



ECOTOURISM FOR ECO FRIENDLY FOREST AND GREEN HOST - A CASE STUDY ON THENMALA ECOTOURISM PROJECT, KERALA

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Abstract

Ecotourism is a purposeful travel to understand the nature and culture of a particular area, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to the local people. Protected Areas such as national Parks, Biosphere Reserves and Wild Life Sanctuaries have figured prominently in biodiversity conservation and well-designed and managed Protected Areas can form the pinnacle of nation's efforts to protect biological diversity and also provide opportunities for recreation and tourism. Scientific studies show that planning ecotourism in Protected Areas as done in Thenmala ecotourism project, Kerala, first planned ecotourism project in India, which can be a model for other such destination development programmes. In Protected areas, developing forests as recreation spots can mitigate hardships of indigenous communities. This will provide monetary returns to the

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public exchequer, while protecting bio diverse patches with the support of the local community. For better planning and implementation of different components of ecotourism, zonalisation, site-specific action plan, reliable estimates of carrying capacity and Environment Impact Assessment may be done in all the Protected Areas so as to avoid the ill effects of tourism. This research paper analyses and evaluates the methodology and typology of ecotourism practices at Thenmala, Kerala and proposing Thenmala as a model for the development of similar program in India

Concept of Ecotourism

Ecotourism is a purposeful travel to understand the nature and culture of a particular area, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to the local people. It has grown as a consequence of the dissatisfaction, which arises on account of the inappropriate implementation of mass tourism. Ecotourism and nature tourism are recognized as being particularly conducive to enriching and enhancing the standing of tourism, on the basis that these forms of tourism respect the natural heritage and local populations and are in keeping with the carrying capacity of the sites (Anak Agung Raka Dalem). It may be true that ecotourism has several definitions depending on whether it is in a developed country or a developing country. As far as developing countries are concerned, ecotourism is more about contributing to the improvements of living standards of the rural local population. But for ecotourism in developed countries, it is more about the nature experience, given that the standard of living in the countryside is quite high (Stephen Mac, 2003). The Ecotourism Society defines ecotourism as "a responsible travel to natural areas, which conserves the environment and improves the welfare of local people" (Western, 1993). In short, ecotourism can be conceptualized as, any tourism programme that is based on the four pillars nature based, ecologically sustainable, possibility of conducting research, involvement of local people. If it does not satisfy any one of these components then it cannot be called a real ecotourism venture.

The Emergence of Ecotourism in India

Ecotourism is a very recent concept to Indian tourism, probably in the last decade; it has been emerged as one of the most important sectors in tourism industry to ensure sustainability and continuity of a destination. In 1998, the Government of India prepared a policy document on ecotourism to identify the ecotourism resources

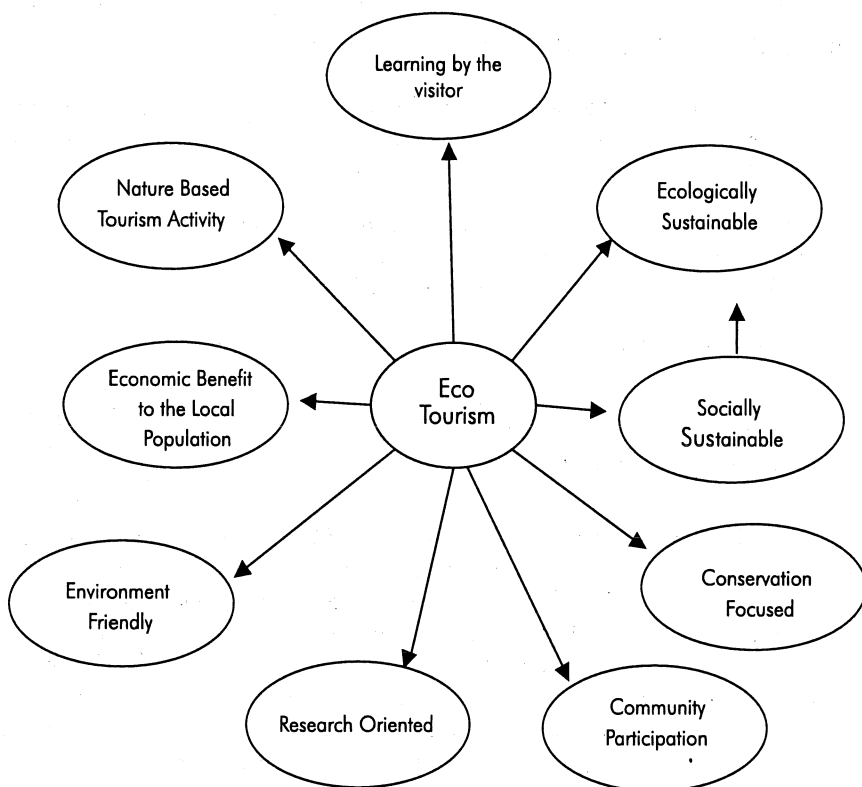
of the country and it lays down the need for a specialized, participatory, policy planning approach for the development of the ecotourism destinations. The State of Kerala ("god's own country") and Jungle Lodges and Resorts Limited of Karnataka State have taken a pioneering step in this regard by creating a separate directorate for ecotourism. The Wildlife Institute of India, which is a national institute, has got a separate wing to consider various issues related to ecotourism. This institute and others like the Kerala Forest Research Institute, and the Indian Institute of Forest Management, provide technical support by way of consultancies in preparing environmental impact assessments for ecotourism projects. Recently the national government has taken over eight sanctuaries for eco-development projects, with the support of the United Nations Global Environment Facility. In all, these eight "project tiger reserves", ecotourism has been visualized as an important component to provide employment opportunities for the local people, without having adverse impacts on the delicate ecosystems. 25th India International Travel Mart (IITM), Mumbai highlights of the expo was 'Experimental Tourism' and 'Ecotourism'. While package holidays provided the convenience of a pre-arranged schedule at a considerably reduced cost, experimental tourism dealt with living in tea and rubber plantations of Kerala or the organic farms of Maharashtra.

Major Apprehensions in Ecotourism Destination Development

A successful ecotourism destination needs certain principles and procedures. The ecotourism resources are to be managed on internationally accepted principles, which ensure ecological sustainability of natural areas, with adequate provision for learning by the visitor, and with a strong component of local participation. Economic benefits should accrue to the local population as local people develop a venture in the conservation of the natural resource. To make ecotourism successful, there is a need for policy and institutional changes in the decision-making systems. Since the majority of the potential ecotourism sites are not with the Tourism Department, interdepartmental coordination and cooperation is crucial for their success. Community awareness issues related to the empowerment of the local people and the creation of adequate ecotourism interpretation are some of the major challenges. Scientific parameters should be established for sustainability, continuous monitoring and making the data available to stakeholders needs to be done and in a transparent way. There needs to be significant attitudinal changes among the policy makers, the private entrepreneurs, tour operators, destination managers, the visitors, and the local community in order to make ecotourism happen the way it should. The Government of India, the state governments, the trade bodies and the NGOs are all fully aware of the problems and issues of resistance to change. Earnest efforts

are being taken to formulate strategies to overcome negative influences and to prepare India to attract a large portion of this fastest growing segment of the international tourism sector.

Concept of Eco Tourism



Tourism Scenario in Kerala

Foreign tourist arrivals to Kerala are showing an increasing trend for the last few years. In 2004, it recorded 17.28% growth over the last year. During 2004 the foreign exchange earnings from tourism in the State was Rs. 1266.77 crores which shows an increase of 28.82% over 2003. The total revenue generated from tourism to the State in the year 2004 is worked out at about Rs. 6829 crores. In 2004,

345546 foreign tourists visited Kerala as against 294621 in 2003, showing an increase of 17.28%, which constitute 10.26% of total foreign tourists, visited India. Domestic tourist arrivals during 2004 are estimated to be 5972182 as against 5871228 in 2003, showing an increase of 1.72%. Tourism employs about 8 lakh people in the State. The investment in tourism is about Rs. 500 crores per year.

World Travel and Tourism Council's Projection on Tourism Development in Kerala

- Tourism demand of Kerala to grow by 11.6% per annum over the next decade (This is the highest recorded growth in the world, surpassing Turkey's 10.2% as well as India's 9.7%)
- A record growth of 23.5% is also predicted in terms of external account earnings from travel and tourism over the next 10 years (India's estimates for this period are 14.3% while the world average is only 6.5%)
- Tourism employment to be 2 million by 2012.

Thenmala Ecotourism Project, India's First Planned Ecotourism Destination

Thenmala, Kollam District is located nearly 72kms from Thiruvananthapuram, the State Capital of Kerala- branded as the "Gods own Country" the southern most State of India. It is a small village at the foothills of Western Ghats, a part of the famous Shenduruney Wildlife Sanctuary, which is a natural habitat of a number of plant and animal species. This Wildlife Sanctuary is of about 100 sq. km. Thenmala is derived from amalgamation of two Malayalam words "Then + Mala" stands for "Then" in Malayalam meaning honey and "Mala" means hillock i.e. it means honey hills. The honey collected from Thenmala forest region is of good quality and of high medicinal value because of the unique floristic composition of the forests. Thenmala Eco-Tourism Site is India's first planned ecotourism destination. The award-winning project was designed in such a way as not to harm any part of the environment. The region boasts a mix of lush forests, swamps and grasslands in an area of 60 acres. Trekking, cycling, boating and shopping in three zones are possible. This destination is 66 km east of Kollam, in Thenmala village, Kollam District, on the Kollam-Shencottai Road. Palaruvi Waterfalls and Kulathupuzha are the nearby attractions. It is also very close to the famous Kuttalam in Tamil Nadu.

When the idea of developing Thenmala as a tourism destination was mooted seriously in 1996, it was decided to develop it as an ecotourism destination by keeping the degraded forest area, in the outskirts of the Sanctuary, as a familiarization zone. The studies and discussions followed helped to evolve a strategy to control the mass tourism within the outer limits of the Sanctuary. Hence the ecotourism products, which are developed within Sanctuary, are expected to be supply driven, which eventually takes care of ecological sustainability. It was also planned to have satellite centers in various places in Western Ghats mountainous region within a radius of 50 km from Thenmala. The familiarisation zones thus created function as area for soft ecotourists.

The Major Objectives of this Project

1. To develop Thenmala dam and its surroundings as a major tourist destination.
2. To promote Ecotourism on the basis of sound principles of ecological sustainability in the surrounding areas of Thenmala.
3. To have a well planned tourism destination with emphasis on sustainable tourism development so as to become a model for other destination development programmes.

Tourism Activities at Thenmala Ecotourism

Thenmala Ecotourism Project features a tourist facilitation centre, shop court, garden, plazas, picnic area, nature trail, rock climbing, river crossing amphitheatre, restaurant, suspension bridge, lotus pond, musical dancing fountain, sculpture garden, deer rehabilitation centre, boating, battery powered vehicles etc

Ecotourism Plans at Thenmala

Eco-friendly General Tourism is planned in the periphery of the sanctuary so that pressure of tourism will not affect the sanctuary. The real ecotourism is to take place in sanctuary and only ecotourists are encouraged for that. Others can experience the eco friendly products such as small nature trails, elevated walkway through canopies, mountain biking etc. This will give them a feeling of what awaits as ecotourism in the sanctuary area, for which they have to wait since it is supply driven. This was a consciously developed management strategy after analysing what is happening in various sanctuaries by way of tourist pressure.

Facilities such as boating in the Sanctuary reservoir, boardwalk, sculpture garden, amphitheatre, Musical Dancing Fountain, etc. are also provided at Thenmala for soft ecotourists. An Environmental education and interpretation center is also being set up at Thenmala. Thenmala Ecotourism Promotion Society adopted a strategy to co-ordinate with Forest Department, the Irrigation Department and Tourism Department and implements various activities in association with each Department.

Private initiative is expected in areas such as providing accommodation, transportation facility etc. No permanent constructions are made in forest areas. Accommodations for tourists are developed outside the forests, at a distance. To make this project a great success Thenmala Ecotourism Promotion Society (TEPS) entrusted the conduct of Environmental Impact Assessment (EIA) to Kerala Forest Research Institute (KFRI). KFRI had conducted EIA for the destination and the satellite spots. Further, on the recommendations of KFRI and on the basis of the Environmental Impact Assessment, TEPS amended the activities so as to minimize the negative impacts of the project.

The products such as trekking, bird watching trails etc. is being developed and operationalised through the institution of Eco-development Committees / Participatory Forest Management Committees (locally known as Vana Samrakshna Samithi (VSS)), thereby ensuring local benefits from ecotourism. Forest Department has already evolved expertise in the formulation of Eco-development Committees and VSS through institutionalized means. This will help in channelising the benefits of ecotourism to the local people, which will ultimately elicit support of local community for forest protection and conservation.

- The facilities such as accommodation in tents, tree tops and caves will be provided in the interior forest without affecting the local environment. Tribal and local people will be involved as guides, helpers, etc. in fostering ecotourism activities here. It is expected that this will give a new dimension to the development pattern of rural areas adjoining these ecotourism centers. Proper environmental impact assessment and carrying capacity studies will be done in these sensitive areas. Environmental monitoring mechanism will be devised to constantly monitor the impact of the tourism activities.
- The four zones at Thenmala offer a wide range of activities for the nature enthusiast. Construction has been kept to the minimum and every effort taken to preserve natural features of the land and the fragile ecosystem. Only temporary stays / visits are permitted so as to maintain peace and quiet of the undisturbed areas. Permanent tourism structures are restricted to degraded forests and close to habitation only.

The project envisages three major components, viz. general tourism, ecotourism and pilgrimage tourism. Facilities such as garden, boating in the reservoir, board walk, elevated walkway, rope way, suspension foot bridge, amphitheatre, musical fountain, mountain biking, deer rehabilitation centre, environments education centre etc. will be provided at Thenmala. This place will be the focal point of the tourism destination.

Thenmala Ecotourism Promotion Society (TEPS)

Thenmala Ecotourism Promotion Society (TEPS) was formed in July 1998 to promote ecotourism activities at Thenmala in Kollam, Kerala and its surroundings with the cooperation of Forest, Irrigation and Tourism departments.

The following areas are very crucial to maintain an ecotourism destination sustainable for a long duration,

- Energy management (both renewable and non renewable)
- Efficient use of water and a systematic water management mechanism
- Very systematic waste management mechanism
- Noise and pollution Control
- Prudent and Effective infrastructure development
- Environmental planning and monitoring
- Training and awareness to the people who are involved in tourism activities

Why, Thenmala is an Ecotourism Destination?

An Ecotourism should be:

- Nature Based
- Ecologically Sustainable
- Local Community Participation
- Education and Research Oriented

How it is nature Based?

The nearby Wildlife Sanctuary (Shendurney Wildlife Sanctuary) is the most important ecotourism resource. This is considered as a unique destination development initiative with "Thenmala" the village as a focal point with small community led ecotourism developments within a radius of 50km from Thenmala in the foothills of Western Ghat Mountains. Investment is to the tune of 1.6 Million US Dollars. Development period was 3 years. Stakeholders include Government Departments such as Tourism, Forest, Irrigation, local self Government and local communities, scientific institutions etc. The main components of the destination are eco friendly general tourism products and ecotourism products. The etymological meaning of the name 'Shendurney' has been derived from a tree species locally called, "Shenkuruny" or "Chenkuruny" (*Gluta travancorica*) an endemic tree mainly confined to this area. The Government declared Shendurney as a Wildlife Sanctuary on 25th August 1984. The construction of the Parappan Dam across the confluence of the Shendurney Kazhuthurutti, and Kulathupuzha rivers had resulted in the creation of an artificial lake of about 26 Sq. Km. which spreads along the middle of the sanctuary.

How it is ecologically Sustainable?

a. Contribution to the Conservation of Natural Areas

Initially 30 acres of degraded forest area were taken up and protected from biotic interferences, which now became fully covered by trees and being used by visitors for small wilderness trails, river line walk, canopy walk etc. This area has been divided into 3 zones and planned as a familiarization zones so that impact on the larger ecosystem, "the sanctuary" is kept minimum. Another conservation effort is the deer rehabilitation programme where the deer that stray out from nearby forests are taken to this center and being helped to survive.

Nakshathravanam: (Star Forest) - A unique system to popularize tree planting. The predictions forecasted for a man are based on the Nakshthra or the constellation in which one's Moon was placed at ones birth. The entire Zodiac comprises of 360 degrees. Therefore, there are 27 Nakshthras or constellations in the Zodiac.

Each of these Nakshthra is associated with a tree. These trees are of medicinal, social, aesthetic or economic value. There is a belief that it will bring good fortunes if one plants one's own tree (pertaining to his star) in his home. In this proposed programme a nursery of these 27 trees are established and visitor are encouraged to visit and if interested, they can buy the same. Definitely people will see that these

plants survive once they purchase it. Hence ultimately ecotourism contributes to the greening i.e. protecting nature. Environmental Practices in the Development and Operation of Ecotourism Facilities, Establishments and Services

Waste Management: Vermi Composting technique is being practiced. Only local architecture and locally available materials are used in construction. Battery Powered Vehicles are used to transport tourists through forests to Boat landing in order to signify the importance of non-polluting sources of energy. Local cuisines are also promoted. Local accommodations are encouraged in destination. Environment Impact Assessment has been done and parameters of sustainability have been laid down by a leading Research Institute - Kerala Forest Research Institute.

How does it promote Education and Research activities?

Society associates with protected area (Wildlife Sanctuary) authorities in the field of the nature education activities. Special concession rate in ecotourism zones are offered for school children, college students and those who attend Wildlife Sanctuary Nature camps. Special nature education classes (1/2 to 1 hour) are conducted in forest environment by the trained staff for the students on demand. Good signage and tree labeling are provided in all pathways and nature trails. During trekking programmes, trained local guides are utilised for education. Local youth are given training on interpretation and helped to avail self employment opportunities in ecotourism.

How local people are benefited?

Local youth were trained to use self-employment opportunities i.e. as guides etc. The trekking programme is being managed by the local group of people residing nearby with support of the private sector. Direct employment is given to people belonging to the area / district. Apart from that the shops established by the Society for selling handicrafts, souvenirs, and for running the cafeteria etc. are entrusted to local "woman group" i.e. local women self help groups. Employees are also given training frequently. Ecotourism products such as trekking etc are managed by local community with the help of forest department.

Tourist visit at Thenmala and Revenue Generated during 2000-2004

Year	Tourist Visited	Revenue Generated
2000-01	26148	445437
2001-2002	41161	1138839
2002-2003	65075	2147985
2003-04	118404	4044571
2004-05	104622	3563820

Source: Directorate of Ecotourism

Multi-disciplinary Aquarium

A multi-disciplinary aquarium comprising freshwater, brackish water and marine aquarium is to be set up at Thenmala ecotourism project to take visitors to a 'world full of fishes' and to educate them about biodiversity. The aquarium would come up in two floors behind the interpretation centre of the project and the office of the Thenmala Ecotourism Project Society (TEPS). In addition to the two floors, there would be a tunnel pool. The Union Government had already sanctioned Rs.74 lakh for commencing the project estimated to cost Rs.1.77 crore and the first phase would be completed in 2008. Designed and developed by the TEPS established in 1998, the first phase of the project had been completed in 13 months. In the second phase, setting up of "Deep woods", development of 10 satellite spots around Thenmala, Pilgrimage tourism and fountain along the downstream river will be taken up. A butterfly park by the Kerala Forest Research Institute has also been proposed.

Ecotourism in Karnataka

The Jungle Lodges Resorts Limited is a public sector corporation promoted by the government of Karnataka. This corporation has four destinations in the state which promote ecotourism. Each of these resorts has a unique specialisation. At K. Gudi there is a wildlife adventure resort with travel in the wilderness on elephant back and camping in the forest. Another resort is at Bimeshawri which is a Mahseer anglers' paradise, a fishing camp. There is also a resort called Kabini River Lodge in the Rajeev Gandhi National Park which offers a variety of ecotourism products. And there are similar resorts at Dandeli and Karwar. Karnataka and Kerala, popular

tourism destinations in the south will team up to promote the tourism interests of respective states, through the formation of a tourism circuit. The proposed circuit will link destinations in the Malabar region of north Kerala to the southern regions of Karnataka like Mangalore, Mysore, Coorg etc.

According to the Tourism Director, Mr. Alkesh Kumar Sharma, a decision in this regard was taken during the inauguration of Kerala Food Festival and exhibition of photographs titled 'God's Own Moments' held as part of the road show organized by Kerala Tourism in Bangalore.

Conclusion

Ecotourism is a recently emerged concept in the tourism industry with a focus on sustainable and eco friendly tourism practices in natural areas with a vision to protect and conserve the natural biodiversity meanwhile giving ample opportunity to the tourist to appreciate and study the nature through which ensuring economic prosperity to local community. India has a wide potential for developing Ecotourism and many state governments have identified the significances of Ecotourism and started taking initiatives to develop it. The ecotourism practices at Thenmala Ecotourism Project, the first planned Ecotourism Destination in India, has been evaluated and presented as a model for similar destination developments. The paper is prepared based on secondary data and the personal observation made by the writer. The negative impacts of Thenmala project is not discussed so far since it needs a thorough research based on primary data.

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