

PROTECTED AREAS NETWORK OF MANIPUR: SUSTAINABLE MANAGEMENT STRATEGIES FOR TAPPING HUGE ECO-TOURISM POTENTIALS

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ABSTRACT

The State of Manipur has a vast forest cover of 76.54 % of the total land area. Of the total Protected Areas Network of the North East India that covers 13,555 sq km. which is 8.86 % of the total Protected Areas Network of the country, Manipur State shares only 789.29 sq.km. which is 1.08% of the total geographical area of the State. This shows that a very little forest areas are included in the Protected Areas Network. For proper planning and management of eco-tourism resources, it is a dire necessity to identify and tapping the existing eco-tourism potentials. In fact, untapped huge eco-tourism potentials are available especially within the Protected Areas Network in the State of Manipur. As such, in the present study an attempt has been made (i) to trace the growth and development of eco-tourism ventures in the State of Manipur; (ii) to identify the eco-tourism potential areas particularly within the Protected Areas of Manipur; and (iii) to formulate sustainable management strategies for tapping huge eco-tourism potentials in the State of Manipur. The present study observes that though the State of Manipur has a huge eco-tourism potentials which are scattering all over the State, there has been a slow race in tapping the eco-tourism potentials due to lack of eco-tourism related infrastructural development, on the one hand and lack of active participation and involvement of the local people, on the other. The present study also reveals that the development of eco-tourism related infrastructures is the need of the hour and eco-tourism guidelines as introduced in other few States of the country like that of Kerala, Karnataka and Tamil Nadu, etc. should be implemented in letter and spirit in order to tapping huge eco-tourism potentials in the State of Manipur.

Key Words:

Protected Areas Network, Eco-tourism, Sustainable Management, Biodiversity Park, Wetlands.

Introduction:

The State of Manipur has varied richness in her biodiversity and ecosystems with luxuriant growth of vegetation ranging from Moist Tropical Forest types in the valley to Sub-tropical Forest types in the hills in association with a large number of orchid species. The recorded forest area of the State is 17,418 sq.km. which is 78.01 % of the total geographical area and 2.54 % of the country's geographical area. The present forest cover of the State is 17,090 sq.km. which is 76.54 % of the total geographical area of the State and 2.47 % of the country's geographical area [1]. Of the total forest area, the Reserved Forests including Wild Life Protected Area Network is 1,467 sq.km. which is 8.4 % of the total forest area. An area of 4,171 sq.km. which is 24 % of the total forest area is recorded as Protected Forests and the rest 11,348 sq.km. which is 67.6 % of the total forest area belongs to the Un-classed Forests of Manipur[2].

The State shares an international border with Myanmar and has a strategic importance in the Nation's Look East Policy and is deemed to become the Gateway to South-East Asia and important tourism destination in the near future. Though small in area (22,327 sq. km) and population (27.2, Census 2011), the State of Manipur is known for its exotic landscape, scenic beauty

of green valley surrounded by nine hill ranges, blue lake of Loktak in the central valley, enchanting waterfalls in Sadu Chiru, Barak Khayang, Bro and Ngailoi, etc. and rich cultural heritage. The State is abode of Shiroi Lily (*Lilium Mclineae*), the paradise flower which is not found anywhere in the world. The Dzuko Valley is also the only habitat of the endemic and the rarest species of Dzuko Lily (*Lilium Chitrangade*). The State is also the only hot spot on earth in which the Brow Antlered deer (*rucervus eldii eldii Mc Clelland 1842*) lovingly called as 'Sangai' (Animal awaiting and looking at you) by the people of Manipur is found. This rare deer is surviving in its natural habitat at Keibul Lamjao National Park of Manipur. Thus, the State has a huge eco-tourism potential, which can provide a sound base to start eco-tourism ventures. In fact, such eco-tourism ventures can be used for advocating environmental awareness, long-term conservation measures and economic benefits to the local communities.

Objectives:

The main focus of the present study is based on the following objectives:

- i) To trace the growth and development of eco-tourism ventures in the State of Manipur;
- ii) To identify the eco-tourism potential areas particularly within the Protected Areas of Manipur; and

- iii) To formulate sustainable management strategies for tapping huge eco-tourism potentials in the State of Manipur.

Methodology:

The present study is based on the secondary sources of data generated by the Tourism Department, Forest Department, and other allied Departments, Government of Manipur, and from various sources of books, journals and annual administration reports of the Government Departments. The data have been carefully scrutinised, reviewed, analysed and interpreted.

Growth of Eco-tourism:

“Ecological Tourism” or “Eco-tourism” is a new concept developed in Germany. The term “Eco tourism” was first coined by Hector Ceballos Lascurian in 1983 and was initially used to describe the nature-based travel to relatively undisturbed area with an emphasis on education [3]. It is the harmonious co- existence of tourism and ecological Principles without destroying the ecological balance or rather encouraging eco-development through mass-education and people’s participation [4]. Thus the activities of a person travelling to and staying in places outside their usual place of residence for not more than one consecutive year for leisure, business, and other purposes constitute tourism. Such visits for being close to nature to enjoy its enormous creation, both biotic and abiotic, in a most environment-friendly manner, without any adverse

impact on the ecosystems, is particularly known as “Eco-tourism”. According to World Tourism Organization (WTO)”, Tourism that involve travelling to relatively undisturbed natural area with the specified object of staying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects (both the past and present) found in these area is defined as “Eco-tourism”. Nature tourism or Resort-tourism by having a lower impact on the environment and requiring less infrastructure [5]. In other words, eco-tourism means management of tourism and conservation of nature in a way so as to maintain a fine balance between the requirements to tourism and ecology, on the one hand and the needs of local communities for jobs, new skills, income generating employments and a better status for women, on the other [3]. Thus, eco-tourism means purposeful travel to natural areas to understand the cultural and natural history of the environment, while producing economic opportunities that make conservation of natural resources beneficial to local people.

Eco-tourism flourished as a worldwide phenomenon. In India, as in rest of the world, such as Kenya, Tunisia, Australia, Spain, Cyprus, Malta, Ecuador, Thailand, Dominican Republic etc. has been gaining momentum. In developed countries like Austria, Canada and USA has already considerably well developed in regard to eco-tourism movement. In an underdeveloped country like

that of Cambodia, Laos and Vietnam had also take advantages of eco-tourism development to a great extent. Whereas countries like Nepal, Bhutan and India, eco-tourism is viewed as an opportunity to add value to their traditional forms of tourism.

Eco-tourism in Manipur:

In the State of Manipur the growth of eco-tourism was deep rooted since the pre-historic period during the time of Luwang Ningthou Punsiba (the asylum God of Manipur) at the 'Cheirao-ching' or 'Langol Ching' of the Langol sacred hill range as the first traditional eco-tourism centre. Since then various eco-tourism centres has been established in different parts of the kingdom (Manipur). Some of the important traditional eco-tourism centres are Nongmaiching-Ching, Kroubu-Ching, Thangjing -Ching, etc. It signifies for aesthetic, good health and longevity of life by preserving the ecological balance of the country [6].

The modern trend of growth of eco-tourism in the State was come up only when the Tourism Department of Manipur came into existence since 1972. The main function of Tourism Department of Manipur is to develop eco-tourism spots and infrastructural facilities for the visiting tourists---- both foreign as well as the domestic. Under the guidelines of National Tourism Policy, Government of Manipur has also taken steps for tapping huge

potentials of eco-tourism under Centrally Sponsored Schemes. The National Tourism Policy focuses greatly on development of tourism with a holistic approach and giving thrust to development of nature-tourism or eco-tourism for elevation of creating employment. Following the guidelines of National Tourism Policy, Tourism Department of Manipur intends to work out strategies in consultation with other related departments for eco-tourism development in the State. The Tourism Department of Manipur aims at to generate economic surplus without causing irreparable damage to the environment, conflict to the individuals, sentiments and ethos of the host population.

The State Government of Manipur had declared Tourism as an industry for taking novel measures for the development of tourism related sectors.

As a part of tourism development programme, tour on every Sunday covering the routes from Shri Shri Govindaji Temple-via-Bishnupur, Loktak Project, INA Memorial complex at Moirang and Sendra Tourist Home to Keibul Lamjao National Park are regularly conducted by the Tourism Department, Government of Manipur for attraction of various tourist goers. The tourist traffic flow during the last two decades is given below in Table 1:

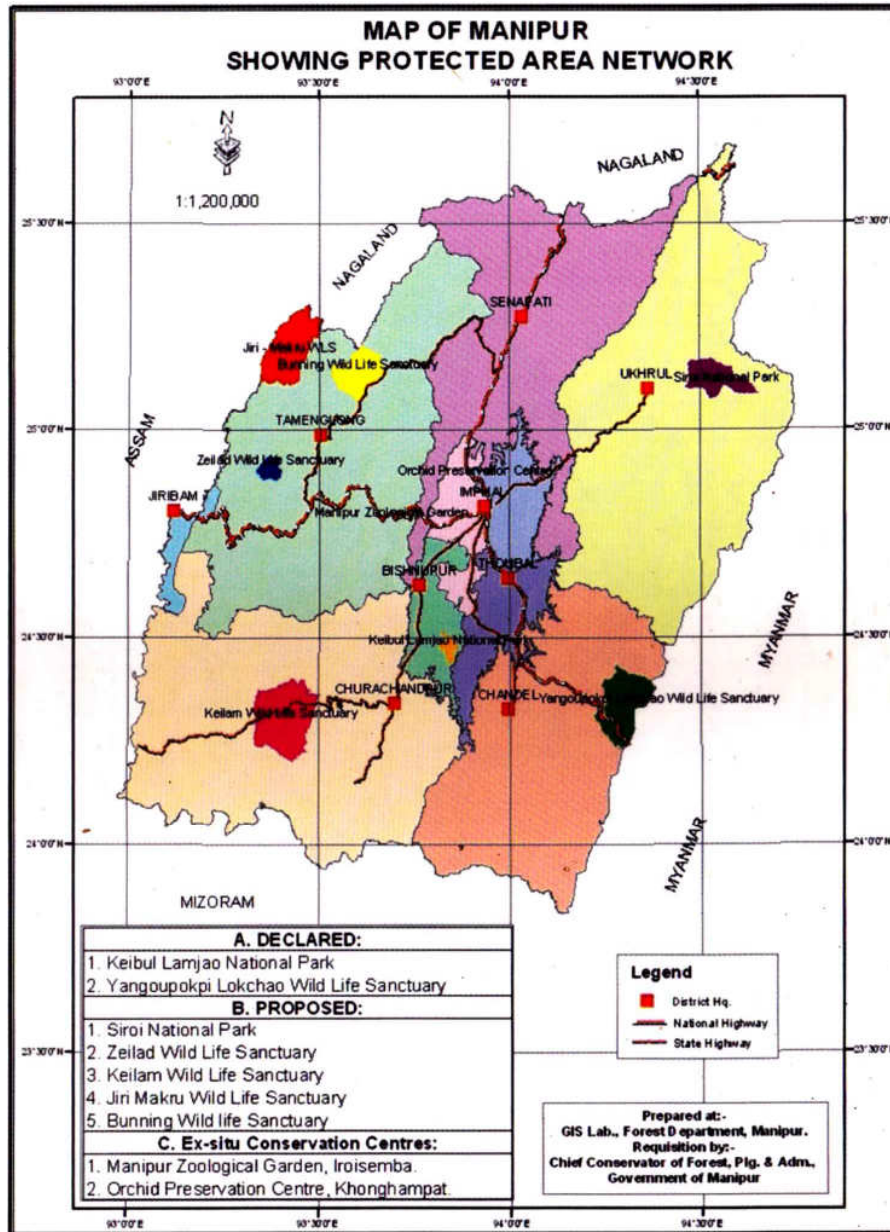
Table 1
Tourist Traffic Flow and Revenue Receipt during the period
from 1990-91 to 2012-13

Year	No. of Tourist spots	No. of Tourist Arrival		Total	Revenue receipt from Tourism (Rs. in lakh)
		Foreign	Domestic		
1990-91	29	185	90,685	90,870	16.79
1991-92	29	374	91,290	91,664	21.09
1992-93	29	221	62,374	62,595	39.02
1993-94	29	350	72,980	73,330	15.68
1994-95	29	370	82,798	83,168	1.68
1995-96	29	288	84,025	84,313	1.70
1996-97	29	219	87,074	87,293	1.11
1997-98	31	173	91,620	91,793	5.19
1998-99	31	294	89,664	89,958	0.64
1999-2000	29	335	99,399	99,734	18.55
2000-2001	29	409	1,03,854	1,04,263	0.74
2001-2002	41	131	73,842	73,973	1.00
2002-2003	41	227	89,829	90,056	0.70
2003-2004	41	296	93,430	93,726	0.93
2004-2005	41	248	97,054	97,302	NA
2005-2006	41	348	93,333	93,681	NA
2006-2007	42	263	1,20,472	1,20,735	NA
2007-2008	42	460	1,01,000	1,01,460	NA
2008-2009	42	271	1,15,300	1,15,571	NA
2009-2010	42	405	1,27,524	1,27,929	NA
2010-2011	42	431	1,16,652	1,17,083	NA
2011-2012	42	602	1,33,224	1,33,826	NA
2012-2013	42	768	1,31,803	1,32,571	NA

NA: Not Available.

Sources: (i) GOM: Statistical Abstract Manipur, 2012,
 Directorate of Economics and Statistics, Imphal.
 (ii) GOM: Directorate of Tourism, Imphal.

Map 1



Protected Areas Network of Manipur:

Protected Area Network is the cornerstone of biodiversity conservation as an integral part of any national conservation strategy. The World Conservation Strategy suggests that the initial efforts towards biodiversity conservation should aim at establishment and maintenance of a network of protected area through making policy change to involve local people in protected areas management and also to mobilize financial resources for their conservation and protection. The strategy also lay down that considering the stress on environment, countries should aim at earmarking 10% of their land area for a Protected Area Networks [7].

Protected Areas extends to around 5% of the geographical area of the country and consist of both National Parks and Wildlife Sanctuaries. At present there are 566 protected areas within mainland Indian Territories and has a Protected Area Network that covers 58% of natural landscape of the country [8]. Almost 4.65% (15, 300.36 sq. km) of India's geographical areas in the form of over 480 sanctuaries and 86 national parks [9]. North East India have a total protected area that covers 13,555 sq km. which is 8.86% of the total protected area of the country. Of which the extent and coverage under Protected Areas Network in the State of Manipur is only 789.29sq.km. which is 1.08% of the total geographical area of the State [10]. This shows that a very little area of

wetlands are included in Protected Area Network (Map 1).

Tapping Huge Eco-tourism Potentials within the Protected Areas of Manipur:

1. Keibul Lamjao National Park:

This park is located at a central location of a chain of wetlands namely, Loktak-Pat (Loktak Lake) and Pumlun-Pat in Bishnupur District ; Kharung-Pat and Ikop-Pat in Thoubal District, etc. It has an area of only 40 sq. Kms. It is the only floating National Park on the globe having a unique eco-system. It is also the only natural home to the key wildlife *Sangai (Rucervus eldii eldii*, Mc Clelland, 1842), the world famous *Brow Antlered Deer*, with its associated animals like *hog deer, wild boar, large Indian civet cat, wild dog ermine, common otter* and other aquatic fauna and avifauna share the habitat with *Sangai*. In fact, it is one of the nature/eco-tourism centre in the State of Manipur attracting both foreign and domestic visitors.



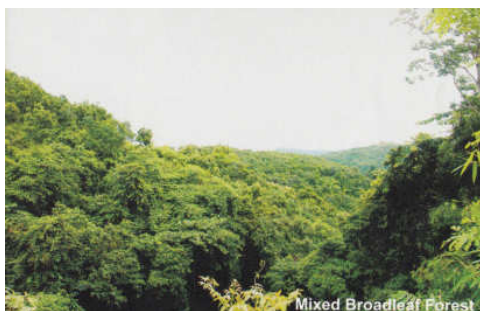
This Park is located at a distance of 52 km by road from Imphal, the capital City of Manipur and having visitor's accommodation of one night halt at any one of the following Rest Houses: (i) Forest

Rest House, Keibul Lamjao National Park ; (ii)Sendra Tourist Centre, (iii) Moirang Tourist Home, Moirang.

The best season for visit is during the month from October to April and best time of visit is in the early sunrise or late afternoon.

2. Yangoupokpi Lokchao Wildlife Sanctuary:

This Wildlife Sanctuary is located at Lokchao of Chandel District at a distance of 110 km by road from Imphal on NH-39. It has an area of 184.80 sq.km. This sanctuary has a unique and vibrant ecosystem representing Indo-Myanmar biodiversity due to location of the sanctuary at the confluence of two major geographical zones. It is the home of *Hoolock Gibbon*, the only Ape species found in India with its associated animals like *wild bear*, *Himalayan black bear*, *Malyan sun bear*, *slow loris*, *stump tail macaque*, *serow*, *Indian civet cat*, *common otter*, *pangolin*, *leopard*, etc. and frequented by seasonal migratory of elephants from Myanmar



Accommodation for overnight halt is available at any one of the following Rest Houses: (i) Forest Rest House, Moreh, (ii) Indo-Myanmar Trade Centre Rest House,

Moreh, and (iii) Transit Camp at Wildlife Office, Moreh.

The best season for visiting to this sanctuary is during the month of October to April and the best time of visit is during early morning.

3. Proposed Shiroy National Park:

The Shiroy National Park is located at Shiroy Hill of Ukhrul District of Manipur at a distance of 98 km by road from Imphal. It has an area of 100 sq.,km. It has very enchanting and exotic landscape, scenic beauty of green grasses along the wind wards of the lofty shiroy hills. It is the home of unique and endemic ground lily *Shiroy Lily* (*lilium Macklinae*). It has an area of 100 sq.,km and other key wildlife viz., *hoolock gibbon*, *slow loris*, *serrow*, *mrs. Hume's bar-backed pheasants*, *Blyth's tragopan*, *horn bill*, *lengwa*, *python*, etc., representing the Eastern Himalayan biodiversity.



Accommodation facilities are available at (i) Hotels in Ukhrul town; and (ii) Rest House, IFAD, Shiroy.

The best season for visiting this park is during the month of May and June (blooming season of lily) and the best time of visit is in the early morning trekking (2-3 hours).

4. Proposed Jiri-Makru Wildlife Sanctuary:

This Sanctuary is located at Jiribam at a distance of 183 km. by road to reach via Imphal-Tousem Road. It has an area of 198 sq.km. This park has virgin forests of catchment areas of Jiri and Makru rivers hosting many valuable wildlife viz., *tiger, leopard, hoolock gibbon, civet cat, clouded leopard, slow loris, Pangolin, the great Indian horn bill, etc.*



Accommodation for visitors are available at Hotels in Jiribam town.

The best season for visiting to this sanctuary is during the month from October to April.

5. Proposed Keilam Wildlife Sanctuary:

This sanctuary is located at Churchandpur District at a distance of 132 km by road from Imphal along the NH 150 and having an area of 187.50 sq.km. It is home to *hoolock gibbon, serrow, five species of horn bills viz., the great Indian horn bill, rufous necked horn bill, wreathed horn bill, Indian pied and lesser pied horn bill, and brown backed horn bill, etc.*



At present, there is no accommodation facility for visitors.

The best season of visit to this Sanctuary is during the month from October to April.

6. Proposed Bunning Wildlife Sanctuary:

This Sanctuary is located at a distance of 172 km by road from Imphal via Tamenglong (Tamei Road) in Tamenglong District and having an area of 115 sq. Km. This sanctuary representing a unique combination of Alpine grassland and forest eco-system with the beautiful undulating small mounds clothed with varied flowering herbs and shrubs, bamboo, orchids mingled with wild lilies and home to the valuable wildlife viz., *tiger, sambar, leopard, pangolin, clouded leopard, golden cat, etc.*



At present, there is no visitor's accommodation in this sanctuary.

The best season for visiting to this Sanctuary is during the month from October to April.

7. Manipur Zoological Garden:

This Zoological Garden is located at Iriosemba along the Imphal-Kangchup Road in the Imphal West District at a distance of 5 km by road from Imphal and having an area of 8 ha and 2.13 ha for *Sangai* captive breeding, the Second Home of *Sangai*. It is a medium sized zoo hosting a number of schedule 1 species of mammals, reptiles, birds and amphibians endemic to this region and recognised by the Central Zoo Authority of India as the co-ordinating zoo for the conservation breeding centre of *Sangai* and *serrow*. It is an in-situ conservation centre of 45 endangered mammals, reptiles and birds, etc.



Visitor's accommodation is available at reputed Hotels in Imphal.

The best season for visiting to this zoological garden is during the month from April to September (Summer) and October to March (Winter). Monday is non-visitor's day.

8. Orchid Preservation Centre:

This Orchid Preservation Centre is located at Khonghampat in Imphal West District and having an area of 50 ha. It is located at a

distance of 12 km by road from Imphal along the Imphal-Dimapur Road. It is an ex-situ conservation centre of nearly 400 orchid species out of 450 known species found in Manipur including rare, endangered and endemic one collected from the 5 hill districts of the State. At present, three orchid species endemic to Manipur, namely, *nachomlei* (*ascocentrum ampullaceum*), *schoenorchis manipurensis* and *kalimpongia narjitii*, are preserved at this centre.



Accommodation for visitors are available at reputed Hotels in Imphal.

The best season of visiting to this orchid preservation centre is during the month from April to July (flowering season).

9. Other Eco-tourism Potential Areas:

The following are other important eco-tourism sites:

- i) **Dzuko Valley:** It is located at Senapati District. It is an attractive site of eco/nature tourism and home to the endemic ground lily *Dzuko Lily* (*lilium chitragade*) with the co-existence of many other valuable wildlife including reptiles and amphibians.



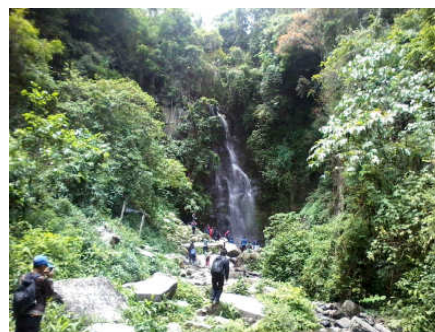
ii) **Zaimeng Lake:** It is located at IT Road in the Senapati District. It is a small highland lake having a unique eco-system and the potential site of eco/nature tourism and home to many valuable reptiles and amphibians.



iii) **Barak Waterfall:** This waterfall is located on the Barak river in Tamenglong District. It is home to many valuable river fishes, reptiles and amphibians. It is an attractive site of eco/nature tourism having sixty metre high and seven step-falls at the boundary of the proposed Zeilad Wildlife Sanctuary.



iv) **Sadu Chiru Waterfall:** This waterfall is located at Chiru village of Waroi-ching in the Sardar Hill. It is located between the border line of Bishnupur and Senapati District and it is convenient to journey from Imphal along the Tiddim Road of the Bishnupur district at a distance of 20 km by road from Imphal beside the Tiddim Road along the NH-150. It is a picturesque site famous for its perennial waterfall at a scenic foot hill. It is also an attractive eco/nature tourism site having about five metres high and it has three step-falls.



v) **Loukoi Pat:** This tiny lake located near the Tiddim Road on NH-150 at a distance of 27 km. From Imphal in Bishnupur District is a retired for visitors from within outside the state. Boating facilities and Scenic beauty of the place is mesmerising for the visitors.



Sustainable Management Strategies for Tapping Huge Eco-tourism Potentials:

Strategies to ensure sustainable management and growth of Eco-tourism without causing irreparable damages to the natural environment, activities relating to eco-tourism take care of the following:

1. Establishment of Biodiversity park in each district to serve as ex-situ conservation, education and recreation centres with promotion and management of biodiversity friendly, eco-tourism through active participation and involvement of local people.
2. Development of eco-tourism related infrastructures and other basic amenities at Dzuko Valley, Loktak Lake, Koubru Hill, Thangjing Hill, Nongmaiching Hill, Ango Hill, Sadu Chiru Waterfall, Khayang Waterfall, Barak Waterfall, Tamenglong Waterfall, Tharon Cave, Kankhui Cave, Chandel cave, Shiroy National Park, Zalied Lake, Bunning, Lokchao, Kailam, etc., and other possible sites giving due importance to biodiversity.
3. Non- destructive use of the other Protected Areas (PAs) of the State for promotion of Eco-tourism with extension of awareness.
4. Creation of amenity forests and green belts on the fringes of urban areas for aesthetic and recreational purposes.
5. An inter-state policy for

neighbouring States should be framed so as to reduce under embarrassment on the National High Ways specially Imphal to Guwahati for assisting the foreign tourists to enter the State of Manipur.

6. Steps should also be taken up to relax Protected Area Permit (PAP) and Inner Line Permit (ILP) System under consideration of the Ministry of Home Affairs, Government of India for the State of Manipur and neighbouring States. Removal of Travel Permit will promote more tourist traffic in the State.

Conclusion:

Though the State of Manipur has a vast and huge eco-tourism potentials which are scattering all over the State, there has been a slow race in tapping the eco-tourism potentials due to lack of eco-tourism related infrastructural development, on the one hand and lack of active participation and involvement of the local people, on the other. Therefore, it is imperative to implement the eco-tourism development strategies as formulated above. In order to tap the huge eco-tourism potentials, eco-tourism guidelines which had already been introduced in few States like Kerela, Karnataka and Tamil Nadu, etc. should be introduced in the State of Manipur. These guidelines includes (i) Guidelines for the development of National Parks and potential areas for tourism of the World Trade Organisation; (ii) PATA Code for

Environmentally Responsible Tourism; (iii) Environmental Guidelines of the World Trade and Tourism Council; (iv) the Himalayan Code of Conduct prepared by the Himalayas; and (v) Eco-tourism guidelines by Eco-tourism Society. In conformities with these guidelines, it is imperative to take steps for preparing a separate Eco-tourism Policy for tapping the huge eco-tourism potentials of the State. If these policies and guidelines are fully implemented by the State Government of Manipur, it will not only develop eco-tourism industry in the State but also it could preserve and protect our environment and natural vegetation.

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