only we can achieve development of the economy without damaging our environment.

KEYWORDS: Tourism, Environmental degradation, Environmental impact, Sustainable tourism, Economic development.

INTRODUCTION

Tourism has emerged as a leading economic power everywhere in the world. It is reputed to be the world largest industry and known as the smokeless industry. It is a service based industry which comprises of numerous tangible and intangible elements. The tangible elements comprises of transportation, food and accommodation, souvenirs and other components of hospitality industry. On the other the important intangible elements related to the purpose of tourist such as education, relaxation, opportunity to meet new people, experience other cultures, to have an adventure or simply to do something different. According to World Tourism Organization, "tourism comprises the activities of persons travelling to and staying 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".

Tourism's potential in the global context remains far from realized. According to the WTTC estimates tourism generates \$449.4 billion in economic activity \$65.5 billion as tax revenues. In spite of this, it employs 10.6 per cent of the global work force and contributes 11.6 per cent of the global GDP. It accounts for 10.9 per cent of consumer spending with \$ 3.4 trillion gross output and 10.7 per cent of the capital investment in the world.

In the tourism rich countries natural resource depletion and environmental degradations associated with tourism activities are considered as serious issues. So the most complicated challenge for different level governments includes the management of natural resources to reduce the natural resource depletion and environmental degradations. The reality is that most tourists choose to keep relatively high pattern of consumption and as a result waste generation in the destination where they reached. So it became a serious



dilemma for countries and regions without the suitable way for protecting their natural resources and local ecosystem from the stress of mass tourism.

Load on natural resources, pollution, waste generation and damage to ecosystem are the main environmental impacts of tourism. The most tourism driven economies are increasingly troubled with the environmental and socio - cultural problems associated with unsustainable tourism. Thus reduce its environmental impact and more sustainable management of natural resources to encourage sustainable tourism development became the increasing concern of the economies. The negative impact of tourism upon the environment weakens not only the basic resources for tourism but also non-tourist economic activities. So the most serious threat to tourism in the world is the uncontrolled tourism expansion which ultimately leads to environmental degradation.

OBJECTIVE OF THE STUDY

To understand the negative impact created by tourism on environment.

RESEARCH METHODOLOGY

The study has been conducted mainly on the basis of literature survey and secondary information. Various seminar papers and summary of discussion in those seminars, taskforce reports of research organization, journals and some periodicals on environmental impacts of tourism have been surveyed for the purpose of the study.

TOURISM AND ENVIRONMENT

Natural as well as manmade environment with quality is essential for the existence of tourism. But the relationship between tourism and environment is multifaceted and its impact is double sided. Tourism is potential to generate positive effects on the environment by contributing to the environmental protection and conservation. That is, through tourism understanding of environmental values can be introduced in the minds of people. It can also serve as a tool to finance protection of natural regions and augment their monetary importance. In contrast to that we can say that tourism can regularly wipe out the environmental resources on which it depends. Tourism is one of the major tools for economic development in most of the countries. But if it is not properly planned it has negative effects on the biodiversity and pristine environments. That is it involves a lot of activities which have adverse environmental effects. It also results in the misuse of natural resources such as freshwater, forests and marine life.

Every environment has its own carrying capacity.

When the number of tourists increased above this capacity it affects the balanced position of environment. That means uncontrolled conventional tourism creates potential threats to the natural environment. Besides these, the adverse effects are also related to the infrastructure development like construction of restaurants, shops, roads, airports, resorts, golf courses and marinas. These potential threats include enormous pressure on an area and lead to impacts such as natural habitat loss, soil erosion, increased pressure on endangered species, increased pollution, heightened vulnerability to forest fires and discharges into the sea. Thus the major negative impacts by tourism includes

- ✦ destruction of natural habitats
- ✦ decrease in air and water quality
- ✦ decrease in landscape characteristics and quality
- ✦ decrease in sensitivity of ecosystems
- ✦ decrease in abundance and diversity of flora and fauna
- ✦ soil erosion and landslide
- ✦ displacement and change of migration patterns of fauna
- ✦ decrease in the aesthetics of the area
- ✦ noise pollution, overcrowding and traffic jam in the area
- ✦ disruption to local people's life style and living culture
- ✦ disturbance of local cultural significant sites
- ✦ lose of traditional knowledge, cultural value and heritage
- ✦ effect on social pathology (increase in crime and associated activities)
- ✦ host community and eco tourists are in conflict causing dissatisfaction
- ✦ distortion and exploitation of resources for money
- ✦ local authorities have less control over development activities
- ✦ lack of sufficient infrastructure
- ✦ economic leakages to outside business owners
- ✦ low productivity of renewable and non renewable resources and poor productivity of tourism business
- ✦ high incoming outmigration of local people
- ✦ expensive place to live and increase in the cost of living
- ✦ seasonality of income or employment causing unstable local economy

Out of these major negative impacts we can point out the main environmental impacts as

- I. Depletion of natural resources
- II. Pollution
- III. Physical impacts

I. DEPLETION OF NATURAL RESOURCES

Natural resource depletion means consumption of resources faster than it can be replaced. This means use of the resources beyond their rate of replacement. In the case of tourism resource depletion occurs when the scarce resources are exceedingly consumed. The important types of depletion of natural resources are:

- I. a. Water Resource Depletion:-
- I. b. Local Resources Depletion and
- I. c. Land degradation

I. a. Water Resource Depletion:-

The most important natural resource is fresh water. Tourism industry is also using water for a lot of purposes. Sometimes it became over uses for swimming pools, personal use of water by tourists, golf courses and hotels. This results in deficiency and degradation of water supplies and generating waste water in a greater volume. Now golf tourism got wide popularity and a lot of golf courses has originated. It required a huge volume of water every day. So the maintenance of golf course also leads to water resource depletion. Golf courses are worsening the actual benefit of the tourism because they are more frequently located in or near protected areas or regions where resources are limited.

I. b. Local Resources Depletion:-

Tourism creates great pressure on local resources when they are in limited supply. Greater extraction and transport of these resources like energy, food and other raw materials aggravates the physical impacts associated with their exploitation. Further, high intensity of tourists in the high season place huge demand upon the resources to meet the high expectations of the tourists for proper heating, hot water, etc.

I. c. Land degradation:-

Major land resources are minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Increased construction of tourism and recreational facilities exert high pressure on these resources and on beautiful sceneries. Construction of tourism and recreational facilities include use of land for accommodation and other building materials, infrastructure provisions like construction of roads, dams, bridges and so on. Negative impact of tourism upon the forests is in the form of deforestation caused by fuel wood collection and land

clearing. For example trekking tourist use four to five kilograms of wood a day.

II. POLLUTION

As any other industry tourism can cause the same forms of pollution like solid waste and littering, air emissions, oil and chemicals, noise and releases of sewage. The major types of pollution include:

- II. a. Air pollution
- II. b. Noise Pollution
- II. c. Solid waste and Littering
- II. d. Sewage
- II. e. Aesthetic Pollution

II. a. Air pollution:-

Air, road, rail and water transportation is rising because of the increased number of tourists and their greater mobility. The number of international air passengers worldwide growth rate was six per cent in 2014(www.statista.com). Out of these total air passengers 60 per cent was constituted by the tourists. Consequently tourism became a major cause for air pollution. One study estimated that a single transatlantic return flight emits almost half the CO₂ emissions produced by all other sources (lighting, heating, car use, etc.) consumed by an average person yearly.

These transportation emissions and emissions from energy production are connected to global warming, acid rain and photochemical pollution. Air pollution from tourist transportation has impacts not only on the global level but also on local air pollution. For example, tour buses often leave their motors running for hours while the tourists go out for an excursion. This is because especially in very hot or cold countries the tour operators want to return their customers to a comfortably air-conditioned bus.

II. b. Noise Pollution:-

Noise pollution is now a growing problem of modern life. Noise pollution originates from airplanes, cars, buses and other vehicles and also from the recreational vehicles such as snowmobiles and jet skis. Noise pollution causes to stress, annoyance and even hearing loss for the humans and sufferings to wildlife, particularly in sensitive areas. For example, animals are forced to change their natural activity patterns because of the sound generated by snowmobiles.

II. c. Solid waste and Littering:-

Waste disposal is a severe problem in the areas where tourist activities are very high and famous for charming natural attractions. Like that improper disposal became a major threat to the natural environments of rivers, roadsides and scenic areas. For example, above

70,000 tons of waste are approximately produced by cruise ships in the Caribbean. Physical appearance of the water and shorelines are degrading by solid waste and littering and also cause the death of marine animals.

Trekking tourists generate large amount of wastes in mountain areas. Oxygen cylinders, garbage and even camping equipments are left by the tourists where they visited on expedition. This type of practices results in the degradation of the environment and causing damage in remote areas that have little garbage collection and disposal facilities. For example, Peruvian Andes and Nepal trails have been nicknamed as “Coca-Cola trail” and “Toilet paper trail” because of the frequent visit of the tourists.

II. d. Sewage:-

Increased sewage pollution was contributed by the construction of hotels, recreation and other facilities. Flora and fauna in the tourist attractions surrounded by seas and lakes are damaged by the polluted waste water. In the same way sewage runoff causes damage to coral reefs by stimulating the growth of algae. Growth of algae hampers the coral’s ability to survive by covering the filter-feeding corals. Variations in salinity and siltation also have extensive impacts on coastal environments by threatening the health of humans and animals.

II. e. Aesthetic Pollution:-

Often tourism fails to incorporate its construction with the geography and indigenous architectural style of the destination. The construction of huge and dominating resorts with contrasting design became inappropriate in the natural environment. Besides it may clash with the indigenous structural design. The sprawling constructions related to tourism include tourism facilities themselves and supporting infrastructure (employee housing, roads, waste disposal, service areas, and parking). These sprawl constructions in the scenic routes, coastlines and valleys has facilitated by the lack of land-use planning and building regulations in many destinations.

III. PHYSICAL IMPACTS

Transitional zones which are attractive in landscape sites include riversides, sandy beaches, mountain tops and slopes and lakes. They are characterized by highly species-rich ecosystems. Degradation of these types of ecosystems is called typical physical impacts. The ecologically fragile areas like wetlands, alpine regions, mangroves, sea grass beds, coral reefs and rain forests are highly threatened with degradation. These threats are severe because these places are very attractive to both the developers and tourists. Thus physical impacts are caused by ongoing tourist activities and enduring changes in local economies and ecologies along with tourism-

related land clearing and construction. The major physical impacts of tourism development are:

III. a. Construction Activities and Infrastructure Development

III. b. Deforestation and Intensified or Unsustainable use of Land

III. c. Marina Development

III. a. Construction Activities and Infrastructure Development:-

The major tourism related facilities are accommodation, restaurants, recreation facilities and water supplies. The development of these facilities take part beach and sand dune erosion, soil erosion, sand mining and extensive paving. Adding up to this, road and airport construction can lead to land degradation and loss of wildlife habitats and deterioration of scenery.

III. b. Deforestation and Intensified or Unsustainable use of Land:-

Ski resorts and other accommodation facilities are often constructed by clearing forest land. Likewise, coastal wetlands are often exhausted and filled because of the shortage of more suitable sites for creation of tourism facilities and infrastructure. Finally all these deeds cause to rigorous interruption and erosion of the local ecosystem and even destruction in the long term.

III. c. Marina Development:-

Variations in currents and coastlines are caused by the development of marinas and breakwaters. Extraction of sand affects the mangroves, coral reefs and neighbourhood forests, which finally leads to erosion and destruction of habitats. Similarly, habitats and land-sea connections are disrupted by the overbuilding and extensive paving of sea shores. Evidences shows that increased sediments in the water, ship groundings, overfishing, fishing with poisons and explosives, shoreline development, trampling by tourists and divers and pollution from sewage etc. caused the destruction of coral habitat.

IMPLIMENTING SUSTAINABLE AND ECO TOURISM

The existence of tourism industry is not possible without the help of natural environment. A lot of tourist attractions are directly related to the natural environment. If this natural environment is deteriorated then the tourist will not be interested to visit that place. As a result the conservation of natural environment is very essential for the tourism industry. In the case of marine based tourist activities also lack of proper control may have environmental effects and should be avoided. If the environment is more effectively managed then it may result

in the sustainable tourism both in terms of financial and social benefits. As a result sustainable tourism and ecotourism implementation should be encouraged. The measures which help the sustainable tourism and ecotourism are limited to the conservation of the natural biodiversity, overall relief of environmental pressure caused by tourism, socio-economic benefits and coastal development. So in order to ensure sustainability and further development of the industry the existing environmental impacts need to be addressed in an efficient way. Through this we can reduce the negative impacts on resources and thereby we can give more importance to sustainability and eco-friendly approaches to the sector. Maintenance of sustainable tourism is very important because it has a role in establishing potential development of the region. We must plan to balance the use of resources to avoid negative effects which reduce visitor satisfaction and adversely affect the local society, economy and culture. Sometimes it may be difficult but are essential for sustainable tourism. Thus tourism sector requires spending in the maintenance of the natural environment.

Tourism can become a positive force for conservation, environmental protection and economic development if it is properly planned. Development of tourism is double sided. On the one side it encourages the preservation of socio-cultural authenticity of host communities and on the other erodes traditional values by introducing foreign elements which are in conflict with the cultural, historical and religious heritage of the community. Therefore, this paradox lies in the tension between our longing to take a trip to the world and the need to offer the most advantages with the least harm. Many well intentioned people in the public and private sector are hard at work looking for solutions that will provide viable, long-term socio-economic benefits for tourist areas. Negative impacts of tourism can be reduced and avoided by effective use and implementation of the tool of Environmental Assessments (EAs). In addition to that environmental evaluations and usual monitoring are equally significant in the environmental issues. Furthermore, from the official side support of government especially local government and NGOs are necessary.

Since the mid 1990s nature based tourism got its importance in the global level. It emerged as a human activity rather than adventure travel and it is recognized as a tool for sustainable development. The major principles of nature tourism includes education about the area, respect for cultural, social and political aspects of local people, enhancement of local community and assistance

in development, profit from the tourism industry providing boost to the local economy and sustainable use of resources and avoidance of degradation. But ecotourism stands out within the vicinity of nature tourism by the points that travel that brings benefits to local host communities, travel to a natural area, travel that leads to better understanding of the natural or cultural environment travelled and travel that supports the conservation of biodiversity. Because these four components restricts the tourism products included in ecotourism. Hence nature tourism needs the interactions and partnerships with government tourism and resource management agencies, NGOs, the private sector and community groups. Also the integration of nature tourism into international strategies for sustainable development is needed. In this situation the United Nations Environment Programme has been appointed a Commission on Sustainable Development as the Interagency Coordinator or lead agency responsible for the implementation of Agenda 21 issues on tourism.

To contribute to this, there is a need for better capacity building to ensure sustainable outcomes. Higher capacity to manage the resources will ensure that the three principles of sustainability (which are social, economic, and ecological considerations), are all underpinned and controlled within a broader framework of governance. Above all, there is a need for better management practices. Measures must be put in place to reduce the impact of tourism on the environments in an economy.

FINDINGS

The tourism industry can contribute to conservation of environment through direct financial contributions, environment awareness rising and protection and preservation.

a. Direct Financial Contributions:-

Sensitive areas and habitat can be conserved through the tourism activities. For that purpose revenue from park-entrance fees and similar sources can be allocated. So, Special fees for park maintenance and protection can be collected from tourists or tour operators.

b. Environmental Awareness Rising:-

Tourism brings people into closer contact with nature and environment. As a result tourism can have the possibility to increase public appreciation of the environment and to extend alertness of environmental problems. This may intensify the awareness of the value of nature and lead to environmentally conscious behavior and activities to preserve the environment.

c. Protection and Preservation:-

Tourism can significantly contribute to environmental protection, conservation and restoration of biological diversity and sustainable use of natural resources. For tourism purpose pristine sites and natural areas can be identified as valuable because of their attractiveness. The desires to maintain this attractiveness can finally lead to the creation of national parks and wild life sanctuaries.

CONCLUSION

The impact of tourism is double sided. On the one side it is a source of international understanding, peace and friendship. On the other it is a cause of environmental destruction, a physical attack on people's privacy, dignity and authenticity and a destroyer and corrupter of local cultures. Sometimes tourism creates a catastrophe situation in the areas and this condition can extinguish local cooperation and communication. Therefore each person should be conscious about the negative impacts of tourism. And to reduce these proper steps should be taken by the government especially local government and international authorities. Thus to keep away from the negative impacts tourism needs to be managed, planned and undertaken in a way that is environmentally sustainable, socially beneficial and economic viable.

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