Landscape Planning Guidelines for Ecotourism in India Case Study: Shogi, Shimla

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Abstract—*Ecotourism can be defined as a form of tourism where tourists have a strong sense of responsibility towards the environment. An important aspect of this is interaction with the local community and participation of local people in the tourism related activities.Ecotourism is essential for the sustenance of tourism on one hand and economic growth of the region on the other.*

1. INTRODUCTION

In the present scenario, there is a tension between recreational and developmental needs on the one hand, and ecological integrity on the other. The problem is**:** *how can tourism be developed in a way that generates revenue while also protecting the ecological integrity?*

The solution to this problem is Ecotourism. It is an agent of change. A strong commitment to nature and a sense of social responsibility on the part of tourists are essential elements of ecotourism.

According to The International Ecotourism Society (TIES), ecotourism has been growing internationally by 20-34% each year since the 1990s (Ecotourism Fact Sheet 2006).

Ecotourism is an increasingly popular form of tourism in which tourists seek out wild and scenic areas such as rainforests or mountains for an active and educational trip. It has also become popular among people interested in both environmental conservation and sustainable development.For nature tourism to be sustainable - a number of environmental, economic and social requirements have to be fulfilled. This has led to the introduction of 'ecotourism'.

1.1 Definitions of Ecotourism

There is no internationally recognized definition of Ecotourism till date. Fundamentally, eco-tourism means making as little environmental impact as possible and helping to sustain the indigenous populace, thereby encouraging the preservation of wildlife and habitats when visiting a place. This is responsible form of tourism and tourism development, which encourages going back to natural products in every aspect of life. It is also the key to sustainable ecological development.

The International Ecotourism Society (TIES) defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the well-being of local people".

1.2 Components of Ecotourism

Table 1: Components of Ecotourism

1	Nature Based
2	Educational
3	Environmental friendly
4	Local participation

The *nature based component* refers to the natural environment by focusing on biological and physical features of the resource. This aspect of ecotourism relates to visits to natural sites or locations, like, national parks, forests, beaches, lakes, waterfalls, etc.

The *education component* refers to learning about species or being informed of the features of the environment. Information is provided to the visitor through booklets, brochures, signs, short videos or briefings.

The *environmentally friendly component,* relates to the concept of sustainable development. Hence, the environmentally friendly component ensures that ecotourism will not degrade the environment or adversely affect the local community.

Local participation is an important feature of ecotourism.It helps in reducing environmental pressure by local communities, by providing them withemployment opportunities in the tourism sector.

Local participation is also important because it helps to channel part of the revenue back to local villagers and the community.

2. NEED FOR ECOTOURISM

Healthy natural ecosystems are critical to the ecological well-being of all living entities. Tourism has proved to have negative impacts as well as the positive ones. It is criticized for contaminating indigenous culture. This takes the form of

changing values, resulting in social maladies like drug addiction, thefts, etc. A far more widespread negative impact is caused by mass tourism in environmentally fragile areas like mountains, hills, deserts and coastal regions. Due to heavy tourist traffic in some areas, the cultural and environmental assets of the community are under threat.

Most wilderness areas across India are fragile ecosystems that provide a whole host of ecosystem services to local residents; and continue to remain important tourist attractions. However, unplanned tourism in such landscapes can destroy the very environment that attracts such tourism in the first place. Hence, there is a need to move towards a model of tourism that is compatible with these fragile landscapes.[1]

3. CHARACTERISTICS OF ECOTOURISM

The characteristics of ecotourism can be summed up in the following table-

Table 2: Characteristics of Ecotourism

Small group of visitors
Rural
Eco marketing activities
High price with purpose of filtering the crowd
Little impact on environment
Management based on local economic principles
Personalized relationships between tourists and local community
Local development objectives
Reduced development of tourism facilities
Imparting education to tourists to create an awareness

3.1. Ecotourism and Communities

Community participation is an essential feature of ecotourism. The benefits of ecotourism for local communities can be broadly categorized as economic, socio-cultural and physical. The most direct economic benefits are the improvements in employment and income. Local communities living at ecotourism site have generally low level of incomes. Hence, ecotourism provides a feasible economic option for such communities. Else, local residents generally earn their livelihoods from forest logging, land clearing for agricultural use, etc. However, these activities eventually lead to environmental damage and ecological imbalances. Ecotourism, on the other hand, encourages responsible travel to natural areas that safeguards the integrity of the ecosystem and produces economic benefits for the local communities that can encourage conservation. Thus, ecotourism is a more sustainable development strategy, protecting the ecosystem and at the same time serving as an income and also employment provider for the local community. Besides the economic benefits, ecotourism accounts for socio-cultural benefits also as it spread awareness amongst people and encourage them to adopt environment friendly habits.

4. ROLES AND RESPONSIBILITIES OF ECO TOURISTS

The role of eco tourists is very crucial for the success of ecotourism. Their primary responsibility towards an Eco

tourist site involves minimal impact on the environment and an interactive approach with the local people. This educates them about the regional issues and prompts to contribute positively towards a healthier environment. They help conserve habitats of flora and fauna, which may be affected by tourism. Eco tourists make no open fires and discourage others from doing so. They remove litter, burn or bury paper and carry back all non-degradable litter. They keep local water clean and avoid using pollutants such as detergents in streams or springs. They leave plants to flourish in their natural environment and avoid taking away cuttings, seeds and roots. They respect local etiquette and do not disrespect the value system of the local communities.

4.1 Roles and responsibilities of Eco tourism developers and operators

The first and foremost step towards ecotourism starts with ecotourism developers and operators. It is their responsibility to coach accountability amongst the people for their actions. They should be aware about the standards, building codes and other regulations. They should educate people about ecotourism and spread awareness for a mutually beneficial relationship with their environment. Ecotourism developers should be sensitive to, protected or threatened areas, species and scenic amenity; under take landscape enhancement wherever possible. Another important aspect is minimum interference with the existing natural ecosystem. For this reason, even burning fire for cooking purpose is not allowed at ecotourist sites. It is crucial to recognize the optimal environmental capacity and sociological use-limits of the site in creating tourist facilities; and takinginto account the safety and convenience of tourists. For this purpose use oftemporary local material and designs is implemented in construction. No permanent structure is erected on site.

At all ecotourist sites, eco-friendly physical planning, architectural design and construction of tourist facilities is done, for example use of solar energy, utilization of rainwater, recycle garbage, use of natural cross-ventilation instead of air conditioning, ensuring a high level of self-sufficiency in food through orchards, ecological farms, aquaculture , etc. While doing all this, it is ensured that due regard is given to local customs and culture and ecotourists are encouraged to interact with them.

5. ECOTOURISM IN INDIA

The geographical diversity of India has given us a wealth of eco-systems which have also become the major resources for ecotourism.These include bio-sphere reserves, mangroves, coral reefs, deserts, mountains and forests. There is abundance of flora and fauna in our country. In order to conserve the rich biodiversity, 75 national parks and 421 wildlife sanctuaries have been created.

5.1. Legislative Controls in India

India has legislation to protect untouched ecologies and sensitive eco-systems. Some important laws are the following:

First, The Forest (Conservation) Act, 1980 controls the use of forests for non-forestry uses.

Second, The Wildilife (Protection) Act, 1972 designates the national parks and wild life sanctuaries and stipulates a comprehensive framework for wildlife protection and conservation.

Third, The Environment Protection Act, 1986 stipulates several measures for protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution. Coastal Regulation Zones (CRZ) were gazette by a notification under the Act in 1991 and a wide range of activities have been prohibited within 500 meters of the high tide line.

In addition, the Department of Tourism has been developing a national policy and guidelines for the development of tourism in forests, deserts and marine systems. Once formulated, these guidelines would be implemented to ensure the sustainability of ecotourism development.

6. CASE STUDY: SHOGI, SHIMLA, HIMACHAL PRADESH

Fig. 1: Theecotourist site, Aamod, lies in the forest areaencircled in red.

AamodEco Unit, called Aamod Eco Resort for marketing purposes, is on NH 22, 16 kms before Shimla. It has an area of 1 hectare and has been given to Tarangan developers on lease for three years by HP Forest Department. The accommodation capacity on site is thirty visitors. No permanent structure, except for the existing rest house (which is now converted to a restaurant) is constructed on site. All the cottages are built in Porta cabins (sandwiched sheets) and no construction is carried out on the site. No tree has been cut till date. The natural existing trails have been used and no permanent pathways are built.

Local tradition and culture is embraced by organizing visits of the ecotourists in the surrounding village areas. At times, lunch is arranged in village houses, children are taken to village school and a healthy interaction is encouraged. The employees at Aamod are from the surrounding village areas.

A good network of trails like nature trail, eco trail, etc. take ecotourist in the surrounding forest areas to enable them to explore the natural flora and fauna. Adventure activities like Burma bridge, rappelling, flying fox, etc. are done on the site. Workshops, small lectures, etc. are carried out in the Education center to impart awareness about Ecotourism.

Tree planting by ecotourist is another salient feature. Till date, 250 plants of *Cedar, Rhododendron, Oak* and *Chinaar* have been planted.

Site photos-
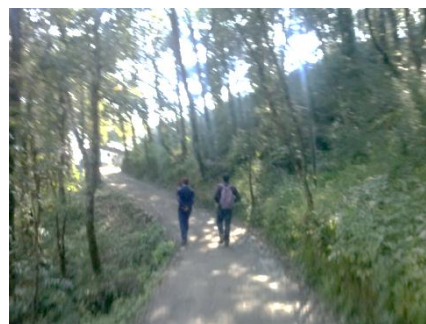
1. **Natural trail leading inside the site from main road.**

2. **Adventure activities promoted on the site.**

3. **All the cottages are built in temporary structure with least impact on surrounding trees.**

5.2. Comparative analysis of the case study

As compared to the international case studies of the ecotourist sites, a comparative analysis has been done.

Certain aspects have been found contradicting with the ideal concept of ecotourism, in the case study. Since, this is a new concept in Shimla and moreover, it is being done in Public Private Partnership there have been some deviations which should be checked.

Table 3: Comparative Analysis

	International trends	Case study-Shogi
Accommodation	Tents	Porta cabin structures
Cooking	Not allowed	Restaurant existing
Awareness programs	Yes	Yes
Examination of tourist before entering the site	Yes	No
Maximum employment to locals	Yes	Yes
Involvement of the Locals	Yes	Yes
Adventure activities	Yes	Yes
Spa	Not allowed	Existing on site
Bar	Not allowed	Existing on site

7. REVISED POLICY ON ECOTOURISM IN HIMACHAL PRADESH, 2005

This 'community based eco-tourism' policy in the state is proposed with a long-term goal of conserving the rich cultural and ecological heritage of the state, so that various benefits from this conservation endeavor, including the benefits by way of tourism, could continue to accrue to generations to follow.

The policy also aims at achieving certain objectives which result in the success of ecotourism in the state. These policies aim at promoting interests of the local communities and attract responsible tourists. They focus at developing infrastructural facilities for ecotourism and also protect cultural integrity of local people.

In the state about two-third of total geographical area is designated as forests, out of which about 12% area is under Protected Area Network. All these areas are dotted with scattered presence of villages and hamlets. Paths leading to some of the most beautiful and breathtaking sites in the state pass through these hamlets, which fall within and outside the Protected Area network.

To benefit the maximum number of people in the state through eco- tourism, it is envisaged to encompass various treks, which have potential to provide insights into the ecological diversity of the state. These treks, to be marketed as 'eco-trails', would be suitably named after some important local feature.

Thirty-five sites are designated as Ecotourist sites in Himachal Pradesh, of which six sites are in Shimla- Larot, Dodra, Shogi, Kawar, Jakhu, Jiskoon.

Under this program the tourists would be taken on a journey through the rich cultural and ecological diversity of state and would be exposed to the customs and rituals of the area they visit and all this under continuous reiteration of conservation values in their subconscious mind.

7.1. Criteria for selection of Eco tourist sites

The ecotourist sites are selected based on their high biodiversity value and natural serenity. These sites include existing forest rest houses and camping sites, etc. Invitations are pursued from locals regarding secret scenic spots that can be converted into ecotourist sites.

These ecotourist sites are such located so that they act as counter magnet nodes to the core area. Basically, these sites are being developed as satellite tourist nodes to ease the pressure on the core of Shimla. HP Forest department identifies the site and gives on lease to a Private sector (which has proven record of working in ecotourism). The land ownership is with H.P. Forest Department - Public Private Partnership. First, the land is given for a time of 3 years and then for a maximum of 10 years. Annually, inspection is carried out by H.P. Forest Department to ensure the ecotourism policies are being followed on the site.

8. FORMULATION OF GUIDELINES FOR ECOTOURISM IN INDIAN CONTEXT

The ecotourism should be developed and propagated based on the strengths of native knowledge. While a project is still in the thinking stages, it is a wise decision to include the local people and their knowledge to assist in determining the feasibility of the project. Indigenous knowledge should be acquired on the basis of trust, respect and empowerment.

Considering landscape design and development of ecotourist sites, there are some guidelines that help in maintaining ecological integrity of the region. Firstly, maintenance of large, structurally complex patches of native vegetation is important. These complex patches sustain high degree of bio diversity. Secondly, creation of buffers around ecologically fragile areas or around patches of native vegetation. This helps in conservation of indigenous species of flora and fauna. Thirdly, observing the linkages between different habitat patches of species and conserving them as it is. This facilitates the ecological processes without any disturbance. Fourth, focusing on species interactions may protect important ecosystem functions. This involves identification of keystone species in the region and protecting their habitats from any external forces. Fifth, control of aggressive, over-abundant

and invasive species. It plays a key role in maintaining biodiversity.

Another very important step is the adoption of Joint Forest Management, an initiative towards Co-management of biodiversity. This approach enables effective conservation of forest resources and ensures that conservation gains are shared between the State and local communities. At present there are 1,18,213 JFM Committees across India, managing around 22.94 million hectares of forests. This move will lead to a more effective forest governance strategy that takes into account sustainability of conservation efforts as well as equitable sharing of benefits accruing from forests.

All the design and developmental interventions on an ecotourist site is done after studying Carrying Capacity of the site and arriving at limiting numbers. In many ecotouist sites in world, the number of visitors is limited in a year. Once the number is achieved, the site is shut for rest part of the year. For instance, in Grand Canyon National Park, private and commercial rafting parties have been limited to approximately 2000 per year. This helps in controlling the negative impacts on the natural environment; this would also serve to increase the quality of the visitors' experience, as most Ecotourists perceive crowding to be a problem.

Another crucial role is that of Zoning. It helps to regulate different uses on site.It is a multidimensional technique that is driven by ecological data to balance the demands of protection and use in determining the most appropriate levels of use for specific areas within the park. One of the most important outcomes is to ensure that activities in one zone do not interruptwith the planned functions of another.Zoning should include areas that are not open for visit in order to minimize the impact of infrastructure on wildlife. For example, tourism and recreation in the upstream part of a catchment may adversely affect water quality in the downstream region, so if the latter has been zoned purely for conservation, it may suffer water quality deterioration even though there are no recreational activities in the conservation zone itself.

Lastly, trail system design should be incorporated so that circulation network is clearly defined. It also improves the quality of visitor experiences, by setting the level of challenge, the scenic quality and the opportunities to observe and learn about natural communities and processes.
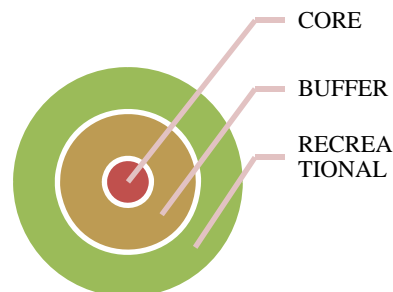

Fig. 2: Ideal Zoning on an ecotourist site.

Induction of these guidelines can act to increase the visitors' enjoyment of the area and also to stimulate modes of behavior which enhance the environmental quality of the site.

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