Master Plan of Ecotourism Programme for Idukki Wildlife Sanctury

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MASTER PLAN OF ECOTOURISM PROGRAMMES FOR IDUKKI WILDLIFE SANCTUARY

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Preface

Idukki Wildlife Sanctuary is a compact protected area blessed with breath-taking scenic beauty, surrounded by Idukki reservoir on three sides and with undulating hilly terrain with lofty peaks and precipitous rocks. The tourism potential of this landscape remains relatively unexplored. As a Protected Area of prime importance in the region, Idukki Wildlife Sanctuary demands special attention regarding the conservation of the habitat and the livelihood security of the local people living in fragmented habitations. Integration of the sustainable biodiversity conservation with the livelihood support system of the area has evolved as the management objective of top priority.

Periyar Foundation is drawing out on the experiences gained in this field by providing technical and institutional support for evolving a holistic management strategy for the landscape. The present master plan is an attempt in that direction.

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Abbreviations Used

CBET - Community Based Ecotourism Programmes
DTPC - District Tourism Promotion Council
EDC - Ecodevelopment Committees
F& WLD - Forest and Wildlife Department
FD (PT) - Field Director, Project Tiger
GL - General
GO - Government Order
GoI - Government of India
hrs - Hours
ICC - Idukki Conservation Council
IWS - Idukki Wildlife Sanctuary
KFD - Kerala Forest Department
KSEB - Kerala State Electricity Board
m - Meters
MoEF - Ministry and Environment and Forests
MoU - Memorandum of Understanding
MP - Management Plan
MS - Manuscript
mts - Minutes
NWFP - Non Wood Forest Products
PA - Protected Area
PCCF - Principal Chief Conservator of Forest
PFM - Participatory Forest Management
PWF - Park Welfare Fund
Sq.km - Square Kilometers
SWOT - Strengths, Weaknesses, Opportunities and Threats
UK - United Kingdom
USP - Unique Selling Property
VSS - Vana Samrakhsana Samithi
WL - Wildlife
WWF - World Wide Fund for Nature
1. Introduction

Protected area management the world over is at cross roads. Biodiversity as the most valuable common property resource needs maximum attention and concern of the whole mankind. Protecting the wilderness with the diversity of the flora and the fauna for the posterity with the active partnership of the local communities has been accepted as the policy of top priority today. The state obviously is considered to be the trustee of all natural resources. The people have all along been traditionally dependent upon the natural bio-resources for their subsistence income supplementing and socio cultural well being. (GoI, 2002). Management of the Protected Areas cannot be contemplated in isolation from the socio economic issues of the local communities. The resources meant for sustainable public use for the many generations to come thus become part of the public trust and ownership.

2. Background:

Consequent to the enactment of Forest policy, 1988, state governments started developing appropriate strategies for the management of PAs by involving local communities. Attempts were also made to successfully integrate the concerns of biodiversity conservation and livelihood security of forest dependant communities. Forest based ecotourism was identified as an important mechanism for achieving the same in this context. Changes were also made in the Wildlife (Protection) Amendment Act 2002 for legalising the participatory management approach. Following this, the state government issued appropriate orders and guidelines for initiating ecotourism in PAs and forest areas. As per GO (MS) 18/2002 F & WLD Dated 02-04-2002 Government of Kerala empowered the Vana Samrakshana Samithies and Forest Department jointly for levying a fee on tourists to meet the livelihood requirements of forest dependant communities and improve forest protection. The Principal Chief Conservator of Forests was designated as the authority for approving various ecotourism programmes and their rates. Accordingly guidelines were issued vide letter No.PFM/GL/4/2003 dated 10-3-2004. As per these guidelines, locations in forest areas with potential for ecotourism are
to be identified by the forest department and the community based organizations (EDCs / VSSs).

The implementation of Community Based Ecotourism (CBET) Programmes in Periyar Tiger Reserve over the last several years has given valuable lessons for future. It is now established beyond doubt that CBET in Periyar has contributed significantly to park protection and visitor satisfaction while ensuring a sustained livelihood support to the local community. Based on the experiences, it is felt that similar initiatives may be attempted in other PAs as well. It is in this background that the PA managers, staff and EDCs of Idukki Wildlife Sanctuary sat together and formulated the protection oriented community based ecotourism programmes including the benefit sharing mechanism contained in this Master Plan seeking approval of the competent authority.

3. About the area:

Idukki Wildlife Sanctuary (IWS), an enchanting place marked with steep mountains and undulating hills and valleys, came into existence in 1976. The total area of the sanctuary is 105.364 sq.km, which includes 33 sq.km water body of the Idukki reservoir. The sanctuary is part of the high range forests, fragmented and isolated from the main tract of forests between Munnar Hills and Periyar Tiger Reserve due to the development of dams and associated human settlements. The entire sanctuary forms the catchment of Idukki Hydro Electric Project and the Idukki arch dam is the first of its kind in India and the second biggest in Asia. The forests surrounding the reservoir are blessed with floristic diversity especially of lower flora such as Lichens, Fungi, Ferns etc.

The altitude ranges from 450 to 1272 m and the highest peak is Vanjur Medu (Kizhakkalachi, 1272m). The climate in general is cool and humid with comparatively high rainfall received during both south west and north east monsoon. Average rainfall is 3800 mm and the maximum precipitation is during July-August. Temperature varies from 13°C to 29°C. The entire sanctuary is drained by Periyar and Cheruthoniyar and a number of tributaries of these rivers.
4. Location

The sanctuary is located in the Thodupuzha and Peerumedu taluks in Idukki district between $76^\circ55'9"$ East longitude and $9^\circ53'30"$ North latitude (map 1). The sanctuary headquarters is at Vellappara, 2 km from District Headquarters at Painavu and can be reached from Cochin International Airport (120km) and Kottayam Railway station (120 km).

5. Forests & Biodiversity

Forest types include West Coast Tropical Evergreen Forests, Semi Evergreen forests, Moist Deciduous Forests, Hill Sholas and Grass lands. The sanctuary has rich floral diversity. However, the flora and fauna of the sanctuary yet need to be studied extensively. About 200 sp of plants have been described so far.

The Tropical evergreen forests in the sanctuary constitute about 15% of the total area and are seen towards the south-western and western sides of the sanctuary mainly in Vakavanam, Vellakamalai and Anjilithandu areas. This climax vegetation consists of large trees of *Dipterocarpus indicus*, *Palaquium ellipticum*, *Calophyllum polyanthum*, *Vernonia arborea*, *Mesua ferrea*, *Hopea parviflora*, *Bombax ceiba*, *Cullenia exarillata*, *Eleocarpus tuberculatus*, *Dysoxylum malabaricum* and *Canarium strictum* etc. Reeds are also found in this area. Undergrowth consists of *Strobilanthus sp*, *Psychotria sp*, *Laportea crenulata*, *Curcuma sp* and *Clerodendron sp*.

Semi evergreen forests are confined to sheltered pockets and basins and found at Anappallam, Muthichola, Kannamkayam, Vellakanam, Konnakuzhi and near Arakkapadam and constitute about 22% of the total area. *Persea macrantha*, *Chionanthus mala-elangi*, *Macargange peltata*, *Bischofia javanica*, *Artocarpus hirsuta*, *Lagerstroemia microcarpa*, *Cinnamomum zeylanicum* etc. are the dominating trees found in this type of forests. There are plenty of openings where *Trema orientalsis*, *Dillenia pentagyna* etc. come up. The undergrowth is the same as that of the evergreen type.

Moist deciduous forests are present at Karara, Vanamavu, Anappallam, Konnakuzhi, Keerimudi, Nellari, Vellakamalai and Vellakanam and constitute about 43% of the total area. Main tree species found in this type of forests are *Tectona grandis*, *Dalbergia latifolia*, *Lagerstroemia microcarpa*, *Pterocarpus marsupium*, *Terminalia*
paniculata, Terminalia bellerica, Grewia tilaefolia etc. Undergrowth consists of Lantana camara, Eupatorium odoratum, Zizyphus sp., etc. Bambusa arundinacea is also present.

The sheltered forests on the hilltops contain a few high altitude montane forests, known as hill shola and constitute about 1% of the total area. They occur at Kanankoovi, Varayattumudi, Chenthuva, Paramedu, Chempanmali and Kizhakkalachi.

All the hill slopes, where soil depth is less, are covered with grasses and constitute 19% of the total area. The grasslands comprise of Cymbopogon sp., Heteropogon contortus, Apluda mutica etc. growing up to 2 meters height. These grasslands are mainly result of annual fires. In the lower slopes savannah like situations exist and amidst the grasslands, fire resistant trees like Anogeissus latifolia, Bridelia retusa, Emblica officinalis, Careya arborea, Kydia calycina etc. are present.

As per the available records, faunal diversity of the sanctuary consists of 27 species of mammals, 201 species of birds, and about 10 species of reptiles. The common animals found are Elephant, Sambar, Barking Deer, Mouse deer, Bonnet macaque, Nilgiri Langur, Malabar giant squirrel, Wild dog, Wild boar, Porcupine, Jackal, Indian Giant Squirrel etc. Due to fragmentation and resultant isolation, animals like Gaur, Tiger and Panther are not reported from the area.

6. PA – People Interface

There are 12 tribal settlements within the sanctuary with an area of 711.26 ha and a population of about 2300 people. These settlements are located on the southern side of the sanctuary in Kizhukanam section. The hamlets were translocated during the construction of the dam. The tribes belong to three communities, viz, Oorali, Ulladan and Malayarayan. Most of them are agricultural laborers and small farmers. They also depend on the sanctuary for subsistence requirements such as firewood, NWFPs, green manure, grazing cattle, fishing etc. There are also eight villages on the fringes of the sanctuary. The fringe area villages also face acute problem of unemployment and many are easily fall trap to illegal activities like felling of trees and smuggling of valuable forest produce. Many of the fringe area settlers have come during the construction of Idukki dam and associated structures and have been heavily depending on the sanctuary resources for livelihood.
7. Management Objectives and Constraints

The objectives of management of the PA as envisaged in the Management Plan (MP) are, protecting and conserving the ecological integrity of the area, enriching degraded habitat by augmenting natural vegetation cover, undertaking ecodevelopment activities for the tribal and fringe area population, promoting Ecotourism activities etc.

With the above socio economic conditions of the people living in and around the sanctuary in view, the major threats for achieving the objectives are pressures on the forests in terms of grazing, firewood collection, poaching, encroachments, unauthorized collection of NWFP, fishing, forest fires, human – wildlife conflict etc. In order to achieve the objectives of management, the human pressures on the forests are to be reduced to minimum by opening up alternative livelihood resources. Another important management constraint is inadequacy of trained staff.

8. Initiatives for PA – People Cohesion

With a view to minimizing the negative dependency on PA resources and ensuring livelihood security of the local community along with strengthening protection of the area, ecodevelopment activities were initiated since 2002. Nine Ecodevelopment Committees (EDCs) were constituted involving the inhabitants of the 12 tribal settlements and another three EDCs were formed involving the fringe area population thereby covering majority of the dependent communities. Socio economic survey, preparation of microplans and some entry point activities have been undertaken so far. However, a full fledged implementation of the ecodevelopment initiatives could not be realized due to paucity of adequate resources. The immediate requirement is to develop income generation programmes through sustainable and viable measures for ensuring livelihood securities and to reduce the negative dependency on the PA.

9. Process and Methodology:

A workshop, involving the participation of various stakeholders, was organized on 22nd June 2005 at Idukki Wildlife Sanctuary, to evolve site specific, protection-oriented and community-based ecotourism programmes. The social acceptability of the ecotourism programmes can be ensured by formulating them through this process. The participatory process will also bring in necessary community empowerment which is
very vital in running such programmes in a sustainable manner. The widely accepted methodology for this is SWOT analysis.

**SWOT Analysis**

A SWOT analysis of the PA with respect to ecotourism potential has been carried out in the workshop. The various strengths, weaknesses, opportunities and threats were identified as given in the box 1 below.

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<td>- Unexplored tourism potential of the area</td>
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<td>- Support of the prevailing policy environment</td>
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<td>- PA-people coordination</td>
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<td><strong>Weaknesses</strong></td>
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<tr>
<td>- Inadequate infrastructure facilities</td>
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<td>- Lack of appropriate institutional mechanism</td>
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<td>- Inter agency conflicts</td>
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<td>- Lack of awareness</td>
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<td>- Lack of proper training on attitudinal change to the staff at all levels</td>
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<td><strong>Opportunities</strong></td>
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<tr>
<td>- Prospects for genuine community based ecotourism programmes</td>
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<tr>
<td>- Active involvement of the local people in the conservation efforts</td>
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<tr>
<td>- Scope for interagency cooperation</td>
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<tr>
<td>- Support of local community in wildlife monitoring</td>
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<tr>
<td>- Improving nature education and awareness</td>
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<td><strong>Threats</strong></td>
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<tr>
<td>- Mounting pressure of mega developmental issues</td>
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<td>- Over exploitation of resources and overkill of the programme.</td>
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<td>- Prevalence of illegal activities such as hunting, quarrying in the close proximity of the PA, excessive cattle grazing, illegal fishing etc.</td>
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10. **Rationale of the Proposed Ecotourism Programme**

The MP of the sanctuary envisages the 33sq. km water body of the Idukki reservoir and a few trails in the buffer zone as tourism zone. It also states “Conducting tourism with the help of local tribals and without disturbing the integrity of the sanctuary
will provide income that can be used for the ecodevelopment activities as well as for sanctuary management. Therefore, participatory tourism development programme will be prepared as part of ecodevelopment initiative in Idukki” (MP, p.26). Being the part of protection strategy for the PA, special protection camps are being done in the interior parts of the PA. The WWF observes “any responsible tourism that can help to generate awareness of and support for conservation and local culture, and create economic opportunities for the countries and communities” (WWF, 2001). In these contexts, a comprehensive ecotourism plan for the sanctuary has been envisaged, “in consonance with the conservation interests of PA and all wildlife”(GoI, ….), as “Management Options for Coexistence” (Knight, 2002) to meet the following objectives:

- Strengthen protection with the active involvement of local community.
- Ensure livelihood security by evolving CBET.
- Improve park interpretation.
- Enhance visitor satisfaction

11. **Identified Programmes**

The essential prerequisite for formulating any ecotourism programme is to work out site specific strategy for dealing with protection issues of the area. During the interaction with the members of EDCs, many areas were revealed to be prone to poaching, excessive grazing etc. (e.g., the areas of Kuvalayattom, Kothapara and Kumarikulam). Ecotourism programmes should not be taken up in isolation, but as part of the holistic solution to the prevailing problems. Hence intensive training programmes are to be designed and imparted to the EDC members as well as staff at all levels, for attitudinal change. The revisiting of microplans incorporating the local issues and solutions (e.g., forming grazing group for controlling the grazing activities) is also important. Ecotourism programmes should also be viewed as a tool for sustaining the protection measures thus undertaken.

In this background, the following programmes are identified after SWOT analysis:
1. Trekking and Camping (one night and two night) - *Wildernite*

2. Day Trek – *Walk in the Woods*

3. Solitary Island Camping - *Roost in the Green Lagoon*

4. Boat Cruise

11.i. **Trekking and Camping**

Branded as “*Wildernite*”, the programme is aimed at patrolling and camping in vulnerable areas with active participation of the EDC members and optimum number of genuine ecotourists. This will strengthen the protection of PA and provide livelihood support for the local community involved. As the programme is designed to provide a first hand experience of the wilderness, it will also enhance the quality of visitor experience.

The programme has two modules, one with two-day’s trek and one-night camp and the other with three-day’s trek and two-night’s camp.

**Module I** consists of trekking through the woods and camping in the night in a makeshift tent. The programme starts at 13.00 hrs (after lunch) from Vellappara and after a short boating (20 mts) reaches the place called IB Thandu. From there, proceeds to the camp site at a place called Chembakassery after about (5 km/2 hrs) trek. The next day the team will trek to Uppukuzhy (8 km/ 3 hrs) and from there return to Vellappara by boating (30 mts). A maximum number of four guests can be entertainment at one slot and a maximum of six programmes will be offered per week. Guests will be accompanied by two trained guides from EDCs and one armed forest personnel. Light vegetarian food (dinner and breakfast) and refreshment will be provided in the programme.

**Module II** is a combination of boating, trekking and camping in the nights at makeshift tents. The programme starts at 13.00 hrs (after lunch) from Vellappara and short boat cruise to Venganum (1hr) and then trek (7 km/3 hrs) to Muthuchola (1st day camping site). Camping is on the tree top Machan. Next day, the team treks (8 km/4 hrs) to Vagavanam (2nd day camping site). On third day, the team treks (7 km/4 hrs) back to Venganum and then to Vellappara via boat (1 hr). A maximum number of four guests can be entertainment at one slot and a maximum of three programmes will be offered per week. Guests will be accompanied by two trained guides from EDCs and one armed
forest personnel. Light vegetarian food (2 dinner, 2 breakfasts and second day lunch) and refreshments will be provided in the programme.

11.i.a Regulations

- The duration of Module I will be 24 hrs and that of Module II will be 48 hrs.
- The Module I can have a maximum of 6 slots in a week with one holiday and Module II can have a maximum of 3 slots in a week with one holiday.
- In the case of Module I, the party will start after 13.00 hrs and come back before lunch on the next day.
- In the case of Module II, the party will start after 13.00 hrs and come back on the 3rd day before lunch.
- There shall not be any overlapping of camps.
- One Module I team and one Module II team shall be simultaneously catered.
- If there is no Module II team on a day, the camp site of Module II can be utilized for a Module I team, if required.
- Maximum number of tourists in a team shall be four and the strength of the team shall not exceed eight.
- One armed guard should invariably accompany the team.
- The tourists should be in the age group of 12 and 55.

11.ii Day Trek

Branded as “Walk in the Woods”, the programme is a day time trekking programme starting from Valavukode via Kothapara to reach a place called Vakavanam (4 kms / 2 hrs). After lunch, the visitors will be taken back to Valavukode via Kuvalayattom (5 kms/ 3 hrs). This is a guided trek accompanied by 3 guides and the maximum number of guests per slot is limited to 10.

11.iii Solitary Island Camping

Commercially branded as “Roost in the Green Lagoons”, the programme gives the visitor an opportunity to camp in the jungle surrounded by the sprawling water body in perfect peace and tranquility.

Programme starts at 16.00 hrs at Idukki boat landing. Accompanied by armed forest personnel, the visitor will be taken for boating (45 mts) to a place called
Vairamani, where facility for a night camp will be provided by EDC members. The visitor will be given simple vegetarian food and tented camping facility with two men tents, groundsheets and sleeping bags. The visitors can have first hand experience of jungle camp. They can leave the camp after breakfast by around 8.00hrs, in the boat back to boat landing at Idukki.

Similarly another camp can be set at Anchuruli after 1 hr boating from the boat landing. The food and tented camping facilities will be provided by the EDC members and they will be accompanied by armed personnel.

**Risk Coverage**

- The whole team shall be brought under insurance coverage for all accidents during the programme.
- The tourists participating in the programme should undertake responsibility of their personal risk and loss. However, statutory security measures will be provided.

**Code of Conduct**

The tourists, staff and guides should abide by the code of conduct presented.

11.iv  **Boat Cruise**

Though IWS has an ample water body consequent to the construction of Idukki and Cheruthoni dams, picnic boat cruise is limited to seasonal guests and the same is under restrictions. The present operators (KSEB) have expressed that the provision of boating facility seasonally incurs unnecessary costs and responsibilities. Keeping the crafts when they are not use, and its transit otherwise is unavoidable, in case they are being utilized throughout the year. And it is known that “the Hydel Tourism” promoted by the KSEB is on the anvil for Idukki reservoir. In these circumstances, the proposed Idukki Conservation Council (ICC) can explore the possibility of conducting picnic boat cruise, no compromise with dam safety, tourist safety and park protection.

12. **Marketing strategy**

The programmes, except Boat Cruise, can be marketed through the following methods.
1. Guests directly approach the booking cum information office (Tourists Facilitation Centre).
2. Bookings by mail.
3. Canvassing by staff or in house guides.
4. Guests brought by other stakeholders.

Since the programmes are new to the region, they have to establish goodwill among the guests. The same will take some time. In the mean time, the guest can only be brought by canvassing. In this case, there must be some kind of incentive for popularizing the items. Since the staff and/or in house guides are, one way or other, benefiting directly from the programmes, they must have the incentive to promote the programme. For outside stake holders like taxi drivers, tour operators, tourist guides from outside are to be given a nominal market promotion charge to invoke participation as an introductory offer. Development and up linking of the official website of the sanctuary can also be attempted as a viable strategy for marketing.

13. Socio-economic & ecological aspects

The National Wildlife Action Plan states “the objective of wildlife tourism should be to inculcate amongst the visitors an empathy for nature, both animate and inanimate and to provide a communion with nature rather than to merely ensure sightings of maximum number of animal populations and species……..it must primarily involve and benefit local communities and the first benefits of tourism activities should flow to the local people” (GoI, 2004). Since all the ecotourism programmes identified for the PA dovetail the park conservation with livelihood security of the local people, they satisfy social, economic and ecological parameters. The people who are currently depending on the PA resources will get some alternative means of livelihood to wean away detrimental forest resource dependency. There is possibility of getting a handsome surplus amount after meeting the operational expenses from the programmes. The economic impact of the earnings from the programme has series of dimensions. The distributive aspect of the earning is equitable. The state government, the PA, EDC people, promoters and local shop owners will be benefiting out of the programme. Park protection will be intensified by getting additional force for perambulation and camping in vulnerable areas of the
park. Regular ecological monitoring can be done through participatory method. Therefore, these programmes are viable socially, economically and ecologically.

14. The Proposed Institutional Arrangement:

- The CBET in IWS will be managed by the park authorities through a federated body of the EDCs.
- To co-ordinate the activities and operation of the confederation an apex body called “Idukki Conservation Council” shall be formed.
- Such a Council will have a General Body constituted by the Executive Committee of the confederation, ex-officio secretaries of all the EDCs under the jurisdiction of the PA, Assistant Conservator of Forests in the Office of the FD (PT) and one representative from the front line staff of Idukki Wildlife Division as nominated by FD (PT) as committee members, the Forest Range Officer, IWS as Member Secretary and Wildlife Warden, Idukki Wildlife Division as Chairman. The general body has the power to take decisions on general policy matters of the Council.
- The Executive committee of the Council will be constituted with two representatives from the Executive committee of the confederation (at least one member must be a tribal), Assistant Conservator of Forests in the Office of the Field Director, Project Tiger, Kottayam and one representative from the front line staff of Idukki Wildlife Division as nominated by FD (PT) as members, Wildlife Warden Idukki as the Chairman and Assistant Wildlife Warden as the ex officio Secretary. The executive committee will look after the day to day affairs of the council.
- An Advisory Body shall also be formed with Chairman of ICC; one Technical expert from Periyar Foundation, Secretary, DTPC, Idukki; Nodal Officer, Hydel Tourism, Idukki District, Presidents of Upputhara and Vazhathopu Grama Panchayats. This committee will advise the Council on technical matters.
- The confederation must have an approved microplan. The activities of the confederation shall include supporting ecodevelopment activities, conducting
ecotourism programmes and also ensuring reciprocal commitments for forest management. There shall be specific agreed arrangements for the sharing of benefits. The confederation shall also earmark a part of the revenue generated for park related activities that also includes meeting ways and means of park administration.

- The guides for conducting the programmes will be selected from among the participating EDCs by the confederation and they will be trained appropriately.
- The trained guides will be deployed for the programmes on rotation basis.
- Each guide will have to attend a minimum number of patrolling programmes either with tourists or without tourists in a month.
- A separate bank account will be opened by the confederation for carrying out the financial transactions related to the programmes.
- The bank account shall be operated jointly by the President of the confederation, and one elected member of from among the EDC Chairpersons and ex-officio of the confederation.

15. **Benefit sharing:**
- The following shall be the sharing pattern of total income generated from the Ecotourism programmes.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government’s revenue share</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>Promotion fee</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Core fund</td>
<td>85%</td>
</tr>
</tbody>
</table>

- The net income generated from the ecotourism programme will form the Core fund of the confederation
- All guides selected in the programme will be paid a reasonable lumpsum amount as decided by the Council from time to time by means of cheque from the core fund.
• The residual amount will be the Core Fund, which will be utilized for village level activities as for the day to day ways and means expenses for the PA administration as per the approved microplan of the confederation

16. Budgeting:

The budgeting given below is based on the assumption that when the programmes are launched the occupancy will be 30% of the carrying capacity of the programmes. The initial kick start expenditure for the launching of the programme is estimated to be Rs 3.00 Lakhs. A proposed budget for the launching year, i.e. 2005-06, has been given in the Annexure. The income expected from the programmes is Rs 25.18 Lakhs. The estimated expenditure inclusive of the insurance, provision for support for the sanctuary management activities education and awareness and research and monitoring is Rs 24.53 Lakhs. The surplus for the year will be Rs 0.65 Lakh, after allocating a reasonable amount for ecodevelopment activities. Idukki Conservation Council will function on the guidelines provided in the approved annual budget and Annual Plan of Action and monitor the expenditure as per the prevailing regulatory mechanism.

17. Conflict Resolution:

• The power to adjudicate disputes between the participating EDCs and confederation is vested with Wildlife Warden, Idukki and between the Council and the Park Management will be vested with the FD (PT), Kottayam.

• The FD (PT) will be the appellate authority for all the unresolved disputes and the power to control or withdraw any or all the programmes will be vested with him.

18. Monitoring protocol

Before implementing the various programmes, the baseline data of the criteria and indicators have to be assessed for the environmental impact monitoring with respect to every programme. The effect on soil, vegetation, frequency of animal and bird sighting, diversity index, quality of water, littering, pollution level etc. have to be studied in detail and should be followed up with periodic monitoring of the various criteria and indicators at least once in three months. The following are some of the indicators that need special attention:
<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Indicators</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vegetation profile: to study the quality of the environment and to quantify improvement/degradation</td>
<td>By taking 10Mx 10M plots in the vicinity of trails and camping area and conducting periodic assessment and measurements. Eg: No. of stumps etc.</td>
</tr>
<tr>
<td>2</td>
<td>Littering</td>
<td>By assessing the plastic or other debris occurring in the observation plots</td>
</tr>
<tr>
<td>3</td>
<td>Fire occurrence and other illegal activities</td>
<td>By participatory monitoring exercise</td>
</tr>
</tbody>
</table>

The orientation, duration and continuation of the individual programmes should be based on the reports of the ecologist and appropriate alterations may be incorporated subsequently. The council can hire the services of technical experts from outside in this regard for evolving site-specific methodology.

19. **Reciprocal Commitment:**

The members of the EDCs and staff will be carrying out regular patrolling and camping as decided by the park management from time to time as part of their reciprocal commitment towards the protection of the Sanctuary.

20. **Positive Impacts of the Programmes**

The positive impacts of the programmes will be the following:

- Strengthening of the protection of the Sanctuary with the active involvement of the local people.
- Livelihood security to the marginalized and forest dependent community poverty alleviation in the most needed sector.
- Formation of the pool fund which will provide support in terms of the management of the sanctuary and welfare of the local community.
- Trust building and improved relationship between the sanctuary management and the local people.
- Enhancing the nature education value and creating awareness among the public.
- Opportunity to associate with and co-ordinate with the similar initiatives undertaken in the neighbourhood area so that a comprehensive ecological planning for the whole landscape can be evolved.
- Formation of the institutional arrangement which can have liaison with line departments for developmental activities to avail financial support
- Chance to rekindle the cultural identity of the indigenous people by developing their traditional skills.

21. Conclusion

The prospects of the budget as envisaged in this master plan are apparently very ambitious at the very outset. Programme development is a very important initial step of the process. But the essential pre-requisite for launching any programme is creating the destination. For this a concerted effort is required in collaboration with agencies such as KSEB, DTPC etc based on long term strategy and vision. A relatively new destination like Idukki needs special attention in this direction

References

**Annexure 1**

**List of Participants in the Stakeholder Workshop Held on 22.06.2005**

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Designation/Position</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Abdul Bashir, C.A</td>
<td>ETO, Periyar Foundation</td>
</tr>
<tr>
<td>2</td>
<td>Aliyar, A.P</td>
<td>Watcher,</td>
</tr>
<tr>
<td>3</td>
<td>Baby, M.V</td>
<td>Forest Guard, IWS</td>
</tr>
<tr>
<td>4</td>
<td>Basheer, M.M</td>
<td>Forest Guard, IWS</td>
</tr>
<tr>
<td>5</td>
<td>Biju, P.N</td>
<td>AEE, KSEB</td>
</tr>
<tr>
<td>6</td>
<td>Cheriyanjunju, P.P</td>
<td>WW, IWS</td>
</tr>
<tr>
<td>7</td>
<td>Divakaran, P.K</td>
<td>Forest Guard, IWS</td>
</tr>
<tr>
<td>8</td>
<td>Fen Antony</td>
<td>AWW, IWS</td>
</tr>
<tr>
<td>9</td>
<td>Geetha, K</td>
<td>Wildlife Assistant, O/o FD(PT)</td>
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<tr>
<td>10</td>
<td>Gopi</td>
<td>Watcher, IWS</td>
</tr>
<tr>
<td>11</td>
<td>Hari, C.N</td>
<td>HA, Periyar West, Staff representing PF</td>
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<tr>
<td>12</td>
<td>Haridas, Punnavikal</td>
<td>Chairman, Kannampadi EDC</td>
</tr>
<tr>
<td>13</td>
<td>Johnson, K.K</td>
<td>Chairman, Kumarakulam EDC</td>
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<td>14</td>
<td>Joseph, K.V, Kuttanthadam,</td>
<td>Kuvalayattam EDC</td>
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<td>15</td>
<td>Kunjan, C.J</td>
<td>Watcher, IWS</td>
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<tr>
<td>16</td>
<td>Mamachan, Arakkal</td>
<td>Chairman, Memari EDC</td>
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<td>17</td>
<td>Narayanan,. K.C, Kandathil</td>
<td>Punnappara EDC</td>
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<td>18</td>
<td>Ramakrishnan, T.D, Tharamuttathil</td>
<td>Chairman, Kizhukanam EDC</td>
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<td>19</td>
<td>Rajasekharan Pillai, K</td>
<td>Economist, Periyar Foundation</td>
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<tr>
<td>20</td>
<td>Saji, K.G, Kudiyattil</td>
<td>Chairman, Punnappara EDC</td>
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<td>21</td>
<td>Sasi, V.R, Velickal</td>
<td>Chairman, Kollathikkavu EDC</td>
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<td>22</td>
<td>Sathyana, T.R</td>
<td>Watcher, IWS</td>
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<tr>
<td>23</td>
<td>Shaji, K.N</td>
<td>Forester, IWS</td>
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<td>24</td>
<td>Shaji.M.Manakkattu</td>
<td>Secretary, DTPC, Idukki</td>
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<tr>
<td>25</td>
<td>Shine, V.K</td>
<td>Forest Guard, IWS</td>
</tr>
<tr>
<td>26</td>
<td>Sujith, C.K,</td>
<td>Forest Guard</td>
</tr>
<tr>
<td>27</td>
<td>Sunil Kumar, A.G</td>
<td>Forest Guard</td>
</tr>
<tr>
<td>28</td>
<td>Thomas Varkey, Poovikkumkalayil</td>
<td>Kothapara EDC</td>
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<tr>
<td>29</td>
<td>Veeramani, A, Dr.</td>
<td>Ecologist, PF</td>
</tr>
</tbody>
</table>
Annexure 2

Code of Conduct for the EDC Members

1. Do not talk unnecessarily during the programme.
2. Give privacy to the tourist.
3. Do not take any gifts or tips from the tourists.
4. Carrying liquor or any other intoxicant inside the forests should be strictly prohibited.
5. Directions of the accompanying forest officials should be strictly obeyed.
6. Detection of any illegal activity should be recorded and reported.
7. Complaints, if any should be registered with the Secretary through Chairman of the Ecodevelopment Committee.
8. Utmost care should be taken to ensure the safety of the tourists.
9. Under no condition should members of the team abandon or shift the route without proper reason.
10. Show courtesy and respect towards the visitors.
11. Always be in uniform while inside the PA.
12. Always carry the identity card.
13. Monitor and regulate the fishing in the lake. Instances of illegal fishing/fishing in non-permissible zones have to be reported to the concerned staff immediately.
14. Deter any effort to remove materials from the forests, howsoever small it might be.
15. Litter and other rubbish should be removed.
16. It is the duty of each member of the team to see that the other members do not misbehave.
17. Any one who acts against the code of conduct will be immediately disqualified and removed from the EDC.
Annexure 3.

Instructions to the Visitors

To minimize the risk factors and to enhance visitor experience the following instructions have to be strictly followed.

1. Do not approach wild animals unnecessarily.
2. Do not get away from the approved route.
3. Do not carry or use liquor/cigarettes or any other intoxicants.
4. Avoid unnecessary talk / loud noise while trekking and camping in the forests.
5. Avoid littering.
6. Do not play music.
7. Adhere to the rules and regulations of the PA.
8. The decisions of the accompanying forest official would be final.
9. Do not give any gifts or tips to the team members.
10. Avoid bright coloured dresses, perfumes etc.
11. Avoid bathing in unfamiliar waters.
12. Guides are personally known to the department and they carry identity cards.
13. The routes and camping sites specified by the forest department should be followed.
14. All possible efforts will be taken by the guiding team to ensure the safety of the visitors.
Annexure 4

Format for Declaration

Declaration given for participating in the programme …………… …………… …………………. (Name of the Programme) conducted by the EDCs in IWS in association with Kerala Forest Department.

I do hereby declaration that I am fully aware of the details of this Programme and all the possible hazards of walking into the forests of IWS.

I further declare that I am confident of my health to undertake the Forest Walking of tedious nature and nobody else will be responsible for any casualities. I will not claim any compensation from the EDC or from Kerala Forest Department, for any damages for my personal health and damages or any of my properties due to accidents while participating the programme.

Signed and delivered by,

1. (Name) ………………………….. (S/o / D/o) …………………… (Aged)
   (Address) …………………………………………………………………………..

2. (Name) ………………………….. (S/o / D/o) …………………… (Aged)
   (Address) …………………………………………………………………………..

3. (Name) ………………………….. (S/o / D/o) …………………… (Aged)
   (Address) …………………………………………………………………………..

4. (Name) ………………………….. (S/o / D/o) …………………… (Aged)
   (Address) …………………………………………………………………………..

5. (Name) ………………………….. (S/o / D/o) …………………… (Aged)
   (Address) …………………………………………………………………………..

in presence of witness

Dated: ________________________________

Name: ________________________________

Idukki

Designation of Forest Officer
Annexure: 5

Proposed Budget of ICC for 2005-06 (12 months)

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Particulars</th>
<th>Amount (Rs)</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Receipts from three Programmes</td>
<td>2517600</td>
</tr>
<tr>
<td>B</td>
<td>Expenditures</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kick start expenditure</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>Equipment and materials</td>
<td>175000</td>
</tr>
<tr>
<td>b</td>
<td>Infrastructure development</td>
<td>100000</td>
</tr>
<tr>
<td>c</td>
<td>Web designing, brochure, tickets etc</td>
<td>25000</td>
</tr>
<tr>
<td>2</td>
<td>Reserve fund (5%)</td>
<td>125880</td>
</tr>
<tr>
<td>3</td>
<td>Government revenue</td>
<td>122960</td>
</tr>
<tr>
<td>4</td>
<td>Market Promotion</td>
<td>122960</td>
</tr>
<tr>
<td>5</td>
<td>Lumpsum payment to guides#</td>
<td>720000</td>
</tr>
<tr>
<td>6</td>
<td>Operational expenditure</td>
<td>486000</td>
</tr>
<tr>
<td>7</td>
<td>Insurance remittance</td>
<td>50000</td>
</tr>
<tr>
<td>8</td>
<td>EDC Welfare activities</td>
<td>200000</td>
</tr>
<tr>
<td>9</td>
<td>Sanctuary management activities</td>
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</tr>
<tr>
<td>10</td>
<td>Education and awareness</td>
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</tr>
<tr>
<td>11</td>
<td>Research and Monitoring</td>
<td>75000</td>
</tr>
<tr>
<td></td>
<td><strong>Expenditure Total</strong></td>
<td><strong>2452800</strong></td>
</tr>
</tbody>
</table>

# though the guides are supposed to work for at least 26 days a month, they are paid on the basis of the days in which they entertain guests. Here the calculation is made on the premise that every guide is paid a lumpsum of Rs.1500 initially on an average and there are 40 guides.

The proposed budget is surplus for an amount to the tune of Rs.64800/-