



Wildlife Tourism: A Case Study of Jim Corbett National Park

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Abstract

Wildlife tourism is increasingly becoming a popular recreational pursuit. Indian sub-continent has huge potential for wildlife tourism owing to its unique diversity. The Jim Corbett National Park is the oldest National park in India, which was first to come under the Project Tiger initiative. Corbett National Park is famed for its wealth and different species of its wildlife which is included with 50 species of mammals and more than 580 species of birds.

The present paper discusses the impacts of wildlife tourism and measures to minimize visitor's impact on wild species and their habitats from a Tour Operator perspective. Managing tourism impacts involves an understanding of the spatial requirements of wild species and the limits that tourists have to impose on themselves in their pursuit for an enjoyable wildlife experience. The study also investigates the State and Central Government policies alongwith international obligations relevant to wildlife tourism. Further, the study also points out the Major issues and challenges related to ecologically sustainable practice in wildlife tourism and wildlife management.

KEY WORDS: wildlife tourism, biodiversity, protected areas, impacts, zoning, regulations, ecologically sustainable practice, wildlife management

1. Introduction

Realizing the socio-economic and educational benefits of Wildlife tourism, most of the nations rich in biodiversity are promoting this form of tourism and it is increasingly becoming a popular recreational pursuit. But a wildlife-dependent recreation is generally more disruptive although outdoor activities are usually planned since visitor's satisfaction relies on the presence of wild species. Wildlife has wide range of activities from leisure, to tracing of wildlife, to photographing and video recording, and to sport hunting and fishing.

The conservationists and natural resource managers believe that wildlife tourism can risk the integrity of ecosystems, in general, and wildlife population dynamics and behaviour, in

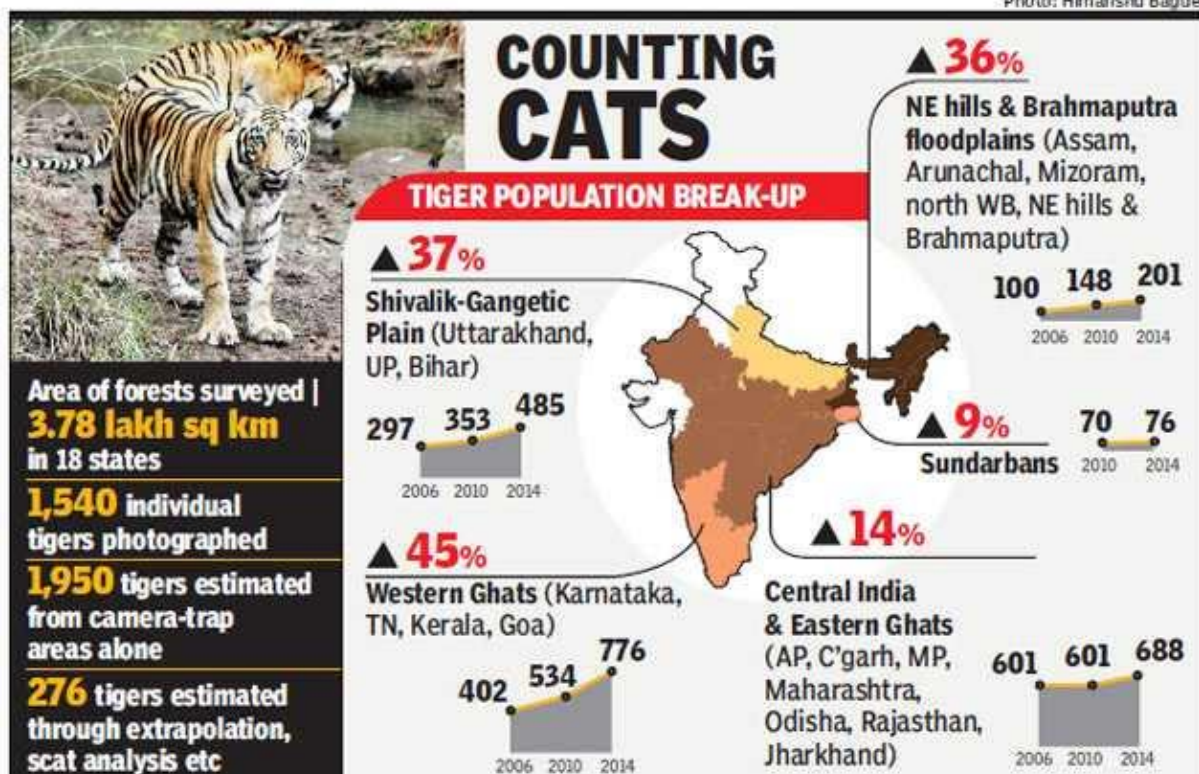


particular. However, others contend that, if properly managed, wildlife tourism can be a tool for biodiversity conservation.

Infact, wildlife refers only to some game species (almost exclusively birds, mammals, and fish) that people hunt. Today the term ‘wildlife’ includes all living forms even those that are not used for sport (non-game species). Among the wildlife species the Big Cat constitutes to be major tourist attraction, especially in Indian Sub-continent. The study conducted by Bagde, H. (2015) depicted by Figure 1, below, reveals the distribution of Wild Cats in the sub-continent. The researcher had photographed 1540 tigers, estimated 1950 from camera trap and 276 through extrapolation from 18 States through a survey of 3.78 Lakh Sq Km area. Interestingly, the Figure also indicates that the population of Tigers in Shivalik –Gangetic Plain is 37% and the population have increased by 37% in four years i.e., from 353 in 2010 to 485 in the year 2014.

Owing to the above fact and with personal experience as a tour operator, I have taken up the present study on WildLife Tourism: A Case of Jim Corbett National Park. This study is exploratory in nature on the tourism potential of the park and in the last section recommendations are made to regularize tourism in the park.

Figure 1





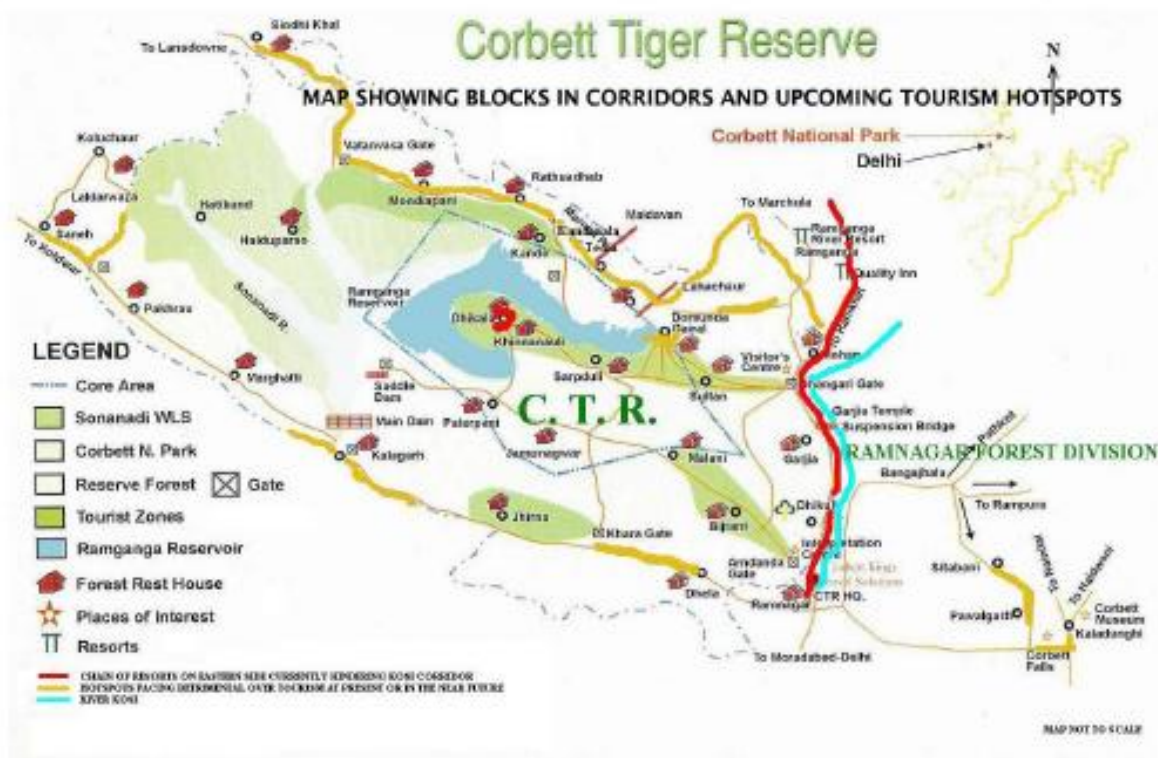
2. The Study Area

Jim Corbett National Park situated along the foothills of Himalaya, is the oldest national park in India and was established in 1936 as Hailey National Park to protect the endangered Bengal tiger. It is located in Nainital district of Uttarakhand and was named after Jim Corbett who played a key role in its establishment. The park was the first to come under the Project Tiger initiative.

Tourism activity is only allowed in selected areas of Corbett Tiger Reserve so that people get an opportunity to see its splendid landscape and the diverse wildlife. In recent years the number of people coming here has increased dramatically.

Corbett National Park comprises 520.8 km² (201.1 sq mi) area of hills, riverine belts, marshy depressions, grasslands and a large lake. The elevation ranges from 1,300 to 4,000 ft (400 to 1,220 m). Winter nights are cold but the days are bright and sunny. It rains from July to September.

Figure 2





3. Zone Wise Classification

The study area can be safely classified under six zones namely, Jhirna, Sitabani, Bijrani, Dhikala, Durga Devi and Dhela. The best season to visits these areas are mentioned in the below Table 1.

Table 1

Tourism Zones	Best Time To Explore
Jhirna	Throughout the Year
Sitabani	Round the Year
Bijrani	01st October to 30th June
Dhikala	15th November 15th June
Durga Devi	15th November to 15th June
Dhela	Throughout the Year

Figure 3
 Glimpses of Scenic View in Jim Corbett Park





4. Objectives of Study

The present study is an exploratory study and is focussed to achieve the following broad Objectives:

- 1) To assess the tourist potential and analyse the tourist traffic trends
- 2) To assess the environmental impact of increasing tourism and to analyse the status of bio-physical assets
- 3) To analyse the new initiatives of State and Central Governments in the study area
- 4) To suggest to regularise tourism in the most suitable manner

5. Tourist Traffic Trends in Study Area

The Table 2 below reveals that 2015-16 has received 2,50,652 domestic visitors registering about 4.5% growth over the previous year, whereas the International tourist were recorded as 6745 having growth of 8.9% over the previous year. The statistics available indicates that revenue generated by the park is also steadily increasing. Year 2014-15 registered a growth of 10.6 per cent revenue growth to Rs 8.28 crore as compared to Rs 7.48 crore in 2013-14.

Interestingly, the current population of tigers in Uttarakhand is 340 and Corbett has the maximum number of big cats in the hill state - second only to Madhya Pradesh.

Table 2



Year wise Tourists Arrivals to Corbett National Park

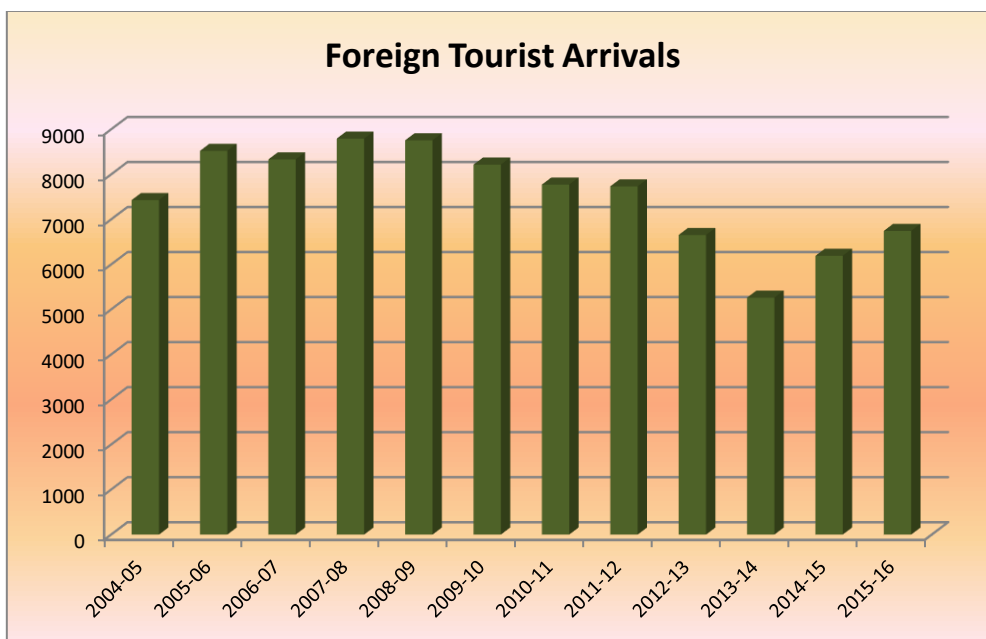
S. No	Year	Indian Tourist Arrivals	Foreign Tourist Arrivals	Total (Indian + Foreign Tourist)
1	2004-05	104869	7429	112298
2	2005-06	121520	8523	130043
3	2006-07	130724	8333	139057
4	2007-08	162601	8794	171395
5	2008-09	193892	8757	202649
6	2009-10	189988	8217	198205
7	2010-11	182019	7774	189793
8	2011-12	202528	7734	210262
9	2012-13	200656	6654	207310
10	2013-14	206413	5262	211675
11	2014-15	239681	6192	245873
12	2015-16	250652	6745	257397

Further, the Table 2, Figure 3 on Domestic Tourist Arrivals and Figure 4 depicting the trends in Foreign Tourist arrivals also indicate that there has been a steady growth in Visitation in the park area with exceptions of few years.

Figure 4



Figure 5



6. Natural Assets of the Park

Flora: A total of 488 different species of plants, including 110 species of Trees, 52 species of shrubs, 27 species of climbers and 37 species of grasses have been recorded in the park. Tree density inside the reserve is higher in the areas of *Sal* forests and lowest in the *Anogeissus-Acacia catechu* forests. Total tree basal cover is greater in *Sal* dominated areas of woody vegetation. Healthy regeneration in sapling and seedling layers is occurring in the *Mallotus philippensis*, *Jamun* and *Diospyros tomentosa* communities, but in the *Sal* forests the regeneration of sapling and seedling is poor.

Fauna: The Park has 586 species of resident and migratory birds, including the crested serpent eagle, blossom-headed parakeet and the red junglefowl — ancestor of all domestic fowl. 33 species of reptiles, seven species of amphibians, seven species of fish and 36 species of dragonflies have also been recorded.

Bengal tigers, although plentiful, are not easily spotted due to the abundance of foliage - camouflage - in the reserve. Thick jungle, the Ramganga River and plentiful prey make this reserve an ideal habitat for tigers that are opportunistic feeders and prey upon a range of animals. The tigers in the park have been known to kill much larger animals such as buffalo and even elephant for food. The tigers prey upon the larger animals in rare cases of food shortage. There have been incidents of tigers attacking domestic animals in times of shortage of prey. Leopards are found in hilly areas but may also venture into the low land jungles. Small cats in the park include the jungle cat, fishing cat and leopard cat. Other mammals include barking deer, sambar deer, hog deer and chital, sloth and Himalayan black bears, Indian grey



mongoose, otters, yellow-throated martens, Himalayan goral, Indian pangolins, and langur and rhesus macaques. Owls and nightjars can be heard during the night.

Figure 6
Tigers in Jim Corbett Park



7. Wildlife Habitat Zonation

The Corbett Tiger Reserve exhibits a great diversity of physiographic, geomorphological, climatic and floral phenomena, obtaining both in foothill zone and adjoining sub-Himalayan mountain ranges, has been divided into the following five habitat zones:

- i. The Bhabar Belt
- ii. The Siwalik Slopes
- iii. The Doon Floor
- iv. The Northern Hill Zone
- v. Aquatic Habitat
- vi. The Grassy Plains

8. Impact of Tourism on Natural Ecosystem

The wildlife areas and forests are highly fragile eco-systems and are extremely vulnerable to human activities and intrusions. Tourist movement, if unplanned and uncontrolled can



be very disastrous to the ecology and environment of such destinations. The natural habitat gets destroyed which in turns endangers the wild life species with a multiplier effect. The natural eco-systems are very delicate and can accommodate a very few visitors, hordes of visitors may cause severe damage not only to the environment but also to the overall recreational quality of the parks. The regular pressure of visitation shall allow not for regeneration of flora and fauna leading to complete disturbance in the ecological balance.

i) Impact on Environment and Ecology

The regular and intensive use of protected areas by huge number of tourist shall deteriorate the environmental quality of the natural areas and shall have high degree of impact on the fragile ecology of the area. Tourist involved in activities, like, feeding the animals, teasing of wildlife, plucking of flowers, trampling of grass, littering, pollution of vehicles and human waste can be severely detrimental to the biotic life of the reserve forests.

ii) Impact on Recreational Quality

Visitation to reserve parks beyond a certain limit shall have highly negative impact on the recreational quality. Overcrowding beyond a level shall mar the quality of recreation in natural areas, as isolation and seclusion is the pre-requisite for recreation in such areas. A park full of noise of human and vehicles, human interference, tents, and garbage shall never remain an attraction for tourist.

iii) Impact of Construction

The study conducted by Ahmad, S. (2017) reveals that the Corbett Tiger Reserve receives very high number of Indian and Foreign visitors, owing to its popularity and diversity. There are 17 Forest rest houses and hutments scattered over the tourist zone of the reserve park and many more are under construction. These complexes have a capacity to accommodate 150 tourist per night, alongside there are 251 buildings having about 200 permanent staff members residing inside the park. The average visitation of tourist in peak season is more than 200 per day between November to June. The degree of impact of such constructional activities created to cater to the needs of huge tourist influx, including construction of metalled roads, buildings, recreational areas, eating outlets are highly damaging to the fragile eco-systems. This kind of human intervention leads to frequent floods, uprooting of trees, damaging the grasslands and vegetation.

iv) Unwarranted Activities of Tourist

The tourist visiting forest reserves must be well educated before entering the park areas; it must be ensured that they are properly aware of do's and dont's. The uneducated or unaware visitors are extremely dangerous to natural areas, as they indulge in littering here and there; create noise pollution; pollute water, air and water; throwing burning cigarette; feeding and teasing animals; plucking trees plants and flowers; disturbing the aquatic life and similar other acts. These uneducated tourists can be highly dangerous



to the floral and faunal wealth of the park. The figure 7 below depicts some human interventions and Tourism Impact on National Park.

Figure 7
Photographs depicting Human Intervention and Tourism Impact



9. Effectiveness in Management of Park

Owing to the increasing ecological problems of Wildlife sanctuaries and parks, it has become imperative to manage these area with effective implementation of polices and guidelines for tourist, host and the authorities. Suitable strategies for sustainable tourism development need to be evolved and incorporated. The state and central government has been framing guidelines for wildlife conservations and the Jim Corbett park authorities deserves all compliments for making right efforts in implementation. The efforts of authorities are getting the requisite support from public i.e., Tourist and Local Community. Several Public awareness programmes are being designed and implemented in the nearby park vicinity for sensitising the local populace. Realising the importance of Interpretation



Centres, Eco-clubs and Nature Clubs for local youth and tourists, the NGOs and Government have initiated steps in that direction.

Key Steps in Effective Management of Jim Corbett Park

- Interestingly, Hon'ble Supreme Court of India in its decision have permitted to allow only 20% are of the Park Area for tourist purpose and rest of the 80% must be used for Wildlife, but Corbett Park Authorities are utilising only 12% out of 20% area to be used for tourist purpose.
- There is proper buffer zone in Corbett National park made by the Forest department.
- The Park does not allow any mining and sand query inside the Corbett National Park / Tiger Reserve.
- Govt has stopped the conversion of commercial land around Corbett till 05 kms. There are 40 villages around Corbett which cannot be converted into the commercial Land.
- Eco sensitive zone of 02 kms is in the pipeline.
- All the water bodies are protected as huge number of Winter Migratory comes to Corbett National park.
- Eco friendly Tourist facilities, thrust on solar energy, no burning of woods inside the park are among the important practices.
- There is no village inside the National Park as they shifted (relocated) the villages and developed the Grassland, the Grassland area known as LALDHANG AREA OF JHIRNA ZONE.
- E-Eye: The Electronic Surveillance in Corbett Tiger Reserve (CTR).
- Norms for proper garbage disposal for forest lodges.
- Vehicles must be Euro 02 and they must abide by the norms of Pollution Control Board
- Park doesn't allow jeeps older than 05 yrs for safaris inside the park.
- Regulation of timings – park authorities doesn't allow full day safaris (park remains closed between 11 AM to 03 PM) so as give rest and grazing time to the Animals.
- Online booking system – foreigner allowed to book 90 days well in advance and Indian can book 45 days in advance (both safaris and Forest rest houses) to less down the chaos.



- No walking is permitted inside the park so as to minimise Human-animal conflict.

10. Recommendations

The following recommendations are made for effectively regularising tourism activity in the park area so as to minimise the negative impacts of human action on the fragile ecology of the park:

- In one of the Judgements passed by Tamil Nadu High Court, on December 3, 2010, which, in reference to elephant corridors near Mudumalai Tiger Reserve and in the Nilgiri Biosphere Reserve ordered that “*the government will ensure that there is no illegal construction on area shown as elephant corridor. Further, the government should not allow any new construction in the area without prior intimation to the court, and immediate action should be taken against illegal, unauthorised holiday resorts.*” The court has also directed that no person should be allowed to put a fresh solar/electrical fencing within the area, and action should be taken for the removal of existing unauthorised electrical/solar fencing. This court order must be referred to and replicated for other tiger reserves across the country. In the case of Corbett, the removal of illegal construction will go a long way in providing a passage for large mammals. Prohibiting any new construction within critical corridors around CTR is imperative to halt further deterioration and fragmentation of tiger habitat.
- Land use pattern needs to be defined around Tiger Reserves and Protected Areas, rivers, corridors.
- Strict implementation of Eco-Sensitive Zone around tiger reserves.
- No industrial projects or resorts in the critical zone around tiger reserves, and tiger and elephant corridors.
- The Dhikala tourism complex must be phased out. Not only is it a long standing proposal but a legal requirement as per the Wildlife (Protection) Amendment Act 2006, which allows for no structure inside the core critical tiger habitat. The National Tiger Conservation Authority has mandated that tourism activities should be phased out from core areas, and shifted to buffer zones. NTCA has also advised states that every care should be taken to ensure minimum noise pollution from canters, diesel vehicles in core/critical habitats of tiger reserves. Every effort must be made to



promote CNG vehicles or those using bio-fuels. A precedent has been set by Tadoba which demolished its canteen and has stopped overnight tourist stays in the core area.

- The Jamoon (and the other fishing beat resorts) simply need to go. We also need to examine its legality which is in question, since the Centre has not been involved in the agreement between the resorts, the angling associations and the states in what is an important buffer to critical tiger habitat.
- We must urgently examine the legality of resorts on the Ramnagar – Dhikuli road, and other corridors. Have they encroached on forest land? How close are they to the river Kosi? What activities are they doing? Illegal activities and activities incompatible with conservation objectives must be stopped.
- Define activities of resorts and effective enforcement. What is important is not the quantum of tourism, but the quality of tourists Corbett attracts and should encourage.

The following suggestions may improve the quality of visitors:

- Visitors may be advised to wear clothes that merge with natural surroundings like, Khaki, olive green and dull colours. Bright Colours must be avoided.
 - Open Fires must be discouraged.
 - The bio-nondegradables (garbage, plastic bags, glass bottles, metal cans etc) must be carried out of the park. The paper and natural refuge must be buried.
 - Avoid chemical detergents, soaps etc to keep the local water clean.
 - Hurting or Teasing of animals must be reported and must call for heavy punishments.
 - Taking Photographs and Video-recording with flash guns must be prohibited, because it may disturb and annoy the animals.
 - Park Visitors must obtain 'Clearance Certificate' before leaving the park.
 - Avoid carving initials on Trees; Avoid feeding animals; Avoid making noise from mobiles, radios etc; Avoid smoking in park area.
- While this study concentrates on Corbett Tiger Reserve, it must be highlighted that many other tiger reserves particularly Bandhavgarh, Ranthambhore, Kanha, Pench, Bandipur-Nagarhole- Mudumalai, Kaziranga also urgently requires follow-up action on the above recommendations.

11. The Final Word

The wildlife tourism can be very detrimental to the floral and faunal assets, if not prudently planned and controlled. On one hand, uncontrolled and unplanned tourism can kill the Golden Goose which lays golden eggs, whereas on the other hand controlled tourism may fetch multifarious benefits to the destination. The effective implementation of the above



recommendations we shall be able to protect our fragile eco-system and thereby shall be able to maintain and preserve the bio-diversity. All humans must be motivated to preserve and conserve the ecological wealth of our planet earth, live within the capacity of the planet, and must not degrade ecological assets to the detriment of future generations.

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