

Chapter - 11

Eco-Tourism - Interpretation, Conservation & Education

11.1 Introduction

Eco-tourism is a sub-component of sustainable tourism. Eco-tourism's perceived potential as an effective tool for sustainable development is the main reason why developing countries are now embracing it and including it in their economic development and conservation strategies. Eco-tourism, as an alternative tourism, involves visiting natural areas in order to learn, to study, or to carry out activities environmentally friendly, that is, a tourism based on the nature experience, which enables the economic and social development of local communities. It focuses primarily on experiencing and learning about nature, its landscape, flora, fauna and their habitats, as well as cultural artifacts from the locality. A symbiotic and complex relationship between the environment and tourist activities is possible when this philosophy can be translated into appropriate policy, careful planning and tactful practicum. Carefully planned and operated eco-tourism sites, especially if it is village-based and includes local participation, is able to provide direct benefits that might offset pressure from other less sustainable activities that make use of natural and cultural resources.

Eco-tourism helps in community development by providing the alternate source of livelihood to local community, which is more sustainable. Its aim is to conserve resources, especially biological diversity, and maintain sustainable use of resources, which brings ecological experience to travelers, conserve the ecological environment and gain economic benefit. However, achieving the aims in eco-tourism depends on whether they are environmentally and ecologically sustainable and economically applicable. Eco-tourism helps in involving local community for the conservation of the ecology and biodiversity of the area that biodiversity in return provides the economic incentives to the local community.

Eco-tourism contributes to conservation of biodiversity; sustains the well-being of local people; involves responsible action on the part of tourist and the tourism industry; promotes small and medium tourism enterprises; requires lowest possible consumption of natural resources; stresses local participation, ownership, and business opportunities, particularly for rural people; and above all includes the learning experiences.

Eco-tourism has the potential to enhance wilderness protection and wildlife conservation, while providing nature-compatible livelihood and greater incomes for a large number of people living around natural ecosystem. This can help to contribute directly to the protection of wildlife or forest areas, while making the local community stakeholders and owners in the process.

11.2 The Need for Eco-Tourism

According to the definition and principles of eco-tourism as established by the International Eco-tourism Society (TIES), Eco-tourism is “responsible travel to natural areas that conserves the environment and improves the well-being of the local people”. Eco-Tourism, when practiced correctly, is an important economic and educational activity. It has the scope to link to a wider constituency and build conservation support, while raising awareness about the worth and fragility of ecosystems in the public at large. Such tourism is low-impact, educational and conserves the environment while directly benefiting the economic development of local communities, i.e., the tribal and other traditional forest dwellers living in and around these fragile landscapes of the tiger reserve. Unplanned tourism in such landscapes without taking into account its carrying capacity can destroy the very environment that attracts such tourism. Eco-tourism must provide more than mere enjoyment, it must foster changes in the attitude and behaviour of tourists about the protection of the natural resources.

11.3 Objectives of Eco-Tourism

The Main Objective of Managing the Tiger Reserve is in situ conservation of Tiger and its habitat. Tourism is only a by-product of conservation goals.

The tourism in its traditional form is not acceptable in wildlife areas. So eco-tourism concept is put forth for wildlife conservation areas.

So the Eco-tourism activities should follow the following principles.

- Encourage conservation.
- Minimize impact.
- Exposure to natural heritage and conservation benefits.
- Understanding of ecology.
- Build environment and cultural awareness and respect.
- Provide positive experience for both visitors and hosts.
- Provide financial benefits and empowerment for local people.
- Raise sensitivity to host countries political, environmental and social climate.

The protected areas can only become sustainable with presence of friendly host communities around their periphery. The communities can become friendly if they are gaining economically, socially and culturally through the Eco-development programme and tourist activities.

Eco-tourism in context of Tiger Reserve is ecologically sustainable nature-tourism, which is emerging as an important component of tourism industry. It is distinct from mass tourism, having sustainable, equitable, community based effort for improving the living standards of local host community living on the fringes of the Tiger Reserve.

Eco-tourism is proposed to be fostered with financial support to the host community through soft loans from Eco-development committees, in accordance with site-specific Eco-tourism plan and carrying capacity of Tiger Reserve in the core & buffer areas. The Critical Tiger habitat should not be used for any form of tourism and the ongoing tourism activities in such areas should be phased out in the fringe/buffer areas, without affecting its corridor values.

In recent times, vast changes in eco-tourism policy of the State and Central Government have taken place. The Supreme Court of India in its order dated 16th October 2012 in Civil Appeal no. 21339/2011 directed the State Govt to prepare eco-tourism plan for each Tiger Reserve as per National Tiger Conservation Authority's Eco-tourism Policy circulated vide no. F.No. 15-31/2012-NTCA dated 15th October 2012. This eco-tourism plan is prepared taking into consideration NTCA's guidelines and the State Governments resolution.

11.4 Eco-Tourism Values of Pench Tiger Reserve -

- i. This area represents Southern Tropical Dry Deciduous Forests in the Tiger habitat. It has a viable population of 65 Tigers with high frequency of Tiger sighting.
- ii. It is a mega-biodiversity site with large surrounding forest area and thus has a long-term conservation value. It is gene bank of wild relatives of the cultivated species for future use.
- iii. Beside Tiger, it is abode to number of prominent wild denizens like Leopard, Wild dog, Sloth bear, Gaur, Sambar, Barking deer, Cheetal, Chausinga, Nilgai, Wild boar, Jackals, Fox's along with rare ones like Ratel, Flying squirrel, Pangolin, Indian Civet Cat, Palm Civet Cats, Porcupines and Wild cat. The continuity with forests of Pench Maharashtra, South Seoni (T) Division, East Chhindwara (T) Division and South Chhindwara (T) Division enrich the conservation prospects of these species. This Tiger Reserve is also connected with the Pench-Kanha and Pench-Satpura corridor. Pench Tiger Reserve with its Core and Buffer and Pench Maharashtra is very big conservation unit.
- iv. Vast bird diversity is of great interest along with diverse vertebrate species.
- v. The tree-clad forests, rolling grasslands habituated with spotted dears afford wonderful sights.

All these values make Pench Tiger Reserve (MP), a favourite area for Eco-tourism interpretation and conservation education.

11.5 Management Zonation -

The management zonation of the area is as follows.

| Zone | Legal Status | Total Area Sq. Kms. |
|-------------|---|--------------------------------|
| Core | Pench Tiger Reserve (MP) | 411.330 |
| Buffer | Area of South Seoni (T), East Chhindwara (T) and South Chhindwara (T) | 768.300 |
| | Total | 1179.630 |

11.6 Organization Set-up and Eco-Tourism Management

Tourism in Pench was at its modest, in the beginning of this Century. Which received an impetus with the improved facilities under Project Tiger. In tune with the objectives of Project Tiger and Wildlife Conservation, tourism is allowed on a limited and regulated basis in the Pench Tiger Reserve. Pench has launched a full-fledged park interpretation programme.

The average, annual tourist influx of last three year amounts to **57212** of which almost 9.62% are foreigners. At times, nine to ten thousands tourists visit the park in a month (November/ December), and on holidays the number sometimes goes upto eight hundred per day.

Apart from the limited departmental accommodation at Karmajhiri gate, Boarding and Lodging facilities are available at Turia Gate of Pench Tiger Reserve, “Kipling Court” a unit of Madhya Pradesh Tourism Development Corporation Ltd. along with some private Resorts / Lodges around the Turia Gate at village Turia, Awargani and other near by villages are available for tourist. The total of lodging facilities (Forest Dept, MPTDC & Private) available around the Pench Tiger Reserve is around 900 beds per night.

The park has a set of rules for regulating the tourism. The Park Management provides elephants and route guides, apart from the interpretation facilities to the tourists at a nominal charge. Entry on foot and night driving are prohibited inside the park. Only light vehicles are allowed with a route guide. Viewing ungulates amidst meadows from a vehicle and having a joy ride from an elephant back are star attractions for the tourists.

Number of tourists in last 5 years in Pench Tiger Reserve is given below –

| Year | Number of Tourist | | | Revenue |
|---------|-------------------|-----------|-------|----------|
| | Indian | Foreigner | Total | |
| 2009-10 | 47758 | 4796 | 52554 | 10398096 |
| 2010-11 | 60038 | 5421 | 65459 | 18080606 |
| 2011-12 | 63802 | 6282 | 70084 | 19238430 |
| 2012-13 | 44407 | 5043 | 49450 | 13640176 |
| 2013-14 | 46602 | 5502 | 52104 | 19555350 |

11.6.1 Organizational Set-up

i. Tourism Zone

Tourism is carried out in Karmajhiri and Gumtara ranges of Indira Priyadarshini Pench National Park. The tourism zone is shown in the map (**Map No-44**). The Core Area of Pench Tiger Reserve is 411.330 Sq Kms & it consists of total 139 compartments. 27 compartments out of 139 compartments of Core Area of Pench Tiger Reserve are opened for tourism & the total “Road Length” of the area opened for tourism is only 116 Kms.

Therefore, as per the Guidelines of NTCA, after considering the beat area for calculating the area of the tourism zone, the total tourism area has been estimated as Only 20% of the Core Area, which is allowed for Tourism, as per the guidelines

submitted by the NTCA to the Supreme Court in Oct 2012, which is Maximum 20% of the Core Area.

The size of Protected Area of the Pench Tiger Reserve is relatively small as compared to the other Tiger Reserves in the State, therefore the tourism should be restricted to the existing level of 20% of the Core, to minimize the adverse impact of the tourism on wildlife. The details of the tourism zones are given in **Annexure No-49**.

Karmajhiri is the main tourism zone having two gates i.e. Karmajhiri and Turia. The roads are very well laid out & are properly maintained. The total length of roads in the Karmajhiri Zone is 110.61 Kms. The Jamtara tourism zone in Gumtara Range is very small and has only one gate i.e. at Jamtara, the total road length in Jamtara Zone is 5.20 Kms. The Karmajhiri Zone is divided into many sub zones for regulating the tourism. The details of the tourism roads are given in **Annexure No – 50, The Total Road Length is 115.81 Kms in the entire Tourism Zone of Pench Tiger Reserve (M.P.)**

ii. Administrative set-up -

For the management of tourism there is no separate tourism range in PTR. The concerning Range officers and ACFs look after the tourism activity. There are limited staffs for regulating the tourism. At Turia and Karmajhiri gates Foresters/Dy Rangers are posted for issuing tickets and checking the entry. At Turia gate some Foresters and Forest Guards are deployed for the checking of tourist vehicles and Interpretation centre. At Alikatta one Forester is posted to look after the elephants and to regulate the Joy Rides.

At Turia and Karmajhiri gates Computerised Advance booking and Current booking system is operational. Online booking facility is also available.

iii. Staff Requirement for Eco-Tourism Activities -

There is an urgent need of Eco-Tourism officer, who will look after the Tourism planning & operations including all Boarding & Lodging needs and One Eco-Tourism Range Officer is required to help the Eco-tourism officer. At Each gate two foresters to issue tickets and to regulate the tourist entry are essential. There should a squad of 5-6 Eco-Traffic Personals, to look after guided movement of vehicles and tourists inside the core area. One very knowledgeable person should be employed for Interpretation Centre.

iv. Infra structure requirement: -

Following infrastructures are urgently required for the proper Eco-tourism and Interpretation.

Tourism Complex at Khawasa having one Information Centre, low cost staying facilities, nature's shop for souvenir and outlet for host community product, open air theatre, office of Interpretation officer and range officer are required for proper interpretation programme.

The old facility may be renovated / modified as per the new requirement.

Eco-tourism Management

Eco-tourism is a recent name for “nature tourism”, which varies in accordance with the ecological setting and seasonal attributes of the site. Essentially, as stated earlier, it aims at the enjoyment of nature and an understanding of the ecology, without causing the least destruction to its support system, leading to economic benefits for the indigenous masses.

Eco-tourism is clearly distinct from mass tourism. Apart from being multi-faceted, it also has various intricate linkages with different forms of human activity, with domestic, regional and international characters. There are many countries where eco-tourism plays an important role in their national economies. Furthermore, the socio-economic and ecological impact of eco-tourism is relevant to a developing country like India, and it is evolving over the vicissitudes of time with new concepts and ideas.

Mass Tourism vis-a-vis Eco-tourism:

Mass tourism, both national as well as international, is an important, multi disciplinary economic activity. It is a symbiosis of various departments, organisations and individuals, and is an employment sector, which is economically important as it provides considerable income. Development of mass tourism necessitates infrastructural interventions and may thereby contribute to the overall development of the area. In our country, it is one of the important net earners of foreign exchange, having the potential for contribution to the balance of international payments.

Eco-tourism is highly esoteric and is distinct from mass tourism, though it may be a component of the latter. ATEC (the Talamanca Association for Eco-tourism and Conservation in Costa Rica) defines eco-tourism as “Eco-tourism means more than bird books and binoculars ... more than native art hanging on hotel walls or ethnic dishes on the restaurant menu. Eco-tourism is not mass tourism behind a green mask. Eco-tourism means a constant struggle to defend the earth and to protect and sustain traditional communities. Eco-tourism is a cooperative relationship between the non-wealthy local community and those sincere, open minded tourists who want to enjoy themselves in Third World setting...”.

In the present scenario of our country, mainland eco-tourism largely connotes to wildlife tourism. Eco-tourism provides the necessary impetus for wildlife conservation and helps in eliciting the much needed public support. It can be expressed as a function of human interventions for eco-tourism (weighted ecologically) added to biodiversity:

ET : $f [(HI \times EP) + (BD)]$

where, ET : Eco-tourism

f : Function

HI : Human interventions for eco-tourism

EP : Ecological principles

BD : Biodiversity (wild plants/ animals in their natural habitat)

Any eco-tourism venture - domestic, intra-regional or international - has to be weighted and audited ecologically before it is embarked, to avoid ecological dislocation.

Numerous terminologies are in-vogue to identify a class of tourism other than mass tourism:

Eco-tourism (ecological tourism), sustainable tourism, environmentally friendly tourism, nature tourism, green tourism, scientific tourism, cottage tourism, wildlife tourism, wilderness tourism, safari tourism, designer tourism, hard tourism, risk tourism and adventure tourism.

The degree of involvement of the indigenous host communities is also emphasised:

- Indigenous communities having full control of planning and development of eco-tourism in their area
- Indigenous communities merely getting employment in activities planned and managed by the Govt. agencies, tour operators or planners

Eco-Tourists:

Martin Mowforth, a visiting research fellow in human geography at the University of Plymouth has categorised the eco-tourist types as below:

- **The Rough Eco-tourist**

(Young - middle aged, travelling individually or in small groups, independent, staying in cheap hotels, using buses for transport, eating locally and preferring sport and adventure tourism).

- **The Smooth Eco-tourist**

(Middle - aged-old, travelling in groups, tour operated, staying in 3-5 star hotels, travelling by taxis, eating in luxury restaurants and preferring safari and nature tourism).

- **The Specialist Eco-tourist**

(Young - old, travelling individually, independent or specialist tours, staying in a wide range of hotels, using various transports and eating places in pursuit of interest or scientific investigation).

The above categories, by and large, accommodate most of the eco-tourists in the Indian context also. However, we can add one more category - viz. the “fun seekers”, conforming to the young - middle age groups who travel solely for the sake of fun.

11.7 Selection Criteria for Tourism Area

Backdrops in mind -

- The requirement /necessities of the wild life should be given priority in PA.
- Ecologically and socio – culturally sustainable.
- Least disturbance to wildlife and its habitat.
- Minimal adverse impact.
- Well thought, well planned and disciplined tourism.
- Responsible travel to natural area.
- Limited and regulated basis.
- Friendly host community around periphery.
- Feeling of wilderness to be provided.

Selection Criteria -

- The part of the buffer zone should be included in the tourism area.
- Breeding areas of the important species should be excluded from the tourism area.
- Environmentally vulnerable areas like riparian zones, biological hotspots, caves and dens, cliffs and over hangs, magic sites, saltlicks, seepage springs etc. should be excluded from the tourism area.
- Residence areas of bigger sizes should be excluded from the tourism areas to create feeling of tranquillity.
- 70 % of the habitat of the most endangered species, should be excluded from the tourism area.
- 50% of most thickly wild animal populated areas should be kept out of tourism area.
- Different types of topography like plateaus, rolling slopes, valley, etc. should be included for variety in animal species sighting and good experience.
- Different types of habitats like Teak/Sal forests, misc. forests, grasslands, etc. should be included for variety in species.
- Village areas should be excluded.
- If unnecessary changes in the wild life habitat is observed /noticed, the tourism should be stopped in the area.
- Carrying capacity of the tourism area should be scientifically determined according to the NTCA Guidelines.
- Tourism plan should be prepared after taking into account the carrying capacity of the PAs.
- At last but not the least, to make the criteria for the selection of tourism areas, a matrix can be prepared as the tourism and conservation contradict each other. The rows can be used for different components of conservation where as columns can be used for the different components of tourism. The judgement values can be used for the different components. Management can get the guidance from WII Dehradun and site-specific matrix can be prepared for each PA.

11.8 Local Advisory Committee

A Local Advisory Committee (hereinafter referred as LAC) for the Pench Tiger Reserve (M.P.) has been constituted by the State Govt of MP (No F-19-26/2010/10-2), in accordance with the Comprehensive Guidelines issued by NTCA Order F. No. 15-31/2012-NTCA dated 15th October 2012 for tiger conservation and tourism as provided under section 38(O) (1) (c) of the Wild Life (Protection) Act, 1972.

The LAC has the following functions namely –

- a) To review the tourism strategy with respect to the tiger reserve and make recommendation to the state government.
- b) To ensure computation of reserve specific carrying capacity and its implementation through periodic review.
- c) To ensure site specific norms on buildings and infrastructures in areas inside and close to tigers reserve, keeping in view the corridor value and ecological aesthetics;
- d) To advice local self government and state government on issues relating to development of tourism in and around tiger reserve.
- e) Monitor half yearly all tourist facilities in and around tiger reserve vis-à-vis environmental clearance, area of coverage, ownership, type of construction, number of employees etc. for suggesting mitigation and retrofitting measures in needed.
- f) Monitor regularly activities of tour operators to ensure that they do not cause disturbance to animals, while taking visitors in to the tiger reserves;
- g) To encourage tourism industry to augment employment opportunities for members of local communities.

11.9 Constitution of Eco-tourism Zone in Core of PTR -

As per Para 2.2.2, 2.2.4 (IV), 2.2.6, 2.2.7 and 2.2.8 of the guidelines of National Tiger Conservation Authority (NTCA) dated 15th Oct 2012, Conservation of Tiger is the paramount objective of tiger reserve and generating public support through regulated tourism is an invaluable tool for harnessing public and community support for tiger conservation. Regulated tourism result in enhanced awareness and is of educational value especially for the younger generations. Non-consumptive, regulated, low impact tourism could be permitted within core or critical tiger habitat for tiger conservation. With this importance of tourism in tiger conservation, maximum of 20% of core or critical tiger habitat usage for regulated, low impact tourist visitation is permitted as per the guidelines submitted by the NTCA to the Supreme Court in Oct 2012.

The usage of core or critical tiger habitat of Pench Tiger Reserve (M.P.) for tourism purpose, before the Supreme Court's order dated 16th October 2012 was in total 44 Compartments out of 139 compartments & the area covered in all 44 compartments was 150 Sq. Kms. and the total Road Length in all these 44 compartments used for tourism purpose was 145 Kms.

As per the NTCA guidelines submitted to the Supreme Court, only 20% of the Core area should be opened for ecotourism. Thus, in compliance to the NTCA guidelines, the tourism area has been reduced to 84.76 Sq.Kms. from 150 Sq.Kms. In this area, the road length is 116 kms. The total number of forest compartments in the tourism zone comes to 27.

Therefore, after taking into account all the factors as per the guidelines of NTCA, the Carrying Capacity of Pench Tiger Reserve is estimated as 88 Vehicles Per day, 44 Vehicles in the Morning and 44 Vehicles in the Evening, from all the 3 entry gates of Pench Tiger Reserve (M.P.) namely Turia, Karmajhiri and Jamtara.

11.9.1 Regulation of Tourism in Eco-tourism zone of core of PTR -

Although maximum of 20% area of core is permitted for low impact eco-tourism following regulations should be implemented.

- Core Management should not manipulate habitat to inflate animal abundance for tourism purpose.
- The water holes, cement-troughs should not be constructed near tourist routes but should be constructed away from road. The existing such cement troughs should also be abandoned within next 2 years and new cement troughs if needed should be constructed away from tourist routes.
- Visitor shall keep a minimum distance of more than 20 meter from all wildlife
- Cordoning, luring or feeding of any wildlife in eco-tourism zone by any person is prohibited.

11.9.2 Criteria for Determination of Carrying Capacity -

Carrying capacity of each entry gate is based on length of the tourism roads and infrastructure available in that area & it is computed as per the model given in the NTCA guidelines & after taking into account the various circulars issued by the NTCA till date. The distribution of vehicle for each gate and bifurcation of tourist vehicles for morning and afternoon safari will be decided by Field Director, Pench Tiger Reserve (M.P.) Amalgamation of carrying capacity of Turia, Karmajhiri and Jamtara is possible only if the interconnectivity is allowed by the Field Director, Pench Tiger Reserve (M.P.) Number of vehicles permitted to enter the core area will always depend on the management capacity available for tourism purpose.

11.9.3 Calculation of Carrying Capacity of Core Area of Pench Tiger Reserve (M.P.) as per the NTCA Guidelines -

Taking into consideration, The Supreme Court Judgment dated 16th October 2012 and the NTCA guidelines submitted to the Supreme Court, on Eco-tourism, duly notified by Circular No F-15-31/2012-NTCA dated 15th October 2012, The Eco-tourism cannot be practiced in more than 20% of the Core or Critical Core Tiger habitat of any Tiger Reserve in India. NTCA has issued a set of instructions for the purpose of clarity on calculation of tourism area by its letter no. 7-16-2012- NTCA dated 19th November 2012.

As per the NTCA guidelines, the Park management should not open any new areas or new roads for tourism purpose. The ecotourism should not go beyond the tourism area existed prior to new guidelines. Therefore, the road lengths of 145 kms, which existed in the entire tourism zone before the Supreme Court Judgment of Oct 2012, the same has been reduced to 116 kms. for calculating the tourism area as per the NTCA guidelines. The value of some other factors have been corrected as per ground reality in Pench Tiger Reserve (M.P.)

Taking the 20% of the Core area and the Road Length as 116 Kms & after correcting the values for some correcting factors, the Management of Pench Tiger Reserve has recalculated the carrying capacity of the tourism zone of the Pench Tiger Reserve. The Management has taken due care & ensured that no new roads and no new areas are being opened for tourism purpose. The exiting tourism area is only 20% of the Core area.

Determination of Carrying Capacity –

As per NTCA guidelines after considering the sighting distance 200 meters on either side of the road, tourism area has been estimated for Pench Tiger Reserve as follows.

| | | |
|--------------|---|-----------------------|
| Core Area | - | 411.330 sq.km. |
| Road Length | - | 116 Kms. |
| Tourism Area | - | 84.76 sq.kms. |
| | - | 20% of the Core area. |

(a) Physical Carrying Capacity (PCC)

This is the “maximum number of visitors that can physically fit into a space, over a particular time”. It is expressed as following -

$$\begin{aligned} \text{PCC} &= A \times v/a \times R_f \\ \text{Where, } A &= \text{available area for public use} \\ v/a &= \text{one visitor / } M^2 \\ R_f &= \text{rotation factor (number of visits per day)} \end{aligned}$$

In order to calculate the PCC, the following are taken into consideration :

- Only vehicular movements on forest roads are permitted, hence road length is more relevant than area.

- “Standing area” is not relevant, but “closeness” between vehicles is important.
- There is a required distance of at least 500 m (1/2 km) between **2 vehicles** to avoid dust (2 vehicles / km)
- At least **3.5 hours** are needed for a single park excursion.
- The PA is open to tourists for **8.5 months in a year** and almost **9 hours per day**.
- Linear road length (for tourist) = **116 Kms**

$$\text{Rotation Factor (Rf)} = \frac{\text{Opening period}}{\text{Average time of one visit}} = \frac{8.5}{3.5} = 2.42$$

$$\begin{aligned} \text{Physical Carrying Capacity (PCC)} &= 116 \text{ km} \times 2 \text{ vehicles / km} \times 2.42 \\ &= 561 \text{ visits / day} \end{aligned}$$

(b) **Real Carrying Capacity (RCC)**

RCC is the maximum permissible number of visits to a site, once the “reductive factors” (corrective) derived from the particular characteristics of biophysical, environmental, ecological, social and management variables.

$$\text{RCC} = \text{PCC} - \text{Cf}_1 - \text{Cf}_2 \text{ ----- } \text{Cf}_n,$$

Where Cf is a corrective factor expressed as a percentage. Thus, the formula for calculating RCC is :

$$\text{RCC} = \text{PCC} \times \frac{100 - \text{Cf}_1}{100} \times \frac{100 - \text{Cf}_2}{100} \times \dots \times \frac{100 - \text{Cf}_n}{100}$$

Corrective Factors are “site-specific”, and are expressed in percentage as below :

$$\text{Cf} = \frac{\text{M1} \times 100}{\text{Mt}}$$

- Where
- Cf = corrective factor,
 - M1 = limiting magnitude of the variable
 - Mt = total magnitude of the variable

(i) **Road erosion :**

Here the susceptibility of the site is taken into account.

| | | |
|---------------------|---|---------------------------------------|
| Total road length | = | 116 Km (Mt) |
| Medium erosion sink | = | 12.5 Km (weighting factor = 2) |
| High erosion risk | = | 10 Km (weighting factor = 3) |

$$M1 = (12.5 \times 2) + (10 \times 3) = 55 \text{ Km}$$

$$M_t = 116 \text{ Km.}$$

$$C_{fe} = \frac{55 \text{ km}}{116 \text{ km}} \times 100 = 47.41 \% \text{ or } 47 \%$$

(ii) **Disturbance to Wildlife :**

Here, species prone to disturbance owing to Visitation are considered. The peak courtship activity for spotted deer lasts for two months before the onset of regular monsoon. As far as tigers are concerned, newborns are seen between March and May, and also during the rains, hence an average value of two months in a year can be considered.

$$\text{Corrector Factor (Cf)} = \frac{\text{Limiting months / year}}{8.5 \text{ months / year}} \times 100$$

Corrective Factor for spotted deer (2 months)

$$Cf w1 = \frac{2}{8.5} \times 100 = 23.52 \%$$

Corrective Factor for tiger (2 months)

$$Cf w2 = \frac{2}{8.5} \times 100 = 23.52 \%$$

Overall corrective factor for disturbance of wildlife in Indira Priyadarshani Pench National Park / Pench Tiger Reserve –

$$Cfw = Cfw1 + Cfw2 = 23.52 + 23.52 = 47.04 \% \text{ or } 47 \%$$

(iii) **Temporary Closing of Roads :**

For maintenance or other managerial reasons, visitation to certain roads may be temporarily restricted within the Protected Area. The Corrective Factor in this regard is calculated as :

$$C_{ft} = \frac{\text{Limiting weeks / year}}{\text{total weeks / year}} \times 100$$

In Pench, an average value of 2 limiting weeks per year may be considered as the “Limiting weeks”, and thus the corrective factor works out to :

$$C_{ft} = \frac{2.5 \text{ weeks / year}}{34 \text{ weeks / year}} \times 100 = 7.35 \% \text{ or } 7 \%$$

At present, there is half day closure on Wednesday. Due to this, temporary closing of roads has been reduced to 2 weeks per year from 5 weeks per year as considered in the earlier working of EPCC.

Computation of RCC

$$\begin{aligned} \text{RCC} &= \text{PCC} \times \frac{100-C_{fe}}{100} \times \frac{100-C_{fw}}{100} \times \frac{100-C_{ft}}{100} \\ \text{RCC} &= 561 \times \frac{100-47}{100} \times \frac{100-47}{100} \times \frac{100-7}{100} \\ &= 561 \times (0.53 \times 0.53 \times 0.93) \\ &= 146.55 \text{ or } 147 \text{ visits / day} \end{aligned}$$

(c) Effective Permissible Carrying Capacity (EPCC) :

The EPCC is the maximum number of visitors that a site can sustain, given the management capacity (MC) available. EPCC is obtained by multiplying the real carrying capacity (RCC) with the management capacity (MC). MC is defined as the sum of conditions that PA administration requires if it is to carry out its functions at the optimum level. Limitations in management like lack of staff and infrastructure limit the RCC.

In Pench Tiger Reserve (MP), we do have sufficient number of staff for the effective management of tourism activity. Tourism is a full day activity for the whole 8.5 months. Therefore, the management capacity cannot go beyond 60%

Effective Permissible Carrying Capacity (EPCC)

$$\text{Managerial Capacity} = 60\%$$

$$\text{Hence, EPCC} = \text{RCC} \times \text{MC} = 147 \times 0.60 = 88.2 \text{ say } 88 \text{ Vehicles / day}$$

Thus, the Effective Permissible Carrying Capacity on any week day is only 88 vehicles per day.

**Break-up for Gate wise Entry of Number of Vehicles in
Pench Tiger Reserve (MP)**

| Sr. No. | Park Entry | Number of Vehicles Per Day | |
|---------|-------------------------------|----------------------------|---------|
| | | Morning | Evening |
| 1) | Turia Gate | 34 | 34 |
| 2) | Karmajhiri Gate | 6 | 6 |
| 3) | Jamtara Gate | 4 | 4 |
| | Shift Total | 44 | 44 |
| | Total Vehicles Per Day | 88 | |

**Break-up for Gate wise Online and Offline Entry tickets for above notified
vehicles in Pench Tiger Reserve (M.P.)**

| Sr. No. | Park Entry | Number of Vehicles Per Day | | | |
|---------|-------------------------------|----------------------------|---------|---------|---------|
| | | Morning | | Evening | |
| | | Online | Offline | Online | Offline |
| 1) | Turia Gate | 29 | 05 | 29 | 05 |
| 2) | Karmajhiri Gate | 04 | 02 | 04 | 02 |
| 3) | Jamtara Gate | 02 | 02 | 02 | 02 |
| | Total | 35 | 09 | 35 | 09 |
| | Shift Total | 44 | | 44 | |
| | Total Vehicles Per Day | 88 | | | |

11.9.4 Need of Research for Eco-Tourism Activities

The primary objective of wildlife management is to protect and conserve the wildlife and its habitats. For environmental education and environmental awareness tourism activities are promoted in Protected Area. More tourism may adversely affect the conservation of wildlife. So well thought eco-tourism programme is necessary to improve the financial condition of surrounding host communities and raising fund for wildlife management without cause in adverse impact on wildlife and its habitat. The Core area of Pench Tiger Reserve is very small so a scientific research is necessary to propose eco-tourism activities in the Protected Area.

11.9.5 Implementation of Eco-Tourism Guidelines

For the proper regulation of tourism in nature Govt. of India has formulated Eco-tourism: Policy & Guidelines (2002). Which is given in **Annexure No. – 51**. Further NTCA has issued circular for proper regulation of eco-tourism – dated 14 December 2007 is Annexed as **Annexure No. – 52**.

PCCF (WL) through there letter no./Prabandha/4005 dated 29-09-03 prescribed instruction for healthy tourism, is annexed as **Annexure No. – 53**.

The Supreme Court of India in its order dated 16th October 2012 in Civil Appeal no. 21339/2011 directed State to prepare Eco-tourism Plan for each Tiger Reserve as per National Tiger Conservation Authority's Eco-tourism policy circulated vide no. F. No. 15-31/2012 NTCA dated 15th October 2012, is annexed as **Annexure No. 53A & 53B**.

Following regulation are prescribed for different categories of stakeholders

11.9.5.1 For the Park Management

The following operational guidelines are proposed:

- The eco-tourism planning should be flexible, site-specific and participatory, and should form part of a larger eco-development/ eco-regional plan for the area
- Assessment of existing infrastructure, surface transportation, air service, road, electricity, water supply, law and order situation
- The eco-tourism package should invariably include :
 - Simple, adequate boarding and lodging facilities, in tune with the environment and the general setting of the landscape
 - Road network within the identified tourism zone
 - Self-guided Nature trails
 - Transportation options
 - Interpretive Centres
 - Way-side exhibits

- Signages
 - Observation towers
 - Public conveniences
 - Garbage disposal facility
 - Living quarters for staff/ personnel
- Structures with an exotic look causing visual pollution and non-compatible and unaesthetic architecture should be avoided
 - Site-specific micro-planning for community based eco-tourism should be resorted to.
 - Providing soft-loans from the “Vikas Nidhis” to identified beneficiaries
 - Temporary housing structures blending with the surrounding should be encouraged like Tents & Wooden Machans etc
 - Establishing building codes in consultation with the Panchayats apart from other regulations to ensure pollution free environment, with the concurrence of the respective "Local Advisory Committee (LAC)" constituted for the Tiger Reserve.
 - Environmental, physical & social carrying capacities to limit the various developmental activities in the fringe area to be identified for eco-tourism
 - Mechanism to ensure continuous monitoring of adverse effects of tourism for quick redressal should be devised
 - Recognize eco-tourism operators, provide incentives to deserving cases and award quality labels
 - Provide visitor information & interpretation services (bilingual) covering:
 - “Do's” and “Don'ts”
 - What to see?
 - Where to see?
 (Brochures, leaflets, guide service, visitor centres)
 - Periodic training programmes on eco-tourism should be conducted for tourism administration, planners, operators, guides, drivers and general public.
 - Ensuring training programme to the host community in:

- Lodge ownership/ management
- Basic education and awareness
- Health and sanitation
- Skill development for preparation of local souvenirs as appropriate
- Codes of conduct
- Forest and wildlife conservation
- Litter control
- Forging partnerships with tourists & tourism industry
- Environmental management
- To evolve and implement eco-tourism package in a few selected sites initially as pilot projects

11.9.5.2 For Tour Operators/ Developers

- To abide by the planning restrictions, codes and standards prescribed by the authorities
- Implementation of desired environmental principles through regulation
- Conducting EIA/ environmental audits for new/ ongoing eco-tourism projects
- Being sensitive to the conservation of endangered species & corridor value of the area
- To ensure construction of structures blending with the environment as per the prescribed building code
- To take into consideration the carrying capacity and sociological use-limits of the site while creating tourist facilities, and ensuring safety & convenience of tourists
- To use local material and design as far as possible.
- The planning, architectural design and construction of tourist facilities should use eco-friendly techniques viz., solar energy, recycling of garbage, rainwater harvesting, natural cross-ventilation, self-sufficiency in food through kitchen garden & farming etc.
- Energy & water saving devices should be used apart from controlled sewage disposal.
- Control of noise pollution, chemical pollution and air emissions
- Use of Signages/ boards as per the standard prescribed in the code.

- Reduced use of environmentally unfriendly items like asbestos, CIS, pesticides, inflammable material
- Respecting the historic and religious sites in the area
- Providing appropriate interpretive service to visitors for communication with nature & local culture
- Ensuring proper marketing of eco-tourism products
- Ensuring training of staff on environmental issues
- Ensuring safety and security of visitors
- Respecting local inhabitants, culture & involving them in various activities and vocations as far as possible
- Barbed wire fencing around tourist premises is to be avoided.

11.9.5.3 For the Visitors

- Abiding by the code of conduct, “Do's” & “Don'ts”
- Helping conservation, apart from protecting any site natural or cultural, which may be adversely affected by tourism
- Avoiding wastage of resources
- Avoiding littering & carrying back all non - degradable litter
- Leaving the camp sites clean before departing
- Avoiding removal of plants, seeds, drift - wood from the site
- Respecting local culture/ customs
- Respecting holy places
- Strictly adhering to the safety precautions

11.9.5.4 Park Rules and Important Information for Tourism

- Abide by the Park rules
- Don't enter the Park with fire arms / explosives
- Obtain a Permit before entering the Park
- Don't carry cigarette & match box.
- Don't carry transistor & tape recorder.
- Take official guide with you.
- Drive slowly, Recommended speed 20 km/h

- Obey the park guide.
- Don't blow horn.
- Don't litter with cans, bottles, etc.
- Always carry drinking water.
- Don't get down, unless told by the guide.
- Don't remove any forest property.
- Maintain silence & discipline during excursions.
- Don't chase or tease animals.
- Don't smoke or lit fire, it can cause forest fire.
- Animals have the first right of the way.
- Don't enter the park in intoxication state.
- Use of polythene inside the park is strictly prohibited.
- No pets are allowed inside the park.
- Do not get down from your vehicle except at designated places.
- Overtaking is strictly prohibited.
- Use of mobile phone inside the park is prohibited.
- Maintain minimum distance 20 meters while viewing wildlife.
- Park guide will be paid Rs. 250/- extra, if not dropped on the same gate.
- Unregistered vehicle carrying tourists will be charged per the prevailing rules.

11.9.5.5 For the Host Community

- Respect the value of environment and cultural heritage
- Avoid overusing the area
- Co-operate with the Authorities & Tourist in ensuring healthy eco-tourism
- Realize and react to the threat of investors who see opportunities and exploit the locals
- Be friendly with the Tourists as effective “nature guides” & “conservationists”

11.10 Park Policy, Management & Interpretation Programme

11.10.1 Development of PA-level Participatory Eco-tourism & Visitor Strategy

Action Points for Planning

- The development of an over-all eco-tourism strategy will incorporate the following:
 - Local participation
 - Sound environmental design
 - Visitor management
 - Conservation education
 - Training
 - Financial sustainability
 - Monitoring & evaluation
- To assess:
 - The existing tourism situation and potential
 - The desirable tourism situation and identify steps to attain the same
- To prepare a Participatory Community Based Eco-tourism strategy for the project area, involving the stakeholders through meetings & workshops
- The eco-tourism strategy should also address the following:
 - Potential PA attributes vis-à-vis eco-tourism
 - Identification of sites
 - Development of monitoring mechanisms for ecological impact of eco-tourism
 - Visitor information & levels
 - Identify marketing opportunities
 - Development of guidelines for visitors/ staff viz., visitor centre, orientation centre, brochures, handbook, signages
 - Development of mechanisms to collate visitation data for management
 - Development of guidelines/ building code for environmentally acceptable and culturally appropriate designs
 - Identification of: staffing levels for tourism, future requirements & training needs

- Identifying: institutional arrangement for eco-tourism management, mechanisms to increase long-term local participation in benefit - sharing and decision-making, local training needs
- Developing, monitoring & evaluation of plans to assess local participation & benefit sharing
- Evolving legal framework for eco-tourism activities
- Establishing administration and legal requirements for: Zoning, entry fees, revenue-sharing with indigenous people

11.10.2 Need for Regulating the Tourism PTR

At present 20% of the PA is used for tourism and the average annual tourist influx is around 60,000 (**Annexure No-4**) which may increase with the improvement of highways. Since the entire National Park is a core, which is visualised as a tranquil zone free from any disturbance whatsoever, it becomes essential to carve out separate tourist zones in buffer especially near both the entry points. In a phased manner, the infrastructural facilities need to be created at these points, so the pressure can be eased out from the core area.

11.10.3 Identifying Ecological Sensitive Areas Surrounding the PTR

As per the NTCA guidelines para 2.2.4 (i) identification and monitoring of ecologically sensitive areas surrounding the tiger reserve, is to be done to ensure ecological integrity of corridor & buffer areas and also to prevent corridor encroachment.

For Pench Tiger Reserve (M.P.), it is proposed that, the entire Buffer Zone of Pench Tiger Reserve as notified by the state, may be notified as Eco-Sensitive Zone. In this Eco-Sensitive Zone, there will be a clear classification of activities into three categories Prohibited, Permitted & Regulated. For example, The “Establishment of Hotels & Resorts” in the ESZ is considered as a Regulated Activity, the “Commercial use of firewood” is considered as Prohibited Activity and “Ongoing agriculture & horticulture practices” by the local communities is considered as Permitted Activity.

As per the proposal of Eco-Sensitive Zone, which is already submitted by the Forest Department to the M.P. State Govt, the area (ground coverage) allowed for construction for all the upcoming resorts / tourist infrastructure in the Buffer Areas of Pench Tiger Reserve (M.P.) will be maximum 5% of the total land area. Existing Resorts / Work-In-Progress Projects / Sanctioned Projects before the notification of LAC by the State Govt, will be excluded from the above criteria.

11.10.4 Regulations for the Tourism Infrastructures in Core & Buffer Areas of Pench Tiger Reserve (M.P.)

Core:

No new tourist infrastructure (i.e. places for stay of tourists, canteen/restaurants) will be constructed in Core. The existing infrastructure present in the core will be used only for wildlife management and protection purpose.

Buffer:

The regulations for the tourism infrastructures in buffer will be strictly governed by following rules–

- As mentioned above, the area (ground coverage) allowed for construction for all the upcoming resorts / tourist infrastructures in the Buffer Areas of Pench Tiger Reserve (M.P.) will be maximum 5% of the total land area. Existing Resorts / Work-In-Progress Projects / Sanctioned Projects before the notification of LAC by the State Govt, will be excluded from the above criteria.
- Low Impact tourist infrastructures such as Tents, Wooden Machans, Bamboo Structures & Mud Houses should be promoted at the same time Community stays / Home stays by individuals & locals or by Eco-development Committees or by Gram Panchayats will be preferred.
- New infrastructure like gates, check posts, protection huts, water holes and signage's can be set up on forest land in notified buffer area to promote & regulate the tourism in buffer areas.
- The existing tourist infrastructure present in buffer areas should conform to aesthetics norms, environment friendly low impact structures, possible use of solar energy, waste recycling, and rainwater harvesting, natural cross ventilation, proper sewage disposal and should merge with the surrounding habitat. The infrastructures and activities there in the buffer areas, must adhere to all standards & must comply to all conditions as stipulated by LAC from time to time. The District Administration and Pench Tiger Reserve Authorities will ensure that, all tourist facilities in the buffer areas should comply with the guidelines as suggested by the LAC & NTCA.
- All Existing / upcoming resorts / tourist infrastructure in the Buffer Areas should follow the following guidelines as suggested by the LAC ...
 - **Fencing** : Chain-link fencing is allowed but Solar fencing is advisable, Plantation of Crippers, Shrubs & Grass along the fence is must, So that it should not be transparent, Barbed wire fencing is strictly banned & should be removed immediately, if installed by any of the property in buffer areas.
 - **Building Height** : The height of the new building should not be more than 25 ft, and the proposed structure of the new building

should be considered as maximum ground plus one (G+1), This building height criteria will not be applicable for overhead tank (s)

- **Lights** : All existing / upcoming resorts / private properties in the Buffer Areas of the Pench Tiger Reserves, should follow the following precautions to minimize the impact on surrounding wilderness.
 - Use of external lights should be as minimum as possible.
 - Use of “white lights” should be avoided, to maintain the synergy, only CFL/LED (yellow light) should be used, that too as minimum as possible.
 - Use of focus lamp / halogen lamps in the open areas of the resort, should be strictly avoided.
 - Maximum use of LED bulbs should be promoted to reduce the overall power requirement.
- **Solar Power** :
 - **For New Resorts** –
 - Use of solar lighting in common areas is advisable but use of solar water heaters for all the rooms, is mandatory.
 - **For Existing Resorts** –
 - Fire based water heaters are totally banned & should be replaced by solar/electric water heaters immediately.
 - Minimum 50% of the rooms should be on solar water heaters.
- **Rain Water Harvesting** : All Existing / upcoming resorts / tourist infrastructure should create reasonable dugouts at a low line areas of the property and imply roof water harvesting measures which will help to conserve the rain water & thereby helps in increasing the ground water level of the surrounding areas
- **General Restrictions & Conditions** :
 - No DJ, music systems or sound systems above 50 decibels should be permitted in open area of any resort facility till 10 PM.
 - Use of DJ, music systems or sound systems in open areas/public places by any resort or even by the local villagers after 10 PM, should be strictly banned within 5 kms of the periphery of the Core Area. This issue will be discussed in the concerned gram sabha for compliance from local villagers.
 - Use of DJ, music systems or sound systems in soundproof hall will be permitted, but precautions must be taken so that, public nuisance can be avoided.
 - The dumping of waste in open areas is strictly banned. Every Resort / Lodge will have to follow; the standard norms & the

procedure as suggested by the LAC for collection, segregation, storage and disposal of Bio & non-bio degradable wastes. Solid wastes and other type of wastes will not be thrown into open areas / disposed of in nearby nallahs, streams, water bodies, etc. Strict action will be taken against those, who will not follow these guidelines.

- The tourist facilities will not be allowed to set up unless & until all clearances as suggested by the LAC, are received by the concerned property / Individual, including the NOC from Field Director, Pench Tiger Reserve. The District Administration and Pench Tiger Reserve Authorities will ensure that, all upcoming tourist facilities in the buffer areas should comply with the above-mentioned guidelines & any violation should be referred to the appropriate authority under intimation to NTCA for taking action in accordance with the relevant provision of the law.
- “Asbestos” should not be used in any form in the upcoming tourism facilities to be set up in buffer areas. Existing properties using “Asbestos” Sheets or in any form, should replace them with the allowed suitable material at the earliest.
- All the tourism complexes, resorts, canteens, restaurants should not use “wood as fuel” for any purpose other than for small campfire. For campfire, wood should be legally purchased with a proper receipt & the same should be produced for verification to the inspecting authorities.
- All tourist facilities falling within buffer zone of Pench Tiger Reserve, shall be reviewed regularly by a team, as per the instructions of Local Advisory Committee (LAC), The LAC or its duly authorised member, Collector, Field Director PTR & Deputy Director of PTR will have the right to get access into any tourist facility as and when required.
- Existing tourist facilities in buffer areas run by the Forest Department will be renovated, landscaped and refurnished as per eco-tourism guidelines.
- Tourist facilities and tour operators shall not cause any disturbance to animals in buffer areas.
- All Resorts Management or Tourist Facilities in buffer areas of Pench Tiger Reserve (M.P.) should employ 100% non-skilled and semi skilled workers from the same village, where facility is situated or from neighbouring villages in buffer areas. The Resort Management / Tourism Facilities should impart training to the local villagers in skill development within one year of sanction of this eco-tourism plan and then they should employ 75% of skilled workers form the same village or from neighbouring villages, failing which penalty should be imposed by the LAC.

11.11 Conservation Fee

As per the provisions contained in Para 2.1.6 of the NTCA guidelines dated 15th Oct 2012, the State Government may charge the "Conservation fee" to all the Resorts/Tourist Facilities situated in and around tiger reserve, depending upon their luxury classification.

In this contest, the Chief Secretary of M.P. State Govt. called a meeting on 26th April 2014, to discuss & decide the various implication & legal sanctity of charging the "Conservation fee" to all the Resorts/Tourist Facilities situated in and around tiger reserve. In this meeting PS-Revenue, PS-Commercial Tax, PS-Tourism, PS-Legal & PCCF (MP State) & APCCF (WL) were all present.

After long discussion & debate, it was decided that, the levy "Conversion Cess" will be considered as unconstitutional & therefore the Implementation of such ordinance (if issued) will be very difficult in Madhya Pradesh, therefore it is decided that, at present the "Conversion Cess" will not be levied on any of the Resort/Tourist Facility situated in and around tiger reserve of Madhya Pradesh.

11.12 Present Entry Fee and Other Fee

| Rate Chart of Tourism Activates, Pench Tiger Reserve Seoni (M. P.) | | | | |
|--|---|--------|------------|--|
| No. | Purpose of Entry | Indian | Foreigners | Remarks |
| 1 | Viewing wildlife in vehicles | | | |
| A | Light vehicle, Per Round | 1200 | 2400 | Rates for foreigners shall be applicable if persons of mixed nationalities travel in a vehicle. Unregistered vehicles carrying tourists in national park shall be charged at double the rate . |
| B | Mini bus, per round | 5000 | 10000 | |
| C | Minibus carrying in excess of 20 tourists shall be charged per person per round | 100 | 200 | |
| 2 | Visiting a specific spot on foot. | 50 | 100 | Per person. |
| 3 | Trekking / Cycling (on Specified route). | 250 | 500 | Per day per person (On specified route) |
| 4 | Camping (Per person per night). | 1000 | 2000 | The rate includes trekking/ cycling on designated routes. Arrival at and departure from the camp site shall be allowed only during normal tourism hours. |
| 5 | Wildlife Viewing from Hide/ Machan/Watch towers | 500 | 1000 | Management can limit the number of persons at any spot according to the sensitivity of the site. |
| 6 | Wildlife viewing from Govt. vehicle (Minibus). | 250 | 500 | Per person. Per round. |

| | | | | |
|----------|--|-------------------------|-------------------------|---|
| 7 | Elephant Rides | | | |
| A | Elephant safari | 750 | 1500 | Maximum time 1.00 hour. Only 4 Persons shall be allowed to sit on a elephant. Kids below 5 year age shall be allowed free along with adult. |
| B | Elephant for filming and photography | 12000 | 24000 | Maximum 5.00 hours. Permission for filming / photography shall be required |
| 8 | Filming and Photography | | | |
| a | First 7 Days 8-15 th Days 16 th Day Onwards (Rates for Filming & Still photography) | 20000 15000 10000 | 40000 30000 20000 | Rates are Per Cameraman, Per day. Permission is required for filming / photography beyond the time and away from the route. |
| 9 | Photography by tourists | Video camera | Free | |
| | | Still camera | Free | |

| | | | | |
|-----------|--------------------------------------|--------------------------------|----------------------------|-----------------------------|
| 10 | Fees for Naturalists / Guides | | | |
| SN | Category | Excursion in vehicle per round | Trekking / Cycling per day | Camping (2 day and 1 Night) |
| 1 | N-1 | 1000 | 3000 | 6000 |
| 2 | N-2 | 750 | 1500 | 3000 |
| 3 | G-1 | 400 | 900 | 1800 |
| 4 | G-2 | 300 | 700 | 1400 |
| 5 | Porter | - | 400 | 800 |

Vehicle & Guide Availability :

- There are around 70 private gypsies registered at Turia gate.
 - List of registered gypsies and their contact mobile numbers are available at Turia Entry Gate
- 05 private gypsies are registered at Karmajhiri gate.
 - List of registered gypsies and their contact mobile numbers is available at Karmajhiri Entry Gate
- Registered Park Guides are also available at Turia, Karmajiri & Jamtara Gates.
 - List of registered Park Guides is available at all entry gates.

Inspection of Private Vehicles Used for Park Excursion:

Private vehicles are allowed entry inside the park with a compulsory route guide. To ascertain the overall condition and exhaust levels of these vehicles, a committee has been specially constituted as below:

Committee for Inspecting Private Vehicles Routinely Used for Park Excursions

| | |
|------------------|--|
| Chairman | : Dy. Director of Pench Tiger Reserve. |
| Member | : A.E. (PWD) |
| Member | : RTO or his representative |
| Member | : Range Officer |
| Member Secretary | : Assistant Director |

11.13 Pench Tiger Reserve Interpretation Programme

Following interpretation programmes will be implemented in Pench Tiger Reserve –

1. Interpretation Centre – An excellent interpretation centre is established at Turia Gate.
2. Park safari
3. Elephant Ride – Joy Ride
4. Boating
5. Rafting in buffer area
6. Natures trails in Core and Buffer area
7. Publications – A brochure for PTR is prepared, one book on Fauna of Pench was published in 2005.

11.14 Eco-tourism Package for the Buffer Zone of PTR

Community based eco-tourism is important in the present context. The host community should be actively involved in conservation and eco-tourism planning. Professional and technical training should be imparted to the local people, which would ensure them a sustained income from eco-tourism initiatives, apart from according a priority status. At present, in Pench, the involvement of local people in eco-tourism is as below:

- as route guides
- as vehicle owners/ operators and drivers of park excursions
- as small cafeteria owners
- as petty shop keepers
- as small scale lodge owners
- misc. works in tourist lodges.

There is more scope for involving the host community in several activities, viz. owners of modest tourist accommodation, catering (ethnic dishes), souvenir making, cultural events and the like. There are several examples of local community involvement in eco-tourism, viz., Nepal (Annapurna Conservation Area, Sagarmatha National Park), Canada and South Pacific (Fiji group).

An eco-tourism package has been proposed for the Buffer Zone, which would complement the tourism inputs already existing in the National Park (Core Zone). The proposals form a part the site-specific ecodevelopment programme evolved in a participatory manner with the indigenous people from villages peripheral to the park. Eco-tourism is visualised here as an important source of income for the host communities living close to the Protected Area, compensating for the curtailment of their access to the PA, and as an incentive for wildlife conservation. The Govt. of Madhya Pradesh have laid down the guiding principles for constituting Ecodevelopment Committees (EDC), apart from microplanning through these committees, to ensure the active participation of the local people for forest protection and rehabilitation. The package addresses both to the indigenous host communities and the visitors (urban/ rural).

- **For the Indigenous Host Communities:**

- **Providing Soft loan to village beneficiaries from “Villagers Contributory Fund” for fostering eco-tourism**

In accordance with the directives from the Government, a fund has been created to ensure cycling of gate and tariff receipts to support Park Management/ eco-tourism (“Project Tiger – Pench- Vikas Nidhi”). The beneficiaries drawn from the peripheral villages would be provided loan from the Nidhi for eco-tourism infrastructure development:

- Low cost accommodation for tourists, home stays, tents, etc.
- Procurement of cycles, canoes/ boats
- Setting up of cafeteria
- Angling facilities
- Facilities for souvenir making, fostering folk dance

The identified beneficiaries would be imparted free training in public relation, visitor management and guide service also.

- **For the Visitors**

The following facilities would be provided to the visitors in the buffer zone, as a part of the buffer zone eco-tourism package:

- **Nature Trail**

Four nature trails of almost 2–8 kms each has been designed near the Karmajhiri entry point. This trail would enable the visitors to feel the forest by trekking and closely observing the trees and birds, which are found inside the

park. A field brochure highlighting the interpretive points would be provided to the visitors. Similarly other potentials areas near Rukhad and Kumbhapani are being developed for nature walk, cycling, camping, boating, machans etc.

□ **Vehicular Excursions**

A network of forest roads would be available to the tourists for vehicular excursions with a route guide in the core & also in the buffer forest of Rukhad, Karmajhiri, Kumbhapani etc.

□ **Elephant Rides**

Four departmental elephants would be made available to the tourists near Alikatta for joy rides. The identified local youths would be trained in housekeeping and care of elephants.

□ **Angling**

“Pench River” near Tikadi is a good spot for angling, since it is rich in many species of fresh water fishes. Trained local villagers would be entrusted with task of visitor management.

□ **Bullock Cart Rides**

Bullock cart would be made available to identified beneficiaries by providing loan from the Vikas Nidhi. The beneficiaries would be trained in the housekeeping and maintenance of the Bullock cart rides.

□ **Ethnic Art/ Folk Dances**

Talented beneficiaries would be provided loan for skill development and to foster talent, which would serve as added attractions to the visitors in the area, apart from generating income.
