

Impact of tourism on environment a case for Manipur state: North East India

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Abstract: Manipur the land of natural beauty, there are so many tourist places created by nature in Manipur which can be Ecotourism places. Ecotourism means management of tourism and conservation of nature in a way so as to maintain a fine balance between requirement of tourism and ecology on the one hand and need of the local communities for jobs, new skills and income generating employment. Though small in area and population, the state is well known for its landscape, green valleys, blue hills and mosaic of a rich cultural heritage. There are many tourist centers and sites in Manipur, which can result in a variety of natural ecotourism and a huge potential of the state. These resources includes natural sites, wildlife & garden sites, cultural and historical sites, lake sites, archeological sites, dam & project sites, adventure sites and waterfall sites. Here this paper shows the benefits of ecotourism in Manipur.

Index Terms: Pollution, Manipur, Wild Life, potential, environment, conservation

I. INTRODUCTION

In this paper we will discuss about the negative and positive impact give by tourism to the environment of the state. With the rise in sustainable tourism and an increased number of initiatives for being environmentally friendly, tourists and stakeholders alike are now recognizing the importance of environmental management in the tourism industry. In this article, we will discuss about the environmental impacts of tourism in the state.

The quality of the environment, both natural and man-made, is essential to tourism. However, tourism's relationship with the environment is complex and many activities can have adverse environmental effects if careful tourism planning and management is not undertaken. It will be ironic really, that tourism often destroys the very things that it relies on. Many of the negative environmental impacts that result from tourism are related with the construction of general infrastructure such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. The negative impacts of tourism development can gradually destroy the environmental resources on which it depends.

It's not all are negative, however. Tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is an important means to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance.

In this article we will discuss how we can both protect and destroy the environment through tourism.



Fig 1. Tourism map of Manipur

II. REVIEW OF LITERATURE

The latest trend in the tourism industry is to combine preserving the natural world and sustaining the well-being of the human cultures that inhabit it. (Mowforth and Munt, 2003) In general, ecotourism differs from traditional tourism in two main respects: first, ecotourism openly promotes environmentally friendly travel and seeks to ensure that visitors do not disturb the natural environment of flora and fauna, nor do they leave behind rubbish and hazardous materials, which can disrupt the delicate ecosystem. A second aspect of ecotourism is that it seeks to promote “sustainable” tourism. Tourism that destroys the natural environment, or that leads to the disappearances of local human cultures and values is not compatible with ecotourism.

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.

Vasenina, K. (2013) examined the water pollution impacts due to tourism industries. Water pollution is increasing with domestic, agricultural and industrial activities.

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.

Frick (2010) studied about the impacts of tourism development in the Bulgarian. The rapid construction of mass-tourism infrastructures 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. 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.

Sarkar (2009) discussed the negative environmental impact on the nature-based tourism resources in the Cameron Highlands in Malaysia. He found that 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.

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.

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.

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.

III. METHODOLOGY

The data for study in this article has been based on secondary information. The data has been collected from various sources like, books, magazines, research papers, journals and website.

The study of environmental impact by tourism can be broadly divided into two. They are

- A. Positive impact of tourism in environment
- B. Negative impact of tourism in environment

A. *Positive impact of tourism in environment*

- i. Protection and Preservation of Environment

Tourism can play a significant role in contributing for the protection of environment, conserving and restoring different biological diversity and sustainable use of natural resources. Due to presence of attractiveness, pristine sites and natural areas are identified as valuable and the need to keep the attraction alive can motivate in creation of national parks and wildlife parks. For example, keibul Lamjao National Park in Bishupur district where the Sangai deer lives and Shirui Kasung hill range of Ukhrul, the place where the Shirui Lily blooms. In India, new laws and regulations have been enacted to preserve the forest and to protect native species by the government of India. 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.



Fig 2. Shirui Lily at Shirui Kasung hill



Fig 3. Sangai at keibul Lamjao

ii. Public awareness about environment

Tourism has immense potentiality to increase public appreciation of the environment and also spreading awareness for various environmental problems when it brings people into closer contact with nature and the environment. This interaction definitely will increase awareness of the value and importance of nature among the community and lead to environmentally conscious behaviour and will force them to involve in various activities to preserve the environment.

iii. Increase in revenue of government

Like Indian government who collects money in more far-reaching and indirect ways that are not linked to specific parks or conservation areas. The funds collected through User fees, income taxes, taxes on sales or rental of recreation equipment, and license fees for activities such as rafting and fishing helps immensely to the Indian government to manage natural resources. The funds which are collected from various taxes can be used for the betterment of the environment by implementation of different conservation programs and other associated activities like for the maintenance of the park and paying salaries to park ranger

B. *Negative impact of tourism in environment*

i. Depletion of Natural Resources

Tourism development can put pressure on natural resources when it increases consumption in areas where resources are already scarce.

- a. *Water resources*: One of the most critical natural resources is water and especially fresh water. In tourism industry generally we can see overuse of water in hotels, swimming pools, golf courses and personal use of water by tourists. This lead to water shortages and degradation of water supplies, as well as creation of a greater volume of waste. In different dryer states the issue of water scarcity is of particular concern.
- b. *Local resources*: Great pressure can be created by tourism on local resources like food, energy 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. Due to the seasonal character of the industry, many destinations have ten times more inhabitants in the high season as in the low season. During peak seasons often high demand is placed upon these resources to meet the high expectations tourists often have (proper heating, hot water, etc.).
- c. *Land degradation*: Important land resources include minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Due to Increase of tourism and its allied activities at the tourist destinations the recreational facilities has increased the pressure on these resources and on scenic landscapes. There can be seen of tourism impact directly 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 worst sufferer is forest resource in the form of deforestation caused by fuel wood collection and land clearing e.g. the trekking in the Hill areas.



Fig 4. Deforestation for fuel wood



Fig 5. Deforestation for construction

ii. 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.

- 1 *Air and Noise Pollution:* Transport by air, road, and rail is continuously increasing in response to the rising number of tourist activities in India. Due to increased emissions of GHG from energy production and use are linked to acid rain, global warming and photochemical pollution. The impacts on the global level can be seen especially from air pollution created by tourist lead to increase of 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. For example, tour buses often leave their engines running for hours while the tourists go out for an excursion because they want to return to a comfortably air-conditioned bus.
- 2 *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 hill districts of Manipur, trekking tourists generate a great deal of waste. Tourists on expedition leave behind their garbage. Such practices degrade the environment particularly in remote areas because they have very few garbage collection or disposal facilities. Noise pollution from 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.



Fig 6. Air and noise pollution



Fig 7. Waste and littering

- 3 *Sewage:* Due to construction of hotels, recreation and other facilities often leads to increased sewage pollution. Wastewater generated through tourism activities has polluted already various rivers and lakes surrounding tourist attractions, damaged heavily the flora and fauna. Sewage runoff causes serious damage to aquatic lives because it stimulates the growth of algae, which hindering their ability to survive. This wage pollution can threaten the health of humans as well as animals.

iii. 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 which are present in the state, characterized by species rich ecosystems. Because of tourism leisure activities more and more habitat has been degraded. For example, wildlife viewing can bring about stress for the animals and alter their natural behaviour 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.

IV. CONCLUSION

There is vast potentiality of tourism industry in various parts of the world because it is one of the fastest growing industry when it is compared with other industries which are generating employment and earning large amount of foreign exchange besides giving a fillip to the country's overall economic and social development. But there is a need of lot more to be done. More emphasis should be given on the concept Eco-tourism. Eco-tourism needed to be implemented in different parts of the world and if it would happen then it would help immensely in conserving, preserving and sustaining world's natural and cultural environments. Tourism need to be developed in such a way that it accommodates and entertains visitors in a way that is minimally intrusive or destructive to the environment and sustains & supports the native cultures in the locations it is operating in. Moreover, since tourism is a multi-dimensional activity, and basically a service industry, there is utmost importance for both Central and state government as well as those are in private sectors and also actively involved involuntary work required to become active partners in the Endeavour to attain sustainable growth in tourism industry.

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