

ECOTOURISM DEVELOPMENT PLAN FOR JAMMU AND KASHMIR

FINAL REPORT

Prepared for the Government of Jammu & Kashmir
Department of Wildlife Preservation

by

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Acknowledgements

This project had its origin after several discussions and meetings between officials of the Government of Jammu & Kashmir and in particular officials of the Department of Wildlife Preservation. These discussions eventually led to Jungle Lodges and Resorts Ltd. being awarded the consultancy. A MoU was signed between the Department of Wildlife Preservation and Jungle Lodges & Resorts Ltd. to develop an Ecotourism Plan for Jammu & Kashmir.

A project of this magnitude could not have been accomplished without the support of a large number of people. I would like to, as a team leader, acknowledge the help and support of all those who were helpful and instrumental in giving shape to the project at various stages and to put together this final report.

First of all, on behalf of Jungle Lodges & Resorts Ltd. and the team I would like to acknowledge the support and co-operation that we received from Mr. A.K.Srivastav IFS., Chief Wildlife Warden, J & K. He was helpful in every possible manner and saw to it that the field visits that were undertaken by the team from Jungle Lodges & Resorts Ltd. were well organized and hassle free. The Regional Wildlife Wardens Mr. Farooq Gillani, Mr. Nasier Kitchloo and Mr. Takpa were all very co-operative during our visits to their respective areas. Mr. Abdul Rauf Zargar, Mr. Suhail, Mr. Rashid Naqash, Mr. Rakesh Kumar, Mr. Mustaq Ahmed Parsa, Mr. Wangchuk, Mr. Rauf and Mr. Tahir Shawl were instrumental in taking us to some of the areas that were under consideration for purposes of ecotourism and sharing all the information with us. We had very meaningful interactions and discussions with everyone. It would be going back on our part if the drivers who accompanied us on these trips are not thanked. They were with us all the while untiringly driving us to our destinations safely. I sincerely thank all of them on behalf of myself and on behalf of Jungle Lodges & Resorts Ltd. for all the support that was extended to us.

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This study was to be completed within a period of six months from the date of signing the MoU. Due to a variety of factors beyond our control it was not possible to keep to this commitment. However, the report is now ready and we wish the Jammu & Kashmir Govt. the very best in taking this effort forward.

Hari Kumar Jha IFS.,
Executive Director
Jungle Lodges & Resorts Ltd.,

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SUMMARY

The report describes the result of the mission for a study on the ecotourism potential of the state of Jammu & Kashmir. The Forest department had requested the study in relation to the area under its management in the state of Jammu and Kashmir.

The current developments on ecotourism in the area are analyzed in its regional context. Potential areas, assets and facilities for development and marketing of ecotourism are identified. Recommendations are also made on the development of selected sites across the state.

First one has to conclude that tourism is developing steadily in the state. It has a very small share of the Indian tourist market. The number of ecotourists is presumably only a lesser part of this.

The major ecotourism zones that have been considered are wetlands and protected areas. The possibilities of attracting part of the growing numbers of inbound tourism to the state were assessed.

Ecotourism as a new function of the forest and potential source of income is developing fast. A small niche market of groups tours of scientists and conservationist, interested in forest conservation and eco-label certified forest management can possible be developed. An additional niche market may be explored for round coverage of the beautiful Kashmir valley coupled with the high altitude areas of Ladakh.

Guided tours can be arranged to visit the spectacular forests and hills of the state through exclusive packages. This will have an appeal to a large number of high end customers who are willing to shell out an amount for the services that they are provided.

A broader group of low to medium budget travellers can be attracted gradually for national park walks, rafting, camping in high altitude passes and more. Home stay development in forest edge village communities with indigenous culture can be developed.

Introduction

The report is the result of a mission on ecotourism development for the state of Jammu and Kashmir. The Terms of Reference and comments are given in Appendix 1. The content of the report is as follows:

Chapter 1 provides the history and background of the project, including preliminary discussions amongst officials of the Jammu and Kashmir Wildlife Department and jungle Lodges and Resorts. It also includes details on various trips made to the state and various activities that were undertaken during those trips. It provides a genesis of the assignment and concludes with Jungle Lodges and Resorts Ltd. detailed trip itineraries.

Chapter 2 provides background information and definition of ecotourism. It describes in detail the ways and means of development of ecotourism and why it is important in the present context. It also studies the various physical attributes of the state and the existing Ecotourism Resource base therein as defined by outstanding natural, biological and cultural features and potential tourist activities as well as access to the identified areas and potential activities. The chapter concludes with studying the current status of ecotourism development and constraints in the state.

Chapter 3 presents further information on Ecotourism in India and various approaches to ecotourism. It carries a showcase methodology to conduct carrying capacity analysis. It discusses the proposed J & K ecotourism development framework and the first priorities areas for investment. It also discusses in detail the potential circuits to be followed while conducting ecotourism practices in the state.

Chapter 4 provides details on the goals and objectives of the proposed project. It also studies the targets to be met and discusses the key components of ecotourism products. Thereafter, it breaks up the proposed ecotourism plan into various products on offer in terms of circuit designs. The chapter breaks up the state into three regions and conducts an analysis of the various circuits that should be developed for a comprehensive ecotourism structure to come into the place in the state of Jammu and Kashmir.

Chapter 5 discusses the marketing methodology that is to be adopted for the implementation of the ecotourism initiative of the state of Jammu and Kashmir. It lays down rules and regulations for the methodology of implementation of the project across various sites. A marketing plan is discussed in detail.

Chapter 6 discusses the organizational structure and financial aspects of the project taking into account the proposed health of the project till 10th Year.

Chapter 7 provides ideas into infrastructural development at the various sites.

Chapter 8 gives the conclusions and recommendations and also deals with aspects of Carrying Capacity.

Chapter 9 deals with some Environmental concerns that need to be taken into account when such projects are envisaged.

Tourism in Jammu and Kashmir

Jammu & Kashmir is known by many names such as the Paradise on Earth, Crown of India etc. The Northern most state of India is indeed a paradise. Divided into three distinct parts of Jammu, Kashmir and Ladakh, the topography, cultures and languages vary greatly in these parts. Similarly there is vast variation in case of tourism potentials of these parts. From ecotourism point of view, the state is full of opportunities.

The major tourism destinations are broadly classified into beaches, backwaters, hill stations, wild life sanctuaries, mangrove vegetation and culture including festivals. Beaches, Hill station, Backwaters, Heritage and Culture have been the centre of attraction for most of the travellers but specific nature-wildlife based and low impact tourism, also called as Ecotourism has grabbed the attention in the recent times.

At present there is no institutionalized system/channel through which public can see the forest and have a quality and lasting experience. A quick visit to the sanctuary, as being practiced now cannot be called ecotourism. It is only mass tourism into a sanctuary as the learning aspect and sensitisation towards nature is missing. There is a marginal direct economic impact to the local community on account of no local participation and weak economic linkages.

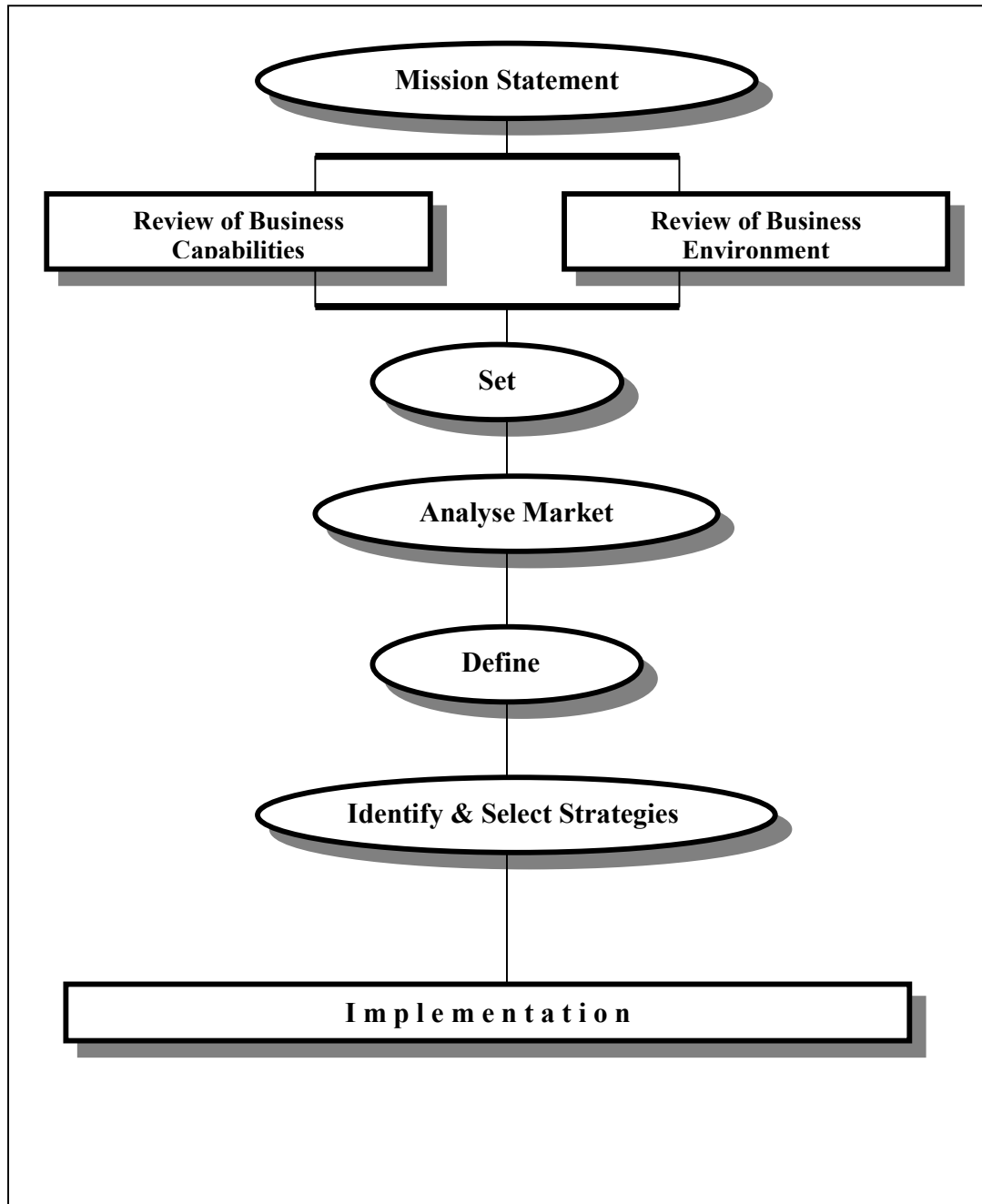
What is needed is a more focused strategy, which is supply driven, awareness oriented and consists of small group so as to take care of the carrying capacity of the protected area. There should be a conscious step to associate the local community by providing them alternative employment opportunities so that they assure sustainability of the project.

The objective of Developing Ecotourism facility in Jammu and Kashmir is to develop a Community-based and Commercial-oriented Ecotourism project and run it as Pilot project which would be replicated at other Eco-sites. The project also aims at providing technical assistance to the local community by capacity building initiatives. Since the project is a Pilot project, there are provisions to review and analyse on the basis of key indicators, and give recommendation to plug the negative deviation from the desired results.

The study suggests formation of **Ecotourism Board** as an apex body to coordinate Ecotourism activities in the state. The Board will develop infrastructural facilities and will outsource the management of the sites to interested parties under a revenue sharing model with a minimum guaranteed amount. An initial Investment of Rupees 6 crore in Capital expenditure and Rupees 90 lakhs in 9th and 10th year will give a return of 15% (IRR 15%) over a period of 10 years and the NPV of returns is 1.9 crores making the project financially viable.

In general, the Ecotourism project is aimed at providing an **insightful, mindful and participatory travel experience** to natural and cultural environments, assisting the well-being of the local cultures and environments for future generations. At the same time the project will produce viable economic opportunities for the host areas.

The Strategic Planning Process



Chapter 1

Genesis of the Project

1.1 About Jungle Lodges and Resorts

Jungle Lodges and Resorts Ltd. has been in operations for the past 28 years and has come a long way since then. Jungle Lodges and Resorts Ltd., was born in 1980 as an effort to promote wildlife destinations in Karnataka. Today with twelve properties, Jungle Lodges and Resorts Ltd. is the leading chain of resorts offering wildlife, eco and adventure tourism in India giving visitors a unique and natural experience. Our Kabini River Lodge, Karapura was rated by Tattler's Travel Guide as one of the top wildlife resorts in the world (1995). Jungle Lodges and Resorts Ltd. was also named "The Best Ecotourism Organisation" by the Ministry of Tourism, Govt. of India (1997-98). In 2008 Kabini River Lodge was also adjudged the "Site with Best Ecotourism Practices" by CNBC AWAAZ.

Jungle Lodges and Resorts Ltd., was formed in the year 1980 as a private Limited Company in the joint sector between the Government of Karnataka and M/s. Tiger Tops (I) Pvt. Ltd., with the management control vested with private partner. M/s. Tiger Tops India Pvt. Ltd. withdrew their participation completely in the year 1987 by selling their entire shares to the Government of Karnataka. Since then, Jungle Lodges and Resorts Ltd. is fully owned by the Government of Karnataka.

The objective

The Company promotes Ecotourism, wildlife tourism, adventure tourism and various outdoor activities like trekking, camping, white water rafting, fishing etc., that are non consumptive components of ecotourism and in general help in environment conservation.

The Establishment

Spread over 12 resorts operated by Jungle Lodges and Resorts Ltd., there are 167 twin sharing accommodations varying from tents to rooms to independent cottages. Besides, there are 4 resorts operated on management contract.

- Kabini River Lodge, Karapur, H.D.Kote Taluk, Mysore District.
- B.R.Hills Wildlife Adventure Resort, K.Gudi, Chamarajnar.
- Cauvery Fishing Camp, Bheemeshwari, Malavalli Taluk, Mandya District.
- Cauvery Fishing Camp, Doddmakali, Malavalli, Taluk, Mandya District.
- Cauvery Fishing Camp, Galibore, Kanakapura Taluk, Bangalore Rural District.
- Kali River Lodge, Kogil Ban, Dandeli Uttara Kannada District.
- Devbagh Beach Resorts, Karwar, Uttara Kannada District.
- Bannerghatta Nature Camp, Bannerghatta, Bangalore.
- Bandipur Safari Lodge, Melakamanahalli, Bandipur.
- River Tern Lodge, Lakavalli, Chikmagalur District.
- Old Magazine House, Ganeshgudi, Uttara Kannada District
- Dubare Elephant Camp, Kodagu District

1.2 Objectives of the Consultancy for Jammu and Kashmir

1. Exploring Ecotourism Potential:

J & K has tremendous potential for ecotourism being bestowed with nature's bounty. It is essential that this is done methodically. Jungle Lodges and Resorts Ltd. would help the state in identifying the locations, which are potential ecotourism sites.

2. Ecotourism Development:

Jungle Lodges and Resorts Ltd. with its experience would include the strategies to be adopted for development of Ecotourism. This would include suggestions on partnerships, selection of travel and tour operators. Jungle Lodges and Resorts Ltd. would also help in identifying the new opportunities and revenue models by exploring adventure and outdoor activities through carrying capacity analysis. Phasing of projects for investment and risk management and development of suitable model for the same.

3. Development of Eco-infrastructure and Eco-lodge Management:

Jungle Lodges and Resorts Ltd. would contribute ideas for developing existing facilities and would suggest structure designs, theme suggestions, rough plans and layouts of facilities and infrastructure of resorts as per Jungle Lodges and Resorts Ltd. concept.

4. Marketing Management:

Development of marketing strategies for promoting ecotourism in J & K. Strategic marketing skills for direct marketing, web-site development and internet marketing. Contributing ideas towards brand awareness.

5. Customer Relations:

Jungle Lodges and Resorts Ltd. would extend support for Customer Relationship Management by contributing ideas for interacting with clients, training sales and booking staff, skills for closing sales and information support for building relationships.

6. Develop organisational structure for Ecotourism in J & K:

Jungle Lodges and Resorts Ltd. would suggest the most suitable organisational structure for the State of J & K which will drive ecotourism in the state.

1.3 Development of Project Concept

The then Additional Principal Chief Conservator of Forests [APCCF] and Chief Wildlife Warden [CWW] of Jammu & Kashmir State [J & K] Shri R. L. Bharti, IFS., had several discussions regarding implementation of ecotourism principals in attracting the tourists in J & K. The CWW J & K then chalked out a plan and invited the then Managing Director, Jungle Lodges and Resorts Ltd. to visit and suggest the measures to improve ecotourism potential of the state. The MD and GM of Jungle Lodges and Resorts Ltd. visited the state during December 2005 and gave a presentation to the Hon. Minister for Forests, Environment and Wildlife Preservation regarding the potentiality. The CWW had further expressed the need of consultancy services from Jungle Lodges and Resorts Ltd. for an in depth study and preparation of ecotourism projects for development of ecotourism for Ramnagar Wildlife

Sanctuary of Jammu region, Hokura-Shallbaug-Dachigham circuit in Kashmir region and Tso Moriri Wetland in Ladakh region.

Subsequently, some officers from the Forest Department visited some properties run by Jungle Lodges & Resorts Ltd.

Thereafter, the Chief Naturalist and one Resident Manager visited the state in May 2006 to derive an initial understanding of the project sites and suggest the planning and operationalisation of the project.

Consequently, a team comprising of four members from Jungle Lodges and Resorts Ltd. completed the first leg of the study in the Jammu and Kashmir regions. The trip was undertaken in the month of December 2007 to gather a perspective of the stark winter conditions and the ways and means to develop tourism for the two regions keeping in mind the conditions at the local level.

Finally, another team of four members visited Ladakh in August 2008 and surveyed the environment in the cold desert regions of the district.

Hence, with these four visits, the fieldwork for the project was completed. The detailed itinerary of these four visits is attached in the following pages.

As mentioned, the first was from 8th to 17th December 2005. The team consisted of Shri Vinay Luthra, IFS, Managing Director, Jungle Lodges and Resorts Ltd. and Shri Subhash Malkhede, IFS, General Manager, Jungle Lodges and Resorts Ltd., Karnataka. The team was accompanied by Shri R.L.Bharti, IFS, Additional Principal Chief Conservator of Forests and Chief Wildlife Warden of J&K. The programme included visit to several wildlife protected areas of the state.

The schedule followed was as given below.

Date	Places Visited
8-12-05	Bangalore-Delhi-Jammu-Srinagar travel. Visit to Hokersar Wetland.
9-12-05	Shallbaug Wetland Reserve. Sonmerg and Thajwas Sanctuary.
10-12-05	Dachigham National Park. Overa-Aru Wildlife Sanctuary.
11-12-05	Srinagar-Leh. Acclimatization.
12-12-05	Tso moriri Wetland Reserve.
13-12-05	Hemis High Altitude National Park. Ramnagar Wildlife Sanctuary.
14-12-05	Leh-Srinagar-Jammu Travel. Gharana Wetland Reserve.
15-12-05	Mahamaya Conservation Area. Presentation to Hon. Minister for Forests, Environment & Wildlife Protection, Jammu & Kashmir.
16-12-05	Meeting with Secretary [Technical] MoFEWLP, J&K. Jammu-Delhi-Bangalore return journey.

The schedule during the second visit made by Mr. Karthikeyan and Mr. Sundar Raj is as follows -

Date	Plan
May 11, 2006	Interaction with Chief Wildlife Warden, Jammu and staff Visit to the Zoo and Rehabilitation Centre
May 12, 2006	Visit to Ramnagar Wildlife Sanctuary and site selection
May 13, 2006	Visit to Surinsar Lake, Mahamaya Conservation Reserve. Travel to Srinagar
May 14, 2006	Visit to Dachigam National Park (incl. visit to Palipora guest house, trout farm and sheep farm) Visit to Pahalgam, Aru Wildlife Sanctuary, and Aru village
May 15, 2006	Travel : Srinagar to Kargil
May 16, 2006	Travel : Kargil to Leh
May 18, 2006	Inauguration of the new office of WWF-India at Leh Visit to Khardung la; Interaction with participants of the workshop
May 19, 2006	Travel to Tso Moriri / Karzok; discussion about Tso Moriri with participants of the workshop
May 20, 2006	Interaction with the villagers of Karzok Travel back to Leh

The third visit was to Jammu and Kashmir region comprising of Mr. Hari Kumar Jha, Mr. Karthikeyan, Mr. Nahar Muhammed and Mr. Sundar Raj was from the following dates.

Date	Plan
Dec. 10, 07	Arrive at Srinagar <i>via</i> Delhi Meet with Mr. Farooq Geelani, Regional Wildlife Warden
Dec. 11, 07	Visit to Hokersar & Shalbaug wetlands Accompanied by Mr. Abdul Rauf Zargar
Dec. 12, 07	Visit to Gulmarg : Accompanied by Mr. Mushtaq Ahmed Parsa
Dec. 13, 07	Visit to Overa, Pahalgam : Accompanied by Mr. Suhail
Dec. 14, 07	Visit to Dachigam : Accompanied by Mr. Rashid Naqash
Dec. 15, 07	Arrive at Jammu Meet with Mr. A.K.Srivastava, Chief Wildlife Warden
Dec. 16, 07	Visit to Jasrota, Mansar & Surinsar Accompanied by Mr. Nasier Kitchloo and Mr. Rakesh Kumar
Dec. 17, 07	Visit to Ramnagar and Nandini Wildlife Sanctuaries Accompanied by Mr. Nasier Kitchloo and Mr. Rakesh Kumar
Dec. 18, 07	Leave for Bangalore <i>via</i> Delhi

The fourth visit was conducted in Jammu and Kashmir region comprising of Mr. Hari Kumar Jha, Mr. Karthikeyan, Mr. Yuvraj and Mr. Kunal Sharma was from the following dates.

Date	Plan
Aug. 04, 08	Arrive and stay at Delhi
Aug. 05, 08	Delhi – Leh Acclimatization; meeting with Mr. Takpa, Regional Wildlife Warden
Aug. 06, 08	Leh Acclimatization; meeting with Mr. Takpa to plan details of site visits
Aug. 07, 08	Leh – Tso Moriri; overnight stay. Accompanied by Mr. Wangchuk
Aug. 08, 08	Tso Moriri – Tso Kar - Leh Accompanied by Mr. Wangchuk
Aug. 09, 08	Leh – Pangong Tso - Leh Accompanied by Mr. Wangchuk
Aug. 10, 08	Leh – Hemis - Leh Rumbak Valley trek; Accompanied by Mr. Abdul Rauf
Aug. 11, 08	Leh – Hemis - Leh Accompanied by Mr. Rauf
Aug. 12, 08	Leave for Bangalore <i>via</i> Delhi

Chapter 2

Ecotourism Resource base of Jammu and Kashmir

The ecotourism resource base is defined by its Outstanding Natural Features, Outstanding Biological Features, Outstanding Cultural Features, and Potential Activities for ecotourist, and the Accessibility by sea, river, road and tracks.

The state of Jammu & Kashmir spans an area of 2,22,236 km² which accounts for 6.8% of the country. The area is divided into the 3 regions viz. – Jammu, Kashmir and Ladakh. Of this about 21,267 km² is under forest cover (9.5% of the state and 0.65% of the country).

Jammu & Kashmir within its boundaries ranges from the scorching heat of the plains of Jammu to the snow-capped mountains of Gulmarg in Kashmir and the cold desert climate of Ladakh. Broadly, the state of Jammu and Kashmir comprises 3 distinct climatic regions: humid sub-tropical region of Jammu, the temperate Kashmir Valley, and the cold arid deserts of Ladakh.

This then would have implications for the flora and fauna of the region. The state described as “Paradise on Earth” is rich in flora and fauna. Scrub and deciduous forests characterise the hotter plains and while temperate forests clothe in the higher reaches. And, the Ladakh region is a cold desert with very stunted shrubby vegetation. Each of these supports their own complement of fauna.

Physiographically speaking the region can be broadly classified into The Plains, The Foothills, The Himalayas, Valley of Kashmir The Upper Indus Valley and The Karakoram Range. Besides the complex mountain chain, innumerable rivers (Jhelum, Ravi, Tawi, Chenab, Indus, etc.), lakes (Dal, Wular, Hokersar, Tso Moriri, Pangong Tso, etc.) and springs also characterize the region.

2.1 Potential Tourist Activities

The potential ecotourism activities attractive to different type of visitors/ tourist are:

Forest based activities- Travelling to natural areas, taking part in treks and long excursions, trekking, jeep safari jungle tours, camping, wildlife viewing, birdwatching and visit to wetlands.

River bound activities: Viewing of river borders wildlife, rafting, canoeing, fishing, boating.

Culture bound activities: In view of the immense possibilities and spread of cultural riches in the state, we also propose that some cultural visits can be involved within the larger framework of ecotourism activities. These include visitations to temples located within parks and so on.

The investment in recreation and tourist facilities comprise:

- Forest recreation areas which could be possibly be developed in future city parks such the region around Ramnagar

- Forest recreation areas with multiple functions and type of visitors such as region like the Nandini Wildlife Sanctuary
- Forest recreation area best to be developed for nature/ ecotourism only such as Dachigam and Tso Moriri

Additionally, Ecotourism in Kashmir related to lake-forest tourism is still minimal. The Kashmiri culture is a major tourist attraction, in particular for its traditional crafts, houseboats, wood carving and weaving. A visit to old growth forest where the wood was sourced traditionally has become increasingly difficult. This could be an approach in attracting tourists to the region by taking them on escorts to the nearby national parks, especially to the Dachigam region and show them the wood in their natural forms. It is necessary to understand that ecotourists in the real sense have a deep appreciation towards the way forestry resources have been used and it could be a manner to bring attention to them.

2.2 Access to the Resource Base of the region

The development of above mentioned natural, biological and cultural features or Implementation of potential visitor's activities depends foremost upon accessibility. Accessibility is defined by travel time, travel cost, travel hardship, and available transport facilities, reliability of schedules and safety provisions.

The access to the Ladakh area is costly. Planes from New Delhi arrive and there is a limitation to the number of air planes that can arrive and depart from Leh town. Jammu is easily accessible while travel to Kashmir also is cumbersome and requires prior bookings on taxies of public transport (buses), as trains were hitherto non existent in the valley. Compete with the more accessible and more developed tourist areas.

The current status of ecotourism development in Jammu and Kashmir is still young and very small. The Dachigam national park culture receives a few thousands visitors only. It has gradually grown since the eighties.

The main constraint of tourism development in Jammu is:

- *Transport, Communication facilities.*
There is a lack of reliable and quality transport facilities by road and air. Prices of transport are relative high.
- *International image of Jammu.*
Though Jammu was relatively isolated and had been spared much of the unrest in Kashmir, it has been increasingly seen that terrorism has begun making an impact in the region. This has started having an effect on the image of the region.
- *Lack of visitor facilities.*
Hotel development in Jammu is not yet up to international standards. Rudimentary tourism boarding/ lodging facilities exist in forest areas so far.

The main constraints of tourism development in Kashmir are:

- *Transport, Communication facilities*
There is a lack of reliable and quality transport facilities by road and air. Prices of transport are relative high.
- *International image of Kashmir*
Widely known as the paradise on earth, Kashmir has suffered from the continuing problems of insurgency and an unstable social environment. This has led to a disastrous fall in tourist footfalls over the past two decades. While, there are signs of considerable improvement in tourist inflows, it will take more effort to increase the confidence of the visitor who would be interested to make a trip to the valley.
- *Lack of visitor facilities.*
Hotel development in Kashmir is not yet up to international standards. Rudimentary tourism boarding/ lodging facilities exist in forest areas so far. While there are several hotels in the town of Srinagar that cater to mainstream tourists, ye there are hardly many places where a discerning ecotourists would be able to stay. Home-stays are one option that exists in the valley.

The main constraints of tourism development in Ladakh are:

- *Transport, Communication facilities*
Looking from one perspective, reaching Ladakh is a holiday by itself and many people do visit the region to enjoy the ride to the place. However, it is a very expensive option to reach the region. Buses do run from Manali and Srinagar bus stands, but for most it is the compulsion of taking a taxi that is heavy to the pocket. Air travel with a limited number of flights exists but as it is, is an expensive option.
- *Lack of visitor facilities*
Hotel development in Ladakh is not yet up to international standards. While Leh as a town has many hotels in every price range during the season period, others parts suffer from a lack of these. There are several home-stays at present across the entire region. Forest guest houses are frequently placed and cannot be said to constitute a viable living option.

2.3 Outstanding Cultural Features

The area has unique cultural features that attract tourists. The three regions namely Jammu, Kashmir and Ladakh have ethnically differing people with their diverse culture and traditions. The food they eat, the dresses they wear, the language they speak is all different and unique.

Religion

There are three main religions that are followed in Jammu and Kashmir. Kashmir has majority of Islam, Jammu has major strength of Hindus and most of the population in Ladakh follows

Buddhism. There is also a group of people who are called Dogras. Their major population lives in Jammu region and follows Hinduism but some also follow Islam.

Language

Urdu is the official language of the state of Jammu and Kashmir. Though it is spoken throughout the state but most widely used in Kashmir. The other languages spoken here are Kashmiri, Ladakhi, and Dogri language.

Customs and Festivals

Jammu and Kashmir is a state of different religions and beliefs. And accordingly, the customs followed and festivals celebrated are many. Popular festivals include Eid-ul-Fitr, Baisakhi, Lohri and the Hemis Festival.

Dressing

People of the state have a unique dressing pattern. Traditional clothes for men include Kurta Pyjama in summers, but in winters, woollen clothes come out. A kind of an overcoat called Pheran is worn over Kurta. It is quite loose but inside Pheran, a warm pot called *kangri* is kept, such is the severity of winters here. For women, ladies suit and Burqha (veil) is the most common attire in summers and in winters Phreran are used.

2.3.1 Need for Involving the local community

Villages at the forest borders are of major importance for forest protection and play an important role as partner in ecotourism development. One of the main objectives of ecotourism is to involve local people in ecotourism development and their possible job opportunities and income earning.

The agency is obliged to implement to support village development, taking into account their traditional rights and cultural systems. It has the aim of raising forest communities to self reliance, welfare and environmental awareness. It is also necessary that any programme by people should translate to development and self reliance mainly to less dependence upon the forest.

The agency has to collect secondary and primary data on the social and economic aspects of these villagers, their land use, income profile, cultural back ground, and their dependence upon the forest resources.

In relation to ecotourism the following data are important.

Do people have an intimate knowledge of the forest, forest resource, locations to become tourist guide?

Do people have special skills in handicrafts?

Do they posses attractive architectural house design, village layout, etc.

As interests of local populations grow, an interest develops amongst the community members to initiate forest protection measures in those regions. Hence, the community should be made a stakeholder in all feasible options. The greatest benefit that any local community can derive from an ecotourism project is that of local employment. This has been proven to be the strongest measure of guaranteeing a respect and feeling of importance from the local community.

2.4 Outstanding Natural and Biological Features

As our mandate specified, each of the regions were treated separately and further studied for potential ecotourism sites. Based on interactions with host officials and field study, it is recommended that the following sites be taken up for ecotourism activities. In addition to discussing the outstanding natural and biological features, this section also studies these potential ecotourism resource bases with respect to their accessibility from the closest railhead, road network and air connectivity.

The outstanding natural features are the scenery, forests, high altitude mountains, the wetlands, national parks; perennial snow bound regions and dramatic scenery, especially in Ladakh region.

In Jammu

2.4.1 Gharana Wetland

Gharana is a small wetland reserve spanning an area of 0.75 km². It is about 35 km. south of Jammu on the India-Pakistan border. In spite of its small size is attracts large a number of migratory of waterfowl including the Barheaded Goose, Shoveller, Pintail, Common Teal, White throated Kingfisher and Indian Moorhen besides a host of other birds that are found on the fringes of the wetland. The neighbouring farm lands and rural setting also supports other birds adding to the avifaunal variety of the area.



2.4.2 Jasrota Wildlife Sanctuary

The Jasrota Wildlife Sanctuary occupies an area of 10.54 km². It was declared as Wildlife Sanctuary in 1987 vide Government Order No: 151; dated: 19-03-1987 and is under the administrative and technical control of Wildlife Protection Department, Jammu & Kashmir. The park is unique for the Jasrota Rajputs who meet here once in a year to celebrate their historical past.



The park has an undulating terrain and supports a simple diversity of flora and fauna. There is a mixed variety of birds as well as animal life. The Jasrota Wildlife Sanctuary is dominated by bamboo besides a variety of other plants including *Dalbergia sissoo*, Acacias and Lantana amongst others. The sanctuary is also home for a variety of mammals like Chital, Barking Deer, Wild Boar and Rhesus Macaque. The avifauna includes both resident and migratory birds. The important species are peafowl, red jungle fowl, jungle bush quail, green pigeon, blue rock pigeon, bulbuls, warblers and ioras. The area also supports a good number of butterflies which include the Blue Pansy, Commander, Common Albatross, Acacia Blue, Common Jezebel, Blue Tiger, Common Crow, Grassyellows, Indian Red Admiral, Striped Tiger, Common Leopard, Yellow Pansy, and Common Map.

The nearest airport from Jasrota Wildlife Sanctuary is in Jammu. The nearest railhead is also Jammu. The Sanctuary is located at a distance of 75 kms from Jammu towards East, off the National High Way 1A.

2.4.3 Surinsar and Mansar Wetlands

Surinsar Mansar Wildlife Sanctuary derives its name from two lakes, located at each corner of the sanctuary. It spans an area of 98 km² in the Shivalik Range of Jammu Region and has an altitudinal range of 547m to 834m above MSL. The area is located between 32° 41' 29" and 32° 49' 28" north latitude and 74° 59' 54" to 75° 09' 12" East longitude



The vegetation of the sanctuary includes the mixed scrub forest which comprises mainly of broad leaved species which are mixed with stands of Pine. The common broad leaved species are *Mallotus phillipensis*, *Acacia* spp., and *Dalbergia sissoo*. The sanctuary is home to Goral, Wild Boar, Barking Deer, Leopard etc. and a host of birds like flycatchers, pheasants, pigeons and doves.

The nearest airport from is Jammu, which is 58 kms away. The nearest railhead is Jammu which is 56 kms away. The sanctuary falls in Jammu and Udhampur Districts of Jammu Region.

2.4.4 Ramnagar Wildlife Sanctuary

Occupying an area of 31 km², the Sanctuary is located on the outskirts of Jammu City along the National Highway. Two major roads run through the park. Access to the sanctuary is very easy. It is only protected forest area near Jammu City and is considered as the lung of the city.

The sanctuary harbours Nilgai, Barking Deer, Wild Boar, Rhesus Macaque, etc. The sanctuary is also home to birds like the Indian Myna, Blue Rock Pigeon, Peafowl, Golden Oriole, Rustycheeked Scimitar Babbler, Whitecheeked Bulbul, etc. Butterflies like the Great Orange Tip, Crimson Tip, Common Leopard, Pansies, Common Jezebel, etc. can also be seen here.

2.4.5 Nandini Wildlife Sanctuary

Nandini Wildlife Sanctuary is characterized by stunning locale and varied topography. The sanctuary derives its name from Nandini village. The region play hosts to a large number of rare and endangered species of mammals and birds. Much acclaim has been accorded to the Nandini Wildlife Sanctuary, famous for its diversity of wildlife and best known for wonderful species of pheasants.

Spread over an area of 34 km², the sanctuary is rich in fauna and provides refuge to a variety of mammals. The main species are Leopard, Wild Boar, Rhesus Macaque, Bharal, Langur etc. Like the Overa wildlife sanctuary, the Nandini, too, is a habitat for a significant population of pheasants like the Peafowl, Red Jungle fowl, Chir Pheasant, and Chukor. The nearest airport and railhead to Nandini Wildlife Sanctuary is in Jammu, which is 26 kms away.

In Kashmir

2.4.6 Hokersar Wetland

Hokersar is 14 km north of Srinagar, and is a world class wetland spread over 13.75 km² including lake and marshy area. The reserve is fed by the perennial streams namely Doodhganaga and Sukhnag. The depth of the wetland is about 3 feet. It is the most accessible and well-known of Kashmir's wetlands which include Hygam and Shalbaug. A record number of migratory birds have visited Hokersar in recent years. An estimated 4 lakh birds have already been spotted at Hokersar in the current season.



Birds found in Hokersar include Brahminy Duck, Tufted Duck, Gadwall, Garganey, Greylag Goose, Mallard, Common Merganser, Northern Pintail, Common Pochard, Ferruginous Pochard, Ruddy Shelduck, Northern Shoveler, Common Teal, Eurasian Widgeon, and Whitebreasted Kingfisher.

Another wetland just about 10 kms from Srinagar city is Shallbaug. Unfortunately, the area is devoid of water presently. The breached bund is being constructed for the sake of water storage. The Sindh River and Amir Khan Nallah are main feeders to the wetland. The wetland is likely to have many resident and migratory birds once the water is stored. The birds found in the area are similar to that in Hokersar.

2.4.7 Dachigam National Park

Home of the endangered Hangul, this is most visited protected area by wildlife lovers visiting Srinagar. It lies 21 kms from Srinagar city and has an area of about 141 sq.km. and it is classified into wintering ground i.e. Lower Dachigam and summer ground i.e. Upper Dachigam.



Dachigam National park is located among the high mountains of the mighty western Himalayas. The variation in altitude is vast, ranging from 5500 ft to 14000 ft above mean sea level. Due to this vast variation, the park is very clearly demarcated into an upper and lower region. The terrain ranges from gently sloping grasslands to sharp rocky outcrops and cliffs. Part of the park lies above the tree line and this area displays its own kind of natural beauty with bare rock mountains and crevices.

It is significant in the sense that it is only area in the world where the last viable population of Kashmir Hangul (*Cervus alphas hangout*) is in existence. Further it is also providing protection to unique galaxy of Himalayan flora and fauna paramount among these include the Kashmir Elm (*Ulmus wallichiana*) which is a candidate for the IUCN Red data Book of threatened Angiosperms, the Musk Deer (*Moschus moschus chrysogaster*), the Brown Bear (*Ursus arctos isabellinus*), the Red Fox (*Vulpus vulpus*), the Leopard Cat (*Felis bengalensis*), the Leopard (*Panthera pardus*) and in avi-fauna the Kashmir Flycatcher (*Muscicapa subrubra*), the Monal Pheasant (*Lophophorus impejanus*), the Koklas (*Pucrasia maculophya*), the Golden Eagle (*Aquila chrysaetos daphanea*) and the Lammergeier (*Gypactus barbatus aureus*) are note worthy.

Dachigam National Park is quite rich in biodiversity. Since the park is also home to rare avifauna so it can attract bird watchers from all over the world.

The mountainsides below the tree line are heavily wooded. Most of this coniferous forest consists of broad leaf species. Interspersed between these are alpine pastures, meadows, waterfalls and scrub vegetation with deep gullies, locally known as Nars, running down the mountain face. Most of the grasslands and meadows, except in the harsh winters, are covered with brightly coloured flowers. The wild trees of the park consist of Wild Cherry, Pear, Plum, Peach, Apple, Apricot, Walnut, Chestnut, Oak, Willow, Poplar, Chinar, Birch, Pine and Elm.

Fauna

The main animal species that Dachigam is most famous for is the Hangul, or the Kashmir Stag. Other than this animal, some of the other species that inhabit its interiors are Musk Deer, Leopards, Himalayan Gray Langurs, Leopard Cats, Himalayan Black Bear, Himalayan Brown Bear, Jackals, Hill Fox, Himalayan Weasel, Yellow-throated Martens, Jungle Cats, Marmots and Otters.

Just like the park itself, the bird life here also changes to a large extent with the onset of every new season. Some of the main bird species found here consist of Cinnamon Sparrows, Black Bulbuls, Himalayan Monals, Golden Orioles, Minivets, Pygmy Owlets, Woodpeckers, Babblers, Redstarts, Wagtails, Koklas Pheasants, Choughs, Orange Bullfinch, Kashmir Flycatcher, Tytler's Leaf Warbler, Streaked Laughingthrushes, Himalayan Rubythroats, Wallcreepers, Black and Yellow Grosbeaks, Himalayan Griffons, Bearded Vultures, Red-billed Blue Magpies and Tits.

Dachigam has been the fresh water catchment area for the Srinagar, identified by the then Maharaja of Kashmir for supply of clear and clean drinking water to the city. But now, the Laribal Trout Fish Farm also banks upon its perennial crystal clear and cold water, besides irrigating the agricultural land in the immediate environ of the park.

2.4.8 Overa – Aru Wildlife Sanctuary

Overa – Aru Wildlife Sanctuary has derived its name from the two hutment areas of Overa and Aru falling in the lap of the sanctuary and along the two famous snow melted fresh water and perennial nallahs of “Overa” and ‘Lidder” which later form the eastern boundary of the sanctuary. The total area of the sanctuary is 511 sq.



km. Overa – Aru Wildlife Sanctuary – Pahalgam (Anantnag) falls adjacent to the holy Shrine of Amarnath cave and Pahalgam hill resort of Kashmir valley. This is in some respect an

extension of Dachigam National Park and hence shares a lot of the faunal diversity with that place.

2.4.9 Gulmarg Wildlife Sanctuary

Gulmarg Wildlife Sanctuary is named after world famous resort “Gulmarg”. It has been notified in 1987. The notified area of the Gulmarg Wildlife Sanctuary is 139.25 square kilometres. The area is encompassed within moderate to steep mountainous range presenting a panoramic scenic beauty. It has many famous peaks within and overlooking the entire landscape, including the magnificent “Affarwat Peak”. Entire area drains through the famous Ferozpora Nallah which is joined by a number of small streams in its natural course.



Gulmarg is the “meadow of flowers” and, as such, the vegetation is very rich in diversity in terms of natural coniferous forests, ornamental and aesthetically rich ground flora. Gulmarg Wildlife Sanctuary presents the most congenial and suitable habitat for the critically endangered species known as “Musk Deer” (Ver. Roose), *Moschus moschiferus* a Schedule – I protected animal under the Wildlife Protection Act. Gulmarg Wildlife Sanctuary also has a diverse endemic mammalian member.

Besides this, Gulmarg Wildlife Sanctuary has a rich population of avifauna. It offers breeding ground to several rare species of resident pheasants and a variety of summer migrants from Indian sub-continent, etc. The avifauna mainly comprises of Himalayan Monal, Common Koklas, Himalayan Snow cock, Hoopoes, Woodpeckers, Crows, Nut-crackers, Bulbuls, Fly-catchers, Warblers, Chats, Thrushes, Dippers, Tits, Creepers, Wagtails, Sparrows, Pipits, Owls, etc.

The Gulmarg Wildlife Sanctuary is blessed with a number of frozen lakes (Sars) and glaciers which happen to be invaluable sources of water, feeding numerous streams or nallahs that flow down into the villages.

In Ladakh

Situated across the main Himalayan chain, Ladakh forms the bulk of the Indian Trans-Himalayas, a unique region distinguished by highly evolved and diverse life forms, including a variety of aromatic and medicinal plants, several wild relatives of domesticated plants and animals and a charismatic mega-fauna, still preserved in its entirety unlike most other parts of the world. Ladakh is a repository of vibrant traditions and indigenous knowledge which have evolved in harmony with its natural wealth.

Situated in the State Jammu & Kashmir between 32°15' - 36° N and 75°15' - 80°15' Ladakh forms the Northern most extension of the country, across the Great Himalayan range. It is bounded by Tibet to the North and South East, the Kashmir Himalayas to the West and the Lahul & Spiti District of Himachal Pradesh to the South

Ladakh displays a very wide range of altitudes, from 2800m in Kargil to the 7600m Saser Kangri peak in the Karakorum, and extreme climatic conditions: Temperatures range from over 30 °C in summer to less than -40°C in winter and the region receives very low precipitations, which decrease eastwards from ca 250mm in Zaskar to less than 100mm in the Indus Valley and the Chang Tang (South Eastern plains).

Ladakh spans over an area of 96700 square km lying athwart four major mountain ranges which run in a general South East – North West direction and delimit Ladakh main sub-regions:

- the Suru and Zaskar river valleys situated between the Great Himalayan Range, which marks Ladakh Southern boundary, and the Zaskar Range to the North
- the Indus valley between the Zaskar and Ladakh ranges
- the Shyok and Nubra river valleys between the Ladakh range and the Karakorum, which bounds Ladakh to the North

In the South Eastern part of Ladakh, the parallelism of range and valley dissolves in a complex of high altitude ridges and plateaux, many of them forming enclosed basins dotted with lakes and wetlands. Known as the Chang Tang, this region is considered an extension of the Tibetan Chang Tang (Northern Plains) into India (Anon. 1997).

Administratively, Ladakh is subdivided into two Districts: Kargil comprising of the Zaskar and Suru Valley region occupies 14036 km² while the Leh District (Indus, Shyok & Nubra valleys and ChangTang is spread over 82665 km (of which c. 37500 under Chinese occupation) which makes it by far the largest district in the country.

Ecological Profile

Geology

A transect across the Western Himalayas from the Upper Spiti valley (Himachal Pradesh) in the South to the Tso Moriri lake and Indus valley to the North offers a continuous section through different tectonic levels of the Himalayan chain, revealing major stages of the Himalayan history from the Pre-Cambrian to the present including a well preserved fossil record (Steck et al.1998). The Upper Indus valley marks the suture zone where the Indian plate is being thrust under Asia (Van Andel, 1985). This chisel like penetration into Asia,

started 4 million years ago and still proceeding at a speed of some 5 cm per year, has given rise to the Himalayas themselves and on Ladakh scale, to the complex system of mountain ranges as well as active faults and enclosed basins where the region's main rivers and lakes are located.

Natural Ecosystems

Lying in the rain shadow of the main massif, Ladakh is best described as a *high elevation cold desert*. Ladakh vegetation has been variously described as alpine steppe, dry alpine scrub or stony desert. Low density and abundance as well as a high level of endemism and adaptation to high altitude and aridity are typical characteristics of both the flora and fauna of Ladakh cold desert.

Ladakh complex hydrological system of rivers, lakes and enclosed basins has allowed the development of important *wetlands*. These ecosystems function as oases of productivity in an otherwise arid environment, hosting varied plant communities, including most of the bush and trees growing naturally in the region, as well as a diverse wildlife including an abundant migratory bird fauna.

Agro-Ecosystems

Extreme climatic conditions and low soil productivity place severe constraints on Ladakh agriculture, which is entirely dependent on irrigation of alluvial terrain and raised terraces on stream sides and in valley bottoms. Less than 1% of Ladakh land mass (< 0.3% in Leh District) is fit for cultivation, which is based on a single yearly crop of mainly naked barley, wheat and irrigated fodder. Between them these three crops account for almost 90% of total sown area in Leh District. The other main crops are pulses, lesser millets and vegetables accounting for another 8 % (Anon. 2001b). Raising two crops a year is only possible in a few lower lying areas, with longer vegetation period and milder climate including part of Nubra and Khamti region in Leh District as well as Batalik, Garkun and Kargil (Mir, 2002). Silvi-horticulture is also widely practiced especially in the lower reaches of Ladakh river valleys, with poplar, willow, apricot and apple as the main crops.

In Western and central Ladakh, farming is traditionally combined with livestock rearing which includes short seasonal migrations to higher pastures (transhumance). Within this traditional system, livestock provide food (milk and meat), fibre and skin for clothing as also power for ploughing. Equally important, livestock convert the nutrients and cellulose of sparsely distributed vegetation and crop residues into dung which is a concentrated form of energy, used as organic fertilizer as well as fuel for cooking and heating (Fox, 1994). Traditional community management systems of Goat (Rarzy) and Cattle rearing (Barzy) are still in force in many villages of the region.

In contrast with the sedentary farmers of central and western Ladakh, the nomadic Chang Pa herders inhabiting the high plateaux of eastern Ladakh undertake substantial migrations at different time of the year, making extensive use of pasture resources. High altitude and a harsh climate do not generally permit cultivation in most of the Chang Tang. Goat and sheep husbandry is the mainstay of the local economy: the high quality pashmina wool produced by the Changra Goat as well as wool and meat from the local breed of sheep are the main cash crops.

The region is famous for its population of the rare Snow Leopards (*Uncia uncia*) and the Ibex (*Capra ibex*), Bharal (*Pseudois nayaur*), Wolf (*Canis lupus*), Pallas' cat (*Felis manul*), Tibetan argali (*Ovis ammon hodgsoni*), Blue sheep (*Pseudois nayaur*), Ladakh urial (*Ovis vigne*), Himalayan marmots (*Marmota bobak*), Tibetan Wild Ass or Kiang (*Equus hemionus kiang*), Woolly hare (*Lepus oiostolus*), wolves (*Canis lupus*), Wild dogs (*Cuon alpinus*), lynx (*Lynx lynx*), Mouse Hare or Pika (*Ochotona sp.*) etc.

2.4.10 Hemis High Altitude National Park

Hemis High Altitude National Park (4100 sq. km.) is situated at northernmost district of Ladakh region of the state of Jammu and Kashmir in India. The park has an altitudinal range of 3,300 m at the confluence of the Indus and Zaskar rivers in the northwest to the 6,400 m Kang Yisay massif in the northeast.

It was notified as a National Park on 4 February 1981 through Government Order No. FST/20. The name of the park was taken after Hemis Gompa, a famous monastery situated about 40 km south-east of Leh, capital of Ladakh Autonomous Council. It lies on the west bank of the Indus River and comprises the catchments of Markha, Rumbak and Sumdah nullahs. The park is potentially the best protected area for snow leopard (*Uncia uncia*) in India. The snow leopard is the most important large predator within the



Eurasian fauna of the mountains of central Ladakh and the creation and expansion of this park has been described by Jammu and Kashmir Government as a major step in a state wide program for protection of this endangered species. The lynx, wild dog, wolf, blue sheep, urial and Tibetan argali are also found in the park.

Physical feature

Hemis occupies much of the catchment of the lower Zaskar River. Valleys are rugged, often littered with rocks and stones and rimmed by peaks exceeding 5,000 m and occasionally 6,000 m in height.

The climate of area is one of extremes, with considerable daily and seasonal fluctuations. Precipitation is low with only 160.5 mm per year recorded at Leh. During winter the Zaskar River and its tributaries become frozen. Temperatures during winter drop typically to -15°C to

-20°C at night and rise to near freezing point in daytime. Although summer temperatures can reach up to 30°C at the lower elevations, snowfall can occur at any time of year. Annual precipitation in Leh at 3,500 m in the Indus valley is about 10 cm, but rainfall and snow increase with altitude.

Forest types and vegetation

The vegetation in Hemis National Park is predominantly alpine and steppe with various tree and shrub communities present in the valley bottoms. The moist upper mountain slopes support limited areas of alpine vegetation, characterized by genera such as *Anemone*, *Gentiana*, *Lloydia*, *Veronica*, *Delphinium* and *Kobresia*. The remaining mountain slopes and open hillsides, comprising the major portion of the park, support primarily steppe vegetation dominated by *Caragana*, *Artemisia*, *Stachys*, and *Ephedra*. Shrubland (*Hippophae*, *Salix*, *Myricaria*) and some trees (*Populus*, *Betula*) are present along the lower river courses.

2.4.11 Tso-moriri Wetland Reserve and Tso Kar lake



This beautiful lake spread over 120 sq. km. in lap of Ladakh is known as the breeding ground for rare birds as it enjoys the unpolluted atmosphere of Ladakh. It is located 225 km. south of Leh. Tourists come here during July to September to view the beautiful landscapes and equally riveting birdlife that has few parallels across the world. The lake can be reached via Chumatang village and also through the Manali Leh highway. Chumatang is a quaint village with hot springs that according to lore contains various healing properties. To reach the lake from Chumatang, guests travel from Debring and reach the lake after a strenuous drive, the last part accentuated with a beautiful view of the lake from a distance and a precarious drive through the lake's edge to the village camping place. Korzok at around 4600 metres is a

beautiful village that has to be sensitively developed if an effective ecotourism facility can be provided to guests.

The charm of the lake is its breathtaking clean waters and the amazing array of wildlife that it supports. Birds and mammals that are found hold an amazing opportunity to showcase the region as a wetland of unparalleled importance and develop it accordingly. There is a growing threat that due to the slow rate of decomposition in these heights, waste will be accumulated very soon and disrupt the regions biodiversity, hence care must be taken to reverse this trend.

The lake and the drive back by the alternative route of the Manali Leh highway is accentuated by the awe inspiring Lake Tso Kar where the likelihood of seeing Black neck Cranes and the Tibetan Wild Ass, increases manifold times. Tso Kar and Tso Moriri are some of the most breathtaking natural wonders of the world and are well suited to be model ecotourism sites. It is especially important for a well planned ecotourism site to be developed as the threat of

2.4.12 Pangong Tso

The beauty of Pangong Lake again is in the journey that is to be made from Leh to the lake and back. The road passes through high passes and verdant pastures. The Chang-la where the Indian Army offers tea to tourists has great potential to be developed as a stop during the journey to Pangong Lake. The pass is 5475



MSL and commands a view of the entire valley on both sides of the pass. Turbuk houses an ancient temple and a convenient point for relaxing.

As guests reach the lake, they are held spellbound by the narrow strip of water that extends for more than 130 km and is at an average altitude of 4200 metres. It is bisected by the international border between India and China. *Spangmik*, the farthest point up to which foreigners are permitted, is about 7 kms along the southern shore from the head of the lake. It presents a spectacular view of the mountains of the *Chang-chenmo* range to the north, their reflections shimmering in the ever-changing blues and greens of the lake's brackish waters. Above Spangmik are the glaciers and snow-capped peaks of the Pangong range.

2.5 Tourism Potential of sites in Jammu and Kashmir

2.5.1 Jasrota

Jasrota has a good tourist potential and is one of the more beautiful spots. Inside the sanctuary, there are ruins of a township and forts of Rajput rulers who ruled the area for 845 years. Besides, there is a temple of a local deity ‘*kalivirji*’ and an ancient temple of Lord Shiva inside the sanctuary.

In these temples, annual religious congregations numbering up to 10,000 persons are held every year. There are large sized water reservoirs which were used in ancient times to cater the water requirement of the township adding a historical charm to the site. There is a barrage that creates a lake which attracts water birds including a few migratory ones. The J&K Tourism Department has also constructed a tourist park at the foot hills of wildlife sanctuary which runs along the banks of river ‘Ujh’.

Wildlife significance

This is the only park area in the J&K State which harbours spotted deer or chital. Other animals like wild boar, barking deer, red jungle fowls and porcupine are significant attractions. Presence of leopard has also been marked well.

Potential

Besides being a popular religious site, this sanctuary has a scope of being promoted further. However, as per our current observations it can be an ideal place for creating infrastructure for ecotourism.

2.5.2 Gharana Wetland Reserve

The area is accessible from Jammu city on the border of India and Pakistan. It is visited by a large number of migratory birds and is a breeding ground for many aquatic birds.

Potential

Gharana Wetland is definitely an important wetland as far as birds are concerned albeit small. Given the size of the wetland, current uncertainty about land tenure and proximity to Jammu it may not be an ideal site to develop it into an independent destination. However, it can become part of a circuit. Besides, there is not much scope to construct anything.

2.5.3 Mansar and Surinsar

Mansar and Surinsar lakes are the main tourist destination in Jammu Region. Thousands of tourists visit these lakes throughout the year. The lakes have religious sanctity attached to them and are revered by many pilgrims who visit the place throughout the year for performing religious rites and rituals. The drive from Jammu to Surinsar is quite scenic with a possibility of seeing some wildlife. The location itself is a small hill with very little flat ground on the top. However, one may consider this place for a small resort at a later date. Since there is a lack of flat area the structures have to be put up on the gentle slopes of the either side of the mountain. This would afford some cottages/tents a water view while others would have a valley view.

The tourism department has already developed some infrastructure in the area. Activities like boating, rafting and tourism mela are held every year at Mansar. The Department of Wildlife Protection has a deer park located near the Wildlife Range Office on the bank of Mansar Lake.

Potential

Mansar Wetland is already overrun by weekend merrymaking tourists. The existing infrastructure put in place by the Tourism Department seems to be catering to their needs. It was strongly felt that no ecotourism venture should be considered. Surinsar is much smaller than Mansar and closer to Jammu and with a better ambience. However, one disadvantage would be the proximity of the village which can be disturbing in more ways than one. Ideally both these destinations should be used as part of a package with Jasrota Wildlife Sanctuary.

2.5.3 Ramnagar Wildlife Sanctuary

Ramnagar attracts a number of tourists due to the presence of a deer park in the sanctuary. There is also a rehabilitation centre for animals. Presently, a full fledged zoo is also being established in a part of the sanctuary. This way the sanctuary has great potential for development of Eco-tourist spot in Jammu city.

A nature trail/morning walker's trail of about 3.5 kms already exists in the sanctuary which can be used after maintenance as track for camel safari, bird watching etc. The Sanctuary has good potential to attract tourist who visit Jammu for religious purposes.

Potential

As Ramnagar is close to the town of Jammu, it has a great potential to be conserved and developed as an ecotourism showcase for the region of Jammu. The ambience is great and as Jammu grows, it has the possibility of being counted as a valuable city forest. And, it is best used in that manner.

The existing zoo can be improved both in terms of better enclosures for the animals and also the infrastructure for handling tourists. Then, the facility can be used for purposes of creating awareness among people, particularly school and college students. The audio-visual hall and the interpretation when fully complete and operational can aid in this effort in a big way. This can also attract tourists visiting Jammu, particularly those proceeding to Vaishno Devi shrine. The revenue earned by these activities could be ploughed back in maintenance and improvement of the Biological Park.

At Ramnagar, the following activities could be undertaken as part of a trip to this forest. The activities include bird-watching, visit to the zoo and interpretation centre and trekking. Water based activities could also be taken up in the near future and coracles or paddle boats added to the unit. This could be a revenue earning opportunity.

Earlier there were suggestions to develop Ramnagar Wildlife Sanctuary on the lines of the Bannerghatta Biological Park wherein animals could be caged in large enclosures and guests taken on a safari. The Van Vihar National park in Bhopal is another successful model on similar lines and has

resulted in generating revenue as well as spread awareness on conservation issues. This, however, may not be feasible due to the highly undulating terrain of the Ramnagar Wildlife Sanctuary.

However, the small wetland within the zoo premises is worth developing into a place for introducing people, particularly students to bird-watching. If access to this place is restricted and the birds that visit the place get privacy, one may get to see more species over a period of time.

2.5.4 Hokersar

Hokersar is perhaps one of the most beautiful wetlands in the country. It has been recently designated as a Ramsar site putting it on the world map. The wetland deserves all the protection and upkeep that is possible without endangering the habitat in any respect. The *shikaras* [local shallow boats] are used in the wetland where waterways are formed for taking the tourists. This could be a popular location for bird watchers.

Potential

The wetland is located close to Srinagar and can be developed as a popular ecotourism site with basic accommodation for overnight guests. However, for serious birdwatchers, tented accommodation may be in order. This will provide an opportunity for the birdwatcher to make the most of the visit rather than travelling back and forth to Srinagar.

In conjunction with Dachigam, this site holds great potential for further development and transformation into an ideal ecotourism venture.

Hokersar and Shallbaug are very close to Srinagar town; hence creating lodging facilities at these centres is not advisable. However, Zainkoot a village nearby could be developed as a model rural tourism village providing basic facilities to the tourists. The wetlands of Hokersar and Shallbaug could be used for birdwatching by the bird lovers by travelling through *Shikaras*. Watch towers at strategic locations should be planned. Differential tariffs for the tourists, depending on their duration of stay in these areas, needs to be worked out. The package shall also include visit to Dachigam National Park, where people can stay in cottages/dormitories. Tourists can be taken for viewing Hangul and Bears, besides other things. *Shikaras* could be used as a non polluting transport for the guests, thereby employing the local community.

2.5.5 Dachigam National Park

The home of the Hangul *Cervus elaphus hanglu*, Dachigam is a beautiful National Park with lush forests, fast flowing rivers, stunning landscapes and of course the dramatic seasonal changes. The park is proximate to the popular tourist destinations of Gulmarg and also not very far from Srinagar city. With respect to accessibility, it can thus be easily reached from the capital city of Srinagar.

Potential

The park has tremendous tourism potential considering the diversity in terrain and its proximity to Srinagar. With the revival of tourism in Jammu and Kashmir over the past few years, there has been an unprecedented increase in the flow of tourists to this National Park.

The famous Mughal Gardens Nishat, Shalimar and Cheshmashahi are located enroute to the Dachigam National Park and the park can be included as the final destination in the itinerary of tourists visiting these gardens.

Dachigam, having been hunting reserve of the erstwhile Maharaja is traversed with cart roads making the lower Dachigam area easily accessible. Improvement of these roads can help in the development of the park as an animal safari destination.

The area has high potential for jeep safaris, bird watching and trekking trails. The *hangul* being a star attraction in the park can be added to the itinerary for the safari. Additionally, an interesting aspect (depending upon the season) is likely to be management for trout fishing at some sites in the park.

Dachigam stands by itself as an unique ecotourism facility and can be developed as a greenfield project. In association with other natural sites, especially Overu Aru, an intensive trekking chart can be prepared that would appeal to serious ecotourism enthusiasts.

There already exists a Forest Department guest house. The park also has a nature interpretation centre which can also be further developed. There is a proposal to move the sheep breeding farm out of the National Park. This would free several structures which can be used to create facilities (both dormitories and cottages) for visitors to stay. Else, a completely new facility can be created proximal to the existing guest house.

2.5.6 Overa – Aru Wildlife Sanctuary

Overa-Aru Wildlife Sanctuary is close to the famous Pahalgam which is on the popular tourist circuit. Thousands of national and international tourists throng every year to enjoy the spectacular landscape and the serenity of the area.

Potential

The flow of pilgrims and tourists peaks during summer months. These tourists throng the Aru area of the sanctuary to see wildlife heritage therein. Further, a mini zoological park in the heart of Pahalgam has been established, all these features add to its potential to be developed under ecotourism package. Since, people living inside or adjacent to the protected area have limited resources for their livelihood; their morale can be boosted up if involved under ecotourism. They would be valuable as trekkers, guides, porters, etc. Ecotourism in the area is booming every year, but the basic infrastructure facilities for the arriving guests are nominal and needs to be developed. The sanctuary has many trek routes, some leading to Amarnath.

2.5.7 Gulmarg Wildlife Sanctuary

Much of the sanctuary is suitable for mountaineering. Sites like Alphatri, Khilanmarg, etc. located in this area have since a long time remained favourite destinations for rock climbers and trekkers. The sanctuary, therefore, can have a vital role in boosting the tourism potential of the area.

Potential

Gulmarg like Pahalgam is also a popular tourist destination already. However, the Gulmarg Wildlife Sanctuary needs a large-scale infra-structure development for habitat improvement/protection/conservation and management for developing as an ecotourist spot. The deer park and other existing facilities can be used too. The area is also home to some interesting Himalayan fauna like the Musk Deer, Serow, Bear, and Leopard besides several species of birds including some pheasants.

2.5.8 Hemis High Altitude National Park

Hemis National Park enjoys the benefit of being located close to the capital town of Leh. A bare fifty minute ride and one reaches the base of the park towards Rumbak village. The ride is spectacular and as one drives higher, can see large parts of the town of Leh. The area represents some of the most popular trekking route with some 5000-6000 national and international visitors per year. This area is mostly visited by foreign tourists who come to trek in this spectacular terrain.

Potential

The biggest charm in the park is that of trekking and that of a chance to see the elusive snow leopard. While snow leopard may not be available for sighting for every single visitor, yet it is likely to see other animals commonly. Ladakh is already famous as India's Shangri La and attracts thousands of visitors each year. It has been observed that of the tourists, several can be induced and encouraged to visit ecotourism facilities and it is necessary to develop some infrastructure in the Hemis region. Recently, several homestays have been established across villages in and around the National Park. These homestays are still in the developing phase and much remains to be seen on their future development.

It is however true that there needs to be more improvement in infrastructure and in providing some basic amenities to customers.

2.5.9 Tso-moriri Wetland Reserve and Tso Kar lake

Tso Moriri is an internationally known wetland. It is also a Ramsar site. This brackish wetland located at about 15000 ft. is a breeding ground for the Barheaded Geese, Blacknecked Crane and a host of other water birds. The wetland is 28 km. long, 8 km. wide and at places 40 m. deep. The Karzok village is also located on the shores of this high altitude lake. The entire landscape is a very fragile and sensitive one.

To develop ecotourism here with the least impact on the landscape and the environment while simultaneously ensuring the benefits accrued from such efforts rest with the local community pose some serious challenges. Unregulated tourism, putting up modern structures with modern amenities will have undesirable long term impact on the landscape, the wildlife and the people. Environment-friendly practices have to be in places for all aspect of the tourism.

Potential

With its inspiring landscape, amazing variety of wildlife and the opportunity to interact with local people, Tso Moriri is presently one of the more popular places of Ladakh. However, the region needs regulated tourist inflow. It is suggested that a camping site could be developed 4

kms before the lake. Local people of Karzok should be initiated in taking up the yak rides to Tso Moriri. Alternatively the Karzok village home stays should be strengthened by developing infrastructure and sewage disposal system and allow controlled inflow of the tourists.

Setting up of a permanent option is not advisable as it would be difficult to maintain it. The best option for this place is the home-stay option and alternatively set up a base camp at Leh on the lines of one of the resorts maintained by Jungle Lodges and Resorts Ltd.

The possible activities could be bird watching in the lake and adjoining regions. It is proposed that an alternative route be created for guests visiting Tso Moriri via Tso Kar to enable sightings of the black headed crane and also the Tibetan Wild Ass. Additionally trekking is a possibility here with varying levels of intensity.

Note :

On the issue of home-stay at Karzok, the following aspects have to be kept in mind.

People who are going to be part of the business should be trained in -

- communication / language – very important as visitors can be demanding and will pose a variety of questions – both culture related and otherwise
- guest relations and basic etiquette, cleanliness and hygiene
- at least some member of the village to be trained about local natural history and can act as naturalists
- basic training in first-aid should be given to such guides
- any accommodation added to be in agreement to the existing local architecture

2.5.10 Pangong Tso

Pangong Tso is located at a distance of 170 km. from Leh via the Chang La. It covers some of the most scenic sites in the district.

Potential

A tent facility can be set up during summer months as the conditions here are too harsh to be able to sustain a hospitality setup during other months. As part of the package for Ladakh region, Pangong should be taken up as a day visit or could include an overnight stay. Birdwatching as an activity can be considered. However, the place and the landscape itself is so beautiful that people would probably want to simply enjoy it.

2.6 Development of Circuits

As per our study and field trips in the state of Jammu & Kashmir would be as detailed below :

Jammu

- a. Jasrota – Surinsar – Mansar (wildlife, heritage, birdwatching, scenic beauty)
- b. Nandini – Vaishnodevi – Ramnagar (wildlife, trekking, birdwatching, religious, zoo interpretation)

Kashmir

- a. Dachigam – Hokersar – Shallbaug (Landscape, birdwatching, wildlife, angling)
- b. Gulmarg (Landscape, wildlife, birdwatching)
- c. Overa – Pahalgam (Landscape, wildlife, birdwatching, zoo interpretation)

Ladakh

- a. Leh – Tso Moriri (wildlife, birdwatching, culture)
- b. Leh – Tso Kar (wildlife, birdwatching, culture)
- c. Leh – Hemis – Leh (wildlife, birdwatching, trekking, culture)

Chapter 3

Review of Business Environment

3.1 Ecotourism Industry

The term "**ecotourism**" originated in the early 1990's in response to the growing interest among travellers in enriching their travel experiences through direct contact with the natural environment, living history, and local cultures.

What is Ecotourism?

The Ecotourism Society in North Bennington, Vermont states, **"Ecotourism is responsible travel to natural areas which conserves the environment and improves the welfare of the local people"**

The World Conservation Union, 1996 states, **"Ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations."**

Both the terms Nature Tourism and Ecotourism are used.

Nature Tourism is a form of tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery, its wild plants and animals, as well as any cultural areas.

Ecotourism is a form of tourism with low impact on the environment and wildlife due to the environmentally friendly tourist services and behaviour of the tourists (e.g., low energy use, low pollution, and low disturbance) and due to careful selection, siting and area zoning, design and use of materials of tourist facilities.

Important to both is the careful siting, design and use of tourist areas and facilities based on study and respect of local cultures. Ecotourism can be regarded as another forest function, a NTFP [Non Timber Forest Product] and potential source of income for a number of stakeholders including concessionaires, local villagers, local Government and local business men.

It is aimed at making the visitor aware of the protective, productive and regulatory functions of the forests. It is a purposeful travel to natural areas to understand the cultural and natural history of environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to local people. There are number of definitions are available for ecotourism, each focusing on a different aspect. An analysis of the developments in this sphere over a period of past one and a half decade helps to discern certain important parameters emerged in common to all eco tourism developmental initiatives.

This understanding leads to conceptualise ecotourism as any tourism programme that is Nature based and Ecologically Sustainable wherein Education and Interpretation are major components and having a direct and positive impacts to the local people.

Ecotourism Concepts

When a person stays outside his place of residence for a period of less than a year, he/she is considered a *tourist* to the place. When such visits are to the places which are close to the nature to enjoy its enormous creations, in an environment friendly manner, without having an adverse impact on environment/ ecosystem, and by involving the local communities, it is called *Ecotourism*.

According to the World Trade Organization [WTO], “tourism that involves travelling to relatively undisturbed natural areas with the specified object of studying, admiring and enjoying the scenery and its wild plants and animals as well as nay existing cultural aspect (both of the past or the present) found in these areas” is defined as *Ecotourism*. Ecotourism is distinguished from mass tourism or resort tourism by having lower impact on the environment and by requiring less infrastructural development.

The key elements of ecotourism include a *natural environment* as the prime attraction, an *optimum number* of eco-friendly visitors, activities which do not have any serious *impact on ecosystem* and positive involvement of the *local communities* in maintaining ecological balance.

Typical Ecotourism resources are Biosphere reserves, Mangroves, Coral reefs, Deserts, Mountains and Forests, Flora and Fauna, Seas, Lakes and Rivers, Caves etc.

Ecotourism has to act as a unifying force nationally and internationally, fostering better understanding through travel. It should preserve, retain and enrich our world view and life style, our cultural expressions and heritage in all its manifestations. The prosperity brought by tourism should strengthen and cause accretion, rather than damage to social and cultural values and depletion of our natural resources. It needs to have selective approach, scientific planning, effective control and continuous monitoring.

The cardinal principles for the development of ecotourism process are as follows [*Ecotourism Policy of Ministry of Tourism of Government of India*].

1. It should involve the local community and lead to the overall economic development of the area.
2. It should identify the likely conflicts between resources use for tourism and the livelihood of local inhabitants and attempt to minimize such conflicts.
3. The type and scale of tourism development should be compatible with the environment and socio-cultural characteristics of the local community and
4. It should be planned as a part of the overall area development strategy, guided by an integrated land use plan and associated with commensurate expansion of public services.

The ecotourism places have fragile ecosystems; hence decisions of development of tourism have to be taken up with understanding of local resources, social and economic factors and other characteristics. These objectives can be achieved in following ways.

1. The scale of development, intended beneficiaries and their dependency on activities should be identified.
2. The development of physical infrastructure should be preceded by preparation of inventory of resources, zoning and management plan.
3. The style, location and sewage treatment, control of litter, preservation of open spaces, avoiding noise pollution etc should be take care off.
4. Integration of community services for potable water, transportation and tourism in the physical design.

Principles of Ecotourism

- Allows for the **sharing of economic benefits** with **local community**;
- **Respects** local cultures;
- Works towards the **conservation** of biodiversity ;
- Emphasizes **nature-based** activities;
- Includes an **interpretation/learning** experience;
- Stresses the importance of **responsible** business;
- Relies on an **eco-infrastructure** that has been developed in harmony with the environment;
- Requires the lowest possible consumption of **non-renewable** resources.

The principles of Ecotourism are details the important characteristics of Ecotourism and absence of any of these disqualify the tourism venture as Ecotourism venture. The principles of Ecotourism forms the basis of Eco-Grid as detailed in FIGURE 2.1

The ECO-GRID in Ecotourism

Figure 3.1

<u>Eco-Technology</u> The promotion of the development and diffusion of environmentally sound technology that reconciles economic growth and environmental protection.	<u>Eco-Consciousness</u> Eco-Consciousness encompasses structures of the environmental knowledge, beliefs, values and concepts that facilitate or motivate positive human behaviour toward the environment
<u>Eco-Policy Linkage</u> The development of linkages among domestic, regional, and global environmental policies as well as policies in other areas.	<u>Eco-Partnership</u> The cooperation and exchange of experience both domestically and internationally, between national governments, local authorities, private sector, and NGOs.

The Eco-Grid explains that an Ecotourism venture should consciously aim at bringing about a positive change in human behaviour towards conservation of the natural resource and should adopt means which are in line with the environment legislations and should benefit the local community directly or indirectly.

Need for proper accomodation

As a growing number of ecotourists plan their holidays around authentic natural and cultural experiences, they will increasingly seek accommodations, such as ecolodges, that reflect the main principles of ecotourism.

The International Ecotourism Society (TIES) defines ecolodges as including three main components: conservation of neighboring lands, benefits to local communities, and interpretation to both local populations and guests.³

Ecolodges are of particular interest to the sustainable development community, because they are small, medium and micro-enterprises that can generate a variety of positive economic development impacts in highly rural, biodiverse areas, where other types of development underway or under consideration are frequently damaging to the environment.

Free and independent travelers (FITs) — as opposed to those traveling with a tour operator — are an important and growing market segment for ecolodges. This study concludes that 50 percent of the market will travel independently, while 50 percent will travel on tours.

What Are They Looking For?

In general, ecotourists choose their destinations first, based on desired activities or attractions, and then choose their accommodations, although a few very successful ecolodges have emerged as a primary reason to travel to a specific destination

Accommodation Preferences

There are few destination studies that have surveyed the lodging preferences of ecotourists. According to the regional experts, consumers want value for their money, and they want to stay in local, more traditional accommodations if there are no easily identifiable facilities that offer a good alternative. In many cases, these travelers would likely embrace a more ecological alternative if it offered good value and excellent guides, and was located near highly viewable wildlife resources or destinations with excellent scenic qualities.¹. Regional advisors indicate that ecotourists seek comfortable, conventional, mid-priced lodgings. Access to the primary attraction or activity is a key factor in choosing accommodation, as are comfort, quality of interpretive guides, friendly service, small group sizes and pricing.

Activity Preferences

The most important motivations for travel by ecotourists around the world are to enjoy the natural environment, have an “experiential” vacation, and learn while traveling. There is a particularly high interest in admiring scenery, viewing wildlife, hiking and walking, taking guided interpretive tours, and visiting parks and protected areas. According to the study’s regional experts, activity preferences vary from destination to destination. For example, diving and other marine activities are rated highly in the Pacific, while jungle/rainforest trekking and bird watching are rated highly in Latin America and Southeast Asia, and game viewing is popular in Africa. In general, wildlife viewing is the primary attraction for ecotourists, both independent travelers and those traveling with ecotour operators. What distinguishes a wildlife attraction and makes it “bankable” relates to the charisma of the

wildlife being viewed. Charismatic animals include gorillas and all great apes, large marine creatures such as whale sharks and whales, and the African “Big Five” (lions, leopards, elephants, Cape buffalos and rhinos). When large mega-fauna are not present in an area such as rainforests, attractions include monkeys, lemurs and large flocks of colorful birds, such as macaws. Whether or not the destination has mega-fauna or congregations of wildlife, high-quality guide services with excellent and accurate interpretive information about culture and nature can distinguish an ecolodge in the marketplace and have a great deal to do with gaining consumer loyalty.

One key special interest among a dedicated segment of the market is birdwatching. Birdwatching has a very strong appeal to a narrow segment of the ecotourism market; about 10–15% of the market seeks to watch birds for nearly 100% of their activity time. Thus, evaluating the attraction and viewability of endemic birds found only in restricted areas, or unique congregations of birds, plays an important role in designing a new ecolodge destination. Birdwatchers are frequently found in countries not yet known for ecotourism, and can help make a name for destinations that might otherwise remain unknown.

Types of Tourism

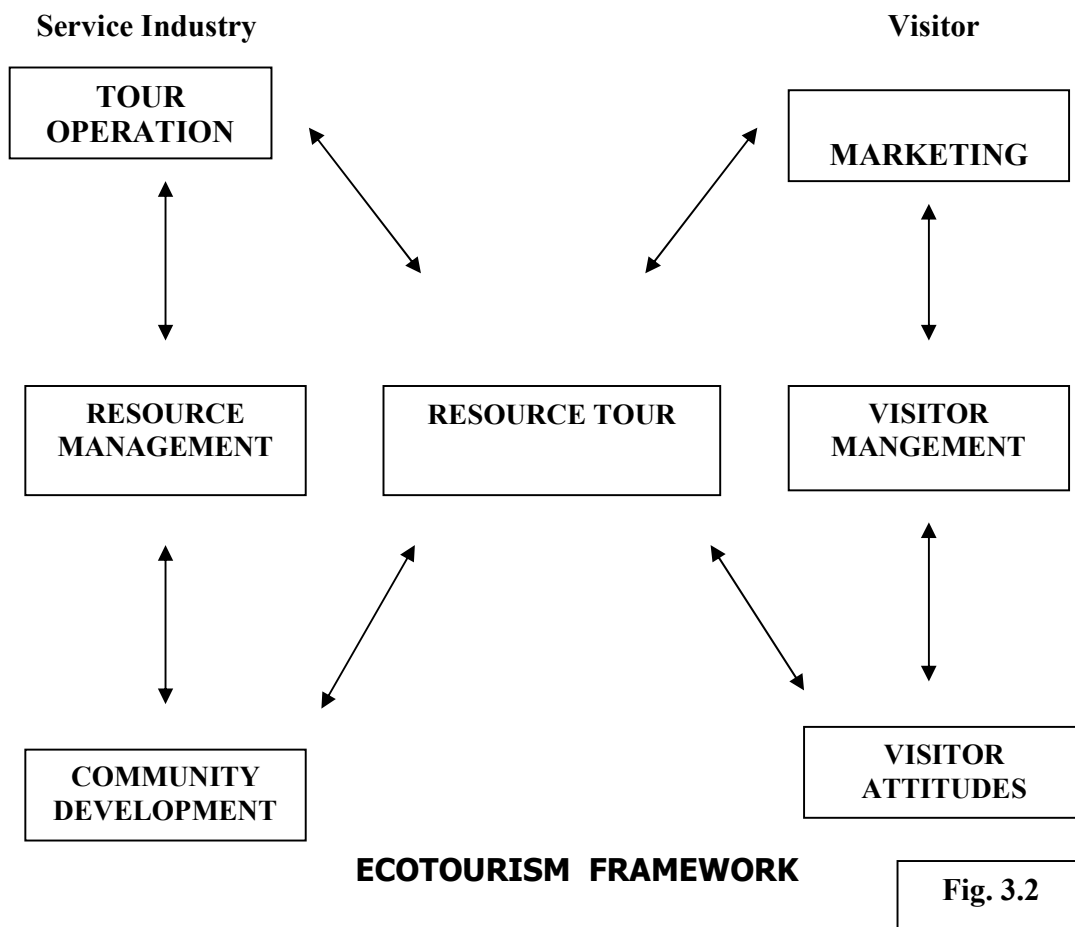
There are mainly two types of tourism – Mass tourism based on extensive infrastructure development of the destination area and Alternative tourism (AT) evolved as paradigm shift from the focus on economic and technical necessities to unspoiled environment and consideration of local people (Krippendorf, 1982).

Mass tourism is criticized for the fact that very little percentage of the money spent in the destination areas stays and helps in local development. Also major emphasis is on commercialization of natural and cultural resources, which results in inappropriate representation of the tourist resource.

AT on the other hand places natural and cultural resources and local community at the forefront of the tourism planning and development. The objective of the AT is to promote sustainable tourism, which involves the overall development of the local community and a better understanding and appreciation of natural and cultural features of the host population leading to international, interregional and intercultural understanding. (Dernoi, 1981). Thus, the concept of sustainable tourism with sustainability as one of its major objectives evolved. Ecotourism is one of the most prominent concepts of sustainable tourism.

Table 3.1 Mass tourism and Alternative tourism

	Mass tourism	Alternative tourism
General features	Rapid development, maximizes, uncontrolled, short term and sectoral	Slow development, optimizes, controlled, long term and holistic
Tourist behaviour	Large groups, fixed programme, tourist directed, comfortable and passive	Singles, families, spontaneous decisions, demanding and active
Basic requirements	Holiday peaks, untrained labour, publicity clichés, hard selling	Staggered holidays, trained staff, tourist education
Development strategies	Unplanned, project led, new buildings and outside developers	Planned concept led, local developers



Positive Impacts of Ecotourism

- Educates the traveller on the importance of conservation
- Directs revenues to the conservation of natural areas and the management of protected areas
- Brings economic benefits to local communities and directs revenues to local people living adjacent protected areas
- Emphasizes the need for planning and sustainable growth of the tourism industry and seeks to ensure that tourism development does not exceed the social and environmental “Carrying capacity”
- Retains a high percentage of revenues in the host community by stressing the use of locally owned facilities and services

-
- Increasingly relies on the infrastructure that has been developed sensitively in harmony with the environment – minimizing use of fossil fuels, conserving local plant and wildlife and blending with natural environment

Negative Impacts of Ecotourism

- Effects on natural environment which can be divided into five parts – effects on fauna and flora, pollution, erosion, depletion of natural resources and visual impacts.
- Effects on built environment which can be classified into three main classes – architectural façade, change of land use and burden on infrastructure
- Impact on tourists, which leads to deterioration in quality of recreation.
- Impacts on host population, which may lead to reactions, like resistance, retreatism, and boundary maintenance.

Recent Trends in Ecotourism

Ecotourism has attracted increasing attention in recent years, not only as an alternative to mass tourism, but also as a means of economic development and environmental conservation. Being a nature based tourism; it takes into account the natural ecological attraction, their conservation and development. Its main aim is to safeguard the environment, making it beneficial to the local people by generating revenue and education and pleasure for the tourist. Ecotourism is one of the fastest growing sectors in the tourism industry at present.

The market for nature holidays is certainly a growing one. In 1993, the World Tourism Organization (WTO) has estimated that nature tourism generates 7 per cent of all international travel expenditure, where the total annual global earning from tourism is nearly \$3 trillion and 212 million people are employed (Eagle, 1997). Year 2002 has been declared as an International Year of Ecotourism (IYE) by the United Nations. This reflects its global importance. Its evolution took place in western society to experience wild nature. It started in 1872 in the United States with Yellowstone Park, in 1879 in Australia with Royal Park and in 1885 in Canada with Banff Park and Niagara Falls to set aside natural areas for protection and recreation in the form of national parks. There is a worldwide system of thousands of protected areas in all parts of the globe now. Since 1970, globally the number of protected areas has increased by 185%. The present area is 926,349,646 square kilometres, in parks which is an increase of 51.5% since 1970.

3.2 Ecotourism in India

India is one of the 12 megadiverse countries of the world with vast natural resources, about 16,000 species of flowering plants (out of the known world total of 150,000) and 75,000 animal species (out of a total of 1.5 million).

The Ministry of Environment and Forests (and its various departments and subordinate offices spread all over the country) is well placed to promote tourism since it exercises control

over about 22% of the land mass. Most of the Ecotourism sites of natural beauty and biodiversity value are located in the forest areas, and to promote wildlife preservation the government has established National Parks and Sanctuaries which account for most of our wildlife resources spread over an area of 4.3% of the total geographical area of India

Since the necessary expertise and infrastructure facilities are mostly available in these existing departments and organisations, it would be prudent to re-orient them to promote Ecotourism rather than creating new organisations specifically for Ecotourism. There is also an option to develop a separate Regulatory Body which governs ecotourism activities in the region with deputed officers from concerned department viz. forest, tourism. A successful example of Jungle Lodges & Resorts Ltd. can be sighted where a separate corporation is running activity based Eco-lodges in the state of Karnataka with an average growth rate of 30 % in terms of tourist inflow.

There are no particular means to collect data about ecotourist movement in India but entry fees collection at the gates of protected areas and rise in revenues of private and public ecotourism concerns gives an indication that ecotourism in India is on the rise. The interest of private players like Conservation Corporation Africa and Country Club in nature based tourism shows that the Ecotourism will be the next big thing.

The Government of India has identified the following as key areas for development of tourism:

- provision of infrastructure
- environmental protection and preservation of national cultural heritage
- product development and diversification, including development of mega tourism resorts
- development of trekking, winter sports, wildlife and beach resorts;
- exploring new source markets in regions and countries with cultural affinity; monitoring and evaluation
- national image building and marketing in key markets
- providing inexpensive accommodation in different tourist centres
- improving service efficiency in public sector corporations
- streamlining of procedures at airports; human resource development
- facilitating private sector participation in development of infrastructure
- strengthening of tourist organizations and
- creating public awareness and participation

3.3 Key Institutions Promoting Ecotourism

In India, the **Department of Tourism** is responsible for the formulation and implementation of policies and programs for the development of tourism by way of:

- developing infrastructure
- publicity and promotion
- dissemination of information and
- coordination and supervision of the activities of various segments of industry

It has **21 field offices** throughout the country and **18 overseas** to undertake both developmental and promotional activities.

The **Indian Institute of Tourism and Travel Management** is an autonomous body set up to provide education in tourism and travel management, and to meet the demands for professionally trained personnel in the tourism industry. The Institute organises executive development programs, seminars and workshops relating to these subjects.

In order to encourage adventure tourism, the **National Institute of Water Sports** at Goa and the **Indian Institute of Skiing and Mountaineering** at Gulmarg, Jammu and Kashmir have been established.

Jungle Lodges & Resorts Ltd., winner of Best Ecotourism Organisation in the year 1999 is a leading Ecotourism concern offering nature based tourism products and catering to about 75,000 customers annually. The **Jungle Lodges & Resorts Training Institute** develops nature lovers into naturalists which in turn initiates a chain reaction and create a Force dedicated to the conservation of the Natural Resource of the country.

The **Jungle Lodges & Resorts Ltd., Consultancy Wing** offers support in exploring Ecotourism potential, Ecotourism Development, Eco-infrastructure and Eco-lodge Management, Marketing Management, Customer Relations, Resort Management for new Ecotourism ventures.

Apart from this, to meet the growing demand for the labour force of the tourism industries, 19 **Institutes of Hotel Management and Catering Technology** and 14 **Food Crafts Institutes** have been set up in the country. In the promotion of Ecotourism, the tour operators, tourists and public play a major role by adhering to norms and practices.

3.4 Approaches to Ecotourism in India

Nature has always been the centre of Indian thinking and has got a unique place in the Indian life style. Over a period of time, in someway or the other there were many conscious efforts on part of the community or the authority to protect and conserve nature. Examples - Chipko movement, efforts of the *bishnoi* community of Rajasthan or the long lived tradition of social fencing- declaring sacred groves. However, all the movements were localised and there no universal solution to conserve the fast depleting natural resource till ecotourism came. Ecotourism enables communities to thrive economically while preserving and restoring the resources on which the travel and tourism industry and local communities depend. In response to the fact that ecotourism and nature-based tourism are today's fastest growing market segment, many businesses involved in the travel industry have a new incentive to

Ecotourism runs on the basic principle of adding monetary value to natural resource which can be reaped only by their existence. The poachers are motivated to protect wildlife as their earnings is directly proportional to the number of times the wildlife is sighted, giving sustainability its meaning.

revaluate their model of operations, and to develop sustainable practices that are desirable for their local communities, beneficial to the economy, and good for the natural world. Many people working in travel and tourism now know that their customers value the responsible, environmentally sound business practices that define ecotourism.

There are different approaches in Ecotourism which range from absolute **Community based model** to absolute **Commercial based model** but both of them lack some or the other aspects of ecotourism which leaves scope for improvisation on these existing models and develop a new model which strike a balance between these two. This may have to be done on a case to case basis.

Community based Ecotourism

A community based ecotourism model is an ecotourism venture wherein the community is at the centre of all the initiatives, where everything starts from the community and ends with the community. The local population may form a small association which owns and manages the eco-lodge and the allied activities. This model is based on the assumption that Community is capable enough to handle high quality customers and maintain high standards of hygiene and quality. In this model the role of capacity builder is of prime importance and the success or failure of the project mainly depends on him.

Limitations of Community based Ecotourism

An absolute Community based ecotourism is characterised with serious barriers, including:

- Lack of a tourism culture within the region
- Lack of tourism expertise on the part of community members
- Potential interference by outside organizations with little tourism experience or expertise
- Poor infrastructure
- Poor hygiene and sanitation practices
- Lack of access to capital and technical expertise

Ecotourism projects around the world have failed because developers and consultants often overestimated the capacity of local communities no Ecotourism planning model has been developed that adequately considers:

- The abilities of individuals within a community to be innovative or entrepreneurial or
- The Entrepreneurial Social Infrastructure (ESI) possessed by the community at a systems level when determining feasibility.

The success of Community based Ecotourism depends mainly on human capital – or more importantly, entrepreneurship and innovation.

Commercial based Ecotourism

A commercial based Ecotourism venture is myth created by high profile marketing of nature based Tourism. This form of tourism venture is oriented towards profit maximization and they achieve either by adopting economies of scale or by charging high value from the customers.

This form of tourism is sustainable as far revenues are concerned and they do abide by their corporate social responsibilities by investing in eco-friendly techniques, mitigating the adverse impacts of their operation in fragile areas but still a direct relationship which exists in a Community based tourism is missing. This happen as the Nature based tour operators are keen on providing a high quality experience to their customers and in the process they hire professionals with high level of communication skills and knowledge, at the cost of local employment.

Ecotourism - A mixed approach

A model which balances both community and commercial aspect without compromising Environment Conservation. A Tourism model which -

- 1) provides for environmental conservation
- 2) includes meaningful community participation
- 3) is profitable and can sustain itself

Successful ecotourism **requires** inter-sectoral alliances, comprehension and respect. If projects are to be considered ecotourism, they **must** include local participation and they **must** assist conservation efforts. This is not to say that tourism services that don't include these components are not "good" --- they simply are not ecotourism.

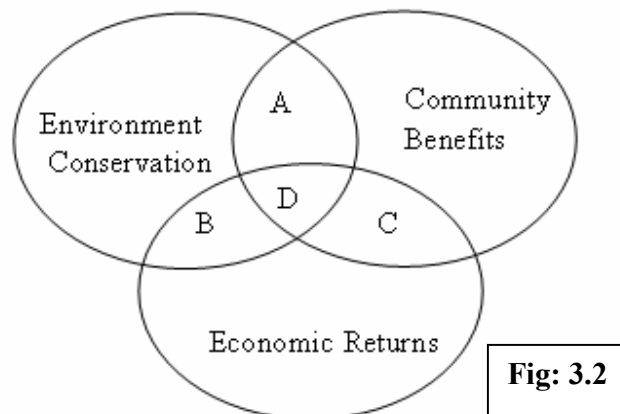


Fig: 3.2

Figure 3.2 explains what an ecotourism concern is and what objectives are achieved by absolute Community oriented and absolute commercially oriented tourism ventures. If we see figure 3.2 region A describes what a community oriented nature based tourism venture may lead to. A tourism concern may benefit local community and help in Nature Conservation but it may fail to continue for long as the economic returns, which is the third pillar of sustainability is missing. The same is either region B or region C which is mostly achieved by commercially oriented nature based tourism venture. They help preserve nature by investing in Eco-friendly techniques and assisting local community by way of charity but for an absolute and sustainable ecotourism concern, it has fall under region D.

Cauvery Fishing Camp- A case study

A fishing holiday destination offered by Jungle Lodges & Resorts Ltd. can be sighted to explain how the three aspects are integrated to give Sustainable Tourism a real meaning. Jungle Lodges and Resorts Ltd. has taken many initiatives towards development of community based ecotourism. In fact all of its resorts are excellent examples of practicing ecotourism. However, some of these need special mention.

Cauvery Fishing Camp is one such resort. Just hundred kilometres from Bangalore is Bheemeshwari, a riverine holiday camp placed amidst steeply plunging hills. Four kilometres upstream is Doddamakali, and sixteen kilometres downstream is Galibore. Together, these three camps are the richest habitat of the world's finest game fish, the Mahseer. The Mahseer is among the largest fresh water fish in the world. At the Cauvery fishing camp one lucky angler can catch a Mahseer that can weigh even up to 120 pounds, where the average Mahseer weighs about 80 to 90 pounds. Maintaining an eco-friendly aura, all fish caught are immediately released back into the water after a trophy photograph is taken. The fishing camp was started in 1986 and was basically managed as a fishing camp. The season for anglers and fishermen is between November and June. The camp was found lean during the off season. It was felt necessary to introduce other non-fishing activities to attract nature lovers to the camp. Soon other activities like coracle rides, trekking in wild, and joy fishing (a non-professional fishing for small fish), bird watching and white water rafting was introduced.

The local community employed in this resort also comprise of poachers who now enjoy guiding tourists to their favourite fishing spots. A tourist learns from the tour experience that the valuable and beautiful resources he/she is enjoying are not inexhaustible, but are in fact under severe pressure from human use. The tourist observes that the tour package she is paying for is in itself the realization of a fishing community's effort to promote conservation by engaging in a non-extractive form of enterprise while promoting environmental understanding to visitors. He/she learns that community members help monitor the river, and boat and dive operators pay user fees and observe user guidelines. He/she then realizes that these local efforts are paying off in terms of better regulation of human activities, generation of tourism revenues, and improved regeneration of marine life. The experience imbues him/her with a feeling of connection with Nature, a grounded awareness of the realities that threaten it, and a new resolve to care for the environment and its people.

Cauvery Fishing Camp is not the only resort to have benefited. The Kabini River Lodge of Jungle Lodges and Resorts Ltd. enjoys the reputation of being ranked among the top five wildlife resorts in the world. Here one can see the deep rooted involvement of community. Here the active participation of the community has won them many benefits like scholarships for students, free health and eye-check-up camps, mid-day meal scheme for school children, etc. Its effectiveness as a conservation tool is illustrated by the active enlistment of community cooperation in the management of a protected area. Its impact on the community's sense of empowerment is exemplified by the community's growing sense of pride in their achievements, renewed confidence in their ability to reach their goals, acquisition of technical skills, spontaneity in expressing their ideas and sentiments, and manifestation of enthusiasm and creativity in their activities. For perhaps the first time in their lives, local folks feel they

are able to contribute to something noble for which they get affirmation from people outside their community. What's more, their efforts allow them to earn extra income and acquire new skills that raise their capability to achieve their dreams of a better future for themselves and their children.

The reason why the Fishing Camps of Jungle Lodges and Resorts Ltd. has become a success story is because the Tourism Industry was not imposed on the Community but they were attracted to towards the sustainability aspects of the industry and towards more comfortable living. This gives an idea as to how an Ecotourism Model should be which strikes a balance between absolute Community based and absolutely commercially oriented model.

Over all these years, Jungle Lodges & Resorts has grown considerably and many more experiences have been added to its treasure. Many lessons were learnt and it is felt important to highlight the few of them here.

- It is now evident that community participation is the key to successful ecotourism development
- Care should be taken to give top priority to interpretation of nature and indigenous culture
- Ecotourism should be promoted as a concept of nature tourism with active involvement of the local community

Jungle Lodges & Resorts Ltd is today a recognized tourism destination across the globe. It has many agents across India and at many ITDC offices across the globe. Its resorts are booked full in advance of six months. From failures in the past, the company has adapted itself to the ever changing tourism market and transformed to a profit making concern, more importantly an ecotourism destination. But for Jungle Lodges & Resorts Ltd, this is just the beginning.

To conclude, a Sustainable Ecotourism model stands on three pillars viz. monetary returns, environment conservation and community benefits should exist. The basic idea is that the Ecotourism should not be forced on the community but they should associate themselves to the concept and be attracted towards the positive change. The improvised Ecotourism model should also needs to be regulated by a Regulatory Authority say *Ecotourism Development Board* capacity of the protected areas.

3.5 Carrying Capacity for Tourism Activities¹

World Tourism Organization (1993) defines Carrying Capacity as, the level of visitor use an area can accommodate with high levels of satisfaction of visitors and few impacts on resources. Mathieson and Wall (1982) defines it as, maximum number of people who can use a site without an unacceptable decline in the quality of experience gained by visitors.

The resurgent interest in carrying capacity as a management framework has its root in several factors: 1) the increasing complexity of management 2) accelerating demands on natural resources 3) the search for a defensible answer that can be implemented in a wide variety of settings.

¹ A reference methodology is attached in the annexure for the Bhitarkanika Sanctuary.

Thus Carrying capacity concept can be used as an effective tool for tourism management. By adopting an alternative approach through identifying and establishing the appropriate factors influencing Carrying Capacity, it is possible to use the carrying capacity concept based management techniques for sustainable ecotourism (Williams & Gill, 1994).

3.5.1 Methodology for the study

Methodology for collection of primary data

The information on the impact of tourism on the different indicators were Collected by the help of questionnaires and interview schedules.

Questionnaires were prepared for collecting information from the Local community, Tourists, Tour operators, Tourist guides, Non – Governmental organisations, Experts, Forest officials and Tourist facility operators.

The sampling was done so as to have the views of all the stakeholders responsible for the success of the ecotourism operation.

Introduction to the Methodology for estimation of Carrying Capacity

The methodology used in the study was an integrated system of Batelle Environmental Evaluation System (BEES) used in Environmental Impact Assessment (EIA) and Limits of Acceptable Change (LAC) framework used for carrying capacity studies of tourism. As the first step, the total carrying capacity was segmented into its constituent elements.

The Carrying capacity of a tourist area is divided into following five components:-

1. Ecological carrying capacity
2. Facility carrying capacity
3. Social carrying capacity
4. Economic carrying capacity
5. Visitor's experience based carrying capacity

(a) Different steps in the method used

The different steps in the estimation of total carrying capacity are as follows:-

Create local level indicators for each of the components to identify the impacts of tourism on the five components of carrying capacity. The indicators were selected after discussions with experts of ecotourism and field visits.

Make a Value Function Curve (VFC) for each indicator on the basis of percentage of people who recognize the impact of tourism on that specific indicator and respective quality of the indicator. So greater the number of people who recognizes the impact, greater is the impact. There will be two types of VFC, for negative and positive indicators. Negative indicators are the indicators, which are given a higher value, when lesser number of people agrees with the statement of impact on it. The positive indicators will be given higher value as the number of peoples agreeing with the statement of impact on it increases.

Calculation of Indicator Quality Unit (IQU)

For negative indicators, if no one among those surveyed says there is an impact on the indicator it will be given an Indicator Quality Unit (IQU) of 1. If 1- 10% of people consider there is an impact then the value given will be 0.9, 11-20% will be 0.8, 21-30% will be 0.7 etc and 91-100% will get an IQU of zero. For positive indicators, it is based on the assumption that the impact is directly proportional to the number of people who recognize that there is an impact.

Calculation of Parametric Importance Unit (PIU)

Fix a Parametric Importance Unit (PIU) for each indicator. The PIU should have been fixed by the Bivariant Analysis and Delphi technique with the help of experts from various fields related to tourism and its management. But due to time constraint another technique was adopted.

In this method, a set of experts was asked to give ratings for the indicators on the basis of its ability to accurately predict the impact. The experts were given the guidelines for rating, which is as follows:

- High importance: - These are the indicators that directly indicate the impact as well as the chances that the occurrence is only due to tourism activity are also high. The impacts are directly observable and the cause – effect relationship can be easily produced. So it should be an important indicator of impact on that component.
- Medium importance: - These are also indicators that directly indicate the impact, but the chance of tourism activity being the lone causative factor is suspected. Thus the cause – effect chain is not discernable. Thus these indicators should be of medium importance.
- Low importance: - These indicators are indirect signs of an impact. They are not directly observable or quantifiable. The possibility that the reason for the impact on these indicators is due to tourism is very difficult to establish. Due to this reason, these indicators should be assigned only a low importance.

Once the data on ratings is collected, then a value was assigned to these ratings, such ‘x’ for low importance, ‘2x’ for medium importance and ‘3x’ for high importance indicators. A summation of the rating of all experts was done and the arithmetic mean is calculated. This will be the Parametric Importance Unit of that indicator.

Multiply the Indicator Quality Unit (IQU) with Parametric Importance Unit (PIU) to get the Carrying capacity Impact Unit (CCIU) for that indicator.

Sum up the CCIU for all the indicators to get the Total Carrying Capacity Impact Unit for that component.

Multiply the Total CCIU for the component with its respective component Importance Value (CIV) as calculated in step no. 1. For example the Total CCIU of Social Carrying Capacity is

obtained as 2 out of a maximum 3, and its Component Importance Value (CIV) is 15%, then for that area the percentage of Social carrying Capacity's quality is $(2/3) \times 15 = 10\%$ out of a maximum possible 15%.

Sum up all the carrying capacity percentages for all the components to get the total carrying capacity value in percentage out of a total possible 100%. This indicates the level of impacts caused due to tourism activities. Lower is the value, greater is the impact. Set standards for the total impact and compare it with obtained percentage.

The standard was set based on expert suggestions:

0-20% = Very high impact on Carrying Capacity

21-40% = High impact on Carrying Capacity

41-60% = Moderate impact on Carrying Capacity

61-80% = low impact on Carrying Capacity

81-100% = Very low impact on Carrying capacity

Based on these impacts, the management steps have to be taken in the tourist sites and special emphasis has to be put on components that are more impacted by the tourism activities.

3.5.2 Limitations of the Methodology

Although subjectivity is kept to a lowest level the chances of a bias still exists. The respondents may give inaccurate responses due to the fear of restricting their activity if found to be affecting the carrying capacity of the study areas. Another possible source of biasness can be from expert rating on the Parametric Importance Unit and Component Importance value. But since there was scarcity of time to carry out Delphi technique for actual estimation of these units, the above said technique was adopted.

3.6 Legal Issues

Ecotourism development in the identified areas will need some civil constructions-repairs and maintenance. The project will also have some impacts during operational phase and needs impact-management so that the nature can recuperate from any losses.

The following laws and legislations will have to be considered while developing the project.

- Water (Prevention and Control of Pollution) Act, 1974;
- The Air (Prevention and Control of Pollution) Act, 1981;
- The Environment (Protection) Act 1986;
- Indian Forest Act, 1927;
- Wildlife (Protection) Act, 1972;
- Forest (Conservation) Act, 1980;
- Coastal Regulation Zone Notification, 1991.

In phase I, it is proposed to renovate the existing Infrastructure and construct new Eco-friendly and temporary structures which will not be in violation of most of the laws. Implementing eco-friendly waste disposal systems will help to function in ecologically sustainable manner. The project with limited Bednight capacities at each property will keep Ecotourism operation under carrying capacity and will be in line with Forest Conservations acts.

Chapter 4

Product Definition

4.1 Goals

The principal goal of Ecotourism in PAs is to strengthen the cause of conservation by providing informed wilderness experience to visitors, enabling the visitors to view a cross section of values of Sanctuary/National Park and providing additional employment opportunities for local communities, thus reducing resource dependency and also enhancing their stake in conservation of protected areas of the State.

4.2 Objectives

Ecotourism has a place in the major objectives for the management of Protected areas in the state. The objectives of Ecotourism management in the above context are categorized below:

- To provide compatible and sustainable tourism to provide enlightened wilderness experience to the visitors and local inhabitants.
- To impart nature education to different target groups i.e. children, teachers, bureaucrats, media persons, rural people and politicians who influence the policy making decisions at the local, state and national level.
- To provide park/sanctuary interpretation facilities to generate conservation awareness among the visitors by discovering wonders of nature and its intricate relationship; and by bringing about change in perception about one's own natural and cultural environment.
- Creating employment opportunities for local people to cater the needs of visitors in raising taxi, eco lodges, hotels etc.
- To generate sufficient revenue and make the activity of Ecotourism self-sustaining as far as possible.
- Involve local people in recycling the revenue from Ecotourism for improvement of resources and facilities in the villages by subsidizing alternate energy devices, improving educational and medical facilities.
- To prepare an Ecotourism management plan focussing on the resource conservation through community involvement.
- To prepare a management plan for the identified sites considering the carrying capacity of the area.
- To develop product after market analysis by involving the local community

4.3 Targets

- Infrastructure development (development of eco-infrastructure) at the proposed.
- Developing supporting infrastructure (launches, ecofriendly vehicles, equipment for activities) at the identified sites within one year from the date of commencement of project.
- Targeting a growth rate of 15% in the initial years (tourism growth rate is 17% currently)
- In the first year of operations, it is proposed to achieve the 40% occupancy (around 12000 bed nights) of the total capacity.

-
- At 40% occupancy the direct annual returns accruing to the community by Ecotourism operation is targeted at Rs. 88,00,000/-.
 - Direct Employment to X% people from local community and Indirect Employment to X% people living close by.

4.4 Mission Statement

The first and foremost step in planning and developing a new venture is to define the essence of your business. The mission statement should convey why business exists; what do u do, how do u do, who your customers are, and why you do and what you do.

An example: *The **Eco-lodges ltd.** (suggested name) provides outstanding nature based experience to domestic and international travellers. We use expert naturalists and visit undiscovered, unexplored destinations to impart a sense of stewardship for the environment.*

The mission is to develop a framework wherein all the Ecotourism development activities will be carried out- An ecotourism Board at the apex which will develop facilities and outs source it to interested parties. The owner ship will be with the board which will identify and lease out management of the place.

In general, the Ecotourism project is aimed at providing an insightful, mindful and participatory travel experience to natural and cultural environments, assisting the well-being of the local cultures and environments for future generations. At the same time the project will produce viable economic opportunities for the host areas.

The **Ecotourism Development Board** should put forward unique product, which differentially priced catering to different segments. The proposed areas for Ecotourism development (*Jammu circuit, Kashmir circuit and Ladakh circuit*), are amongst the most diverse and rich ecosystems in the world. They have got unique and special biotic and abiotic factors giving them an edge over the other PAs.

4.5 Key components of ecotourism products

The **ecotourism** products vary in order to satisfy different market requirements and local conditions. The following are some of the components for promoting ecotourism as a concept -

Quality, authenticity and security. Quality does not necessarily mean luxury, but providing a neat and clean place to stay with basic comforts. Authenticity is about being as close to nature and local way of life as possible. Security is about visitor safety and reliability.

Interpretation of nature and culture. The most essential component of an **ecotourism** product is the inherent quality of the landscape and wildlife. The experience should be both both educative and enjoyable. Knowledge and software developed to enhance the local experience and delivering it with the help of good local guides, who know their subject and how to put it over, is of paramount importance.

Cost effective promotion is a challenge for many **ecotourism** enterprises because of their isolation, small size and lack of resources and skills.

Community involvement is very important for success and sustainability of the project. For selected sites in the state, following products is offered which can be modified as per the customer's preference.

4.6 Products on Offer

JAMMU

This product offered for the Jammu region is a **two night-three day** package, which will start from Jasrota and will end at Jammu via Surinsar and Mansar. This offers exclusive stay at Jasrota to experience the wilderness and the heritage of this area. While the Surinsar and Mansar visits would give a glimpse of the Ramsar site.

Table 4.1 Jammu - Package 1

Timings	Particulars	Approx.Cost
Day 1 ---12:00 noon	<i>Arrival at Jasrota and Welcome drinks</i>	Rs. 10/pax
1 pm	<i>Lunch</i>	Rs. 100/pax
04:00	<i>Briefing at Jasrota Camp by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) and snacks served. Departure</i>	Overheads: 500 Naturalist fee:Rs.300
04:30 pm	<i>Tea-Coffee and departure for safari at Jasrota Sanctuary</i>	Rs. 5/pax
04:30 pm - 06:00 pm	<i>Safari</i>	Rs. 1000/pax
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 2 -----06:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail</i>	
08:30 am	<i>Breakfast</i>	
10:00 am-06:00 pm	<i>Visit to Mansar/ Surinsar and Lunch</i>	Rs. 750 for travel and lunch
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 3 -----6:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Heritage trail</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
10.00 am	<i>Departure to Jammu</i>	

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 3375.00 per person, hence the product can be suitably priced

between Rs. 4500.00-Rs. 6000.00 per person so as to cover other administrative expenses and entrance fess etc. Foreigners can be charged @ 150 \$ per person. Single supplementary charges can be kept @ Rs. 1000.00 for Indian and \$ 50 for foreigners for a night stay.

Table 4.2 Package II

This is a second product offered for the Jammu region. This like the earlier one is also a **two night-three day** package, while incorporating a visit to Vaishnodevi. This is keeping in mind the kind of clientele that would want to use a good facility while on a visit to Vaishnodevi. A larger number of guests belonging to this category can be attracted if special facilities are made available for darshan.

Timings	Particulars	Approx.Cost
Day 1 ---12:00 noon	<i>Arrival at Nandini through Jammu and welcome drinks</i>	Rs. 10/pax Stay. Rs.1000/pax
1 pm	<i>Lunch</i>	Rs. 100/pax
03:30 - 06:00 pm	<i>Briefing at Nandini and departure for birdwatching and trekking</i>	Overheads: 500 Naturalist fee:Rs.300
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 2 -----06:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
9:00 am-08:00 pm	<i>Visit to Vaishnodevi</i>	*
08:30 pm	<i>Dinner</i>	Rs. 200/pax
Day 3 -----6:30 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
08:00 am	<i>Breakfast</i>	Rs. 100/pax
09.00 am	<i>Departure for Jammu via Ramnagar</i>	Rs. 50/pax

*Cost borne by customer

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 2670.00 per person, hence the product can be suitably priced between Rs. 4500.00. per person so as to cover other administrative expenses and entrance fess etc. Foreigners can be charged @ 150 \$ per person. Single supplementary charges can be kept @ Rs. 1000.00 for Indian and \$ 50 for foreigners for a night stay.

SRINAGAR

The product offered for the Srinagar region is a **Wilderness Package, a two night-three day**. A detailed itinerary is given below:

Table 4.3 Wilderness Package – Dachigam National Park

Timings	Particulars	Approx.Cost
Day 1 ---12:00 noon	<i>Arrival at Dachigam and welcome drinks</i>	Rs. 10/pax
1 pm	<i>Lunch</i>	Rs. 100/pax
04:00 pm	<i>Briefing at Dachigam by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) and snacks served. Departure</i>	Overheads: 500 Naturalist fee:Rs.300
04:30 pm	<i>Tea-Coffee and departure for safari / trek in Dachigam National Park</i>	Rs. 5/pax
04:30 pm-06:00 pm	<i>Safari</i>	Rs. 500/pax
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 2 -----06:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail / Birdwatching</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
10:00 am-06:00 pm	<i>Visit to Hokersar and Shalbaug; packed lunch; return to Dachigam for night</i>	Rs. 1000 for travel and lunch
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 3 -----6:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail / Birdwatching</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
10.00 am	<i>Visit to Trout farm; Departure to Srinagar</i>	

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 3225.00 per person, hence the product can be suitably priced at about Rs. 4550.00 per person so as to cover other administrative expenses and entrance fess etc. Foreigners can be charged @ 150 \$ per person. Single supplementary charges can be kept @ Rs. 1000.00 for Indian and \$ 50 for foreigners for a night stay.

Xtreme Wilderness Package – This is a trek for serious birdwatchers, wildlife enthusiasts and trekkers who are in good physical condition. The costing for various trek durations and routes can be worked out.

For **Category C** visitors who are price sensitive and coming only for day visit to Dachigam can be offered a guided trek with a minimum of 6 other guests. It can also include a visit to the trout farm, 2 beverages, and lunch. Cost can be suitably fixed.

Table 4.4 – Modified package for School Children

Day 1-----10:00 am	<i>Arrival at Dachigam</i>
10.30 am	<i>Wildlife Briefing by a Naturalist (a brief introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) Welcome drinks and snacks served.</i>
11:30 am	<i>Guided Nature trail</i>
1 pm.	<i>Lunch</i>
2 pm.	<i>Nature games</i>
3:00 pm	<i>Tea and depart</i>

Pricing: This package is modified and offered to students groups of size 20. The package can be sold at Rs.300.00 per student with complimentary offerings for teachers accompanying the group.

Table 4.5 Wilderness Package – Gulmarg

Timings	Particulars	Approx.Cost
Day 1---12:00 noon	<i>Arrival at Gulmarg and welcome drinks</i>	Rs. 10/pax
1 pm	<i>Lunch</i>	Rs. 100/pax
04:00 pm	<i>Briefing at Gulmarg by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) and snacks served. Departure</i>	Overheads: 500 Naturalist fee:Rs.300
04:30 pm	<i>Tea-Coffee and departure for trek in Gulmarg Wildlife Sanctuary</i>	Rs. 5/pax
04:30 pm-06:00 pm	<i>Trek</i>	Rs. 100/pax
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 2-----06:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail / Birdwatching</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
10:00 am-06:00 pm	<i>Departure to Srinagar</i>	

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 1420.00 per person, hence the product can be suitably priced at about Rs. 1750-2000.00 per person per day so as to cover other administrative expenses and entrance fess etc. Foreigners can be charged @ 80 \$ per person. Single supplementary charges can be kept @ Rs. 1000.00 for Indian and \$ 50 for foreigners for a night stay.

Table 4.6 Wilderness Package : Overa - Pahalgam

Timings	Particulars	Approx.Cost
Day 1--- 12:00 noon	<i>Arrival at Overa and welcome drinks</i>	Rs. 10/pax
1 pm	<i>Lunch</i>	Rs. 100/pax
04:00 pm	<i>Briefing at Overa by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) and snacks served. Departure</i>	Overheads: 500 Naturalist fee:Rs.300
04:00 pm	<i>Tea-Coffee and departure for trek in Overa-Aru</i>	Rs. 5/pax
04:30 pm-06:00 pm	<i>Trek</i>	
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 2----- 06:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail / Birdwatching</i>	
08:30 am	<i>Breakfast</i>	Rs. 100/pax
10:00 am-06:00 pm	<i>Visit to Pahalgam Zoo with packed lunch</i>	Rs. 750 for travel lunch, entry fee
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Film Show/ Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 200/pax
Day 3----- 6:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
06:30 am-08:00 am	<i>Nature Trail / Birdwatching</i>	
08:30 am	<i>Breakfast and Departure to Srinagar</i>	Rs. 100/pax

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 2475.00 per person, hence the product can be suitably priced at about Rs. 1700-2000 per person per day so as to cover other administrative expenses and entrance fees etc. Foreigners can be charged @ 100 \$ per person. Single supplementary charges can be kept @ Rs. 1000.00 for Indian and \$ 50 for foreigners for a night stay.

LADAKH

The product offered for the Ladakh region is a **Wilderness Package, a One night-Two day²**, which will start from Leh and will end at Leh via Tso Moriri. This product can be sold to **Category A** and **Category B** who wants to spend one night in the wilderness of Tso Moriri. A detailed itinerary is given below:

Table 4.6 Wilderness Package

Timings	Particulars	Approx.Cost
Day 1-----9:00 am	<i>Reception centre at Leh-Guest check-in</i>	
9.15 am	<i>Briefing at Leh by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) Welcome drinks and snacks served. Departure from Leh to Tso Moriri via Chumatang</i>	Rental Rs.1000 Fuel Rs. 500 Naturalist fee:Rs.300 i.e.Welcome drink-snacks: Rs. 15/pax
01:30 pm-03:00 pm	<i>Lunch at Chumatang hot springs</i>	Rs. 100/pax
04:30 pm	<i>Tea-Coffee</i>	Rs. 5/pax
05:00 pm	<i>Arrival at Tso Moriri, halt at the place</i>	Rs. 1000/pax
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Tribal Dance / Cultural Events</i>	Rs. 100/pax
08:30 pm-10:00 pm	<i>Dinner</i>	Rs. 300/pax
Day 2-----05:00 am	<i>Wake-up Call- Tea/Coffee served</i>	Rs. 5/pax
07:00 am	<i>Check-out from Tso Moriri</i>	
07:00 am-11:00 am	<i>Trekking at Tso Moriri till sunrise point and visit to monastery</i>	
07:30 am-08:30 am	<i>Breakfast</i>	Rs. 100/pax
2.00 pm	<i>Departure to Leh via Chumatang</i>	

Pricing: It is assumed that a minimum of 5 pax will be there and the total cost per head in that case will come up to Rs. 3425.00 per person, hence the product can be suitably priced between Rs. 4550.00-Rs. 6000.00 per person so as to cover other administrative expenses and entrance fess etc. Foreigners can be charged @ 150 \$ per person. Single supplementary charges can be kept @ Rs. 1150.00 for Indian and \$ 50 for foreigners for a night stay.

Xtreme Wilderness Package, a Two night-Three day (48 hours), for those overstay can opt for different activities like a trip to the Tso Kar lake and an extreme trek in the Tso Moriri region. In the evening they can walk or take mountain bikes on 3.5 kilometres **Nature Trail** in Tso Moriri that passes through the lake side boundary, a good place to sight wild animals and birds in the lake border. This product can be sold to **Category A** and **Category B** who wants to spend two nights in Tso Moriri and return via Tso kar lake and the Leh Manali highway.

² It is assumed that the guest will be sufficiently prepared and fit enough and would have acclimatized to the conditions of the high altitudes of Ladakh.

Table 4.7 - Xtreme Wilderness Package

Timings	Particulars
Day 1-----9:00 am	<i>Reception centre at Leh-Guest check-in</i>
9.15 am	<i>Briefing at Leh by a Naturalist (introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) Welcome drinks and snacks served. Departure from Leh to Tso Moriri via Chumatang</i>
01:30 pm-03:00 pm	<i>Lunch at Chumatang hot springs</i>
04:30 pm	<i>Tea-Coffee</i>
05:00 pm	<i>Arrival at Tso Moriri, halt at the place</i>
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing / Tribal Dance / Cultural Events</i>
08:30 pm-10:00 pm	<i>Dinner</i>
Day 2-----05:00 am	<i>Wake-up Call- Tea/Coffee served</i>
07:00 am	<i>Check-out from Tso Moriri</i>
07:00 am-11:00 am	<i>Birding Trail</i>
07:30 am-08:30 am	<i>Breakfast</i>
02:30 pm-06:00 pm	<i>Trek</i>
04:00 pm- 04:30 pm	<i>Tea-Coffee</i>
08:30 pm-10:00 pm	<i>Dinner</i>
Day 3-----05:00 am	<i>Wake-up Call- Tea/Coffee served</i>
07:00	<i>Early breakfast</i>
08:00	<i>Departure to Leh via Tso Kar</i>
09:00 – 2:00 pm	<i>Visit to Tso Kar Lake</i>
01:30 pm-03:00 pm	<i>Lunch at Tso Kar</i>
3:00 pm – 5:00 pm	<i>Travel to Leh via Tanglang La and check out</i>

Pricing: This package provides additional activities like Birding trails, Nature Trek or Mountain Biking to places close and can be priced at Rs. 8050.00-Rs. 9500.00 per person for Indians. The foreigners can be charged @ \$ 250.00- \$ 270.00 per person for the package. Single supplementary charges can be kept @ Rs. 1150.00 for Indian and \$ 50 for foreigners for a night stay.

For **Category C** visitors who are price sensitive and coming only for day visit to Pangong Tso can be offered a guided jeep ride to the site on a shared basis with a minimum of 6 other guests. Depending on the number of day visitors the product can be modified, if the visitors are less and offered not on a daily but two to three times a week.

Table 4.8 - Price Sensitive itinerary

Timings	Particulars	Approx.Cost
6:00 am	<i>Reception centre at Leh- to Tso Pangong</i>	Rental Rs.1000 Fuel Rs. 500
01:30 pm-03:00 pm	<i>Lunch at Pangong</i>	Rs. 150/pax
04:30 pm	<i>Tea-Coffee</i>	Rs. 50/pax
5.00 pm	<i>Departure to Leh</i>	

Pricing: This package is aimed at large number of people coming only for day visits and is priced @ Rs.1700.00 which is very close to the cost of the package per person. The idea is to create awareness about the place with providing them insight of the product offerings. This can be considered as a Marketing strategy also.

For **Category D** visitors, trekking groups are to be targeted in this regard. Overnight camping is the highlight to the group to the places close-by as a part of the package after identifying suitable sites and taking precautionary measures. The **Category A** is the biggest market segment for Hemis National park to target. Informal interviewing with many of the local travellers at Leh town also indicate that they are constantly looking for recreational activities during their visit to Leh and are interested in visiting the park. This group is in Leh close to the park and has access to transportation and should be easy to reach via direct marketing. The product offerings in Hemis National park is different from the package offered in Tso Moriri and Tso Panging, the package need not to be time bound as the terrain is different and access to the Eco-Lodges is an experience by itself. For Hemis, following products are offered which can be modified as per the customer's preference.

The product offered is a **Wilderness Package, a One night-Two day (23 hours)**, which will be offered at all the sites proposed in Hemis depending on access/availability of activities close to the proposed sites. This product can be sold to **Category A** and **Category B** who wants to spend one night in the wilderness of Hemis National park.

Table 4.9 – Wilderness package

Day 1-----9:00 am	<i>Reception centre at Leh -Guest check-in</i>
9.15 am	<i>Wildlife Briefing by a Naturalist (a brief introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) Welcome drinks and snacks served.</i>
11:30 pm	<i>Arrival at Hemis base Camp</i>
03:30 pm	<i>Guided Trek through the Hemis National Park till Rumtak Overnight camping supported by camping equipments</i>
01:30 pm-03:00 pm	<i>Lunch</i>
05:00 pm-06:30 pm	<i>Cultural exposure at village</i>
06:30 pm-08:30 pm	<i>Camp fire / Star Gazing/ Discussions</i>
08:30 pm-10:00 pm	<i>Dinner</i>
Day 2-----05:00 am	<i>Wake-up Call- Tea/Coffee served</i>
09:00 am	<i>Return to the Base Camp</i>
07:30 am-08:30 am	<i>Breakfast at homestay</i>
10:30 am	<i>Arrival at Leh</i>

Pricing: The package is a modification of Wilderness Package and covers a large area close to the town of Leh, wherein the visitors are given an activity of over-night camping assisted by guides and equipments. This package can be sold at any price close to Rs. 2000.00 with group discounts applicable. This segment has a number of options in the form of established home stays. Proper memorandums of associations can be discussed with them and their association discussed to make it a succesfl segment. They can also be developed and more

treks can be undertaken that can be two to three and possibly more days across various trekking points in the park.

For **Category E** visitors also (School children, University students or youth associated to some civic organisations), The Wilderness Package or The Xtreme Wilderness Package can be modified by providing basic food and Dormitory type accommodation and can be suitably priced at a site near the town of Leh, possibly at the Hemis National park. The product should focus more on Education and Interpretation of Nature.

Table 4.10 – Modified package for Students

Day 1 -----9:00 am	<i>Reception centre at Leh -Guest check-in</i>
6.15 am	<i>Wildlife Briefing by a Naturalist (a brief introduction of the Area-flora and fauna, Itinerary of the trip, Activities that are offered, Do's and Don't) Welcome drinks and snacks served.</i>
11:30 am	<i>Guided Trek through the Hemis National Park till Rumtak</i>
12:30 pm	<i>Arrival at Rumtak</i>
01:30 pm-03:00 pm	<i>Lunch</i>
4:00 pm	<i>Return to the Base Camp</i>

Pricing: The Wilderness package is modified and offered to students groups of size 20. The package can be sold at Rs.500.00 per student with complimentary offerings for teachers accompanying the group.

In the initial phase, the entry point is kept at Leh (the site where the Sindhu darshan has been created is an ideal place for such an ecotourism camp) where the visitors for the day can assemble and the trip can be started from one place. Leh has been suggested as the entry point after considering the time constraint and operating expenses. It is also suggested that the trips should be time bound and would help in managing the place with minimum vehicles. As the flow of tourists increases Pangong route can also be explored or depending on the response a separate unit can be operated at Pangong keeping the lake site or a nearby as the base.

Chapter 5

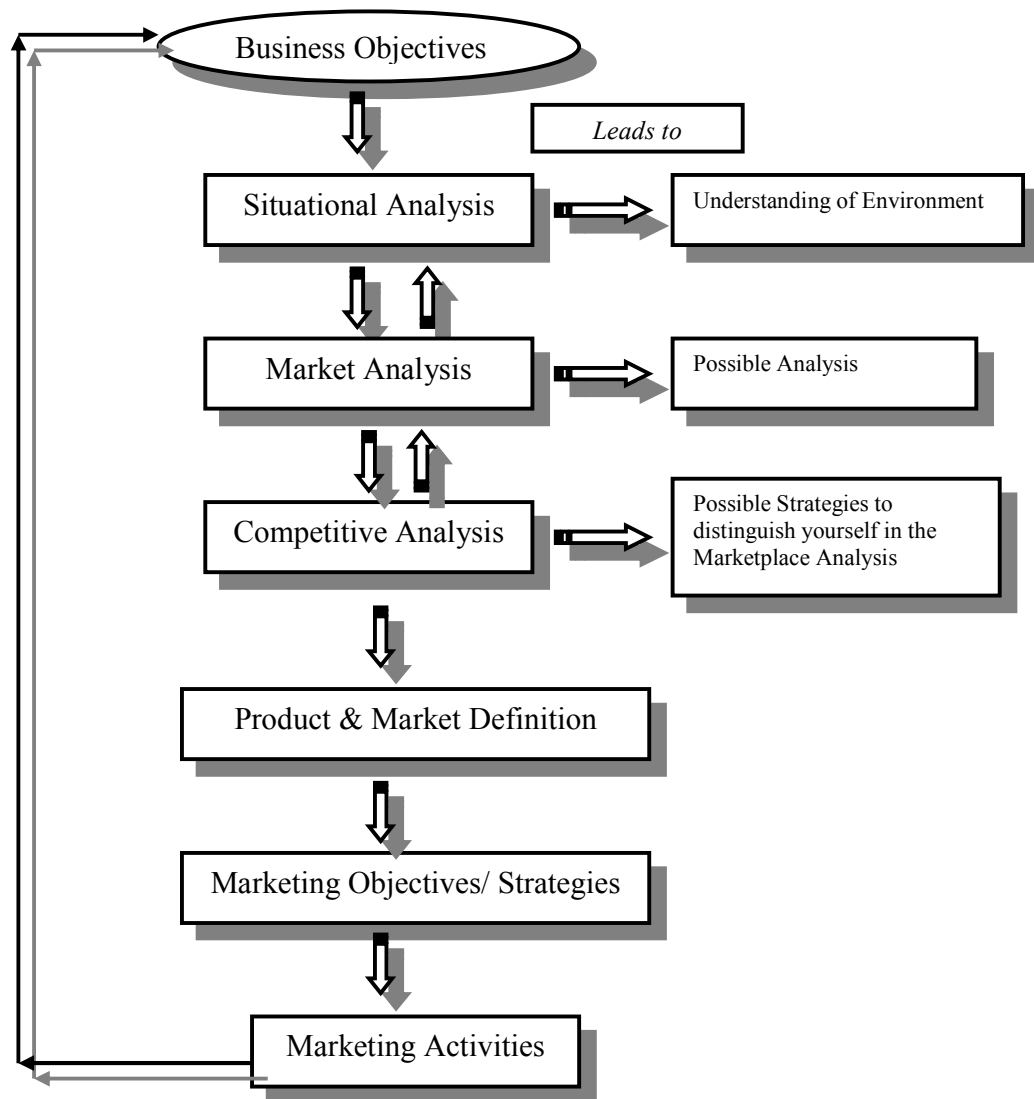
Marketing Ecotourism

The Ecotourism Market

“Marketing is the process by which you determine the potential buyers of your Product, what their needs are, and how you can respond to their needs in a way that will encourage them to visit your business” (Patterson, 1997).

Marketing also helps to determine how to reach customers at a reasonable cost. This leads to forecasts sales levels, which drives budget process related financial decisions. Marketing is very critical to the success and failure of any business venture and it becomes utmost important to put substantial effort in developing a marketing plan. Figure 5.1 describes the critical stages of **Marketing Planning Process**:

5.1 Marketing Planning Process



5.2 The Travel and Tourism Industry: A global Economic and Environment Force

Travel and tourism is today the world's largest industry and is also among the fastest growing economic sectors. The travel and tourism industry accounts for 10.2% of the world's total economic output (\$3.53 trillion), 194.6 million jobs (1 out of 13 jobs on the planet) and is expected to grow 4.6% annually during each of the next 10 years. **The industry has a multiplier effect of 3.1 stating its significance in the economic growth of a region** invested. The industry provides immeasurable economic, social and other benefits to travelers and the communities they visit.

Despite its many benefits the industry has also adversely affected the environmental and social qualities of many destination areas. As a result of its global scale and unsurpassed economic clout, the industry represents a vast, largely untapped source of solutions to serious environmental and social problems.

The sustainable tourism market is a large market and it is utmost important to recognize and incorporate niche specialization into planning and management. The entrepreneurs should treat each market with a specific set of policies.

To understand the Tourism Market a Market Research was carried with the following objectives:

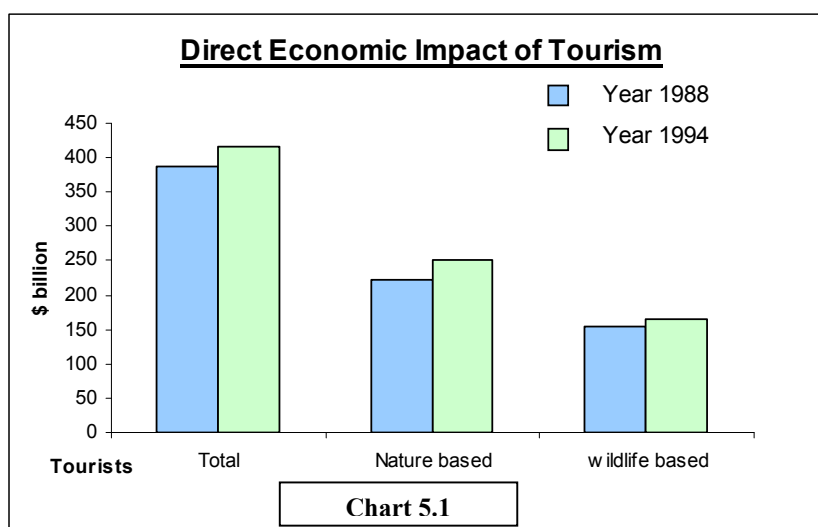
- To understand the Market for sustainable tourism
- To understand the size of the market
- To understand the profile of the market
- To identifying the potential market for Ecotourism products of Orissa
- Market segregation on the basis of:
 - Spending power, Destination
- To Assess the willingness to pay for improved facility
- To assess the Seasonality of the market

The Methodology that was adopted to achieve the above mentioned objectives

- Primary data collection
 - Interaction with Travel agents
 - Launch operators and Taxi drivers
 - Forest department, Tourism department
- Secondary data collection
 - Reports and international publications
 - Report published by tourism dept.
 - Flow of tourists recorded by forests dept.
 - Arrival of guests at rest houses and OTDC establishments

5.3 General Tourism Statistics Worldwide

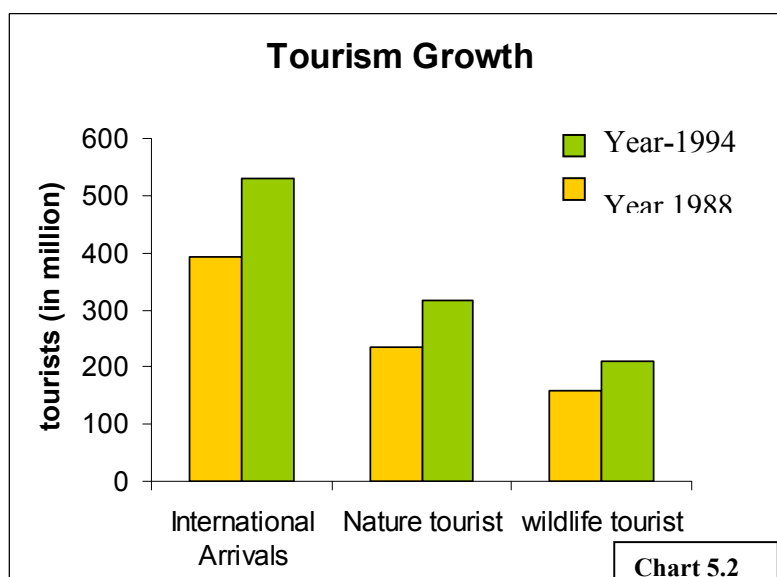
The World Tourism Organization (WTO) estimates that there were more than 663 million international travellers in 1999. Spending by these tourists was estimated at more than US\$453 billion. Tourist arrivals are predicted to grow by an average 4.1% a year over the next two decades, surpassing a total of one billion international travellers by the year 2010



and reaching 1.6 billion by the year 2020 (WTO, 2000). Tourism is the world's largest employer, generating, directly and indirectly, nearly 200 million jobs or some 10% of the jobs globally. **Chart 5.1** details as about the total Direct Economic impact due to tourism and the share of wildlife and nature based tourism. In 1988 the total Direct Economic impact due to Ecotourism was 388 \$ billion of which 233 \$ billion was nature based and \$ 155 billion was wildlife based. In the year 1994 the total impact \$ 416 billion of which \$ 250 billion was from nature based and \$ 166 billion from wildlife based tourism.

The Ecotourism Market Growth

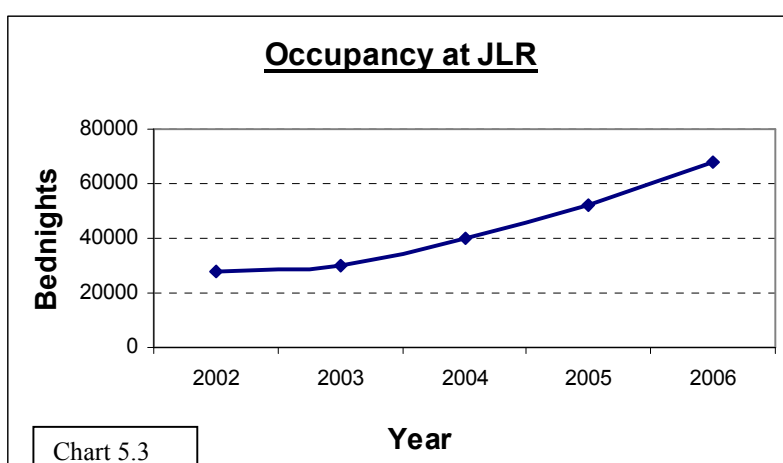
Ceballos-Lascuráin (1993) reports a WTO estimate that nature tourism generates 7% of all international travel expenditure (Lindberg, 1997). The World Resources Institute (1990) found that while tourism overall has been growing at an annual rate of 4%, nature travel is increasing at an annual rate between 10% and 30% (Reingold, 1993). The **Chart 5.2** highlights the Ecotourism growth at 35 % in a span of



six years of which there has been an accelerated growth in the 90s. Data which supports this growth rate is found in Lew's (1997) survey of tour operators in the Asia-Pacific region who have experienced annual growth rates of 10% to 25% in recent years (Lindberg, 1997). WTO (1998) stated that Ecotourism and all nature-related forms of tourism account for

approximately 20 percent of total international travel. Fillion (1992) outlines the magnitude of the Ecotourism market through the use of general tourism statistics.

Jungle Lodges and Resorts Ltd. (JLR) bed night's data shows a sudden surge in Ecotourism as the company experienced an average growth of 30 % over the past 5 years. It has also been observed that 30 % of the customers of Jungle Lodges are repeat clients and a majority of new clients have come mainly because of referrals from friends or relatives who have been to forests of Karnataka. This data emphasize on the fact that for a niche market like Ecotourism a satisfied customers is a marketing and selling agent, as he is in a better position to explain an experience. In the recent past it has been observed that there is major shift in the destinations liked by tourists from hill stations and beaches to areas which are unexplored and unheard of. An analysis of inbound tourist motivations to different worldwide destinations, that 40-60% of all international tourists are nature tourists and that 20-40% is wildlife-related tourists.



5.4 Marketing of Ecotourism Product

The success of an effective Tourism Product Development Strategy lies in a unique marketing strategy. Unlike classic product marketing criteria, when the product is developed first followed by the marketing strategy, this report has instead been determined as a consequence of marketing imperatives.

The recommendations of the Tourism Product Development Strategy have been 'packaged' into distinct tourism destinations. Each destination is a distinct product, exhibiting a clear and unambiguous differentiation from the others.

Business Objectives

Identifying the business objectives early on in the development phase of the marketing plan will help guide the marketing process and keep the community well focused (Patterson, 1997). The development of Ecotourism in PAs is done with the objective of Environment Conservation through community participation gaining Economic returns through providing local community alternative means of livelihood. Since Economic gains are important for sustainability of business venture, it becomes necessary to set business objectives to achieve the economic gains. The Ecotourism development in the identified areas is carried on to achieve a substantial share in the Tourism business starting with 40% occupancy and 15 % average annual growth.

Situational Analysis

The situational analysis plays an important part of in marketing planning process wherein one needs to know who?, what?, where?, why?, and when? and then the stock of resources available is taken. Situational analysis help determine all of the factors that will positively or negatively affect a business's ability to meet the requirements of potential customers. It helps to define the product in the offering based on the resource inventory.

Market Analysis

The reasons for conducting a market analysis are similar to the reasons for conducting a situational analysis. It is just as important to determine the who, what, where, why, and when of the marketplace as it is to understand the situational circumstances. A market analysis helps to determine niche market, the size of the target market, market profile. A through market analysis, one should be able to identify who your potential customers are and what market segments to target.

By targeting the proper market segments, the Eco-Development Board can make optimum use of the allocated resources, by identifying marketing strategies to achieve the desired results. An analysis of the visitors profile helps in determining **Five** primary market segments.

- ❑ **Category A-** Nature-based travellers-High Income group and Middle High Income group category from all parts of India, especially from the neighbouring states and Jammu and Kashmir.
- ❑ **Category B-** Wilderness based foreign travellers coming to visit neighbouring states.
- ❑ **Category C-** Day visitors of budget category coming from places close by in Jammu and Kashmir or from other neighbouring states.
- ❑ **Category D-** Corporate groups coming for outings.
- ❑ **Category E-** School children, University students or youth associated to some civic organisations.

Competitive Analysis

The next step in planning marketing initiatives is Competitive Analysis wherein a review of competitors lets you determine:

- ❑ Operators in the market.
- ❑ Competitors Product offerings.
- ❑ Competitor's Strength and Weaknesses.
- ❑ Define the new Product and its Unique Selling Proposition.

The competitive analysis should not only focus on the Competitors in the Ecotourism Market but also from the Hospitality industry who would be eyeing on the tourists inflow. After Competitive analysis is done the planners are in a position to Define their product and the Target market.

Product and Market Definition

Situational analysis, Market Analysis and Competitive analysis give us a detailed picture of what is the present situation of resources, the recent trends in the market and the operators existing. The analysis also helps to identify the range of products in the offering by the competitors and their pricing. This is very critical in Product Definition and Pricing and helps to target the identified market segments. **Refer chapter Define product.**

Marketing Objectives / Strategies

After determining business objectives; completing the situational, market, and competitive analyses; and completing a product-market match, the next step of the marketing development process is to develop marketing goals and objectives. These should identify specific desired results, provide direction, and assist in monitoring the success of all-marketing efforts and activities.

The following objectives are to be achieved:

- ❑ Generating awareness about Wilderness tourism.
- ❑ Creating a niche space in the Wilderness tourism market in India as well as globally.
- ❑ Creation of a Brand and improving its visibility in the Ecotourism sector.
- ❑ To convert casual nature travellers to Eco-tourists.
- ❑ To attract Wilderness-based travellers visiting neighbouring states to the areas developed under Ecotourism plan in Jammu and Kashmir.
- ❑ Targeting a 40 % share in the Nature-based tourism market and achieving a 15 % average annual growth.

Developing Marketing Strategies

A marketing strategy is a specific Action or Strategy that will increase awareness and attractiveness of the products offered, so that travellers are motivated to buy.

(Patterson, 1997)

A marketing strategy can be developed by focussing on:

- ❑ Product
- ❑ Position
- ❑ Price
- ❑ Placement
- ❑ Promotion

The **Product** and **Positioning** is itself a Marketing Strategy with unique product offerings that are designed to target the identified market segments. The product is customised to cater the needs of the different categories in the Market.

The **Pricing** of the product can be an effective marketing strategy as it can be competitively priced with all-inclusive concept. The operators can adopt flexible pricing system, which should be modified depending on the market and season. Following strategies can be adopted

1. Differential Pricing:

The weekends and weekdays can be priced differently to achieve economic gains by attracting price sensitive customers in the threshold area. A **Weekdays discounts** of 10% can be offered to regulate the flow of visitors evenly through out the week and gain from economies of scale on weekdays also. To attract visitors in the lean period **Off-season rates** can be floated where the same package will be available with a flat discount of 20% .

2. Loyalty Discounts:

The objective of Ecotourism is to create Brand ambassadors and patrons of Conservation hence a loyalty discount of 10 % can be offered to repeat clients or referral visitors.

3. Senior Citizen Discounts:

Visitors above the age of 60 years can be offered 15 % discount on the tariffs charged.

4. Group Discounts / Corporate Discounts:

For large groups of the size of 20 or more, a special discount can be offered to them wherein the group will get complimentary stay for one person for every 20 pax. The corporate groups coming for outings can also avail this offer wherein one complimentary stay is given for every 15 pax.

5. Student Package:

As discussed earlier, the students can avail special package rates depending on the size of group as the rates can be further reduced from the normal rates of Rs. 500.00. The teachers accompanying the group can avail complimentary stays.

The Product **Placement** and **Promotion** are the most critical elements of the Marketing strategies and needs attention on each and every aspect of it. In this phase one needs to decide how to make optimum utilisation of the resources available. Identification of potential areas where selected market categories exist and means to reach the customers are decided in this phase.

Market research results shows that the major chunk of people coming to the selected area are from states of West Bengal and Andhra Pradesh apart from the local tourists of Jammu and Kashmir. In the initial phase the marketing initiatives should focus on these specific geographic locations. The inflow of foreign visitors is very less at the two identified locations hence in the initial phase the international market is not targeted directly. *Following marketing strategies can be adopted with the limited resources available and to achieve desired results:*

1. Direct Sales and Marketing:

The operators can directly do the sales and marketing by making a centralised reservation system and employing a team of sales professionals who will do the bookings for all the lodges.

2. Out-sourcing Marketing and Reservations:

The marketing and sales can also be outsourced to a private player, which will work on commission basis. The private party to whom the marketing and sales has been outsourced will be responsible for all the marketing activities and will be motivated by the commission earned on each bookings.

3. Web-based marketing:

In the present e-revolution, web based marketing is the most cost effective of reaching to the global customers. A website giving detailed information about the products-places and the packages can be developed with contact details. The website can also be linked to other prominent websites in the similar field like:

- ❑ The International Ecotourism Society- www.ecotourism.org
- ❑ Ecotour Directory www.ecoclub.com
- ❑ Planeta www.planeta.com
- ❑ www.earthfoot.com
- ❑ Green Travel Network www.green_travel.com

4. Liaison with travel agents.

The packages can also be marketed by developing a network of travel agents working on commission basis. A slab system can be put into place with commission rates directly proportional to the business generated by that particular agent. Suggested rates are given below:

Table 5.1: Commission rates to Travel agents

Business Generated	Commission rates
< Rs. 08.00 lakh	15 %
> Rs. 08.00 lakh	20 %

The slab system is a tool to motivate travel agents to achieve higher business

5. Word of mouth marketing.

For a product like wilderness tourism, the word of mouth marketing is the most rewarding of the strategy that can be employed with minimum investment and have long-term results. A chain of customers can be made by giving high quality service to the visitors; this will ensure repeat visits and referral clients.

6. Public relations

- ❑ Conduct special media trips related to Travel-tourism and Environment & conservation.
- ❑ Encourage travelogues by freelancers.
- ❑ Publishing of travel guides with information about all the places and activities offered.
- ❑ Frequent press releases with columns and interviews of prominent people of the organization

7. Sale of Promotional materials

The organisation should lay emphasis on Brochures, Marketing materials, Souvenirs etc. as they are not only a source of revenue but also creates an image of the company.

8. Advertisement and sponsorships

Sponsoring events which have link with conservation or environmental issues and placing advertisements in the right kind of media can also be used to market the product.

5.5 J & K Tourism: A Market Research

Introduction:

The natural beauty of the valley of Kashmir is well known widely and has deservedly won high praise from travelers, since time immemorial. The first Himalayan State of India, Jammu and Kashmir is divided into mainly three regions, the foothill plains of Jammu; the lakes and blue valleys of Kashmir rising to alpine passes, the high altitude plains and starkly beautiful mountains of Ladakh, which lies beyond those passes.

The valley, practically one large health resort, is enchanting all the year round. The colourful flower season starts from the middle of March and April. May and June find fruit trees laden with many hued carpets of flowers decking the meadows and hill slopes. One of the most attractive aspects of Kashmir is its adventure prospects which includes trekking, mountaineering, fishing, rafting, heli- skiing to trans Himalayan Jeep Safari. June and July is the best time for swimming, sun-bathing, surf-riding and trekking. August and September are good for fishing trout and mahseer in ice-cold mountain streams. Big and small game are to be found aplenty in September and October; Autumn is the fruit season and also a good time for trekking. December to February is the season for winter sports in Gulmarg.

The state experiences extreme climates in the summer and winter. The weather is pleasant from October onwards. However, the best time to enjoy Kashmir and the adventures of Ladakh region is between the months of May and September.

Kashmiri handicrafts are known throughout the world for their exquisite craftsmanship. Srinagar is a shoppers paradise of traditional crafts. Several craft shops line the streets of Srinagar. The diverse articles range from woolen textiles of fleecy soft texture and matchless excellence in weaving, hand-woven carpets in both wool and silk with their intricate Persian design, to the exquisite designs worked on papier-mâché, wood work, silverware etc are products of unique craftsmanship.

Organisational Structure:

The Department of Tourism, J&K is the main developmental, promotional and regulatory arm of the J&K Government. Its main role comprises of:

- Overall planning and execution of schemes for the development

-
- Upgradation and improvement of the tourism infrastructure in different parts of the State
 - Support the private sector industry in the form of incentives for setting up various tourist facilities as well as for promotion and marketing of their products and services
 - Promotion and marketing of various tourist destinations and products of the State
 - Regulation of the travel-trade by enforcement of provisions of J&K Registration of Tourist Trade Act

The Department of Tourism has Tourist Offices in all the tourist resorts of the State. In addition, there are 6 promotional offices outside the State, one each at New Delhi, Mumbai, Ahmedabad, Hyderabad, Chennai and Kolkata. Also, there is one provincial Director of Tourism each for Jammu and Kashmir Divisions. The Department also has Engineering Division under its control for the implementation and execution of various schemes for upgradation and improvement of the basic and tourist infrastructure. For formulating and monitoring the plan schemes, the Department has a Planning Wing headed by an Assistant Director deputed by the State Planning and Development Department. For overall marketing and promotion including production of literature and other promotional tools, undertaking of advertisement campaigns and coordination of various marketing and promotional efforts, the Department has a Publicity Wing headed by the Deputy Director Publicity.

The Department of Tourism is provided with and controls an Annual Plan Budget. A sufficient amount is earmarked and utilized for providing incentives to the private-sector in the form of interest subsidy on loans advanced by various financial institutions for setting up or upgrading various tourism units. In addition, direct financial assistance is also given for conversion of residential houses as paying guest accommodation and for improvement of other facilities in the tourism sector. A sufficient amount is also earmarked for promotion and marketing of various destinations through the print and electronic media, as well as for sponsoring participation of the State's travel-trade delegations in various Travel Marts and Expos within the country and abroad. The Department also conducts Familiarization Tours of leading travel agents, tour operators and travel writers from within the country and abroad to different parts of the State.

The commercial activities in the tourism sector from the Government side are looked after by a public sector corporation known as the Jammu and Kashmir Tourism Development Corporation (J&K TDC). It operates and manages Government accommodation in Tourist Centres at Srinagar and Jammu, and the Tourist Complexes, Hotels, Tourist Bungalows in various resorts. The Corporation also runs a Travel Division, which organizes package tours to various parts of the State and also arranges transport facilities for the tourists.

Other related organizations of the Tourism Department are the Jammu and Kashmir State Cable Car Corporation (J&K CCC) and the Sher-e-Kashmir International Convention Centre (SKICC). The Cable Car Corporation operates a Gondola Lift at Gulmarg. It is also planning to set up similar facilities as joint ventures in different tourist resorts of the State. The Convention Centre has Conference facilities of International standard, and is connected to a five Star Hotel. An International Golf Course designed by World famous Golf Architect Robert-Trent Jones, Jr. has also come up in its vicinity.

For safeguarding the interests of tourists visiting Jammu and Kashmir, the State has enacted a special legislation titled the "Jammu and Kashmir Registration of Tourist Trade Act, 1978/1982 ". Under this act, all the Tourist Officers posted in different resorts have been vested with special powers as Prescribed Authorities to register and regulate the tourist trade in their respective areas of jurisdiction, and to look into complaints from tourists visiting the State, the Department has an Enforcement Wing headed by a Superintendent of Police on deputation from the Police Department who is designated as Deputy Director Tourism (Enforcement). There is a contingent of Tourist Police on deputation from the Police Department under the administrative control of Deputy Director Tourism (Enforcement) for assisting him in the disposal of complaints of tourists. The Registration Act also confers compounding powers on the Deputy Director Tourism (Enforcement) enabling him to settle the complaints on the spot. For cases requiring prosecution, written complaint of a tourist is admissible as evidence even if he may have left the State.

5. 6 Ecotourism Market Profile

Based on JLR's experience and the data collected during market research, the Ecotourism market profile was detailed as follows:

Age: 35 - 54 years old, although age varied with activity and other factors such as cost.

Gender: 50% female and 50% male, although clear differences by activity were found.

Education: 82% were college graduates; a shift in interest in Ecotourism from those who have high levels of education to those with less education was also found, indicating an expansion into mainstream markets.

Household composition: No major differences were found between general tourists and experienced Ecotourists.

Party composition: A majority (60%) of experienced Ecotourism respondents stated they prefer to travel as a couple, with only 15% stating they preferred to travel with their families, and 13% preferring to travel alone.

Trip duration: The largest group of experienced ecotourists (50%) preferred trips lasting 8-14 days.

Expenditure: Experienced ecotourists were willing to spend more than general tourists, the largest group (26%) stating they were prepared to spend \$1,001-\$1,500 per trip.

Important elements of trip: Experienced ecotourists top three responses were wilderness setting, wildlife viewing, hiking/trekking.

5.7 Visitors' attitude survey

The main purpose of these guidelines is to assist the PA managers and other stakeholders in planning and management, so that tourism can develop in a sustainable fashion while

representing local community and conditions. A key message is the importance of managing visitors and resources today so that tomorrow visitors can also experience quality sites and the conservation values that these sites represent.

The major objective of this section of the report is

- To outline approaches to planning and development of tourism infrastructure and services in the protected areas.
- To outline ways of enhancing the quality of the tourism experience

All protected areas require some level of service infrastructure. This infrastructure must be located with care because it can get intrusive. Therefore tourism related structures should be carefully designed and operated thus reflecting the protected area values and also according with park policy. Therefore it should be managed as a cultural and natural area and doesn't assume a different state from that which once prevailed.

5.8 Recommendations

Based on the field visit and the survey thereupon, the following recommendations were made for marketing of ecotourism in state of Jammu and Kashmir.

Establishing an Ecotourism Cell

The consultancy team after doing the field analysis came to a conclusion that, a separate dedicated organisational set up is required for the introduction of ecotourism in the state. It should be preferably in the form of an ecotourism cell. The cell should take up all the marketing and promotional aspects related to ecotourism. The ecotourism cell should work in tandem with the Wildlife department of J&K.

Establishing a Brand

Since ecotourism is a niche market, carved out from the larger spectrum of tourism, it should have a distinct identity. In order to position ecotourism from general tourism, it is necessary to have a different brand identity. Therefore, similar to Jungle Lodges & Resorts in the state of Karnataka, the J&K Ecotourism Cell should come out with a unique brand proposition for its ecotourism development. The new brand should have a logo and a punch line which will translate the ecotourism programs in the most efficient manner.

Promotional Campaign

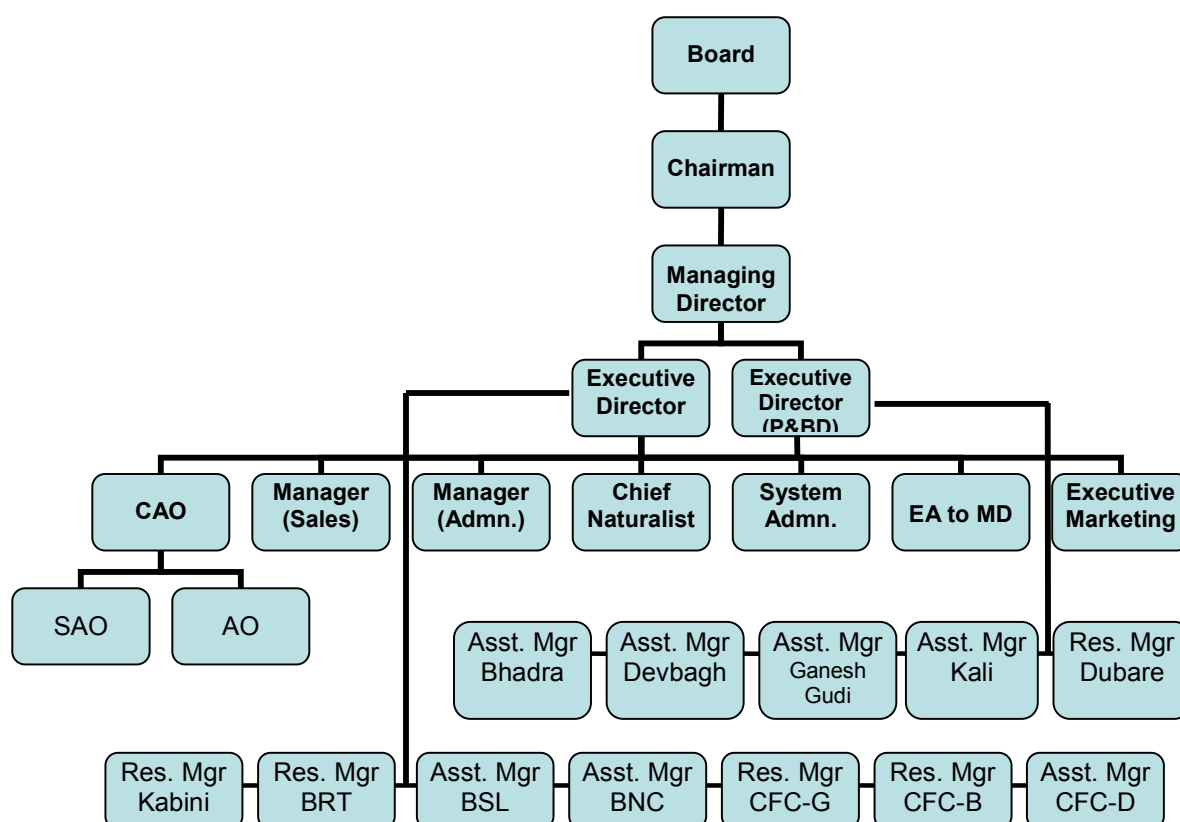
Once the branding is done, a well planned promotional campaign should begin. This exercise should focus more into the destinations and its unique features. J&K had been positioned as "paradise on earth" amongst both the inbound and domestic tourists and it had displayed effectively the natural, geographical and cultural beauty of J&K. However, the ecotourism campaign should bring in a feeling of the unique activities devised according to the principles of sustainable tourism.

Chapter 6

Identify and Select Strategies

Figure 6.1 Organisation Structure

The Organisation structure as it exists currently in Jungel Lodges & Resorts Ltd. is represented in a graphic form below. This structure has worked very well for the Company. It is suggested that a similar set-up be adopted in Jammu and Kashmir while keeping in mind the local situation. Creation of a separate board is recommended as it gives better autonomy and functional independence. A list of all Directors on the Board is also given for reference.



List of Board Members

- Principal Secretary to Honorable Chief Minister
- Principal Secretary to Govt., Kannada Culture, Information & Tourism Department
- Principal Secretary to Govt. Dept. of Public Enterprises
- Principal Chief Conservator of Forests (Wildlife)
- Director of Tourism
- Managing Director, Karnataka State Tourism Development Corporation
- Managing Director, Jungle Lodges & Resorts Ltd.
- Executive Director, Jungle Lodges & Resorts Ltd.

6.1.1 The Ecotourism Development Board

To develop Ecotourism in the state of Jammu and Kashmir it has been suggested that an Ecotourism Development Board be constituted which will be an apex body to regulate Ecotourism activities in the state. Government of Madhya Pradesh have already constituted a board and registered the same vide Registration No.01/01/01/15425/05 S-2172/05 Dated 14/07/2005. The Bye laws of the MP Ecodevelopment Board are enclosed in Annexure -8.

The **aims and objectives** of the Ecotourism Development Board are as follows:

1. Complementing, supplementing, strengthening the Ecotourism activities or facilitating linkage between public and private operators in the cause of conservation of wildlife.
2. To coordinate and liaise with national/international bodies, experts and funding agencies, and to receive contribution and funds from Government of India, State government.
3. To engage / employ such staff as may be necessary for efficient handling and conduct of business of the Board with the approval of the Board.
4. To carry out any other activities in the furtherance of the above objectives.

Powers and functions of the Board

The General business of the Board shall be managed and carried on by the CEO, subject, however, to the overall control and Policy decisions of the Government.

- a. Overall policy guidance and co-ordination of programmes implemented by the Board.
- b. To manage properties including funds of the Board.
- c. To raise funds for the Board by generating revenue from the Ecotourism activities.
- d. To approve and sanction the Annual Plan Budget and Audited Accounts.
- i. To make alter and amend the objectives, rules and regulation of society, constitute committees from time to time as and when considered necessary for effective execution of the programme and schemes.
- j. Delegate powers and function to the employees, committees and consultants of the Board.
- k. To receive any movable and immovable property for and on behalf of the Board.
- l. To enter into agreement for and on behalf of the Board.
- m. To defend legal proceedings against the Board.
- n. To sell, transfer or otherwise dispose of any movable property of the Board with the prior approval of Board.

- o. To authorize the undertaking of works of a capital nature subject to the condition that all cases involving a capital expenditure exceeding rupees ten lakhs shall be referred to the Board for approval before authorization
- p. To perform all such acts and do all such things as maybe necessary for proper management of the affairs of the Board.
- q. To issue guidelines and directions to the CEO as may be necessary for implementation of programmes.
- r. To critically examine and to pass the annual / quarterly work programme of the Board, action plans and project proposals.

Functions of the President of the Board

- ❑ The President shall preside over and conduct the meetings of the Board and in his absence the senior most member will preside.
- ❑ The President shall have overall powers of supervision, direction and control over all affairs of the Board and functioning of office bearers.
- ❑ The President may invite such persons other than the members of the Board to the meetings of the Board as he thinks proper for specialized inputs and expertise.

Powers and Functions of the Chief Executive Officer

- 1. The CEO shall carry out all decisions, instructions and orders of the Board. He shall receive and carry on all contributions/grants mean for the Board, and deposit, the same in the Development Fund and will grant proper receipts for the same.
- 2. He shall have control and supervision of all resources, assets, properties and estates of the Board.
- 3. Drawing of money from the account of the Board will be through cheques signed by the CEO.
- 4. All contracts on behalf of the Board shall be signed by the CEO and witnessed by another member of the Board.
- 5. The CEO shall arrange to comply with the requisite statutory returns and statements and periodical accounts. He shall submit Annual Administration report on the affairs and financial position and budget to the Board.
- 6. The CEO shall represent the Board and act on its behalf and in its stead in all judicial, quasi-judicial proceedings and matters and shall have powers to engage Advocate(s) to represent him and the Board in any proceedings. He may sue or be sued on behalf of the Board.
- 7. The CEO shall present for inspection the books of accounts and records of the Board as required under the financial rules.
- 8. It shall be the duty of the CEO to carry on the works, administration and management of the Board under the control of the Executive Body, in conformity, with the aims and objectives and rules of the Board.
- 9. All contract and other instruments on behalf of the Board shall be executed by the CEO, provided that all capital expenditure involving a financial consideration not exceeding Rs. 200000- (two lakh only) shall be executed after obtaining the prior approval of the President of the Board and other works involving financial execution above Rs. 2,00,000 but less than Rs. 25,00,000 (twenty five lakhs only) shall be execute with prior approval of the General Body and any contract/transaction beyond that limit shall require prior approval of the Government.

6.2 Business Model

Ecotourism is the fastest growing segment in the Tourism industry with 40-60% of all international travellers is nature tourists and 20-40% are wildlife tourists. In India, the Forest department is practising Ecotourism by opening up its rest houses for public on payment of some fees. The facilities offered are basic and therefore the Forest Rest Houses although located at beautiful locations have not been in a position to attract Higher and Middle-Higher income group customers. Forest Department with short staff and in want of funds are not in position to operate the places. There are Capital budgets available for Ecotourism development with the Department but the activities initiated fail to follow the spiral trajectory of Sustainability.

Therefore, it becomes imperative to develop a Business Model that

- ☞ is economically viable, i.e. gives a good return on investment
- ☞ ensures that the physical infrastructures are maintained properly
- ☞ ensures that the services offered to the visitors are of good quality
- ☞ ensures that the environmental impacts are minimum
- ☞ achieves the objectives of environment conservation and education
- ☞ gives socio-economic benefits the local community
- ☞ develops the local area

ABC approach:

Ecotourism development in Jammu and Kashmir is based on ABC approach wherein the potential sites can be classified into three categories:

- Category A-** Development & Operation by ETB (the Ecotourism Development Board)
- Category B-** Development by ETB (the Ecotourism Development Board) & Operation by Private Sector
- Category C-** Development & Operation by Private Sector

The three approaches have been discussed in **Table 7.1** on different parameters like Eco-sensitivity, land status, construction responsibility and permits required for it. The state can decide to pursue all the three approaches by classifying the projects into different classes or can follow one model.

Table 6.1: Suggestive Business model for operations

S.No.	Parameter	Category A	Category B	Category C
1	Eco-sensitivity	High	Medium	Low
2	Approvals/permissions	Many	Fewer	Lesser
3	Status of Land	Forest/River	Private/Forest	Private
4	Construction Permits	ETB only	ETB only	ETB/Private
5	O & M	ETB only	ETB via Pvt.	ETB / Private
6	Typical Location	Reserve Forests/ PAs / River Banks	Border area of Forests/ Jungles/ River Banks	Vicinity of Forests/ Jungles

It has been suggested that in the initial phase the ETB should adopt **Approach B** wherein the ETB will takeover properties from Forest Department, Tourism Department or any other concerned Department (see **Annexure-9**) on lease (refer **table 7.2**). The **Ecotourism Development Board** can use the ecotourism development funds in developing infrastructure at the identified sites and then ask for competitive bidding from interested private players.

Suggestive Lease Rent rates: Table 6.2

Period	Lease Rent / Property
Year 1	100000
Year 2	150000
Year 3	150000
Year 4	200000
Year 5	200000
Year 6	200000
Year 7	200000
Year 8	200000
Year 9	200000
Year 10	200000

The ETB can enter into an agreement with the preferred bidder for maintenance and operation of the property. The highlights of the agreement are as follows:

- ☞ **Branding-Name:** The properties to be operated in the name of ETB or any organisation floated by the Board. This is required for concentrated marketing effort.
- ☞ **Capital investment:** The capital investment to be done by ETB initially and any up gradation to be done after consulting the private operator.
- ☞ **Maintenance:** Private operator to be responsible for management for Lodging, Catering and the Activities. The private operator will incur costs towards the operations and maintenance of all the agreed infrastructure and payment of the all bills and taxes such as the Electricity bill, Telephone bill, local authority tax and all other taxes at the camp.
- ☞ **Taxes and Forest Entry Fees:** The private operator will pay taxes on food, if any and shall pay the forest fees such as the forest entry fees, trekking fees, or any other fee imposed by the Forest Department
- ☞ **Marketing:** Both the parties should market the properties in their respective publicity material including their respective websites. The ETB with the help of Tourism dept will promote all the Ecotourism destinations.
- ☞ **Human Resource:** All the staffing will be done by the private operator but there will be fixed percentage, as agreed upon, of Local people employed at low level at each property. The ETB can appoint an official representative to monitor the business operations.
- ☞ **Accounting:** It is agreed that the private operator shall keep and maintain all necessary statutory records and financial books of accounts, which will be submitted to the board via official representative on a monthly basis
- ☞ **Risks and Insurance:** The ETB will insure all the existing physical assets, road insurance for the guests and staff with the suitable Insurance Policy acceptable by

the both parties (**Refer Chapter 7.6 Business Risk**). The private operator will be fully responsible for the safety of clients and any legal action that may arise as a result of the accommodation and food.

☞ **Reservations:** the reservation will be done by the operator and will be recorded by the official representative. At the end of the year, the revenue generated will be shared if it is more than the minimum guarantee (**refer table 6.3**) agreed by the operator.

Revenue sharing

The properties developed by the EBT, will be outsourced to a private player under a Revenue sharing mechanism wherein the private operator will guarantee a minimum annual returns. If the returns exceed the guaranteed amount then the Ecotourism Development Board and the private operator will share the revenue in which the EBT will get 25 % in the initial years, which will go up to 40 % in the 4th year and will be constant at that percentage for the agreement period.

Minimum Guarantee & Sharing ratio – Table 6.3

Period	Min. Guarantee per Property	Sharing Ratio	
		Board	Operator
Year-1	200000	25%	75%
Year-2	250000	30%	70%
Year-3	300000	30%	70%
Year-4	350000	40%	60%
Year-5	400000	40%	60%
Year-6	400000	40%	60%
Year-7	450000	40%	60%
Year-8	500000	40%	60%
Year-9	550000	40%	60%
Year-10	600000	40%	60%

Considering the minimum guarantee for each of the property agreed upon, the NPV of total minimum guarantee amount for six places for 10 years period and at 10 % discount rate would come close to 2.5 crore, hence an investment worth 2.5 core will have positive returns if all the properties developed are taken over by private operators at the above-mentioned sharing ratio.

A brief of the roles and responsibilities of Ecotourism Board and private operator is as below:

The role of The Ecotourism Development Board with respect to:

•Development of Resort

- Finalisation of location for ecotourism resort
- Obtain necessary environment/ forest clearances
- Procurement of land and development of resort

•Operations of Resort with Private Participation

- Bidding for the selection of the private operator
- Handover of the resort to the private operator for operations and management
- Obtain necessary approvals for conducting theme-based ecotourism activities
- Appoint representatives for monitoring operations and management
- Permit affiliation of brand name
- Grant timely approvals/ permissions/ authorisations to Licensee

The Obligation of private operator with respect to:

•Project Commencement

- on or before ‘x’ months from Appointed Date
- Provide Mandatory Project Facilities
- Obtain Completion Certificate
- Commence commercial operations

•Performance Security

- Revolving bank guarantee of 1 year term
- Amount equal to Fixed Payment for succeeding year

•Alterations/ Modifications

- Carry out necessary alterations/ modifications/ additions
- Obtain prior approval of ETB in case of structural changes/ demolition

•Operations & Maintenance

- Operate it as a resort – cottages, restaurant, ecotourism awareness, specific ecotourism activity (rafting, trekking, safari etc.)
- Comply with O&M Requirements specified by ETB

•List of Do’s & Dont’s practiced at other existing ETB properties

•Guidelines on specific ecotourism activity

•Maintenance guidelines

- Carry out necessary & periodic checks & maintain proper records of checks & remedial measures
- Operate on its own or through Contractor
- Appoint suitable officers to supervise operations & management
- Maintain Complaint Register at reception area open to inspection by ETB/ Project Engineer

•Preserved Structures

- ETB to specify certain structures as Preserved Structures
- Preserved Structures not to be destroyed or damaged

•Community Employment

- Local Region defined as area within 10 kms of boundary of resort
- At-least ‘x’% of total persons employed to be residents of Local Region

•**Accommodation for ETB's Representative**

- A specified space (of minimum 'x' sq.ft.) to be provided for accommodation and common public utilities at no charge to ETB

•**Insurance**

- Obtain necessary insurance at its own cost
- Provide copies of all insurance policies to ETB periodically
- In the event of claim, insurance proceeds to be applied for repair & restoration of Project Facilities

•**Environmental Compliance**

- Conform to laws & guidelines relating to environment, ecology, forest, health & safety

•**Books of Accounts**

- Maintain statutory books of accounts & statement of Annual Revenue to arrive at revenue share payment
- To be audited by Statutory Auditor and submitted to ETB

Project Engineer

A project engineer needs to be appointed for the infrastructural changes to be done at different properties. He can be appointed for all the places or one engineer for each of the properties.

The main area of consideration for appointment of the engineer

•**Appointment**

- ETB to provide list of eligible persons
- Private operator to appoint one person from list as Project Engineer
- Private operator & ETB to finalise fees & terms of appointment of Project Engineer
- To be appointed at least 15 days before expected project commencement

•**Remuneration**

- All costs/ charges to be paid by ETB
- Half of the costs/ charges to be reimbursed by private operator to ETB

•**Role**

- Review implementation of Project
- Issue of Completion Certificate to private operator
- Review of operations & management of Project Facilities to check compliance with O&M Requirements
- Issue Certificate of Compliance to private operator during hand back
- Assist in amicable settlement of disputes

Payment Mechanism

•Private operator to pay to the higher of

- Fixed payment (the minimum guarantee amount)
- Revenue share payment (% of Annual Revenue as per the agreement)

- Private operator to submit audited statement of Annual Revenue and deductions to ETB at the time of payment
- In the event of default, interest of 5% over SBI-PLR on the default amount till date of payment

Force Majeure

Force Majeure Events include uncontrollable events like natural calamities, fire, labour unrest, riots, political disturbances etc.

• **Affected party to notify Project Engineer and other party on**

- Nature & extent of event
- Period for which the event is likely to continue
- Nature & extent to which performance of obligations would be affected
- Mitigation measures proposed

• **Termination due to Force Majeure**

- If such event persists beyond specified time, either of party can issue a notice and terminate the agreement
- In case of termination on account national emergency, then a termination payment based on the book value of capital investments made by the Private Operator shall be paid by ETB

Events of Default

• **Private operator event of default**

- Fails to make agreed payments
- Fails to adhere to Mandatory Facilities
- Fails to comply with O&M Requirements
- Other acts/omissions leading to material breach

• **ETB event of default**

- Fails to handover site
- Other acts/omissions leading to material breach

• **Termination on event of default**

- Affected party can through a Termination Notice terminate the agreement
- Termination payment by ETB.

• **ETB EoD : 120% of Book Value**

• **Private operator EoD : 100% of Book Value**

Hand back of Project Facilities

• **Ownership**

- Ownership of land/structures and improvements thereof would remain with ETB at all times

•Hand back Plan

- Project facilities would be handed back to ETB, free of cost, on the last day of the License period
- At least 4 months before the completion of License Period, a joint inspection of ETB/Pvt. Operator and Project Engineer of all the Project Facilities
- ETB to provide a list of pending items, if it is of opinion that any work/s need to be completed to bring it to the level to confirm to mandatory facilities
- Private operator shall provide hand back guarantee
- ETB shall on expiry of License period, subject to any pending works, release the Hand back Guarantee to Private Operator

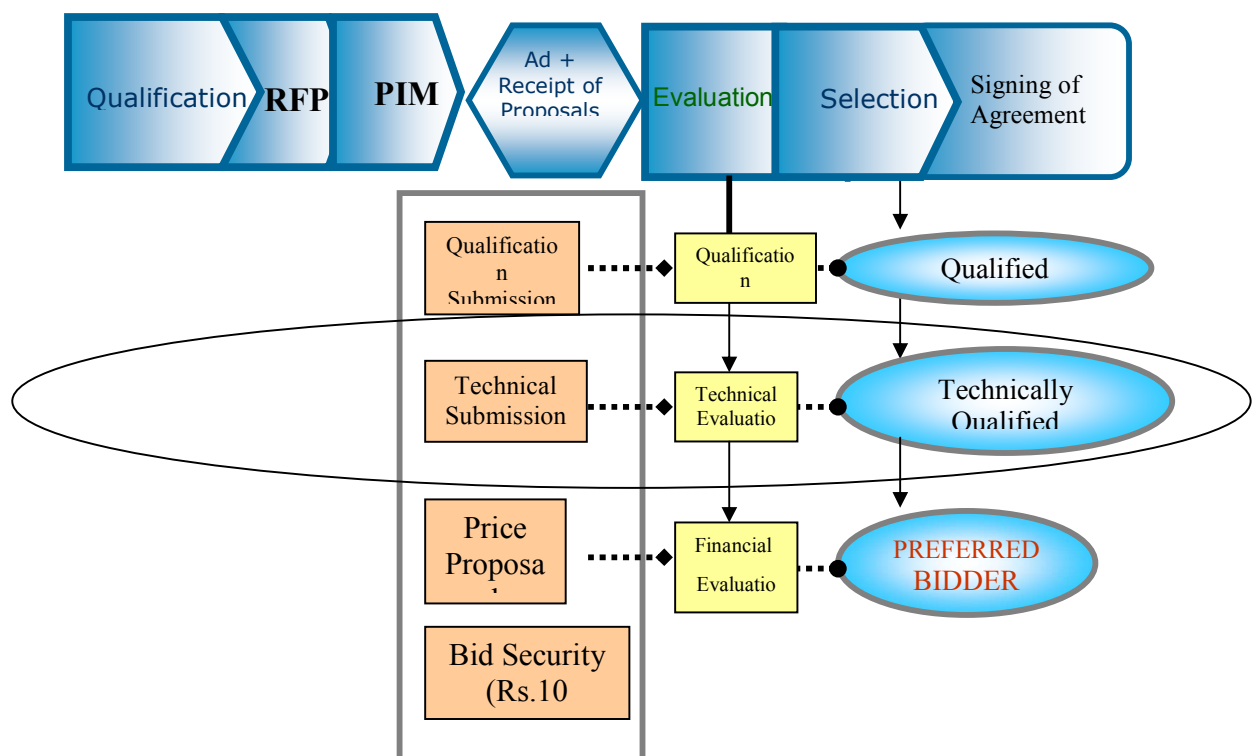
• Selection of Private Developer/ Investor

1. Bidding Process.
2. Selection of Bidders - Qualification
3. Selection of Bidders - Technical Proposal
4. Selection of Bidders - Financial Proposal
5. Schedule of Bidding

Bidding Process

Bid Process Components (Two stage process)

Figure 6.2



Selection of Bidders: Qualification

- Qualification criteria:
 - Experience Criteria
- Operating/managing atleast one ‘x’ star hotel from April 01, 2002
- Operating/managing atleast one hotel of atleast ‘x’ rooms from April 01, 20xx
 - Financial Capability Criteria
- Average turnover in last 2 completed financial years: At least Rs. ‘x’ crores
- Net worth for the previous completed financial year: At least Rs. ‘x’ crores
- Aggregate net cash accruals for last two financial years: At least Rs. ‘x’ crores
 - Necessary documents – letter from auditor, annual reports, GoI certification etc. to be submitted as evidence for qualification

Selection of Bidders: Technical Proposal

- Technical evaluation (by Expert Panel)
 - Presentation by Qualified Bidders to expert panel
 - Threshold technical score: 75 marks out of 100
 - Qualified bidders crossing Threshold score: Technically Qualified Bidders

Selection of Bidders : Financial Proposal

- Price proposal
 - Slab Payment
- A fixed minimum annual payment to ETB to be made by the Bidder (Slab Payment). This payment is equal for all the Bidders
 - Variable Payment
- The second component of the payments to ETB by the Bidder would be the variable annual payment as quoted by the Bidder (Variable Payment).
 - Upfront Payment:
- The third component of the payments to ETB by the bidder would be an upfront payment at the time of signing of Agreement. This payment is equal for all the Bidders
- Evaluation of Price Proposal
 - Technically Qualified Bidder quoting the highest present value (at 9%) of aforesaid payments, shall be declared as Preferred Bidder

Schedule of Bidding

The Preferred Bidder should be identified within a period of 12 weeks from approval date

Table 6.4: Schedule of Bidding

Activity	Time Frame
Approval of Bidding Documents and Instructions to Commence Bidding	Week 0
Finalisation of Bidding Documents	Week 1
Release of Tender Notice	Week 1
Receipt of Proposals	Week 6
Evaluation of Qualification Submissions	Week 8
Evaluation of Technical Submissions	Week 10
Evaluation of Price Proposals	Week 11
Identification of Preferred Bidder	Week 12

It has been assumed that the minimum bidding match with standard sharing ratio decided and the minimum guarantee will more than or equal to as shown in **table 6.3**

6.3 Financial Feasibility

Ecotourism development needs huge investment in terms of infrastructure development as well as Marketing and promotional efforts. It becomes imperative to determine if such investment is feasible and how many years would it take to recover the amount invested. The following Key performance indicators will help to address the above issues:

Net Present Value.

NPV is used to calculate the present value of total cash flows occurring in the course of Ecotourism development at the identified sites. If the NPV comes positive than the investment is considered worth else other options for investment should be looked.

Internal Rate of Return.

The IRR helps in determining the rate of return that the business is earning; this can be compared with return on investment from bank deposits and the decision to invest in Ecotourism development activities can be taken. Generally the IRR for the developmental projects is low and have long gestation period. The returns are less in the initial years and investment is more but in later years when the Organisation has developed its Brand and more customers starts coming, the economies of scale starts with higher returns. The Ecotourism development activities have other social and environmental gains also which are not valued while calculating the cash-inflow and thus IRR for such projects comes low. IRR should be taken only to give a rough idea of the financial situation.

To determine the financial feasibility following steps are to be followed:

- Step I-** Capital Budget.
- Step II-** Calculation of Total Bednights.
- Step III-** Occupancy projections
- Step IV-** Calculation of Revenue generated.
- Step V-** Calculation of Net Returns to the Ecotourism Development Board.
- Step VI-** Calculation of Net Present Value and internal Rate of Return.

Capital Budget:

The Ecotourism Development project in Jammu and Kashmir has been divided into Phase I and Phase II ; In Phase I, six sites have been identified as High Ecotourism Potential category and an Investment Budget of 6 crore has been marked for them. The sites developed in Phase I will be run as a pilot project and the results will be monitored. The phase two is suggested if the results are encouraging and follow the projected growth pattern.

Table 6.5: Capital budget

Period	Amt. Invested	Investment	Add. Bednights available
Year 0	60000000		
Year 1	0	-	-
Year 2	0	-	-
Year 3	0	-	-
Year 4	0	-	-
Year 5	0	-	-
Year 6	0	-	-
Year 7	0	-	-
Year 8	0	-	-
Year 9	4000000	4 double-bed rooms	1000
Year 10	5000000	5 double-bed rooms	2000

Calculation of Bednights Available:

In phase I, the capital expenditure is marked for refurbishing of the existing infrastructure hence the total Beds available for sale is (see table 6.6) amounting to 36000 annually with 6-8 months of operation period. In the 9th Year, total Bednights could be increased to 37000 annually and in the 10th Year could be increased to 38000.

Table 6.6: Calculation of Bed nights

Statement showing calculation of Bednights available				
S. No.	Place	Present Beds	Period	Total Bednights
1	Jasrota	30	30 days X 8 months	7200
2	Nandini	30	30 days X 8 months	7200
3	Dachigam	30	30 days X 6 months	5400
4	Gulmarg	30	30 days X 6 months	5400
5	Overa	30	30 days X 6 months	5400
6	Leh	30	30 days X 6 months	5400
Total Beds		180		36000

Occupancy Projections:

The Tourism industry is growing at a rate of 4% while the nature travel is increasing at somewhere between 10%-30%. The identified sites fall under High potential zone for

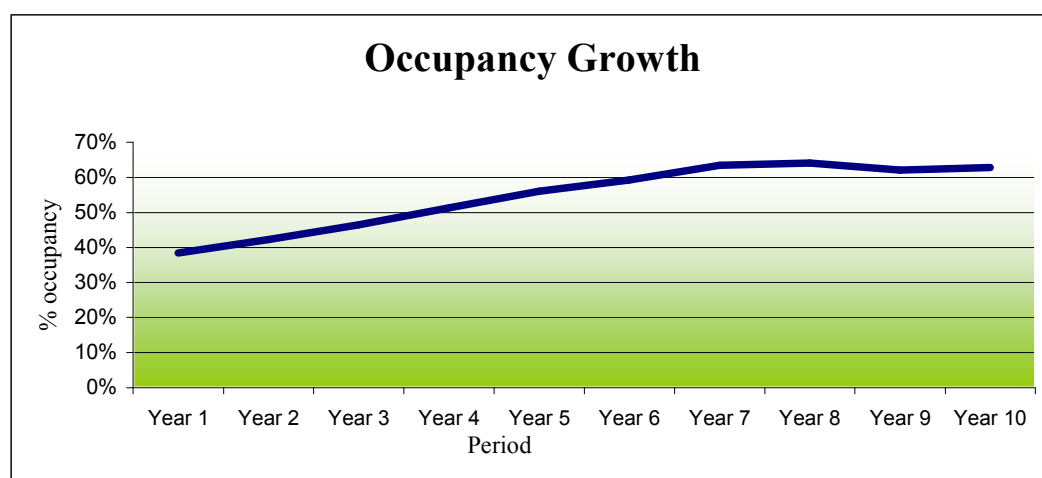
wilderness based tourism and considering the flow of tourists at each of the places a conservative figure of 40 % occupancy (refer table 7.7) is taken.

Table 6.7: Occupancy in the proposed sites

Statement showing Bednights @ 40 % occupancy				
S. No.	Place	Present Beds	Period	Total Bednights
1	Jasrota	30	30 days X 8 months	2880
2	Nandini	30	30 days X 8 months	2880
3	Dachigam	30	30 days X 6 months	2160
4	Gulmarg	30	30 days X 6 months	2160
5	Overa	30	30 days X 6 months	2160
6	Leh	30	30 days X 6 months	2160
Total Beds		130		14400
In the Initial year-Targeted Bednights are rounded off to 14000				

Considering the high demand for nature based tourism in the recent times a normal growth curve is assumed with higher growth rate in the initial years (**refer chart 6.1**) and constant growth in the later period.

Chart 6.1



The growth in Bednights are projected in two scenarios (**refer table 6.7**), In **Case I** no additional investment is done to increase the Bednights for sale, whereas in **Case II**, in the year 9th additional investment done to increase the Bednights to 37000 and in 10th year to 38000.

Table 6.8: Projections of occupancy figures

Projections of Occupancy figures						
Period	Scenario I			Scenario II		
	Bednights available	Bednights	Occupancy	Bednights available	Bednights	Occupancy
Year 1	36000	13680	38%	36000	13680	38%
Year 2	36000	15120	42%	36000	15120	42%
Year 3	36000	16560	46%	36000	16560	46%
Year 4	36000	18360	51%	36000	18360	51%
Year 5	36000	20160	56%	36000	20160	56%
Year 6	36000	21240	59%	36000	21240	59%
Year 7	36000	22680	63%	36000	22680	63%
Year 8	36000	23040	64%	36000	23040	64%
Year 9	36000	23760	66%	37000	22940	62%
Year 10	36000	25560	71%	38000	23940	63%
	Beds available kept constant, no further investment done			The total beds are increased in the year 9 and year 10		

An additional investment is done although the units were operating at an average occupancy of 70 % but to meet the demands during peak season and to cater weekend crowd additional rooms are needed at the sites. The decision can be taken after considering the growth and occupancy figures for the 8 years.

Calculation of Revenue

The Revenue can generate either from the sale of nature based Packages or from Other Income sources like bar, restaurant receipts etc.

The average tariff for a one-night stay at any of the six developed sites is kept at 1700, which is all-inclusive package. The tariff is kept at the same level for one more year and after that the tariffs are raised keeping the inflation into consideration. The average growth in tariff is 10 % and the average annual growth in Bednights is 8 %, which is again a conservative figure (**refer table 6.7**). Apart from the income from sale of packages, other incomes are also a source of revenue.

It has been assumed that on an average other incomes are Rs. 50 per Bednights sold. Other Incomes may account from Bar sales, Kitchen Receipts, Sale of promotional materials and Wild Life activity receipts.

Table 6.9: Calculation of Revenue

Year	Bednights	Tariff	Revenue	Other Income	Total Income
Year-1	13680	1700*	23256000	684000	23940000
Year-2	15120	1700	25704000	756000	26460000
Year-3	16560	1850	30636000	828000	31464000
Year-4	18360	2000	36720000	918000	37638000
Year-5	20160	2200	44352000	1008000	45360000
Year-6	21240	2400	50976000	1062000	52038000
Year-7	22680	2600	58968000	1134000	60102000
Year-8	23040	2800	64512000	1152000	65664000
Year-9	23760	3000	71280000	1188000	72468000
Year-10	25560	3300	84348000	1278000	85626000
Total	200160		490752000	10008000	500760000

* The per person / day tariff mentioned under different packages vary. But for calculation purposes an average of Rs.1700 per person / day is considered.

Returns to Ecotourism Development Board

The Ecotourism Development Board plans to invest Rs. 6 crore in the first year and 40 lakhs in the 9th year and 50 lakhs in the 10th year as Capital investment and will get returns close to 8.5 crore (refer table 6.10). The Board will take properties from Forest Department or Tourism Department on lease, (refer 6.2) which will be paid by the board. Other expense like maintenance etc. has to be borne by the private operator. The Tourism department will carry on marketing activities and will allow Board or its representatives in Travel marts and Trade shows.

Table 6.10: Returns to Ecotourism Development Board

Period	Board's Expenses		Returns to Board
	Lease rent	Investment	
Year-0	-	-60000000	-60000000
Year-1	-600000	0	5385000
Year-2	-900000	0	5715000
Year-3	-900000	0	6966000
Year-4	-1200000	0	8209500
Year-5	-1200000	0	10140000
Year-6	-1200000	0	11809500
Year-7	-1200000	0	13825500
Year-8	-1200000	0	15216000
Year-9	-1200000	-4000000	16917000
Year-10	-1200000	-5000000	20206500
Total	-10800000	-69000000	54390000

Calculation of Net Present Value and Internal Rate of Return.

To determine the financial feasibility of the project-Phase I, the NPV of the returns to the Ecotourism Development Board is calculated by discounting the future returns or cash flows by 10 %. The Net return to the Board is the amount, the percentage of share in the revenue or the minimum guarantee for the six places, which ever is higher.

Table 6.11: Net Present Value

Note: A rate of 10 % is used to discount the future returns. A Lease rent (see table 6.2) is fixed for each of the property taken from Forest Department or any other Department, a total

Period	Total Income	Share of income		Board's Expenses		Returns to Board	Present Value of Returns
		Board	Operator	Lease rent	Investment		
Year-0	-	-	-	-	-60000000	60000000	-60000000
Year-1	23940000	5985000	17955000	-600000	0	5385000	4895455
Year-2	26460000	6615000	19845000	-900000	0	5715000	4723141
Year-3	31464000	7866000	23598000	-900000	0	6966000	5233659
Year-4	37638000	9409500	28228500	-1200000	0	8209500	5607199
Year-5	45360000	11340000	34020000	-1200000	0	10140000	6296142
Year-6	52038000	13009500	39028500	-1200000	0	11809500	6666155
Year-7	60102000	15025500	45076500	-1200000	0	13825500	7094668
Year-8	65664000	16416000	49248000	-1200000	0	15216000	7098377
Year-9	72468000	18117000	54351000	-1200000	-4000000	16917000	7174460
Year10	85626000	21406500	64219500	-1200000	-5000000	20206500	7790481
Total	500760000	125190000	375570000	10800000	-69000000	54390000	2579735

of 6 properties are considered to be operational in the phase I.

In all the years the percentage share in the revenue is more than the minimum guarantee period; hence the higher value is taken to calculate returns. The net returns accruing in 10 years are discounted at 10% rate and their present value is calculated. The NPV of the project comes to Rs. **2579735**.

Calculation of Internal Rate of Return

The positive signs in NPV of the returns show that the project is feasible; the fact can be substantiated by calculating the Internal Rate of Return of the series of cash flows.

The IRR for the project is 11 % which is considered good if we compare with returns in other business operation. The higher returns can be attributed to the growth in the wilderness tourism sector and occupancy levels in the years of operation.

Table 6.12: Calculation of Internal Rate of Return

Period	Returns to Board
Year-0	-60000000
Year-1	5385000
Year-2	5715000
Year-3	6966000
Year-4	8209500
Year-5	10140000
Year-6	11809500
Year-7	13825500
Year-8	15216000
Year-9	16917000
Year-10	20206500
Total	54390000

The IRR is 11 %

With IRR at 11 %, the project is considered viable under the given conditions; therefore the Govt. of Jammu and Kashmir should go ahead with the phase I of the Ecotourism Development project. The projected growth rates can be achieved if substantial and determined effort is put into marketing the destinations.

6.5 Industry Standards and Association

Need of Industry Standards

In any business, may be tourism or otherwise, operating in a natural settings, the potential for harm exists. While some Ecotourism advocates have argued for no-impact travel, most agree that all travel has some impact; the critical thing is that the impact should not exceed the limit that it cannot recuperate from the loss. The venture should take steps to compensate for the impact by contributing positively to the economy and social fabric of the communities visited.

The philosophy of Ecotourism is to see tourism developed and operated sustainable so that future generations enjoy the same places we do. Although people argue that all tourism must be operated sustainable for us to survive, and therefore all tourism becomes Ecotourism, but still there are no standards existing which can be used to gauge sustainable environmental programs adopted by tourism providers.

Industry standards are increasingly recognized as mechanisms to ensure the integrity of the tourism product, as well as increase marketability and credibility with the travelling public.

Existing Programs

There are few programs emerging to identify responsible tourism providers of which few are mentioned below, representing a commitment to responsible tourism practices. There are few problems with these programs as there are few formal enforcement procedures and even the regular monitoring aspect is missing. Although the present stage of correct compliance is not up to the mark but over a period of time these processes will grow, as there will be a need to comply to preserve the integrity of the accreditation process.

GREEN GLOBE

This program is sponsored by the World Travel and Tourism Council and is open to companies of any size, type, or location. Green Globe is a non-profit entity whose goals are to:

- Provide a means for companies to commit to environmentally- friendly business practices
- Distribute information on the best environmental management practices
- Allow companies to display their commitment through the Green Globe logo.

To qualify, members complete a self-assessment on their business practices regarding the environment and host communities. They then commit to undertake improvement for the following year. Renewal of membership is based upon progress in achieving the goals set the previous years. The program is financed through annual membership fees based upon annual gross receipts, and can vary from a few hundred to a few thousand dollars. No independent monitoring occurs.

Contact:

Green Globe,

London, United Kingdom

Telephone 011-44-171-222-1955

Fax 011-44-171-222-4983

GREEN LEAF

This program is sponsored by the Pacific Asia Travel Association (PATA) and is open to members of any size. The objectives are to:

- Create interest in PATA'S "Cord for Environmentally responsible Tourism".
- Create support for the cord by recognizing environmentally responsible tourism practises.
- Allow companies to display their environmental commitment with the Green Leaf Logo.

Organizations apply for accreditation by completing a self – assessment questionnaire on general tourism practices and sector-specific practices. It is then evaluated by PATA. The annual questionnaire must receive a minimum score of 50 percent and the organization must

maintain a combined average of 60 percent. No independent monitoring of participants' tourism practices occurs.

Contact:

Pacific Asia Travel Association,
Pacific Telesis Tower, 1 Montgomery Street,
Suite 1000, San Francisco, California
94104-4539 USA

GREEN EVALUATION :

This is a unique accreditation program developed by the Ecotourism Society that involves the traveller in the certification process. Launched in 1995, it relies upon completed questionnaires from travellers to Ecuador who evaluate the performance of nature-tour operators.

The Ecotourism Society has been active in developing standards for the Ecotourism industry and released Ecotourism Guidelines for nature tour operators as a guide to responsible tourism practices. **The Green Evaluation** program is a concerted effort to monitor compliance of tour operators with these guidelines. Questionnaires elicit observations about environmental practices, pre-trip information, the relationship and contributions between the tour operator and the host community, and trip impacts: The program is financed by tour operators participating in the program and The Ecotourism Society's membership revenues.

Contact:

The Ecotourism Society,
P.O. Box 755,
North Bennington,
Vermont, 05257 USA.

The role of Ecotourism Standards

Standards clarify what is expected from a service provider to travellers or a tourism organisation to be considered 'Environmentally Responsible' and 'Sustainable'. Standards would refine that process further by establishing measurable criteria for tourism development and operation. Identifying the product for touristy is another benefit of standards. A certification is required for a new organisation in the field of Ecotourism as in the process organisations are recognized as one who is meeting responsible tourism standards helping travellers in decision making and identifying organisations where they can be assured of quality service delivered to them after meeting sustainable tourism criteria.

6.5 Managing Business Risk

Ecotourism contained elements of nature, adventure, and culture travel. It also involves severe weather conditions, unexpected route changes, and encounters with animals are all potential parts of the experience. There is an element of risk in eco-travel which needs to be managed. The small but real threat of legal action requires a good understanding of where an Ecotourism business is exposed to risk and activity working to minimize your exposure. Before managing the risk it is important that the origins of risk to be identified.

PROPERTY DAMAGE - Damage or loss to the physical assets of your business, such as a boat, building, or vehicle from theft, accident, fire, or vandalism.

BUSINESS INTERRUPTION - there are circumstances where the operation may temporarily closed by accidents, cancellation of permits or any unforeseen circumstances, causing interruption in earnings.

DISABILITY- The loss or disability of key individuals could jeopardize the operation until a replacement is found.

MEDICAL - If a customer were to be injured or become ill in a remote location, the evacuation or treatment of that person could become your responsibility.

PUBLIC LIABILITY - This is the area often associated with insurance claims and of particular interest of Ecotourism provider. If some one is injured during any adventure activity, the operator could be held responsible for the losses and stress suffered by that person, or in worst case scenarios, by that person's surviving family.

LEGAL LIABILITY: Of prime concern is the threat of legal action arising from the operation of your business. The areas most relevant to Ecotourism providers are:

- **Tort claims**: Include liability for negligence or gross negligence. If an operator is found to have not acted carefully in a circumstance (negligence), or even when facing danger acted with some degree of recklessness (gross negligence) he may be liable to the customer.
- **Doctrine of respondent superior**: An employer is responsible for the action of employees as they execute their job duties.
- **Contract law**: In one the many agreements, sign between operators and their suppliers and clients. Suppliers who fail to deliver services as said out in the agreement could be liable under contract law for losses incurred.
- **Product liability**: A concern for operators who provide equipments for tours, if a product or equipment fails or results in injury, the customer can take legal actions.

Preventive Measures

Losses in these areas could severely affect business operations and to prevent this from occurring, preventive actions can be taken to counter losses occurring from these areas.

- The organisation can undertake a program of safety management to minimize the potential of accidents occurring in the first place.
- Assess those areas where you have the greatest risk and obtain insurance to absorb the financial cost of an illness, accident, or property loss.
- The organisation can also reduce their risk by contracting out of services and clarifying the risk they are assuming and obtain proof of insurance.

6.6 Visitors' Management

This section concentrates on the management of park visitation that already exists, and is occurring at levels that needs intervention of some sort. The basic aim is to evolve strategies

to manage large number of visitors and at the same time evolve strategies to attract them to the adjoining areas.

Broadly speaking there are four strategic approaches that can be used to manage visitors' negative impacts and also increase visitors' satisfaction.

- Managing the supply of tourism or visitor opportunities e.g. by increasing the space available or time available to accommodate more use.
- Managing the demand for visitation e.g. through restrictions on length of stay, the total numbers or type of use.
- Managing the resource capabilities to handle use e.g. hardening the site or specific locations, or developing facilities.
- Managing the impact of use e.g. reducing the negative impact of use and modifying the type of use.

We are using the guidelines evolved by Manning & Cole for managing visitors' negative impacts and coping with high levels of use.

Following is the list of possible strategies and options to do the same.

Table 6.13: Strategy and Techniques for Visitor management

Strategy	Management tactics & techniques
1. Reduce use of the entire protected area	<ul style="list-style-type: none"> • Limit no. of visitors in the entire protected area • Encourage use of other areas • Charge a flat visitor fee • Make access more difficult in all wilderness
2. Reduce use of problem areas	<ul style="list-style-type: none"> • Inform about problem areas and alternative areas • Discourage or prohibit use of problem area • Limit no. of visitors in problem areas • Limit the length of stay • Encourage off-trail travel • Charge differential visitors fee
3. Modify the locations of use within problem areas	<ul style="list-style-type: none"> • Locate facilities on durable sites • Segregate different types of visitors • Concentrate use through facility design or info
4. Modify the timing of use	<ul style="list-style-type: none"> • Encourage use outside peak use periods • Discourage/ Ban use when impact potential high • Differential fees in periods of high use/ high impact potential
5. Modify type of use and visitor behaviour	<ul style="list-style-type: none"> • Discourage/ Ban damaging practices/ Equipment • Teach a wilderness ethic • Encourage/ Require a party size and / or limit on no. of visitors
6. Modify visitor expectations	<ul style="list-style-type: none"> • Inform visitors about appropriate wilderness/ PA uses • Inform about potential conditions in wilderness/ PA
7. Increase the resistance of the resource	<ul style="list-style-type: none"> • Shield the site form impact • Strengthen the site
8. Maintain / Rehabilitate resource	<ul style="list-style-type: none"> • Remove problems • Maintain/Rehabilitate impacted locations

Source: Manning (1979); Cole et al. (1987)

When applying the above stated strategies to the Simlipal Tiger Reserve many local characteristics will have to be taken into account because the Simlipal Tiger Reserve region is very peculiar in its nature and major changes are required when such strategies are applied to manage the tourism opportunities there.

Following are the major strategies and their application techniques for the Simlipal Tiger Reserve.

Reduce use of the entire protected area

The management should apply this technique by restricting the use to certain trails which are considered in tourism zone. The second strategy is to categorize visitors' into day visitors and over night staying visitors'. Then a fixed number can be allotted as the maximum number of tourists from each tourism facility that will be allowed to enter the regions in a day. For that purpose, management has to fix slots of visitors' and these slots must be booked in advance for entry into the tourism zone. If a tourist facility does not have enough tourists to fulfill its quota of slots, then these can be transferred to other tourism facilities or day visitors who may be interested to use them. This requires as the first step, the setting up of proper communication channels for informing potential visitors' about this central mechanism. Adequate measures should be taken to control the monopolizing of these slots by a few people.

The other strategy which can be used to serve both overnight staying guests and day visitors' fairly is by allotting different time slots to them. The overnight staying guests can be given the evening slot and the day visitors' can be assigned the morning slot for wildlife drive in the tourism zone.

Reduce use of problem areas

This is a very important aspect to look into, especially in the case of Tso Moriri Wetland Reserve where there are a few spots and routes where maximum tourists go and these places get crowded. The tourists should be informed about the problem areas and discouraged to go or limit the stay there. This problem can also be solved by zoning of the ecotourism zone and thus diverting the tourists into other areas. Another solution could be to charge extra fees if somebody is really interested in going to that region for e.g. a limited number of tourists could be allowed for night halt in the area with all the ecotourism codes being strictly followed. This will effectively restrict the number of tourists in that particular area, provide wilderness excitement, impart habitat education and also increase the revenue generated by the Park.

Modify the timings and locations of use

Another important aspect of visitors' management is the development of outside park areas as ecotourism facilities. It is observed that all the visitors' are not usually hardcore wildlife enthusiasts thus wildlife viewing is being used as a part of entertainment which is not an objective of ecotourism. If there are enough such places outside the parks, these visitors' can be diverted to those areas. But there should be enough information available before hand so that they can plan for the trip. Another aspect of this management will be giving incentives for

the tourist facilities or tour operators to promote these satellite facilities among the visitors'. The incentive can be monetary or some concessions; which can be decided by an appropriate authority. The tourist facilities or tour operators who send a fixed percentage of their customers to any of the identified satellite areas should alone receive this incentive. These facilities can also be encouraged to take diverse recreational activities such as trekking, camping, bird watching boating etc.

The number of visitors' coming is season specific, thus the management strategies have to be flexible. So as a compromise step, more number of 'visitors' should be allowed up to a certain percentage of the carrying capacity, but this increased number should be conveyed to the tourism facility providers and day visitors in advance and the slot filling should be on this basis. There should be provision for increased number of temporary staff who should be used to manage the tourism load during the peak periods. Thus the reduction of carrying capacity due to lack of management staff can be temporarily solved. Another option for reducing the number of visitors', especially during the peak timing will be to raise the fees for those peak periods and during weekends, so that people are encouraged to take trips during weekdays or non – peak sessions. These slots may be named as 'high value slots' and can be given only on higher fees. It not only benefits park financially, but also encourages a large portion of visitors' to prepone or postpone their trips. The economy class traveler will be certainly discouraged by this step and they form a major portion of day visitors. But this increase in hike should be given enough publicity before the peak seasons, so that the visitors' do not face any inconvenience.

Modify type of use and visitor behavior

The longevity of resources of a sensitive ecosystem depends on the behavior of the tourists that are visiting the region. A strong code of conduct should be made and effectively monitored to discourage or ban tourists from indulging in damaging practices. Polythenes should be banned inside the Park, as should be throwing of food and other items overboard into the channels. Tourists should be regularly reminded about wilderness ethics. At every tourist point this code of conduct should be displayed. It is important that tourists be informed of the do's and don'ts by the naturalist or the resort manager.

Modify visitor expectations

This is a very peculiar problem in India because most visitors' come here to see iconic mammals or birds that make that particular region special. So once they are not able to sight the wild ass or marmot or tiger, they get frustrated as they usually come with very high expectations of sighting them. This is a very particular problem created by the management and the promotional techniques. The management and the tour operators should understand this problem and stop promoting these places as a single animal spot. Instead there are many other unique features which could be promoted. Like the breathtaking landscapes, wide variety of flora and fauna which are unique to this forest, nearby tourism sites, local culture and most of all for its peaceful environment and serenity.

Increase the resistance of the resource and maintain and rehabilitate the resource:

Care should be taken by the park management to constantly inspect the various resource and tourist spots, which are available to the visitors. If any of these spots is seen to have degraded or is getting very adversely affected then that particular spot should be closed temporarily and restored to its original position. While restoring the area, care should be taken to plant only the indigenous species as imported ones might adversely affect the sensitive environment in the long term.

Chapter 7

Implementation strategies

7.1 Infrastructure & Services

Tourist infrastructure within any eco-sensitive area should be carefully designed taking into considerations the environment legislations pertaining to civil constructions or any other activity. The structures should be eco-friendly with proper sewage and waste disposal systems in place.

List of infrastructure to be developed

A- Civil constructions:

- | | |
|-----------------------------------|-----------------------------|
| ☞ Accommodation | ☞ Kitchen and Housekeeping. |
| ☞ Reception centre & parking area | ☞ Landscaping. |
| ☞ Souvenir shops. | ☞ Jetty point. |

B- Activities:

- | | |
|-----------------------|-----------------------------------|
| ☞ Boat / Launches. | ☞ Stargazing equipments. |
| ☞ Open top- Jeeps. | ☞ Audio-video equipments |
| ☞ Mountain bikes. | ☞ Wireless communication systems. |
| ☞ Night camping gear. | ☞ Binoculars. |

C- Wildlife activities

- | | |
|---------------------|----------------|
| ☞ Roads and trails. | ☞ Watchtowers. |
| ☞ View lines. | |

D- Office Equipment:

- ☞ Computers hardware devices.
- ☞ Software.

The list of investment heads is not exhaustive and is subject to up gradation. The results of market research and visitors' attitude survey emphasise the need to construct eco-friendly structures like tents or ethnic cottages that are safe and hygienic and merge with the surroundings. Visitors coming to the potential sites needs activity based tourism and thus investment in activities is also required. Apart from this some investment is needed for maintenance of the wildlife area in order to improve wildlife sightings which can be done by making watchtowers, clearing view lines, making roads and trails.

Civil Construction:



Plate 7.1 : Exterior of a tent



Plate 7.2 : Platform of a tent



Plate 7.3 : Interior of a tent



Plate 7 4 · Ethnic cottage



Plate 7.5 : Wooden cottage



Plate 7.6 : Interior of wooden cottage



Plate 7.7 : Loghut on stilts



Plate 7.8 : Interior of Loghut



Plate 7.9 : Interior of bathroom



Plate 7.10 : Exterior of dining area



Plate 7.11 : Interior of dining area

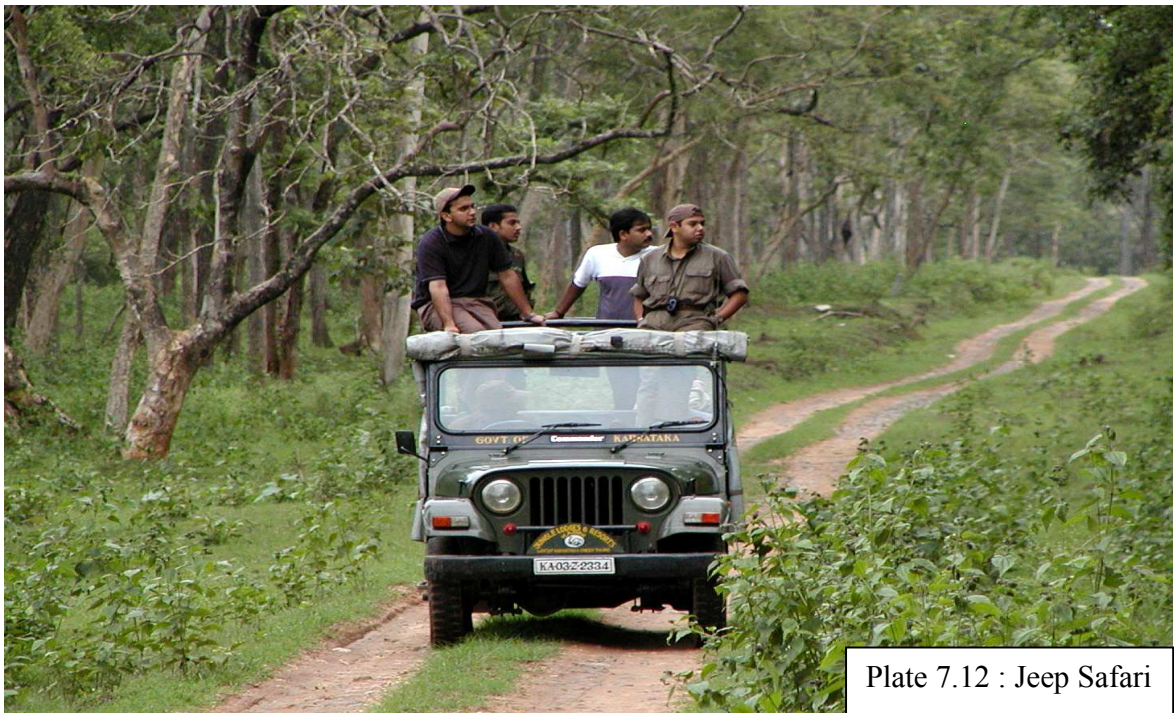


Plate 7.12 : Jeep Safari



Plate 7.13 : Night camping



Plate 7.14 : Camping



Plate 7.15 : Nature Camps



Plate 7.16 : Canyoning

Plate 7.17 : Adventure activities



S No.	Expenses Head	Amount
1	Accommodation	2.47 crore
2	Reception centre and parking area	5 lakhs
3	Souvenir shops	6 lakhs
4	Kitchen and Housekeeping	60 lakhs
5	Landscaping	60 lakhs
6	Jeeps	60 lakhs
7	Mountain bikes	1 lakhs
8	Night camping gear	1 lakhs
9	Stargazing equipments	0.5 lakhs
10	Audio-video equipments	1 lakhs
11	Wireless communication systems	10 lakhs
12	Binoculars.	0.5 lakhs
13	Roads and trails	50 lakhs
14	Watchtowers	20 lakhs
15	Computers hardware devices	3 lakhs
16	Software	25 lakhs
	Sub Total	5.5 crore
	Contingency Funds	50 lakhs
	Total	6 crore*

* Rs. 6 crores is an indicative figure providing an overview of the minimum cost entailed in setting up an infrastructure of this scale. However, this is subject to change depending on the kind of architecture and the number of accommodations/resorts that are being planned. The financial outlook has been placed at an initial investment of Rs.6 crores and would be subject to changes dependant on local conditions / rates and scale of operations.

This is done based on the visitors' levels of interest, desire to experience and willingness to pay for ecotourism services, a complete survey of the existing facilities and services was done in study area for Site selection to establish ecolodges and recreational activities which can attract visitors' and also help keep in check the impact of ecotourism to the carrying capacity. On the basis of the survey, four sites has been selected for ecotourism purpose as they are easily accessible and also different activities can be started as they are strategically located.

Leh

Improvement of Tourism Complex

The infrastructure is already in place to cater to tourists but needs to be spruced up to provide quality service to the visitors'. There needs to some more buildings that should be set in the Sindhu Darshan region so as to cater to the demands of the ecotourists. The interiors of the rooms can be painted on the theme given to the room. The toilets should be big. Each toilets' walls and floor should be tiled to give it a modern and comfortable look along with it Indian style toilet should be changed in to western style. The dormitory, which can be catered to backpackers, low-end tourist and students from schools and colleges, should have 12 cots, two attached toilets with bath (one each in western and Indian style) for dormitory should be

done. The toilet cum bath floor and walls should be tiled to give it a modern and comfortable look. It is proposed to have a well equipped kitchen with basic facilities. The complex should have a bar cum conference room keeping a corner to serve as bar with a counter and stools around the place to serve as sit out. A U - shaped table with comfortable armchairs can be added to provide facility for conferencing. A wall attached screen (for slide show presentations) and a whiteboard can be added in the conference area. The area can be also used as an interpretation centre cum reading room, where literature and photographs in connection with natural history and tribal culture can be put on display.

The dining area can have chairs and tables for the capacity of 40 clients. The food can be served on buffet basis. A watch tower overlooking the river Indus can be made with seating capacity of 6 to 10 so that place can be used for having small meetings and gazing at the river.

As power is expected to be provided through solar power it is suggested to have regulated power timings. The power can be provided for a few hours after sundown till dinner and then again in the morning say for 2 to 3 hours. Hot water can be provided using solar energy (as infrastructure already exists in the region) the timings of which can be regulated, say for 3 hours after breakfast and in the evening after sundown. For lazing one's time in morning and afternoon hammocks can be provided in front of each cottage for relaxing.

This property in Leh in association with the smaller setups in Tso Moriri and Hemis are expected to be operational for not more than 3-5 months in a year and fresh maintenance work is expected to be undertaken prior to the beginning of each season.

Development of activities

The proposed Leh tourism complex is located on the banks of river Indus with breathtaking views of the hill ranges behind and in front of it. The complex is also next to the tourism circuit which has good probability of visiting monasteries and learning about the ancient culture of Ladakhis. The activities proposed around the Leh complex is :

- Visits to the Tso Moriri – Tso Kar region on a one night two days or two nights three day basis. The circuit can have more stopovers for refreshments and rest for tourists during the arduous journeys to these popular tourist destinations.
- Visit to the Pangong region on a single day platform and a visit to the Hemis National Park in association with the homestay owners that should include an overnight stay as well as a day package.
- Joy fishing can be introduced as one of the activities of interest.
- Hiking should be made available to visitors' who wants to delve in adventure activities. For this a proper trail can be made by using the GPS technology and the trail map can be uploaded on the website to give previsit information about the kind of trails expected in the area. The trails can be categorized on the basis of gradient and length to give option to visitors' to exercise their choice. The mountain biking activity can become a model for private – public partnership as some adventure company can be asked to look after the activity along with investing the cost of purchase and

maintenance on the bicycles. The revenue earned can be shared between the stakeholders.

- The private party to ascertain the feasibility of adventure activities like rappelling, canyoning and mountain climbing can carry further survey. In the adjoining Indus River feasibility for rafting or canyoning can be tested using lighter and smaller equipments.

Improvement of Tourism complex : Jammu & Srinagar

Similar to what has been detailed for Ladakh it is important to develop the facilities in the places chosen for the Jammu & Srinagar sectors. As for infrastructure is concerned aspects like Cottages, Main Office, Housekeeping unit, Staff quarters, Kitchen and store room, Dining hall, Water tank, Manager's quarters, vehicle parking area will have to be developed. Besides purchase of essential equipment that would be required for the functioning of each unit like vehicles, etc have to be purchased.

Development of activities : Jammu & Srinagar

In the Jammu & Srinagar sector the primary activities would be exposure to some very beautiful landscapes, wildlife, birdwatching, trekking, angling, heritage and religious activities and zoo interpretation. These have been mentioned and incorporated in the products and suitable infrastructure and man-power needs to be developed.

7.2 Participation of Local Community

The participation of local community is key to success of ecotourism as the benefits of visitors' visitation should help local economy by increase in expenditure of visitors' in the area, employment generated for local people and purchase of materials from the local area. This developmental program will increase visitation to nearby places of tourism interest and in turn will lead to more facilities being created which will create multiplier effect in the local economy.

- Local community can be employed by ecotourism ventures starting in and around the region for all the activities related to ecotourism.
- Local community can be employed in specialist positions of naturalist/guides for their knowledge about the flora and fauna of the local area.
- Each ecotourism venture can have a souvenir shop which can be run by local community with involvement of local NGO and village level institutions.
- A commitment to local cause can be done by ecotourism ventures by purchasing things locally without compromising on quality.

The ecotourism ventures can contribute some amount of revenue back in the local community by supporting education, healthcare, farming or animal husbandry.

7.2.1 Benefit sharing with The Local Community:

Community participation is one of the three pillars of Ecotourism and the success of Ecotourism depends on the benefits accrued to the community. The increase of visitors'

visitation should help local economy by increase in expenditure of visitors' in the area, employment generated for local people and purchase of materials from the local area. This developmental program will increase visitation to nearby places of tourism interest and in turn will lead to more facilities being created which will create multiplier effect in the local economy. Ecotourism development results in following benefits to the community:

- **Direct economic benefits in the form of resource use:**
The development of Ecotourism activities and facilities like eco-lodges, camping etc. creates demand for resources vegetables-fruits or grocery items to be used in daily operation.
- **Generating alternative employment opportunities.**
Ecotourism act as a tool for natural resource conservation by way of employing local community, which are otherwise depending on unsustainable use natural resources. They can be employed as lodge staff-naturalists-launch operators and other subsidiary services.
- **Development of local arts and crafts.**
Ecotoursim aims at developing local arts and crafts by way of highlighting the existing handicrafts through a souvenir shop. Such souvenir shops can be developed at the reception centres with crafts available for sale. NGOs or local level institutions can be used as a capacity builder and as an interface between the community and the customers as they are in a position to push the sales up by attractive packaging and marketing. The merchandise which can promoted for sales can be hunting weapons, fishing tools, agriculture implements, household items, jewellery, textile, musical instruments, combs, *dhokara*, basketry works from *sabai grass* and bamboo, gourd items, wood carving, and decorative objects.
- **Development of local culture:**
The Ecotourists are keen in the local culture and they can be use this opportunity to understand them. Every evening or on weekends cultural shows can be organized for which the local artists can be paid along with promoting local festivals.
- **Corporate Social Responsibility:**
After the success of pilot projects more lodges can be floated and corporate can be brought in to develop-Human Capital and Social Capital. The companies can sponsor conservation programmes, organise vocational training courses, health camps and education.

7.2.2 Benefits accrued to the Local community

Calculation of Bed nights

There are six proposed places with a total capacity of 130 beds and with total annual capacity of 31200 bed nights (130 bed nights *per day* X 30 days *per month* X 8 months). It has been assumed that in the starting years the places will operate at approximately 40 % occupancy with a total of 12000 bed nights.

Calculation of Cultural performances

Cultural shows will be organized during peak season or on weekends-assuming 64 weekends for the period of November to June.

Sale of Merchandise

As per Jungle Lodges & Resorts Ltd. experience it has been found that visitors coming to the lodges carry souvenirs and can be estimated @ Rs. 50 per visitor.

Table 7.2: Shows the annual returns accruing to the community by Ecotourism operation

S No.	Benefits	Annual benefits accrued
A	Resource use	1380000
B	Direct Employment	3000000
C	Indirect Employment	1215000
D	Development of Local culture	576000
E	Development of Local Arts & Crafts	2600000
Total Benefits accrued annually		8771000

From **table 7.2**, we can see that the total benefits accruing to the community by way of starting Ecotourism activity comes to 87 lakh in the initial year of operation @ 40 % occupancy level. The benefit does not include benefits going to community during project development phase. At 12000 bed nights the community benefits itself works out to about Rs. 700/- per bed night.

Table 7.3 shows the total benefits accruing to the community expressed in terms of money over a period of 10 years. The NPV of returns by Ecotourism development amounts to 11.6 crore in the phase I when 6 places are developed by investing 6.9 crore.

Returns accruing to the community: Table 7.3

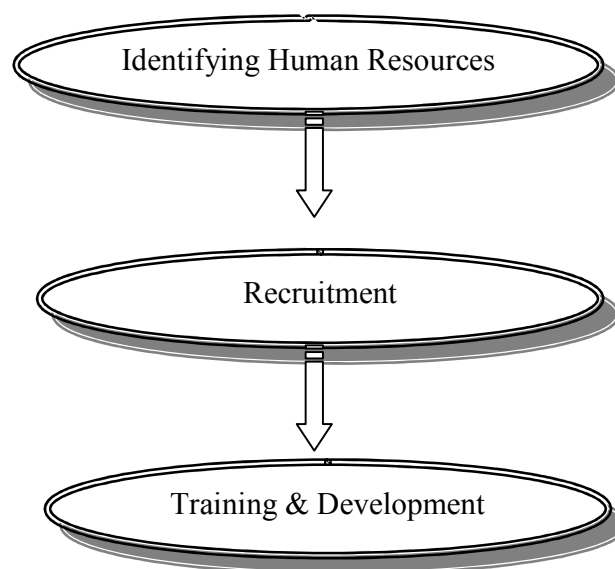
Period	Bednights	Benefits to community	NPV of returns
Year 1	12000	8,856,000	8,050,909
Year 2	13200	9,741,600	8,856,000
Year 3	14500	10,701,000	9,728,182
Year 4	16000	11,808,000	10,734,545
Year 5	17500	12,915,000	11,740,909
Year 6	18500	13,653,000	12,411,818
Year 7	19800	14,612,400	13,284,000
Year 8	20000	14,760,000	13,418,182
Year 9	20500	15,129,000	13,753,636
Year 10	22000	16,236,000	14,760,000
Total Benefits to Community			116,738,182

7.3 Software Skills Development

Tourism industry demands not only infrastructure development but also development of software skills i.e. customer relationship management. For success of any tourism project human capital becomes a critical factor and it becomes utmost important that substantial investment is done to recruit and train human resources.

Ecotourism provides alternative employment opportunities to the local but finding qualified employees with both interpretation and communication skills are difficult and hence the project should keep some cope of skill transfer. As a short term option outside guides and other experts can be contracted. As a long-term option, capacity building of local community can be done.

Figure 7.1: Software Skill Development



There are three phases (**see figure 7.1**) in the software skills development in which first and foremost step is to identify the kind of people required. Once the need is analysed, suitable candidates can be screened and interviewed. This is very critical phase, as the planner has to maintain a balance between minimum skills required/expected and local employment. The recruitment should have only those people who has an interest to work in wilderness and has desire to learn. At the screening of the candidate is done properly the positive results can be reflected in low attrition rate.

Training and development of human resources is critical in tourism industry as the expectation from the customer paying a premium for the eco-lodge is always high.

The staff consisting of housekeeping, bearer, drivers, naturalists should be trained in basic etiquette and mannered which generates customer delight. A customized training schedule for each category workers will give better result following training schedules will ensure that the change in attitude is brought in.

Customer relationship Management

This is the backbone for tourism industry and the success, failure or growth of a company depends on this aspect. It becomes imperative to identify areas where CRM exists and how one can improvise the existing resources to achieve high customer satisfaction.

A customer interaction in an Eco-lodge takes place at the following place

Level 1

- Booking/Reservation staff
- Travel agent
- Website/email
- Telephone/Other communication

This is the first place of customer interaction and revenue of any concern depends largely on how the customers are handled from the start. The basic objective of the level 1 is to convert the potential customer into the loyal customer. One important aspect, which must be taken care of, is the information about the lodge and the wilderness in particular to minimize the customer dissatisfaction. A true picture of what a customer would be getting should be shown. This is a phase to screen one's customers.

Level 2

- Receptionist/ Manager
- Naturalist
- Room boys/Bearer

Once the potential customer has turned into paid customer and reaches the lodge, the phase of converting a customer into delighted customer starts. In this phase the skilled staff at the resort plays important role. The way receptionist handles clients and briefs them about the itenary, the way naturalist/guides entertain and interpret wilderness to the customers, the way bearers, room boys and cooks keep the comfort level in the resorts on

the higher side proves it to be a critical stage where customer satisfaction and customer delight comes into picture.

Level 3

- Email/Updates
- New scheme/Privilege card
- Greetings

This is basically about after-sales period and contributes significantly to convert a delightful customer into a loyal customer. This can be achieved if the customer is contacted through email, discounts, loyalty programs and seasonal greetings. This makes the customer feel that he/she is important for the organization. At all the levels respectively human resources is required which can be hired locally and trained and developed.

At all the three levels there should be a complaint redressal mechanism which can be helpful in the long run if complaints are addressed properly.

Chapter 8

Review and Analysis

Review and Analysis is a continuous process, which gives insight into the day-to-day operations of the organisation. It is important to review the actions and decisions taken and analyse the deviation, both positive and negative from the pre-determined standards. This process is critical as it helps to review the standards set as well gives a direction to the organisation with new goals and targets. There are two major fields in which business review is required are mentioned below:

8.1 Performance of the Lodges

The performance of the Lodges can be measured on various indicators giving information about different aspects of the business including financial, visitors turn-over and quality of services offered.

The Key performance indicators are as follows:

☞ **Income & Expenses statements.**

The Income and Expenses statement acts as a tool of control for the authorities as it gives detailed information of the cash flow. It forms the base for the Management Information system. *Refer Annexure 1*

☞ **Comparative cost sheets.**

A Comparative Cost sheet can be made for two different periods for the same year and the performance can be analysed against the other period or the standard period. The statement gives a detailed idea to the Management of the Operating and Administrative expenses and their percentage to the revenue. The percentage to the revenue figures can be used for comparison between two years. *Refer Annexure 2*

☞ **Break Even analysis.**

A Break Even analysis is critical in the initial years when the Bednights are low and the management is keen to know the Break Even point, i.e. the minimum level of Bednights that should be achieved so that there are no operating losses. The Break Even point can be calculated both in terms of Revenue and in terms of Bednights. *Refer Annexure 3*

☞ **Bed-nights statements.**

It has been suggested that a detailed Bed-nights statements *Refer Annexure 4* be prepared and sent to the management so that the authorities know the turnout of visitors at each lodge in different periods. The Bednights can be compared with different periods to know the growth rate in the customer base. The same can be used to identify the flow of tourists in the year and help to decide prices and discounts.

☞ **Visitors book.**

A visitor book gives an insight of the services offered and the quality of services offered and is mandatory for each lodge. This can be taken as the base to judge the customer satisfaction level.

☞ **Feed back forms.**

Apart from keeping visitors book and using it as the base to judge customer satisfaction, getting feed back forms filled from the visitors can also help to know the quality of services offered. The Feedback form can also be used to collect Customers details and used to build Customers Database and give the repeat clients a personalised service. The Feedback forms should be sealed and be addressed to a responsible person in the organisation. The complaints or suggestion should be taken seriously and be solved at the earliest. The actions taken should be communicated to the concerned person who has put up the suggestion. This will help to create an image in the minds of Customers that their suggestions are valued and would like to return to see the changes. In the long run, such customers become patrons of the concerned place or lodge. *Refer Annexure 5*

☞ **Exclusive email address.**

An exclusive email id can also be publicised which can be used for suggestions or complaints. This can be displayed on the website apart from places at the Lodge or in Brochures. Prompt actions should be taken on any suggestions/complaints mailed.

8.2 Carrying Capacity review

Review of Carrying capacity is required periodically. This will help to determine if there is any effect on the ecological aspect or any other aspect due to Ecotourism Development. This will also help to study the extent of disturbance due to wilderness tourism and the scope of development that can be done without crossing the minimum level. This will act as guideline to determine the scale of operations. *Refer to templates provided in Annexure 14.*

Chapter 9

Environmental concerns

It must be acknowledged that ecotourism, for that matter any tourism, will have an impact on the environment that it is operating in. In such a scenario, the onus lies upon the concerned organization to evolve a highly result oriented approach that seeks to reduce and eliminate various negative impacts upon the environment.

The impacts of tourism are several. A venture can be more damaging than mass tourism if not managed properly. Since ecotourism ventures are located in pristine, fragile ecosystems, they run the risk of destroying the very assets which they depend upon, by destroying habitats and production of wastes and effluents* in areas that have little capacity to absorb them. The various impacts include -

- ⇒ The carrying capacity of the region is severely taxed as a result of tourism activities
- ⇒ There is indiscriminate use of resources (water, energy and fossil fuel consumption)
- ⇒ There is an inordinate pressure on natural resources due to the presence of polluting actions such as vehicular pollution, extraction of ground water and disturbance to natural systems in the forests and natural areas

** Special attention has to be given to methods of waste disposal particularly in the high altitude cold areas like Tso Moriri, etc. If not, the experience of the guests may not be a pleasant one.*

These concerns are present in most tourism ventures and it becomes essential in ecotourism to constantly increase the benchmark – both to set a standard and to encourage the competition to raise their level of consciousness in managing natural resources.

Energy Conservation

The growing significance of alternative energy sources aim to reduce the dependency upon conventional sources of energy, especially oil and energy produced by conventional means.

Several of the proposed sites are located in the ecosensitive zones of the Himalayas. These regions are internationally renowned for their wealth of flora and fauna and have been accorded various forms of protection in the form of National Parks and Wildlife Sanctuaries. Most of the resorts are proposed to be located in the vicinity of protected areas and have as their primary mandate - protection of resources. One means of ensuring this is through proper energy conservation.

Energy conservation thus becomes one of the primary operational tools that serves the twin purpose of reducing costs for the organization as well as aid in lowering the ecological footprint of the resorts.

As a concept, energy conservation has assumed importance in the past few years. This has been prompted as much by a rising consciousness as by the shortage syndrome in water, power and oil supplies much across the world.

Energy conservation is a dynamic process in itself and is a means to the end result of increasing operational effectiveness. The greatest challenge in promoting energy conservation is that of raising the sensitivity of the staff. This is because there were few takers for the concept of conservation in the earlier days. So, now we find mentors in the organization making consistent efforts to inculcate the practice of switching off lights when not needed. This is the simplest form of conservation and we find that it is also one of the most effective. For example, switching off the heater saving even 1 unit of power can translate into financial gains. The change makers in this regard are the resort managers and various senior personnel of the ecotourism board who through a method of carrot and stick have to promote the “switch-off” policy.

At this micro level, we must ensure that nothing remains switched on in the rooms when rooms are empty. Main switches should be installed outside rooms to make it easier for housekeeping staff to completely shut down electricity connection in the rooms. Power savers should be installed in the properties. Air conditioners which are prime guzzlers of electricity are actively discouraged in the resorts and except for a genuine need, they should be avoided. Wherever, there are air-conditioners, it is the prerogative of the customer to pay a higher tariff as a tax for consuming greater amounts of electricity.

At a larger level, we suggest the use of solar or any other alternate source of energy; be it lighting or for heating purposes. Water heating pushes up the bill by 30–40% during cold months. Therefore, most resorts should be equipped with solar heating of substantial capacities and plans should be implemented to reduce further dependency upon the conventional grid system by increasing the capacity of alternate energy. Additionally, most lighting units can be powered by alternate energy sources.

Another simple intervention can be the use of low energy consuming lights that substantially reduce the electric bill and aid energy saving.

There are several more examples of energy conservation techniques that should be put in place across various proposed sites. It is necessary that we must take advantage of the increasing possibilities of reducing energy consumption across various projects that are envisaged.

Similarly, effort should be made to use the best available technology, also one that is viable for purposes of ecotourism thereby reducing the impact on the environment where such operations are undertaken.

ANNEXURES

Annexure - 1**Income and Expenses of Property I for the Period _ _ _ _**

Particulars	Period I	Per Bednight
Bednights		
Income		
A-Income from sale of rooms		
Head office		
<i>Direct</i>		
Total		
B-Other Income		
Activity		
<i>Kitchen receipts</i>		
<i>Bar sales</i>		
<i>S P sales</i>		
<i>Misc receipts</i>		
Total		
Total Income C = (A+B)		
Less: Expenditure		
D- Operating expenditure		
Kitchen purchases		
<i>Fuel and lighting</i>		
<i>Forest entry fees</i>		
<i>Vehicle maintenance</i>		
<i>Vehicle repair & service</i>		
<i>Hiring of vehicles</i>		
<i>Bar purchase</i>		
<i>Boat Maintenance</i>		
Total		
Operating Profit E = (C-D)		
F- Administrative expenditure		
Salaries		
<i>Contract wages</i>		
<i>Camp maintenance</i>		
<i>Electricity charges</i>		
<i>Telephone charges</i>		
<i>Office maintenance</i>		
<i>Postal & telegraph</i>		

<i>Printing & stationery</i>		
<i>Books & periodicals</i>		
<i>Bank charges</i>		
<i>Entertainment expense</i>		
<i>Medical expense</i>		
<i>Misc. expense</i>		
<i>Advertisement & Publicity</i>		
Travelling allowance		
<i>Travelling expense</i>		
<i>Uniform and shoes</i>		
Total		
Profit after Adm. exp = (E-F)		
Less: Other Expenses		
<i>Expenses capital or annual in nature to be proportionately distributed</i>		
Total		
Profit before Depreciation		

Annexure 2**Comparative Cost sheet for two Years of Property 1**

Particulars	Period I	% of Income	Period II	% of Income
Income				
A-Income from sale of rooms				
B-Other Income				
Total Income C = (A+B)				
D- Operating expenditure				
Operating Profit E = (C-D)				
F- Administrative expenditure				
Profit after Adm. exp G = (E-F)				

Annexure 3**Break Even Analysis**

Particulars	Total	Per Bednight
Income		
A-Income from sale of rooms		
B-Other Income		
Total Income C = (A+B)		
D- Variable expenses		
Contribution E = (C-D)		
F- Fixed Costs		
Break Even point X = (F / E)		

Annexure – 4**Bednights Statement for the Month __ Year ____**

Date	Head Office		Direct Booking		Complimentary	Total
	Indian	Foreigner	Indian	Foreigner		
Day 1						
Day 2						
Day 3						
Day 4						
Day 5						
Day 6						
Day 7						
Day 8						
Day 9						
Day 10						
Day 11						
Day 12						
Day 13						
Day 14						
Day 15						
Day 16						
Day 17						
Day 18						
Day 19						
Day 20						
Day 21						
Day 22						
Day 23						
Day 24						
Day 25						
Day 26						
Day 27						
Day 28						
Day 29						
Day 30						
Total						

Annexure – 5

Draft Feedback Form

You Valued Comments

Eco-Lodges Ltd. values your inputs. Please take a few minutes to complete the form below

Your Name: _____ Address: _____
Email id: _____
Tel: _____ Cell: _____
Birthday: _____ Anniversary: _____

1. Please indicate the Eco-Lodges Ltd. property you would like to comment on:

- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> Property 1 | <input type="checkbox"/> Property 4 |
| <input type="checkbox"/> Property 2 | <input type="checkbox"/> Property 5 |
| <input type="checkbox"/> Property 3 | |

Room/ Tent/ Cottage/ Log Hut #: _____

Check in date: _____ **Check out date:** _____

2. How did you first learn about this property?

- | | | |
|---|--|---|
| <input type="checkbox"/> Friend or Colleague | <input type="checkbox"/> Brochure | <input type="checkbox"/> Advertising |
| <input type="checkbox"/> Another Eco-Lodges Ltd. property | <input type="checkbox"/> Corporate Travel Desk | <input type="checkbox"/> Article(s) |
| <input type="checkbox"/> Meeting/ Convention | <input type="checkbox"/> Travel Agent | <input type="checkbox"/> Other (Please specify) _____ |

3. How would you rate your reception at the property?

- ☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations

Specific to this question, please helps us with more comments, if any _____

4. How would you rate the outdoor experience(s) arranged by us?

- ☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations

Specific to this question, please helps us with more comments, if any _____

5. How would you rate the naturalist(s)/ guide(s) who accompanied you during your outdoor experience(s)?

- ☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations

Specific to this question, please helps us with more comments, if any _____

6. How would you rate the food served to you at the property?

- ☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations

Specific to this question, please helps us with more comments, if any _____

7. How would you rate the presentation of our *Gol-Ghar* (the gazebo where we serve all our meals)?

☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations
Specific to this question, please helps us with more comments, if any _____

8. How would you rate our housekeeping services at the property? Housekeeping involves activities towards the maintenance of your room – interiors, cleanliness, linen, facilities etc

☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations
Specific to this question, please helps us with more comments, if any _____

9. How would you rate our staff?

Knowledge/ Skills	<input type="checkbox"/> Exceeded Expectations	<input type="checkbox"/> Met Expectations	<input type="checkbox"/> Did not meet Expectations
Friendliness	<input type="checkbox"/> Exceeded Expectations	<input type="checkbox"/> Met Expectations	<input type="checkbox"/> Did not meet Expectations
Promptness	<input type="checkbox"/> Exceeded Expectations	<input type="checkbox"/> Met Expectations	<input type="checkbox"/> Did not meet Expectations
Handling of problems	<input type="checkbox"/> Exceeded Expectations	<input type="checkbox"/> Met Expectations	<input type="checkbox"/> Did not meet Expectations

Specific to this question, please helps us with more comments, if any _____

10. How would you rate the up keeping of the campus around our property?

☐ Exceeded Expectations ☐ Met Expectations ☐ Did not Meet Expectations
Specific to this question, please helps us with more comments, if any _____

11. Name(s) of employee(s) you wish to recognize _____

12. Based on your experience, would you visit us again?

- ☐ Yes
☐ No
☐ Maybe

13. Additional remarks and recommendations

Please drop the completed form into the Suggestion Boxes provided at the reception and/or the dining area.

Thank you for your valuable time. We look forward to seeing you again in the future.

Annexure – 6

Draft Agreement for Adventure Activities

This agreement made on this day of _____ between _____ [THE COMPANY], represented by its Managing Director, where the context so admits, include his successor in office acting for and on behalf of _____, of one part, hereinafter called the "FIRST PARTY".

M/S _____ [NAME OF THE OPERATOR] which is a COMPANY having expertise in adventure operations, here in after called the "SECOND PARTY"

Now both the Parties agree that these outdoor operations are fast-evolving eco-tourism activities which need to respond to changes in order to remain vibrant and competitive. Now after discussions between the FIRST PARTY and the SECOND PARTY it is decided to enter into an agreement.

Whereas the activities are initiated from _____ properties of the COMPANY, and that The FIRST PARTY has secured permissions from the Forest Department to conduct these activities in river Kali, and whereas the FIRST PARTY has appointed the SECOND PARTY as the authorized agency to conduct these adventure activities on an exclusive basis in the above mentioned area.

And whereas the parties hereto desire to sign an agreement to this effect, along with the terms and conditions, be entered into:

Now, therefore, this agreement witnesseth as follows:

1. The FIRST PARTY, which is a public sector undertaking, has permission from the Forest Department to operate adventure activities in and around the _____ [LOCATION] located in _____ District of Orissa.
2. The FIRST PARTY hereby further appoints and authorizes the SECOND PARTY as their exclusive agency for conducting adventure sports activities in _____ [LOCATION]. Following adventure activities are permitted to be taken by the SECOND PARTY on behalf of the FIRST PARTY.
[LIST].
3. The appointment shall be for a period of 5 years from _____ [DATE] to _____ [DATE] unless, otherwise terminated earlier as per Clauses 21 and 22 of this agreement.
4. The programme of adventure activities shall be conducted under the name of the COMPANY.
5. The SECOND PARTY shall provide all the necessary qualified guides, other manpower and investment towards the equipments required at their cost. All other specialized staff to run the adventure activities will also be provided by the SECOND PARTY at their cost. However, the FIRST PARTY may, at his discretion, provide equipments free of cost out of the grant funds received from the Government, in the larger public interest of encouraging outdoor tourism activities.

6. The SECOND PARTY will be permitted to house their guides at _____ Resort where staff room accommodation shall be provided to them. The Duty Guides will be responsible for taking bookings of clients who wish to go for the adventure activities conducted by the SECOND PARTY. Further to this the Duty Guides will liaise with the Manager of the resort about vehicles and all other trip requirements. The designated official of the resort will inform the Duty Guides, on a daily basis, particulars of the clients who wish to make a booking for the adventure activities operated by the SECOND PARTY.

7. The Duty Guide permanently stationed at the Resort and any other representatives of the SECOND PARTY, who are present at the Resort in the line of duty, shall be provided with basic food and refreshment by the FIRST PARTY free of cost.

8. The SECOND PARTY agrees (subject to availability of funds) to build and provide a separate basic, inexpensive, temporary structure at the ----- [SITE] to accommodate the SECOND PARTY to enable better control and logistics of the operations by the SECOND PARTY

9. The Adventure programme may be initiated at one of the two points:

a. At the Resort

b. At the site of the activity.

In each case, three copies of vouchers will be issued for the adventure programme to each person I group by the representatives of the SECOND PARTY. One will be handed over to the client, the second would be handed over to the designated official of the FIRST PARTY and the third copy will be retained by the SECOND PARTY.

As regards clients starting from Resort, it is the responsibility of the FIRST PARTY to collect the fee. As regards the other case, it is the responsibility of SECOND PARTY to collect the fee and hand it over immediately thereafter to the FIRST PARTY.

At the end of every month the vouchers shall be tallied and payments will be made to the SECOND PARTY by the FIRST PARTY's manager, based on these vouchers within 10th day of the succeeding month. While paying to the SECOND PARTY its share, the TDS will be deducted as per prescribed rates published by the IT department.

10. The FIRST PARTY will make available to the SECOND PARTY the following facilities which will enable the conduct of the adventure programmes:

a. Sufficient proper space for storage of adventure equipment.

b. Maintain and supply one or more dedicated jeeps with trailers to transport guides and equipment to the programme starting points and back.

c. Any additional vehicles, in case of need, would be supplied by the FIRST PARTY by hiring locally.

d. Allow free use of computer and telephones at the Resort in relation to the adventure activities.

11. The FIRST PARTY will adequately insure their entire and all its operations including the adventure activities, jeeps, and road insurance for guests, staff and the lodge itself with a suitable Insurance Policy to cover the activities of the SECOND PARTY.

12. In case of any claims from the clients due to any accidents, sickness, death, etc, arising during the conduct of the various adventure activities, such claims will be met out of the insurance cover taken by the FIRST PARTY. However, the SECOND PARTY, shall take utmost safety precautions to ensure that any incident does not, happen."

13. The two parties, by mutual consent, shall operate the adventure programmes, and share.

14. The Second Party shall be paid 59.5 % of the fee. The FIRST PARTY share will be 40.50% of the fee. Travel agents commission of 15 %, if paid, shall be borne by the FIRST PARTY from its share. The existing tariff is as per the annexure to this agreement. The tariff rates for various adventure activities and any new programmes are subject to periodic revision by mutual discussion and acceptance.

15. In case of any other resorts or walk-ins who are providing their own transport while availing any of the adventure programmes, a rebate of 5% shall be offered out of the FIRST PARTY's share.

16. The Dollar rate for sharing of the fee purposes will be fixed at the start of November and will remain firm for 12 months, regardless of market fluctuations.

17. The SECOND PARTY shall incur the costs of their staff, crew members, purchase and maintenance cost of the equipment, from out of their earnings. The FIRST PARTY shall, in no way, make any payment to the SECOND PARTY other than what is already agreed to in this agreement.

18. The FIRST PARTY agrees to publicize and promote the adventure activities of the SECOND PARTY in various travel fairs, road-shows and publicity materials including brochures and websites, including that of the Tourism Department and associate travel agents.

19. The FIRST PARTY and the SECOND PARTY may forego their respective shares of the fee while providing complimentary services to VIPs of the Government and FAM tour operators. However such persons should be kept to the minimum.

20. The SECOND PARTY will be offered the 'first right of refusal' only on his written refusal for renewal, shall the FIRST PARTY approach any other Party to take up the adventure programmes. However, the SECOND PARTY shall continue to maintain the same high standards at all times.

21. The SECOND PARTY shall ensure that the adventure activities, guides/experts and guests do not violate any of the provisions of the Wildlife Protection Act 1972, and the Forest Act and Rules.

22. This agreement may be terminated by the FIRST PARTY at any time for serious and repeated violations of any of the major conditions of the agreement entered into heretofore, or by mutual consent by both the Parties before the expiry of the agreement.

23. Any dispute; difference and / or claims arising out of in connection with or in relation to this agreement, shall be settled by arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996, by sole arbitrator. The arbitrator shall be competent to decide whether any matter or dispute or difference referred to the arbitrator falls within the purview of arbitration as provided under the Arbitration and Conciliation Act 1996 and proceed further. Any arbitration award granted shall be final and binding on the parties.

24. This agreement is entered into without prejudice to any other laws of the land.

Annexure – 7

Draft agreement for Travel agent

To

Sub : Appointment as Sales Agent.

The Company is pleased to appoint M/s _____ as authorised sales agent for the following properties for the year _____. The appointment is for a period of one year, starting from October 1 _____ to 30 September _____, and thereafter shall be reviewed on performance.

Following shall be the prices on which the tour operator shall be offered his package by the Company.

- 1.
- 2.
- 3.

The prices are commissionable as under. Revenue generated on bed nights + activities

Up to 8.00 lakhs	15%
8.00 lakhs and above	20 %

However, this commission will be eligible on bed nights only and not on activities. Exchange rate will be worked at Rs.48 to a dollar (the existing exchange rate).

As a special incentive for the guests brought in by the tour operator, which has been agreed to be passed on directly to the charter company, for every 20 guests per group brought to any resort of the company, a free stay will be given to one for which no TAC is payable.

- Complimentary welcome drinks will be given on arrival to all guests and also to guides and drivers accompanying the group.
- An agreed menu will be supplied to the Manager of the resort before the season begins. The menu should include barbecue for one evening meal and be strictly maintained and provided to all groups sent by the tour operator.
- A qualified Naturalist will give a briefing to the group before the safari
- A reasonable accommodation will be supplied to all drives and basic meals.
- Guides will be given food with the group and accommodation to a reasonable level of comfort.
- Information, library services will be displayed and made available for clients.
- Approved transport and insurance as requirements will be provided by the Company.

Annexure – 8

Madhya Pradesh Eco-Tourism Development Board
(Registration No.01/01/01/15425/05 S-2172/05 Dated 14/07/2005)

BYE-LAWS

1. Definitions:

In these Rules, unless the context otherwise requires--

- i. **"Acts"** means the Madhya Pradesh Societies Registration Act 1973 (No. 44 of 1973).
- ii. **"Rules"** means the Madhya Pradesh Societies Registration Rules 1988.
- iii. **"Board"** means the Madhya Pradesh Eco-Tourism Development or Promotion Board, which has been registered under Madhya Pradesh Societies Registration Act 1973.
- iv. **"General Body"** means the General Body, which has been constituted in under section 3 and 5 of the Bye-laws.
- v. **"Executive Committee"** means the Committee, which has been constituted under Section 3 and 12 of the Bye-laws.
- vi. **"Chairperson"** means the Chairperson of the Executive committee of the Board.
- vii. **"President"** means the President of the General Body of the Board.
- viii. **"Chief Executive Officer"** means the Chief Executive Officer who has been appointed in the Board as per Section 14 (a) of the Bye-laws.
- ix. **"Member"** means the member of General Body of the Board.
- x. **"State Government"** means the Forest Department, Government of Madhya Pradesh.

2. Activities:-

The main activities of the board shall be following:-

- (a) Identification of Eco Tourism potentiality and development of eco-tourism facilities.
 - (i) To identify the Eco-tourism areas and special destination sites in the natural regions of the state.
 - (ii) Development of infrastructure facilities and their maintenance viz.:
 1. Development of interpretation and information facilities.

2. Development of Trekking Trails, Natural Trails, Camping grounds, Machans and dormitories etc.
 3. Development of Picnic Spots, Safaris Parks, Adventures Sports, Parks, Horse riding, Elephant Safair, Kayaking-Canoeing or boating, Water Sports etc in the natural regions.
 4. Making available means of transportation.
 5. Development of such infrastructure, which may be helpful to promote ecotourism.
- (b) To classify the developed and proposed eco-tourism facilities as per international standards.
- (c) To undertake following works for publicity, dissemination and monitoring of the programs and activities.
- (i) In cooperation and collaboration with Tourism Department and Public Relations Departments and utilizing capacities of these departments, publicize and disseminate activities and programs of the Board.
 - (ii) To produce, demonstrate and distribute literature and audio visual materials.
 - (iii) To undertake activities for the benefits of students, common-people, media persons and other target groups.
 - (iv) To advertise through Newspaper, Internet and other periodicals.
 - (v) To undertake / commission studies related with eco-tourism activities.
 - (vi) To undertake other activities for fulfillment of aforementioned objectives.
 - (vii) To design and operationalize the website for the Board.
 - (viii) To participate in National and International programs for dissemination of schemes/ programs of the Board.
- (d) Formulate schemes/ programs for promotion of Ecotourism in the state and implement, monitor and evaluate them; and to extend technical and financial assistance to other stakeholders.
- (e) To organize symposiums, conferences, fairs and exhibitions relating to Ecotourism and to participate in the similar programmes organized by other organizations.
- (f) To obtain membership from the relevant International Organizations dealing with Ecotourism and to participate in their programs.
- (g) To undertake / conduct all such programmes and activities which may facilitate in achieving of the objectives of the Board.

3. Structure of the Board:

The structure of the Board shall be as follows:-

1. General Body
2. Executive Committee.
3. Any other committee as may be constituted by the General Body

4. Membership of the Board:

- (a) There shall be two types of members: Government (Ex-Officio) and Nominated.
- (b) The President of the Board shall have the powers of appointment, terminations and the power to accept the resignations of Nominated / Non government member(s).
- (c) No membership fee would be required to be paid by the members of the Board.
- (d) The general body and the executive committee shall have members as enunciated in the Section 5 and 12 of the Bye-Laws. The Board shall have full rights to increase the strength of its members for fulfilment of its objectives.

5. General Body:

The General Body shall be consist of:-

- | | | |
|-----|---|-----------|
| 1. | The Forest Minister of Madhya Pradesh | President |
| 2. | The Principal Secretary, Forest Department | Member |
| 3. | The Principal Chief Conservator of Forests | Member |
| 4. | The Managing Director, M.P. Minor Forest Produce Federation | Member |
| 5. | The Managing Director, M.P. Forest Development Corporation | Member |
| 6. | The Principal Chief Conservator of Forests (Wildlife) | Member |
| 7. | The Principal Secretary, Government of MP, Tourism Department | Member |
| 8. | The Principal Secretary, Biodiversity and Biotechnology (or its representative) | Member |
| 9. | The Managing Director, MP Tourism Development Corporation | Member |
| 10. | The Principal Secretary, Water Resources Department (or his/her representative) | Member |
| 11. | The Principal Secretary, Public Works Department, (or his representative) | Member |
| 12. | The Principal Secretary, Rural Development Department, (or its representative) | Member |
| 13. | The Principal Secretary, Tribal Development Department, (or its representative) | Member |
| 14. | The Principal Secretary, Finance Department, (or its representative) | Member |

15.	The Principal Secretary, Urban Development Department, (or its representative)	Member
16.	The Commissioner, Public Relation Department, (or its representative)	Member
17.	Member Secretary, MP Bio-diversity Board	Member
18.	Representative of Archeological Survey of India	Member
19.	Commissioner, State Archeology Department (or its representative)	Member
20.	Director, Youth and Sports Welfare Department, M.P	Member
21.	Two Forest Officials (Nominated by PCCF)	Member
22.	One Representative from Hoteliers Association	Member
23.	One Representative from Tour Operators Association*	Member
24.	One Representative from Adventure and Sports Association**	Member
25.	One Expert on Ecotourism Sector***	Member
26.	Chief Executive Officer, Ecotourism Dev. Board	Member
	Secretary	

* To be nominated by the President on the recommendation of Tourism Department.

** To be nominated by the President on the recommendation of Sports Department.

*** To be nominated by the President on the recommendation of Executive Committee.

Note: The departments where Additional Chief Secretaries or Secretaries are working in place of Principal Secretary, they shall be the ex-officio members of the General Body.

6. Disqualification for Membership of the Board:-

A person shall be disqualified for being appointed as and for being the member of the board, if he/she -

- (a) is of unsound of mind.
- (b) is or has been convicted for a criminal offence and penalised.
- (c) has been removed or dismissed from the service of State or Union Government on the charges of corruption.
- (d) holds any official position such as Director/Secretary/Manager or a salaried official in any organisation which has any share or interest in any contract awarded by the Board. (applicable only for nominated members)

7. Tenure:

The term of office of the every member other than ex-officio members shall be of two years unless the President removes him on the recommendation of the General Body.

8. Resignation of Member:

Any non-official member may resign his / her office by writing under his / her hand, addressed to the Board but he / she shall continue in office until his / her resignation is accepted. The resignation shall be accepted only by the President.

9. Rights, Powers and Duties of the General Body:

1. To formulate policies for achieving Board's objectives.
2. To approve the annual reports and budget of the Board.
3. To accord sanction to the audited financial report of the Board.
4. To supervise the working of the executive committee.
5. To approve the amendments in the Bye-laws of the Board.
6. To approve the service conditions, Traveling Allowances/Dearness Allowance rules, Medical facility rules, Leave rules, LTC facility rules and other facilities for the Officials/ Employees of the Board.
7. To sanction the unforeseen and unexpected expenses incurred from the contingency funds of the Board and to approve rules regarding operation and maintenance of this fund.
8. To approve the setup of the Board.

10. General Body Meeting:-

- (a) The general meeting of the General Body shall be held at the decided place, date and time.
- (b) The meeting of the general body shall be held at least once in a year.
- (c) The President himself/herself or on the written request of at least six members of the Board may call a special meeting of the Board at any time.
- (d) Every meeting shall be presided over by the President of the Board and in his/her absence any other member nominated by the members present at the meeting.
- (e) All questions at any meeting shall be decided by a majority of the members present and in case of equality of votes, the person presiding shall have and exercise a second or casting vote.
- (f) A register shall be maintained for the meetings of the General Body and it will contain signature of the members present in the meeting and the proceeding of every meeting shall be issued under the signature of Chief Executive Officer after obtaining approval of the President.
- (g) The quorum for the General Body meeting shall be of 08 members. If at any special or ordinary meeting of the General Body a quorum is not present, the President shall adjourn the meeting for some other time on the same day as he/she may think fit and the business which would have been

- brought before the original meeting, if there had been quorum present shall be brought before and transacted at the adjourned meeting, whether there is a quorum present there at or not.
- (h) The proceedings of the Annual General Meeting (AGM) shall be submitted to the Registrar, Firms and Societies within 15 days.

11. Procedure for calling the meeting of the general body:

Every meeting of the General Body shall be convened by a notice issued under the signature of the Chief Executive Officer. Every notice calling of a meeting of the General Body shall be issued Ten days in advance. Notice calling for a meeting may be issued Five days in advance under special circumstances.

12. Executive Committee:

(a) The executive committee shall consist of following members:-

- | | | |
|-----|--|------------------|
| 1. | The Principal Secretary, Forest Department | Chairperson |
| 2. | The Principal Chief Conservator of Forests, M.P. | Member |
| 3. | The Managing Director, M.P. Minor Forest Produce Co-operative Federation | Member |
| 4. | The Managing Director, M.P. Forest Development Corporation | Member |
| 5. | The Principal Chief Conservator of Forests (Wildlife) M.P. | Member |
| 6. | The Principal Secretary, Government of MP, Tourism Department | Member |
| 7. | The Principal Secretary, Finance Department, (or his representative) | Member |
| 8. | The Managing Director, MP Tourism Development Corporation | Member |
| 9. | Member Secretary, MP Bio-diversity Board | Member |
| 10. | Member (Mechanical), Narmada Valley Development Authority | Special Invitee |
| 11. | Chief Executive Officer | |
| | | Member Secretary |
| 12. | Any other person(s) invited by the chairperson | |

Note: The departments where Additional Chief Secretaries or Secretaries are working in the place of Principal Secretary, they shall be the ex-officio members of the executive committee.

- (b) The executive committee shall come into force from the date of these bye-laws coming in force and shall function till its dissolution or supersession.

13. The Right, Powers and Duties of the Executive Committee:

The Executive Committee shall be responsible for taking necessary actions to achieve the objectives of the Board. The executive committee shall have all the rights except the rights conferred especially to the General Body, Chief Executive Officer or any other official or powers delegated to them. The following functions shall be discharged by the executive committee:-

- (a) To approve the annual work plan of the Board.
- (b) To approve the projects of Ecotourism Development.
- (c) To consider and approve the annual budget, audited reports, annual reports and other relevant proposals before putting them to the General Body.
- (d) To discuss the proposed amendment in bye laws and put it up before the General Body for consideration and approval.
- (e) To formulate the service rules/ service conditions of the employees of the Board.
- (f) To supervise monitor and control the works of the Chief Executive Officer and other officials and programmes of the Board.
- (g) To delegate the powers of the executive committee to the Chief Executive Officer or any other officer of the Board as it deems necessary to the proper conduct of the business of the Board.
- (h) Any other matter referred by the General Body on any subject.
- (i) To appoint the Chartered Accountant for auditing the accounts of the Board.
- (j) To take decision on any dispute related to any decision/issue of the Board.
- (k) To decide the contribution for welfare/recreation of the officials/employees of the Board.

14. The officials/employees of the Board:

There shall be a Chief Executive Officer and such other officials as per the approved setup of the Board for that successful conduct of the function of the Board.

(a) The Chief Executive Officer:

- 1. The Chief Executive Officer shall be appointed by the State Government on deputation.
- 2. The Chief Executive Officer of the Board shall be an officer of Indian Forest Service (IFS) of Madhya Pradesh Cadre, not below the rank of Chief Conservator of Forests.

(b) The Responsibilities of Chief Executive Officer:-

1. The Chief Executive Officer shall be overall responsible for day-to-day administrative and management works of the Board.
2. All orders, notices and instructions to be issued by the Board shall be issued under the signature of the Chief Executive Officer.
3. Maintenance of records and proceedings of the meetings.
4. Chief Executive Officer shall be the person in whose name Board may sue or be sued.
5. Acquire/ Receive on behalf of the Board any donation/gifts or to exchange or obtain land on lease or building or other movable and immovable properties together with all rights pertaining thereto.
6. Manage funds and implement various activities and programmes, sanction and disburse all payments of all approved schemes to the executing bodies as per approved budget of the Board
7. To prepare annual reports, programmes, financial statement of accounts, financial estimates, budget and establishment reports etc.
8. To appoint and to take action according to conduct rules in the case of employees of the Board.
9. To impose and recover the fees and charges for the services by the Board and to raise necessary funds for achieving the objectives of the Board.
10. Execute any agreement/contracts for and on behalf of the Board.
11. To frame rules for the use of fund from contingency fund of the Board and to get its approval from the Board.
12. Any other work assigned by the Board / Executive Committee and / or necessary to carry out to promote ecotourism development.

(c) The Duties and Powers of Chief Executive Officers:

1. The Chief Executive Officer shall exercise all the powers delegated to him by the Executive Committee.
2. The Chief Executive Officer shall be the competent authority for fixing and disbursing the pay and allowances of all the officials/ employees of the Board as per their services conditions.

(d) Appointment of Staff:

1. The staff shall be appointed on deputation from Forest, Tourism and other related department/ agencies. The deputation period shall be of three years and this period can be extended further with the approval of Executive Committee. Staff and professional/ specialists may also be appointed on contract basis in case suitable persons are not available on deputation.
2. All the officials and employees of the Board shall work under the control of the Chief Executive Officer.

16. Service condition of officials and employees:

- (a) The service condition and remuneration of the employees shall be in accordance with the rules approved by the General Body or as prescribed in the contract conditions approved by General Body.
- (b) The service condition of the officers of All India Services working on deputation shall be as per All India Services Rules.

17. General disqualification of all officers and employees:-

No person who has directly or indirectly by himself or through his/ her partner or agent any share or interest in any contract, by or on behalf of the Board, or in any employment under, by or on behalf of the Board otherwise than as an officer or staff thereof shall become or remain an officer or staff of the Board.

18. Project Implementation Agencies:-

The activities of the Board shall be normally implemented through the field units of Forest Department as per subject and terms as approved by Executive Committee. However when necessary these can be implemented through other agencies viz Tourism Department, Central / State Government under-takings, Local forest committee, Local bodies, Self help groups etc.

19. Board's Fund:-

The Board shall accept grants, funds, financial assistance, subventions from the Central or State Government or a local authority or any individual or body, whether incorporated or not for achieving its objectives.

All the funds received by or on behalf of the Board by virtue of these by-laws, all proceeds of any other kind or property sold by the Board, all rents and all interests, profits and other money accruing to the Board shall constitute the fund of the Board.

(a) The Following funds shall be maintained by the Board:

1. General Fund: - This fund shall not be related to any plan and shall be used mainly for meeting the administrative expenses of the Board. However money from this fund can be transferred to project fund as per the availability.

Some of the sources of this fund shall be as follows:-

- (a) A fixed amount from the Development Fund of protected areas of Forest Department (at least 10%)

- (b) A fixed amount (not less than 10%) from the "Vikas Nidhi" (Development Fund) of M.P. Minor Forest Produce (T&D) Federation.
- (c) Contributions from other departments like Tourism, Rural Development and Sports etc.
- (d) Grants / Assistance from the Central Government or its undertakings or any other source.
- (e) The savings accrued from the amount received for different projects from other sources.
- (f) Supervision charges for the projects of other departments / agencies being implemented through Eco-Tourism Board.

2. **Project Fund:** - This fund shall consist of the amount received to the Board for implementing eco-tourism projects from its own sources or from other organisation / sources.

3. **Establishment of Sinking Fund and its Managements:** - Whenever loan has to be repaid, the Board shall establish a sinking fund and shall pay into it every year until the loan is repaid a sum so calculated that if regularly paid throughout the period agreed upon, it would with accumulations in the way of compound interest, be sufficient after payment of all expenses, to pay off the loan.

4. **Contingency Fund of the Board:-**

- (a) The Board shall establish a fund which shall be called the contingency fund of the Board and an amount of Rs 10 Lacs shall be deposited in the fund from the funds of the Board.
- (b) The fund shall be held on behalf of the Board by Chief Executive Officer and no advances shall be made out of this fund. Payment of unforeseen nature shall be made from this fund in anticipation of Board's approval.
- (c) The Board shall frame such rules as may be necessary for withdrawal and maintenance of this fund for meeting the objectives of this fund.

5. **Bank Account:** - Except otherwise directed by the State Government all receipts and funds specified in the foregoing provision and forming part of the fund of the Board shall be deposited in: -

- (a) Any Scheduled Bank or
- (b) A subsidiary or associate bank of State Bank of India or
- (c) MP State Co-operative Bank limited or
- (d) Such securities and cash deposit receipt as may be approved by the State Government.

All such accounts shall be operated by the Chief Executive Officer or the officers as may be authorized by him.

20. The powers to borrow and lend:-

Subject to the provisions of these by-laws of the Board may, from time to time, advance any sum standing at the credit of the Board and with the previous sanction of the State Government, borrow money required for the purpose from the public or from any financial institution or any corporation owned or controlled by the Central or State Government.

21. State Government Guarantee:-

If the Board so desires and requests, the State Government may guarantee in such a manner and subject to such conditions as it may think fit the payment of the loan proposed to be taken or raised by the Board.

22. Accounts and Audit:

- (i) The Chief Executive Officer shall ensure to maintain proper books of accounts and such other books as the act may require and shall prepare in accordance with the act an annual statement of account.
- (ii) The Chief Executive Officer shall cause the accounts to be audited annually by such person appointed by the Board.
- (iii) As soon as the accounts of the Board are audited, the Chief Executive Officer present a copy thereof together with a copy of the report of the auditor to the General Body.
- (iv) The Chief Executive Officer shall comply with such directions as the General Body / Executive Committee may after perusal of the report of the auditor think fit to issue.
- (v) The audited accounts shall be sent to the Registrar, Firms and Societies under section 28 of the act.

23. Reports:-

The Board shall, before such dates and in such forms and at such interval as may be prescribed submit to the State Government a report, on such matters as may be prescribed.

24. Supersession of the Governing Body of the Board:-

(a) Dissolution of the governing body (Executive Committee) as per the provisions of the Section 33 of the Act:-

- 1. The Chairperson and all the members shall have to vacate their offices from the date of the publication of notification of the dissolution of the Board.
- 2. All the powers and duties which may by or under the provisions of this Act, be exercised or performed by or on behalf of the Board and the

Chairman shall during the period of such suppression, be exercised and performed by such authority or person as the State Government may direct.

3. All funds and other property vested in the Board shall during the period of suppression vest in the authority or person referred to in clause 2; and

4. All liabilities legally subsisting and enforceable against the Board shall be enforceable against the authority or person referred to in clause 2 to the extent the funds and properties vested in it or him.

(b) On the expiration of the period of suppression specified in the notification issued under sub-section (i) the State Government may-

1. Extend the period of suppression for such further period as it may consider necessary; or
2. Reconstitute the Board.

25. Dissolution of the Board:-

If the Board is dissolved due to reason assigned and as per the procedure as prescribed in Section 34 (1) of the Act or the registration of the Board is cancelled under Section 34 (2) of the Act:-

1. All properties, funds and dues which are vested in or realizable by the Board shall vest in and be realizable by the State Government;
2. All liabilities enforceable against the Board shall be enforceable against the State Government to the extent of the properties, funds and dues vested in and realized by the State Government.

26. Powers to make Rules:-

(a) The Board shall have powers to make rule and amend them not in consistent with the provision of the Act. The proposed Rules/Amendment shall have to be approved by two third majority of the General Body.

(b) In particular and without prejudice to the generality of the foregoing power, such regulations may provide for-

- (1) All matters expressly required or allowed by this Act.
- (2) Appointment of the persons as the members of the Executive committee under section 12.
- (3) The procedure to be followed by the committee at its meeting.
- (4) The creation of the posts and delegations of powers and duties of the Board conferred to any other official/officials or any committee/s of the Board.

- (5) The duties and conduct of officers and servants of the Board and of other persons employed by the Board under this Act for carrying out any of the purposes of this Act;
- (6) The welfare and recreation of the staff of the Board and the contributions to be made therefore;
- (7) The fees payable for the copies of the documents, estimates and plans furnished by any of its officers and servants under this Act;
- (8) The management, use and regulation of dwellings constructed;
- (9) The efficient conduct of the affairs of the Board.

27. Disputes:-

- (a) The Jurisdiction of all legal matters shall be the courts of Bhopal.
- (b) In all matters of disputes related to the issues/ decisions arising out of decisions of the Board the decision of the Board will be final.

Annexure – 9

AGREEMENT

THIS AGREEMENT ENTERED INTO AT _____ THIS
_____ DAY OF _____ TWO THOUSAND AND
_____ BY AND BETWEEN:

1. The Deputy Conservator of Forests, _____ Division, _____, representing the Forest Department, Government of _____, hereinafter called the “FOREST DEPARTMENT” of the ONE PART.
2. M/s _____ - Ltd., a COMPANY incorporated under the Companies Act 1956, having registered office at _____, represented by its Managing Director, herein after called ‘THE COMPANY’ of the SECOND PART’.

WHEREAS, the Government of _____, in their order no. _____ dated _____ has permitted the COMPANY for establishing an Ecotourism resort in _____ -HA of area at Sy. No. _____ of _____ Village in _____ Taluk of _____ District and the above permission was duly communicated by the Principal Chief Conservator in his letter no. _____ dated _____ lying down certain terms and condition before permitting the COMPANY to use the premises and whereas the parties hereto desire that the terms and condition of the agreement to be reduce into writing.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Company should pay an occupancy rent of Rs. _____/- per hectare per annum in advance with effect from the date of entering into this agreement, which is liable to be revised by the Department as and when it is found necessary.
2. The Company can create a simple, low-cost facility for capacity not exceeding 40 (forty) people at any given time.
3. The company shall protect a\natural environment and wildlife in natural condition so as to see that there is no violation of laws of forest conservancy.
4. The Company shall ensure that no illegal activities take place in the area. Any incident of forest smuggling, illicit felling, poaching, etc. should be reported to the nearest forest officer immediately.
5. The purpose of ecotoursim shall be to protect and strengthen the trees, forest and nature.
6. The policies and guidelines related ecotourism issued by the Ministry of Environment and Forest, Government of India and those by the Tourism Department shall be followed in running of the facility and behaviour of the guests coming to the area.

7. The facility shall be open for inspection of any Forest Officer of and above the rank of the Range Forest Officer.
8. The Company shall provide preferential employment opportunities to the local people.
9. The Company shall not violate the conditions of existing laws and rules relating to Forests and wildlife. If any violation is noticed, the Company may be fined suitably or permission given to operate may be withdrawn or both. If there is any dispute on any part between the parties to the agreement, the same shall be referred to the Principal Chief Conservator of Forests, _____, whose decision shall be final and binding on both parties.

The above agreement shall be in force until and unless it is revised or revoked by the order of the Government.

Witnesses

PARTY OF THE FIRST PART

1.

PARTY OF THE FIRST PART

2.

Annexure – 10

PROGRAMME LIST

1. Land acquisition
2. Company registration with a corpus fund
3. freedom to respective managers for their day to day activities
4. Opening of Bank A/c
5. Market study
6. Put it that those requirements are required then that can be done -
7. Forest Dept. Agreement
8. Pollution clearance
9. Environmental clearance
10. Waste management clearance
11. Bar License
12. Food and beverage clearance
13. Sales tax clearance
14. Registration with the tourism deptt.
15. Agreement with the local panchayat
16. Permission from the local govt.
17. EIA report
18. Public hearing
19. Permission for movement in water
20. Project report with financials
21. Office set up
22. Design of resort
23. Interiors of resort
24. Tour program setting
25. Beginning the construction of resort
26. Waste management
27. Focus on non renewable sources of energy and its management

Annexure -11

MEMORANDUM OF UNDERSTANDING

This agreement made on this day of between

Jungle Lodges & Resorts Ltd., which is set up with the objective to develop wildlife tourism and various outdoor adventure activities such as trekking, camping etc, and help in general towards conservation and development of wildlife and improvement of the environment and act as a consultant to others in these spheres, represented by its Managing Director, where the context so admits, include his successor in office acting for and on behalf of Jungle Lodges & Resorts Ltd., of one part, hereinafter called the “FIRST PARTY”.

and

Department of Wildlife Preservation, Jammu and Kashmir represented by Chief Wildlife Warden, where the context so admits, include his successor in office hereinafter called the “SECOND PARTY”.

Whereas Department of Wildlife Preservation, Jammu and Kashmir who now represents the SECOND PARTY has shown interest in engaging the FIRST PARTY for consultancy services for the preparation of Project Report for “Development of Ecotourism Potential in the State of Jammu and Kashmir”.

Now both the Parties agree that ecotourism operations are fast-evolving and there is a need to respond to it. Hence, after discussions a proposal for consultancy services for preparation of the said project was submitted by the FIRST PARTY during May 2006. After careful consideration, the SEOCND PARTY has agreed to engage the FIRST PARTY vide letter dated 22.05.2007 (No.WLP/Tech/1800-01/07) and it is decided to enter into an agreement for the preparation of the said Project Report.

And, whereas the parties hereto desire that a MoU to this effect, along with the terms and conditions, be entered into:

Now, therefore, this MoU withnesseeth as follows:

1. Scope of Consultancy

- Exploring the Ecotourism potential of the area.
- Facilitate Ecotourism Development in the area.
- Prepare plans for Development of Eco-infrastructure and Eco-lodge Management.
- Assist in Marketing management.
- Develop organisational structure for Ecotourism in J & K.

2. Objectives of the Proposed Consultancy

- Exploring Ecotourism Potential: J & K has tremendous potential for ecotourism being bestowed with nature's bounty. It is essential that this is done methodically. JUNGLE LODGES AND RESORTS would help the state in identifying the locations, which are potential ecotourism sites.
- Ecotourism Development: JUNGLE LODGES AND RESORTS with its experience would include the strategies to be adopted for development of Ecotourism. This would include suggestions on partnerships, selection of travel and tour operators. JUNGLE LODGES AND RESORTS would also help in identifying the new opportunities and revenue models by exploring adventure and outdoor activities through carrying capacity analysis. Phasing of projects for investment and risk management and development of suitable model for the same.
- Development of Eco-infrastructure and Eco-lodge Management: JUNGLE LODGES AND RESORTS would contribute ideas for developing existing facilities and would suggest structure designs, theme suggestions, rough plans and layouts of facilities and infrastructure of resorts as per JUNGLE LODGES AND RESORTS concept.
- Marketing Management: Development of marketing strategies for promoting ecotourism in J & K. Strategic marketing skills for direct marketing, web-site development and internet marketing. Contributing ideas towards brand awareness.
- Customer Relations: JUNGLE LODGES AND RESORTS would extend support for Customer Relationship Management by contributing ideas for interacting with clients, training sales and booking staff, skills for closing sales and information support for building relationships.
- Develop organisational structure for Ecotourism in J & K: JUNGLE LODGES AND RESORTS would suggest the most suitable organisational structure for the State of J & K which will drive ecotourism in the state.

3. Consultancy Fee

The host organization shall be responsible for –

1. Airfare from Bangalore to the airport closest to the venue and return for the team of consultants.
2. Local transportation or reimbursement for the costs of the local travel for carrying out the analysis and study.
3. Accommodation and boarding during the consultancy.
4. A consultant's fee for the duration spent at the venue.
5. All incidental expenses required for the study and stationary required during the consultancy.
6. A part of research work, analysis and design will be carried out at our head office in Bangalore. Expenses incurred towards this would also be charged on actuals.
7. The Jungle Lodges and Resorts Ltd Bangalore shall have copyrights to the research work and project design.

4. Schedule of Payment

- a. 25% of the consultancy costs will be paid at the time of signing the MoU; further 50% to be paid on the submission of the draft report and the remaining 25% to be paid on submission of final report.
- b. All other expenses towards travel, etc. of the panel of consultants, as mentioned above to be met by FIRST PARTY at the time of their visit.

Any dispute, difference and / or claims arising out of in connection with or in relation to this agreement, shall be settled by mutual discussions.

In witness thereof parties have set and subscribed their hands to the agreement on this in the presence of witnesses.

Managing Director
Jungle lodges & Resorts Ltd.,
Bangalore

Chief Wildlife Warden
Department of Wildlife Preservation,
Jammu and Kashmir

Dated:

Witnesses: 1. _____

2. _____

Annexure – 12

DAY-WISE ACTIVITIES OF THE TEAM DURING KASHMIR AND JAMMU TRIP 2007

Day 1 : December 10, 2007

The team from Jungle Lodges & Resorts Ltd. comprising of Mr. Harikumar Jha, Executive Director, Mr. S.Karthikeyan, Chief Naturalist, Mr. Sundar Raj and Mr. Muhammed Nahar, Managers arrived at Srinagar. After checking-in at the Circuit House they met Mr. Farooq Geelani, Regional Wildlife Warden, Srinagar and discussed the plan for the period of stay at Srinagar.

After discussions, they made a quick trip to the Dachigam National Park before returning to the Circuit House.

Day 2 : December 11, 2007

Hokersar, a wetland proposed to be a Ramsar Site was visited by the team accompanied by Mr. Abdul Rauf Zargar, Wildlife Warden. The team went on boats into the wetland from the proposed Interpretation Centre. They were overwhelmed by the sheer number of birds that were seen. The Mallard seemed to be the most predominant species while others like the Shoveller and the Pintails were seen. The Greylag Geese, Common Teals, Coots, etc. were seen.

Subsequently, they travelled to the near by Shalbaug Wetland which is being developed.

Day 3 : December 12, 2007

Gulmarg, a place which is on the tourist map of J&K was visited. Mr. Mushtaq Ahmed Parsa, Wildlife Warden of that area accompanied the group. They had a brief glimpse of the Gulmarg Wildlife Sanctuary. They saw the pugmarks of Leopards on the fresh snowfall. The snowfall was initially mild but eventually becoming very heavy forcing them to return.

Day 4 : December 13, 2007

Mr. Suhail, Wildlife Warden of the Overa-Aru Wildlife Sanctuary joined the team to the Overa Wildlife Sanctuary. After a cup of tea and a brief introduction to the sanctuary they set off to visit the burnt down campsite that was functional in the past. The team while on site discussed the possibility of reviving the place and the possible kind of infrastructure that would be required for the purpose. From there they drove to Pahalgam Zoo and returned to Srinagar.

Day 5 : December 14, 2007

On Day 5 the destination was the Dachigam National Park that is known for the endangered Hangul / Kashmir Stag. After detailed interactions with Mr. Rashid Naqash, Wildlife Warden, they visited some of the existing infrastructure in the Park and discussed the various activities that can be considered in the Park with ecotourism in mind.

Day 6 : December 15, 2007

Departure from Srinagar; Arrival at Jammu. On arrival the team went straight to Gharana wetland on the border of India and Pakistan. The 0.75 sq. km wetland had several hundred ducks and geese besides coots and some herons. The team was met by Mr. Nasier Kitchloo, Regional Wildlife Warden and Mr. Rakesh Kumar, Wildlife Warden. Discussions were had over lunch.

Day 7 : December 16, 2007

Accompanied by Mr. Nasier Kitchloo, Regional Wildlife Warden and Mr. Rakesh Kumar, Wildlife Warden the team visited Jasrota Wildlife Sanctuary (10 sq. km.). The vegetation was predominantly deciduous. The sanctuary also has an ancient fort within its boundaries. The team felt that this could possibly be developed into a stand alone destination because of the variety of things that could be considered / offered to the guests.

Mansar and Surinsar wetlands were also visited en route to Jammu.

Day 8 : December 17, 2007

During the first half of the day, the team visited the Ramnagar Wildlife Sanctuary which is located on the outskirts of Jammu city and also the zoo. They also briefly met the Chief Wildlife Warden. Nandini Wildlife Sanctuary which is located in the Shivaliks was also visited during the latter half of the day.

Day 9 : December 18, 2007

After a brief interaction with the press, the team left for Bangalore.

Annexure 13

DAY-WISE ACTIVITIES OF THE TEAM DURING VISIT TO LADAKH AUTONOMOUS HILL DISTRICT IN AUGUST 2008

Day 1 : August 04, 2008

The team from Jungle Lodges & Resorts Ltd. comprising of Mr. Harikumar Jha, Executive Director, Mr. S. Karthikeyan, Chief Naturalist, Mr. Yuvaraj and Mr. Kunal Sharma, Managers arrived at Delhi. The team stayed overnight to board the early morning flight to Leh.

Day 2 : August 05, 2008

The early morning flight reached the team to Leh. Having reached Leh, they settled down to get acclimatised to the high altitude. During the day, they were met by Mr. Takpa, IFS, Regional Wildlife Warden briefly.

Day 3 : August 06, 2008

The team had a meeting with the Regional Wildlife Warden to plan out the following days for the purpose of site visits. Also present during the meeting were the Range Forest Officers Mr. Wangchuk and Mr. Rauf. Later, the team went around some of the tourist spots around Leh.

Day 4 : August 07, 2008

The team started early to visit Tso Moriri, a high altitude wetland (approx. 15,000 ft.) and a Ramsar site. *En route* species like Mergansers, Gulls, Golden Eagles and Himalayan Marmots were seen. Accompanied by, Mr. Wangchuk RFO reached Karzok village near the lake. The area was surveyed to assess the kind of tourism that was happening around the wetland.

Day 5 : August 08, 2008

The following morning the team started early and was on its way to Tso Kar again accompanied by Mr. Wangchuk RFO. The team was lucky to see the endangered Kiang and the Blacknecked Cranes. Having spent some time at the lake, they travelled back to Leh.

Day 6 : August 09, 2008

Pangong Tso was visited. The 170 km. drive past the second highest pass, Chang La, was through some scenic landscapes. The Tibetan Woolly Hare was seen *en route*. And on the return a Pika was also seen besides the Marmots.

Day 7 : August 10, 2008

There was a change of guard. Mr. Abdul Rauf accompanied us to Hemis National Park. Having driven till Jingchan, we prepared for the trek into the Rumbak Valley to visit a homestay at the end of the trek. The trek saw the team crossing small rivers several times. A herd of Bharals were seen roughly mid-way on the trek. Also seen were the Whitethroated Dipper, Martins, Hill Pigeons and Ladakhi Rock Skinks were seen.

A discussion with the residents of Rumbak who are involved actively in offering Home stay facilities was held. A trek in the rain back to Jingchan crossing the now swollen river was accomplished.

Day 8 August 11, 2008

Another part of Hemis and another example of home stay could not be done due to a landslide near Chilling. The team returned to Leh after visiting one other household.

Day 9 : August 12, 2008

Mr. Abdul Rauf saw us off at the Leh airport. The team reached Bangalore later that night.

Annexure 14**TEMPLATE FOR CALCULATION OF CARRYING CAPACITY.****Calculation of percentage of carrying capacity left in Bhitarkanika, Orissa for Ecotourism**

The percentage of carrying capacity left is calculated by the method illustrated in the methodology part. It is followed by the results obtained from the management perspective of carrying capacity collected from the different stakeholders.

Calculation of Indicator Quality Unit (IQU)**(a) Ecological Carrying Capacity**

This table is based on the questions about the impact of tourism on ecological aspects. The interviewees were asked whether they agree or disagree to the statement that there is an impact on these indicators. The stakeholders interviewed were those who are constantly in contact with the ecological aspects of the Bhitarkanika sanctuary, such as Forest department officials, Non Governmental Organisations, and Researchers. *All the indicators except (g) and (h) are negative indicators.*

Table 1 Calculation of Ecological IQU - Bhitarkanika

INDICATOR	AGREE	DISAGREE	% OF AGREEMENT	IQU
a) Less animal sighting during the trip inside the Bhitarkanika	16	14	0.53	0.47
b) Crowding of launches around wildlife	8	22	0.27	0.73
c) Aggressive behaviour of wild animals towards launches	0	30	0.00	1.00
d) Avoiding an area previously used by animals	5	25	0.17	0.83
e) Increased suspended matter and disturbance of bottom sediments	8	22	0.27	0.73
f) Reduction of ocular forest quality in around tourism zone	0	30	0.00	1.00
g) Awareness generated about the environmental protection among the visitors(+)	5	25	0.17	0.17
h) Importance given to wild animals by local people(+)	25	5	0.83	0.83
i) Pollution in the tourism zone - Air pollution, Noise pollution or solid waste	8	22	0.27	0.73
j) Efforts in waste management by tour operators (+)	6	24	0.20	0.20

(b) Facility Carrying Capacity

The following table is based on the questions about the problems faced by the tourism facilities in the growth of their industry. The stakeholders who were asked the questions were the tourism facility operators and the local people.

The positive indicators in the questionnaire were (a), (b) and (e). Greater the value of these indicators, better is the conditions of the indicators.

Table 2: Calculation of Facility IQU - Bhitarkanika

INDICATOR	AGREE	DISAGREE	% OF AGREE-MENT	IQU
a) Legal restrictions present during construction of facility(+)	12	18	0.40	0.40
b) Rate of growth of number of tourists in the area, leading to more facilities being constructed (+)	15	15	0.50	0.50
c) Water or natural resource shortage faced by the facilities	20	10	0.67	0.33
d) Objections from the local people against the facility	7	23	0.23	0.77
e) Willingness of the local people to sell their land for facility construction purposes (+)	22	8	0.73	0.73

(c) Social Carrying Capacity

The following table deals with the impact of tourism on the social aspects of tourism. It mainly deals with the social impacts of tourism on local people and also as to whether any impact is felt by the tourists due to the social system of local people. The stakeholders interviewed included the local community and the tourists visiting the area. *All the indicators except (f) and (g) are negative indicators.*

Table 3: Calculation of Social IQU - Bhitarkanika

INDICATOR	AGREE	DISAGREE	% OF AGREEMENT	IQU
a) A social issue created by the tourism - Alien culture	2	28	0.07	0.93
b) Nuisance created to the local people by tourists	4	26	0.13	0.87
c) A social issue created by the tourism - Drinking culture	5	25	0.17	0.83
d) A social issue created by the tourism - Eve-teasing of local women	0	30	0.00	1.00
e) Social inequalities created within the community due to tourism	10	20	0.33	0.67
f) Preservation of local art and culture due to tourism (+)	3	27	0.10	0.10
g) Improvement in the functioning of local institutions like Panchayat or EDC due to the growth of tourism(+)	3	27	0.10	0.10
h) Problems from local people to tourists	0	30	0.00	1.00

(d) Economic Carrying Capacity

The following table is for the measurement of impact of tourism on economic aspects of local people. The stakeholders interviewed were the local people. *Only negative indicator used in the questionnaire was the indicator number (b).*

Table 4: Calculation of Economic IQU - Bhitarkanika

Indicators	Agree	Disagree	% of agreement	IQU
a) Increased employment or increased dependence of local people on tourism for their livelihood (+)	18	12	0.60	0.60
b) Increased cost of living in around the tourism zone.	5	25	0.17	0.83
c) Change in resistance towards man-animal conflict due to increased earnings from tourism(+)	13	17	0.43	0.43

(e) Visitors' Experience based Carrying Capacity

The following table deals with the impact of increased tourism activity on general recreational experience of the visitors. The respondents were asked to agree or disagree to the statement that there is an impact on the visitors' experience due to the increased tourism activity.

Tourists were the only stakeholders interviewed for obtaining this data. *Only (a) and (b) were the negative indicators.*

Table 5: Calculation of Visitors' experience based IQU - Bhitarkanika

Indicators	Agree	Disagree	% of agreement	IQU
a) Pollution in the tourism zone	12	18	0.40	0.60
b) Overcrowding inside or outside PA	10	20	0.33	0.67
c) Quality of guides and the interest generated by them in nature (+)	2	28	0.07	0.07
d) Interpretation facilities (+)	5	25	0.17	0.17
e) Feeling of worthiness of the visit to PA (+)	18	12	0.60	0.60
f) Willingness for another visit (+)	20	10	0.67	0.67

Calculation of Parametric Importance Unit (PIU)

Parametric Importance Unit is calculated from the feedback given by the experts and was calculated as follows

Indicators of Ecological carrying Capacity

Table 6: Ratings for Ecological CC - Bhitarkanika

Indicators	Rating given by the Experts(L,M,H)					
	1	2	3	4	5	Final PIU
Less animal sighting during the trip inside the Bhitarkanika	<i>M</i>	<i>L</i>	<i>M</i>	<i>L</i>	<i>M</i>	7.5
Crowding of launches around wildlife	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	<i>H</i>	12.1
Aggressive behaviour of wild animals towards launches	<i>H</i>	<i>H</i>	<i>H</i>	<i>H</i>	<i>M</i>	13.1
Avoiding an area previously used by animals	<i>L</i>	<i>L</i>	<i>M</i>	<i>H</i>	<i>M</i>	8.4
Increased suspended matter and disturbance of bottom sediments	<i>M</i>	<i>M</i>	<i>M</i>	<i>L</i>	<i>L</i>	7.5
Reduction of ocular forest quality in around tourism zone	<i>M</i>	<i>M</i>	<i>M</i>	<i>L</i>	<i>L</i>	7.5
Awareness generated about the environmental protection among the visitors(+)	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	<i>L</i>	10.3
Importance given to wild animals by local people(+)	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	<i>M</i>	11.2
Pollution in the tourism zone - Air pollution, Noise pollution or solid waste	<i>H</i>	<i>H</i>	<i>H</i>	<i>M</i>	<i>H</i>	13.1
Efforts in waste management by tour operators (+)	<i>H</i>	<i>H</i>	<i>L</i>	<i>L</i>	<i>M</i>	9.3

Indicators of Facility Carrying Capacity

Table 7: Ratings for Facility CC- Bhitarkanika

Indicators	Rating given by Experts(L,M,H)					
	1	2	3	4	5	Final PIU
Legal restrictions present during construction of facility(+)	<i>H</i>	<i>H</i>	<i>M</i>	<i>L</i>	<i>H</i>	26.7
Rate of growth of number of tourists in the area, leading to more facilities being constructed (+)	<i>M</i>	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	26.7
Water or natural resource shortage faced by the facilities	<i>M</i>	<i>M</i>	<i>L</i>	<i>L</i>	<i>L</i>	15.6
Objections from the local people against the facility	<i>L</i>	<i>M</i>	<i>L</i>	<i>L</i>	<i>M</i>	15.6
Willingness of the local people to sell their land for facility construction purposes (+)	<i>L</i>	<i>L</i>	<i>M</i>	<i>L</i>	<i>M</i>	15.6

Indicators of Social Carrying Capacity**Table 8 : Ratings for Social CC- Bhitarkanika**

Indicators	Rating given by Experts (L,M,H)					
	1	2	3	4	5	Final PIU
A social issue created by the tourism - Alien culture	<i>M</i>	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	18.5
Nuisance created to the local people by tourists	<i>M</i>	<i>L</i>	<i>M</i>	<i>L</i>	<i>L</i>	10.8
A social issue created by the tourism - Drinking culture	<i>L</i>	<i>L</i>	<i>L</i>	<i>L</i>	<i>L</i>	7.7
A social issue created by the tourism - Eve-teasing of local women	<i>M</i>	<i>L</i>	<i>L</i>	<i>L</i>	<i>L</i>	9.2
Social inequalities created within the community due to tourism	<i>H</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	16.9
Preservation of local art and culture due to tourism (+)	<i>L</i>	<i>L</i>	<i>M</i>	<i>M</i>	<i>L</i>	10.8
Improvement in the functioning of local institutions like Panchayat or EDC due to the growth of tourism(+)	<i>M</i>	<i>M</i>	<i>H</i>	<i>M</i>	<i>L</i>	15.4
Problems from local people to tourists	<i>H</i>	<i>L</i>	<i>L</i>	<i>L</i>	<i>L</i>	10.8

Indicators of Economic Carrying Capacity**Table 9: Ratings for Economic CC- Bhitarkanika**

Indicators	Rating given by Experts (L,M,H)					
	1	2	3	4	5	Final PIU
Increased employment or increased dependence of local people on tourism for their livelihood (+)	<i>H</i>	<i>H</i>	<i>H</i>	<i>H</i>	<i>M</i>	43.8
Increased cost of living in around the tourism zone.	<i>L</i>	<i>L</i>	<i>M</i>	<i>H</i>	<i>M</i>	28.1
Change in resistance towards man-animal conflict due to increased earnings from tourism(+)	<i>M</i>	<i>M</i>	<i>M</i>	<i>L</i>	<i>M</i>	28.1

Indicators of Visitors' Experience based Carrying Capacity**Table 10: Ratings for Visitors' CC- Bhitarkanika**

Indicators	Rating given by Experts (L,M,H)					
	1	2	3	4	5	Final PIU
Pollution in the tourism zone	<i>H</i>	<i>M</i>	<i>M</i>	<i>H</i>	<i>L</i>	16.2
Overcrowding inside or outside PA	<i>H</i>	<i>M</i>	<i>H</i>	<i>M</i>	<i>H</i>	19.1
Quality of guides and the interest generated by them in nature (+)	<i>M</i>	<i>H</i>	<i>M</i>	<i>H</i>	<i>L</i>	16.2
Interpretation facilities (+)	<i>M</i>	<i>L</i>	<i>H</i>	<i>L</i>	<i>M</i>	13.2
Feeling of worthiness of the visit to PA (+)	<i>H</i>	<i>H</i>	<i>M</i>	<i>M</i>	<i>L</i>	16.2
Willingness for another visit (+)	<i>H</i>	<i>H</i>	<i>M</i>	<i>H</i>	<i>M</i>	19.1

Calculation of Carrying Capacity Impact Unit (CCIU)

Carrying capacity Impact unit is calculated by multiplying IQU of each indicator with the respective PIU. It signifies the impact that the indicator has been subjected to and so is important in demarcating the components that are impacted and those, which are not.

Ecological carrying capacity

Table 11: Calculation of Ecological CCIU - Bhitarkanika

Indicator	CCIU
Less animal sighting during the trip inside the Bhitarkanika	3.49
Crowding of launches around wildlife	8.91
Aggressive behaviour of wild animals towards launches	13.08
Avoiding an area previously used by animals	7.01
Increased suspended matter and disturbance of bottom sediments	5.48
Reduction of ocular forest quality in around tourism zone	7.48
Awareness generated about the environmental protection among the visitors(+)	1.71
Importance given to wild animals by local people(+)	9.35
Pollution in the tourism zone - Air pollution, Noise pollution or solid waste	9.60
Efforts in waste management by tour operators (+)	1.87

Total carrying capacity impact unit for ecological aspects = 67.98% or 0.68

Facility carrying capacity

Table 12: Calculation of Facility CCIU - Bhitarkanika

INDICATORS	CCIU
Legal restrictions faced during construction of facility	10.7
Rate of growth of tourism in this area leading to more facilities being created	13.3
Water or natural resources shortage faced by facilities	5.2
Objections from the local people against the facility	11.9
Willingness of the local people to sell land for facility construction	11.4

Total carrying capacity impact unit for Facility aspects = 52.5% or 0.53

Social carrying capacity

Table 13: Calculation of Social CCIU - Bhitarkanika

INDICATORS	CCIU
A social issue created by the tourism - Alien culture	17.2
Nuisance created to the local people by tourists	9.3
A social issue created by the tourism - Drinking culture	6.4
A social issue created by the tourism - Eve-teasing of local women	9.2
Social inequalities created within the community due to tourism	11.3
Preservation of local art and culture due to tourism (+)	1.1
Improvement in the functioning of local institutions like Panchayat or EDC due to the growth of tourism(+)	1.5
Problems from local people to tourists	10.8

Total carrying capacity impact unit for Social aspects = 66.9% or 0.67

Economic carrying capacity

Table 14: Calculation of Economic CCIU - Bhitarkanika

INDICATORS	CCIU
Increased employment or increased dependence of local people on tourism for their livelihood (+)	26.3
Increased cost of living in around the tourism zone.	23.4
Change in resistance towards man-animal conflict due to increased earnings from tourism(+)	12.2

Total carrying capacity impact unit for Economic aspects = 61.9% or 0.62

Visitors' Experience based carrying capacity

Table 15: Calculation of Visitors' experience based CCIU - Bhitarkanika

INDICATORS	CCIU
Pollution in the tourism zone	9.7
Overcrowding inside or outside PA	12.7
Quality of guides and the interest generated by them in nature (+)	1.1
Interpretation facilities (+)	2.2
Feeling of worthiness of the visit to PA (+)	9.7
Willingness for another visit (+)	12.7

Total carrying capacity impact unit for Visitors experience aspects = 48.2% or 0.48

Calculation of Component Important Values (CIV)

Table 16: CIV for Bhitarkanika PA

COMPONENT	1	2	3	4	5	FINAL CIV
Ecological	50	45	45	55	40	47.0
Facility	10	15	10	10	10	11.0
Social	10	10	15	15	10	12.0
Economic	20	15	20	10	30	19.0
Visitors Experience	10	15	10	10	10	11.0

Calculation of total Carrying Capacity left for tourism activity

The total impact on Carrying capacity of Bhitarkanika Sanctuary due to different tourism activities can be calculated as follows:

Table 17: Total CC left for Tourism activity- Bhitarkanika

COMPONENT	CCIU	CIV	% OF CC LEFT FOR TOURISM
Ecological CC	0.68	47.00	31.95
Facility CC	0.53	11.00	5.78
Social CC	0.67	12.00	8.02
Economic CC	0.62	19.00	11.76
Visitors' experience based CC	0.48	11.00	5.30

Thus the Total Carrying Capacity left in Bhitarkanika Sanctuary for tourism activity = **62.8%**. From the standard table it can be seen that the impact produced by tourism on the carrying capacity of Bhitarkanika Sanctuary is **LOW (60 - 80%)**

Discussion of the Results

The study result shows that the Carrying Capacity of Bhitarkanika Sanctuary is only 62.8% of its limit (a protected area has a 100% carrying capacity, when it is left undisturbed).

Table 18: Discussion of the Results

Component	Optimum level of CC	Present level of CC
Ecological CC	47.00	31.95
Facility CC	11.00	5.78
Social CC	12.00	8.02
Economic CC	19.00	11.76
Visitors' experience based CC	11.00	5.3

The table shows that the components most affected are the visitors' experience based cc (operating at 48% of its maximum capacity) and facility (operating at 53% of its maximum capacity) based CC. Both, facility and visitors' experience based carrying capacity has reached the moderate impact range (infact visitors' experience based CC reaching high impact range) whereas ecological, social and economic based CC is about to reach the moderate impact range.

Ecological carrying capacity:

The main reasons for low scoring of ecological CC are the noise pollution, which affects visitors' satisfaction and puts immense pressure on the fauna of the region. Most of the boats being used in the region operate above permissible sound limits and there movement in the sanctuary gets irritating for the visitors as well as villagers living in the periphery area. Sound pollution is the main reason which visitors and forest department officials see as the reason behind less sighting of wild animals. For better sighting of wild animals tourists feel that watch towers be more inside the forest and the water holes be at a greater distance from watchtowers than the existing norm which is being followed.

Also efforts of tour operators in waste management is not considered high enough which leads to low scoring of ecological CC.

The other reasons cited for low scoring are increased suspended matter and disturbance of bottom sediments due to movement of launches in channels which might be leading to the disturbance in the food chain of marine animals. Certain channels are narrow but have unrestricted movement of launches, as they are preferred routes of the tour operators. Crowding of launches around wild animals is not happening regularly but it was reported that mechanized boats are the major offenders as they crowd around crocodiles or water monitors seen on the shore.

Awareness generated among the visitors' about the environmental protection fell below par because of lack of interpretation facilities and quality of naturalists scoring low on

Indicator quality unit (IQU). Thus trips are moderately sensitizing visitors' and it can be brought to a higher level by improving the infrastructure and training of staffs.

Mangrove ecosystems like Bhitarkanika are very fragile ecosystems and therefore require regular monitoring of its indicators. Indicators (c), (f) and (i) require closer monitoring over longer period of time to have clearer picture as these indicators haven't been studied in detail.

Facility carrying capacity:

The main reasons for the low scoring of Facility CC is the high rate of growth of tourists leading to more facilities being created which are unchecked by any kind of legal restrictions which might force the lodge owners to comply to environmentally sensitive design and operations. The launches operating in the area also do not comply to environmentally sensitive operations. The launches carry visitors' more than the permissible limit and the waste management in the launches is rudimentary.

The construction activity will continue as it faces no objections from the local people (**77% people interviewed have no objections**) as they are willing to sell land for facility construction (**73% people interviewed are willing to sell land for facility construction**).

The other major reason cited for the low scoring of facility CC is the water shortage faced by facilities. This also leads to low visitors' satisfaction, as the tourists are not used to using water supplied from the ponds in the vicinity of the facility area.

Social carrying capacity:

Social CC has not been highly affected by the tourism activity. The main reason for it is the low level of contact between the villagers and the tourists. The major complaint of villagers have been their absence from the planning process for tourism activity. This has not allowed their local art and culture to get prominence.

Local community is not complaining about the social evils, which generally happen at tourism sites due to alien culture. Infact no case of nuisance was reported to the researchers which also suggests the limited interaction between the tourists and local community.

A few villagers were of the suggestion that limited interaction with tourists has increased social inequalities within the community as few **villagers (33% respondents agreed to it)** have become launch owners and suppliers of raw materials to the tourists.

The institutional mechanism has not reached a stage to initiate a community based ecotourism programme but the data (**75% respondents were interested in community based ecotourism**) indicate a wide popularity towards the idea of a community based ecotourism venture. For this to succeed, economic support as well as training from the authorities will be required.

Economic carrying capacity:

The tourism activity is not adversely affecting the economic aspects of the local community. Though with the increase in the tourists numbers there has been rise in the

job opportunities but it is widely affecting the overall economy as most of the job holders, tour operators and raw material suppliers are from outside. There has been slight increase in the cost of living mainly due to rise in the prices of edible goods and land in the periphery area.

Little change in resistance towards man-animal conflict due to increased earnings from tourism is showing in the study which clearly shows that earnings from the tourism have not percolated to the lowest level.

Visitors' experience based carrying capacity:

The major complaint against the visitors' experience aspect was the absence of quality guides (**93% tourist showing dissatisfaction over guides performance**) and interpretation of the tour (**83% tourist showing dissatisfaction over the standard of information dissemination**) of Bhitarkanika. This clearly shows that tourist value good interpretation. Though there is an interpretation center at Dangmal but Forest department **data shows that only 24% of the tourists coming to Bhitarkanika avail its facility**. To reduce the under utilization of the interpretation facilities authorities must develop an amalgam of contents which keeps in mind the visitors' experiential interests, content interests, experiential dislikes and mental capabilities. In spite of this, **54% tourists agree that the tour had generated awareness** about the environment protection. **67% tourists were willing for another visit**.

Most tourists were of the opinion that there was no overcrowding in the tourism zone (but they stressed on setting of lower limits for the number of tourists to be allowed in a launch). 60% respondents were of the opinion that there is no pollution in the tourism zone but at the same time they were not sure about the practices of the tour operators in dealing with the wastes.