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LOKTAK LAKE AND ECOTOURISM PROSPECTS

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ABSTRACT

As ecotourism is a new approach in tourism, greater emphasis is being laid on it with a view to appreciate the cultural and natural history of the environment with special care to preserve and protect the natural resources and not to disturb the ecosystem. Ecotourism may be regarded as a vital means for generating employment, income, and revenue of the State, preserving cultural heritage, improving overall environment and facilitating growth of a sound and fair Social order. Manipur, being a land of enchanting natural beauties has abundant potentials of ecotourism. The Loktak Lake of Manipur, the largest fresh water lake in North-East India, situated at Moirang, about 48 km. away from Imphal, enriched with her bountiful ingredients of nature like various aquatic flora and fauna, her cultural aesthetics and historical significance is one of the foremost ecotourism destinations in Manipur to cater to the eco tourists and nature lovers. This paper attempts to highlight the ecotourism potentials in the Loktak Lake and its surrounding areas for the promotion of ecotourism in the State to achieve Socio-economic benefits as well as the preservation of nature, environment and cultural heritage.

INTRODUCTION

Tourism is an ever growing phenomenon expanded all over the world. It is one of the highest income earning industries in the world. Ecotourism, a major branch of rural tourism is a nature based tourism in which visiting programmes are made to natural areas to enjoy the scenic beauties of nature taking care not to disturb the integrity of the ecosystem. Thus ecotourism can be defined as a nature based tourism programme, ecologically sustainable, in which education and interpretation is a major constituent and where local people are benefitted. (Eco Tourism in India a, n.d.). Ecotourism creates a lot of advantages to the people. It can generate employment opportunities, and sustainable market economy. Besides, preservation of traditional or cultural heritage, conservation of biodiversity, exploration of virgin natural beauties and promotion of sustainable tourism development are the main opportunities provided by ecotourism. (Sunita and Sulochana, 2014). Manipur a land of enchanting beauties is a small state lying on the North East Frontier of India far beyond the Brahmaputra and the Ganges.

Surrounded by a number of hill ranges on all sides, she is one of the beauty spots on the earth. Bewitched by her beauty, the Japanese soldiers during the Second World War described her as 'Takane No Hana', which literally meant, "a flower on the lofty heights" (Evans and Brett, 1962). This beautiful and unique region is enriched with a number of ecotourism potentials which attracted many tourists from inside and outside the country. Rather than her natural charms, Manipur is proud of being the sports factory of India, her unique historical significance and bountiful essence of cultural heritage. Adding more to the beauty of Manipur, Loktak Lake the largest fresh water lake in North East India, shines like a spotless mirror among the blue hillocks at the centre of the State.

MATERIALS AND METHODS

The present paper is based on previous research works available on websites, relevant journals of N.E. India as well as local dailies of the State, books, documents, magazines etc.

Interview methods and field study are also done whenever necessary

The broad objectives of the Study are:

- to explore the different potentials of ecotourism in the Loktak Lake.
- to point out the main factors for creating threats in the ecosystem of Loktak Lake and also to highlight the basic innovative plans undertaken by the central and State Govt. as well as the Civil societies for the development of Loktak Lake and promotion of tourism industry in and around the lake.
- to highlight the main Strategies for the development of Loktak Lake and promotion of ecotourism in the Lake as well.

RESULTS AND DISCUSSIONS

Background and facets of Loktak Lake

Abundant sources and folk elements such as different legends, mythological accounts, folktales and puyas or ancient literary accounts throw a flood of light regarding the origin of the Loktak Lake. Ancient text of Manipur, viz. Thangjing Chingoirol, Moirang Sayol, Kanglei Lamthon, Kege Pung Ngangoi Lammitlon etc. reflect different aspects of the Lake including the unexplored sites of the lake, its holy places, beautiful hillocks, origin of the word 'Loktak' and the cultural aesthetics of the lake. The stories of Moirang kangleirol, which have been inseparable ingredients of Manipur history, culture and civilization, are closely associated with the Loktak Lake. The etymology of Loktak is Lok = Stream and Tak= the end, meaning the journey end of several streams and rivulets (Gajananda and Sundari, n.d). It is situated at Moirang about 48 km from Imphal, a place once famous for her pristine glory, unique cultural heritage and historical importance. The Lake covers an area of about 286 sq. Km at an elevation of 768.5 m located between 93.45 to 93.55 E. Longitude and 24.25 to 24.42 N. Latitude. (Loktak Lake a, n.d.)



Source : <https://www.epao.nic.com>

Loktak lake

The Lake is unanimously the meeting point of different streams and rivulets from different hill and land areas of Manipur particularly from the Western hill ranges of the State, like Koubru, Karong, Kangpokpi, Ngaprum Chingjel, Laimaton and Thangjing hills (Shamungou, 2011).

The major streams and rivulets which directly or indirectly drain into the Loktak Lake are the Nambul, the Nambol, the Thongjaorok, the Awang Khujairok the Awang Kharok, the Ningthoukhong, the Potsangbam, the Oinam, the Keinou and the Irulok (Loktak lake b: n.d.) There are fourteen different hillocks appearing as islands in the southern portion of the Lake. Among these Sendra, Ithing, Karang, Thanga are worth mentioning. The Lake is also the only floating lake in the world due to the floating phumdis, heterogeneous mass of vegetation, soil and organic matters at various stages of decomposition on it. They cover, a substantial part of the lake area and the largest single mass of Phumdi is in the southeastern part of the lake, covering an area of 40 sq. km. This mass constitutes the world's largest floating park, namely Keibul Lamjao National park. The Park was formed to preserve the endangered Eld's deer subspecies, called Sangai (Cervus eldi eldi) also known as the Dancing deer of Manipuri.

Potentials of Ecotourism in the Loktak Lake

Lakes are the most valuable gifts of nature which attract enormous numbers of tourist Lake tourism in India is not new as there are many beautiful lakes like Dal Lake in Kashmir and enchanting Mughal Gardens around it. Lakes at Ooty and Kodai Canal, Nakki Lake in Mt. Abu, Wenna Lake in Mahabaleshwar, Nainital and Bhimtal in Uttarakhand, Jaisamand and Rajsamand Lakes in Udaipur, Nal Sarovar, a natural lake in Gujarat etc. are some of the well-known lakes in India captivating a large number of tourists every year (Achouba a, 2013)

Loktak Lake becomes a part and parcel of the life of Manipuris in terms of its socio economic value, environment, cultural tourism, habitats of numerous waterfowls, plants, animals, fishes, dynamic ecological system and Potential natural resources. Besides, from the eco tourism viewpoint, the places in and around the Loktak are a State tourism asset. With special reference to its fauna, there are 57 species of water birds and another 14 species of wetland associated birds inclusive of 28 species of migratory water fowl (most migrating from different parts of the northern hemispheres beyond the Himalayas). Also recorded were 425 species of animals, 249 vertebrates and 176 invertebrates. The list includes rare animals like the Indian python, Sambhar and barking deer, (Loktak Lake c, n.d.) in and around the lake. On the Northern sides of Keibul Lamjao, beautiful hillocks, viz. Chingjao, Pabotching and Toyaching are standing still where Sangai Kharsha and other species of rare animals take refuge from early historical times. It is said that Sangai loves to live on phumdis. Phumdis are a mixed variety of water weeds & other herbivore plants species covering most part of water surface. The main components for forming the phumdis are phragmiteskarka (Tou) Singut (Manipuri) Saccharumlatifolia (Ishingkambong) Saccharumprocerum (Singnang), etc. Phumdis can support the weight of large mammals floating all over the Lake. (Babycha a, 2015). Keibul Lamjao National park is open for all tourists and the shortest route from Imphal is around 1 hour journey from Imphal accessible by private vehicles and local transport services.

Besides the national park the islands of Sendra and Phubala which attract numerous visitors are another destination for tourism in the Loktak Lake. The Sendra Tourist Home on the island with an attached Cafeteria in the middle of the lake is an ideal tourist spot.



Source : <https://www.epao.nic.com>

The visitors get a bird's eye view of life on the lake - the small islands that are actually floating phumdis on which the inhabitants live. Thanga and Karang are also becoming another notable tourist centres of Manipur as they stand now as the "Thanga Karang", small islands surrounded on all sides by the fresh water. Local Villagers use locally made boats or Heenaos to connect with Karang- an island enriched with natural beauties and phumdis. It is said that the best season to visit the tourist centers of Loktak Lake particularly the Keibul Lamjao is between October and February. Since early historical times tourism in the Loktak Lake was a recreation and pastime of Manipuri Kings. References are abundantly found in this regard in the Royal Chronicle Cheitharol Kumbaba (Iboonghal and Khelchandra : 1989).



Source : <https://www.epao.nic.com>

Sangai (Brow Antlered Deer)

Threats in the Ecosystem of Loktak Lake

The lake and its precincts have been facing serious problems due to loss of vegetal cover in the catchment area and construction of Ithai Barrage. Deforestation and shifting cultivation in the catchment area have accelerated the process of soil erosion thereby resulting in the lake's shrinkage due to siltation. The annual silt flow into the lake is estimated to be 3,36,325 tons. Besides, the nutrients from catchment area and domestic sewage from Imphal City carried by Nambul River are directly composited into the lake thereby resulting in pollution of water and encouraging the growth of water

hyacinth and phumdis. Rather than this it disturbs navigation and other traditional practices in the lake. The construction of Ithai Barrage resulted in the proliferation of Phumdis in the Lake to an alarming situation. It has adverse effect on the biodiversity and overall fish productivity of the lake. About 35 number of fishes like Ngaton (Cirrhines Reba), Ngaril Leina (Anguilla Bangalensis), Ngawa Arangbi (Aspido paria morar), Ngawa (Barilius), Ngatin (L. Panguisia), Ngara (Tor progenices) etc. had disappeared due to the blockage of migratory routes of these fishes from the Chindwin River to the Imphal Valley. (Arunkumar, 1993). Besides, as the thickness of the Phumdis becoming thinner, the survival of Sangai deer becomes unpredictable now a day. With the phumdis becoming thinner, the hoofs of the limbs of Sangai get stuck in the marsh thereby resulting in their drowning (Tombi, 1993). The population of a number of economic plants and major food plants have been decreased which becomes a factor for starvation conditions of Sangai Deer. Due to these factors, the world famous Dancing deer of the State is on the brink of extinction. The economy of poor inhabitants in and around the Lake also begins to degrade due to the extinction of natural resources of the lake as they have been depending on the lake resources for their livelihood. In addition to this, hazardous substances such as DDT, PCB's, greases, plastic, metallic waste, oil and oil products brought by the rivers and used by the inhabitants of the Lake make the Lake not only a polluted water body but also adversely affected upon the species of flora & fauna and even human beings. Incidents of floating dead fishes on the surface of the lake in large numbers are very frequent in these recent months.

Development Policies

The Lake plays an important role in the economy of Manipur as it has been a source of water for irrigation and drinking purposes. Besides the valley would be suffered frequent floods during rainy season and draught during the dry season if there were not such a lake in the State. In view of its importance in the socio economic life of the people, it is considered as the Life line of Manipur (Achouba b, 2011). The fruits of Heikak (Trapa bispinosa), (Thangjing) Eurayle Ferox, Loklei (Hedychium spicatum) etc. are the major sources of livelihood

for thousands of people, which are the products of the lake. Thus, in terms of its socio-economic potential, and other important values, the Lake is becoming indispensable not only to the people of Manipur but also of the world. The first International concern of this lake was in the year, 1990 in which the Convention of Wetlands of International Importance drafted at the Iranian City of Ramsar (1971) gives full emphasis on the Loktak Lake for its particular characteristics (Gajananda and Sundari, n.d.). Besides, the Manipur Loktak Lake (Protection) Act 2006 (Manipur Act 3 of 2006) was passed with the objective to provide for administration, control, protection, improvement, of the Loktak Lake... (Loktak Lake d: n.d.) Moreover, a Project on Sustainable Development & Water Resources Management of Loktak Lake (SDWRML) jointly formulated by Wetlands International South Asia (WISA) & Loktak Development Authority was initiated in 1997 to address the root cause, problems & development strategies for sustainable management of the lake, with financial support provided by India Canada Environmental Facilities. L.D.A. & India Canada Environmental Facility have brought out a publication, 'Atlas of Loktak Lake' in 2004 that presents information on ecological, hydrological & Socio-economic aspects of this Wetland of International Importance in India. In 2006, Ministry of development of N.E. region has sanctioned Rs. 41.00 crores recently for management and development of Loktak Lake and removal of phumdi and improvement of catchment areas are being carried out continuously by LDA (Loktak Lake, Rain water Harvesting, n.d.).

New development ventures have also been adopted to promote wide scale tourism activity in Loktak Lake & generate large revenue which include plans for introduction of adventure water sports in Takmu, Integrated cable car, Ropeway & Lakeside Development of Loktak lake. In Keibul Lamjao National Park (K.L.N.P.) the park management provides some sets of rules & regulations for regulating ecotourism. There are route guides, trekking and interpretation facilities and also supports emerging international movement aimed at promoting green tourism, which takes ecological tourism a step further, promoting environmentally responsible tourist operations with a view to conserve energy, recycle waste, instruct staff & tourists on proper behaviour in parks and protected areas at a nominal charge. Heavy vehicles are strictly restricted and only light vehicles with the route guides are allowed to go within the area of the ecological park (Babycha b, 2015). Thus a comprehensive Tourism policy is being finalized by the State Govt. The State Tourism Department is also looking at rural tourism projects. In spite of these facts, there is no adequate boarding and lodging facilities surrounding the area. But not only the government but also some of the local NGOs like Loktak Eco Tourism Development Organization (LEDO) are serving near the tourist centers with the aim of promoting ecotourism in the lake and upliftment of the economic condition of the fisherman by doing ecotourism. The members of LEDO not only provide Food & lodging services to the ecotourists but also enable them to enjoy the scenic beauties of Loktak Lake on local traditional boats viz. (Lukai Hi) instead of motorboat as a means to protect eco-system in the lake (Ecotourism, 2015) Thus tourism facilitates the State as well as rural economy to a great extent. The tourist traffic in Manipur is somewhat encouraging as the arrival of foreign and domestic tourists during 2013-14 is 1,22,964 in which 1932 are foreign tourists and 1,21,032, domestic tourists, (Directorate of Economics & Statistics, 2015).

Suggestions

The schemes so far taken up for the development of tourist facilities in and around this lake are so inadequate that even one percent of the charms of this lake has not been explored for the tourists (Joshi, 2002). Still there are a number of unexplored sites of scenic beauties having historical, ecological as well as cultural values in the Loktak lake. In order to promote ecotourism in the Loktak Lake, getting desirable impacts in terms of economy as well as ecology, the following suggestions can be taken up:

- Installation and improvement of road network within the identified tourism zones in and around the lake.
- Making frequent tour programs for visiting unexplored areas of Loktak Lake and other sites having the potentials of ecotourism.
- To provide adequate boarding and lodging facilities to the tourists surrounding the tourist centers.
- To check pollution and other ecological conflicts, use of motor vehicles and boats should be minimized and encouragement for using traditional canoes (Heenaos), walking and cycling in and around the lake. Proper Management of waste disposal should be adopted in the tourist zones.
- To achieve the goal of ecotourism, tourists should be encouraged to learn about the flora and fauna, traditional food habit, history, language, arts and crafts, indigenous method of fishing at the Lake, folk songs, etc.
- As a possible step to check the ecological imbalance and environment pollution, mass awareness programmes and education for better prospects on the protection and conservation of environment is the need of the hour. Though the Government and NGOs have made enormous efforts to protect and save Loktak and its surrounding areas, it will be impossible if the commoners have not possessed the sense of environment consciousness, eco-system, cleanliness, disposal of waste products and after all civic sense. So awareness and providing environment education to the common people inclusive of illiterate old age people, women and children is the urgent need of the hour.
- If a Responsible Tourism Development Policy can be taken up in and around the Loktak Lake area, tourism in this area might be flourished remarkably very soon as in case of Sikkim. Since the Govt. of Sikkim has implemented the Sikkim Ecotourism policy in 2011 with the objective to protect and manage the forest and sustainable livelihood development, the entire state is eco green and pollution free. (India's North East a: 2013). Thenmala in Kerala is the first planned ecotourism destination in India created to cater the eco-tourists and nature lovers (Ecotourism in India: b, n.d.)

Conclusion

Loktak Lake, the precious gift of nature with its bountiful and charming facets, its socio-economic values, its cultural aesthetics and historical significance is indeed one of the most appropriate sites in the world for ecotourism. However, due to the ignorance and greedy nature of human beings, their inexcusable ceaseless efforts to challenge nature and mismanagement of scientific products, hazardous effects are fallen on the eco-system, natural resources and other valuable features of the unique Lake. If this process is continuing

further without any resistance, definitely our State will suffer the loss of this 'Spotless Mirror of Manipur'. As lakes, the precious gifts of nature are the most sensitive features of ecosystems, such hazardous, management policy can easily transform a beautiful lake into an ecological slum in a short period.

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