

Ecotourism without Conflict in Wildlife Conservation

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'Tourism', with a green tag and termed 'ecotourism' has received recognition as one of the managerial approaches that can provide alternate livelihood to people 'affected' due to wildlife conservation. Amplified with limited staff resources, proliferation of the concept within a protected area is detrimental, as it will dilute many of the standards required and set towards serious and committed approach for wildlife protection, conservation and research. Historically, the National Board for Wildlife or the first National Wildlife Action Plan didn't suggest promotion of tourism in areas meant for wildlife conservation. In this paper a graded approach in area selection is suggested for biodiversity- or wildlife-oriented tourism in the order of priority which reads, (1) areas showing fruits of biodiversity under participatory forest management; (2) wildlife corridors or habitat-linkages; (3) periphery of wildlife sanctuaries; and (4) wildlife sanctuaries, national parks and tiger reserves.

It is based on inferences drawn from review of the historical processes, studies on tourism profile, personal experiences, and lessons learnt while developing field strategies for managing wildlife and tourism during 1975 through 2010, covering work done in Similipal Tiger Reserve, Satkosia Gorge Sanctuary and National Chambal Sanctuary.

1. Introduction

Wildlife management is a science that is constantly evolving on the basis of experience and lessons learnt. It concerns at least three other components which change in themselves. These are the ecological factors influencing the habitat of wildlife species, the anthropogenic elements and the changing or adapting behavioural biology of wildlife species.

Within the ambit of this management science, for achieving success in conservation, there is no scope for allowing promotion of any kind of 'destructive' human use in wildlife-areas that may lead to behavioural adaptations by species and lose original traits within threatened 'wilderness values' of the habitat. Outside the positive results of conservation, other outputs or feasible services are subsidiary by-products.

In this context the present paper is an explanatory version of the summarized concept presented in Singh (2011). It suggests one aspect namely, the graded approach in area selection for biodiversity- or wildlife-oriented tourism.

The inferences and recommendations made are based on review of the historical processes in management approach, the studies on tourism profile, personal experiences, and lessons learnt while developing field strategies for managing tourism. It is based on work primarily done in Similipal Tiger Reserve during 1987-2003, and in Satkosia Gorge Sanctuary (now a Tiger Reserve) during 1975-1981, and in National Chambal Sanctuary during 1983-1985.

2. Suggested Order of Focus Area

Contrary to the present order of the things, it is suggested that for achieving compatible and sustainable ecotourism, the areas where wildlife-oriented ecotourism should be developed and implemented should be in the following order of priority:

(1) areas showing fruits of biodiversity under participatory forest management; (2) wildlife corridors or habitat-linkages; (3) periphery of wildlife sanctuaries; and (4) wildlife sanctuaries, national parks and tiger reserves.

3. Ecotourism: Concept and Objectives

Ecotourism is "sustainable, nature tourism" involving the indigenous stake- holders, while forging partnerships with the existing tourism industry.

The World Tourism Organization (WTO) defines ecotourism as "tourism that involves traveling to relatively undisturbed natural areas with the specified object for studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects (both of the past or the present) found in these areas".

'Wildlife tourism' may fall into one of the types of 'ecotourism' but it constitutes the most fragile and sensitive type of nature tourism. Hence extreme care and restraint is necessary while promoting ecotourism in areas otherwise created and managed for wildlife conservation.

Until the year 2002, when the new National Wildlife Action Plan was released, the concept of 'tourism' was not institutionalized in the wildlife sector as it is today. It is therefore, necessary to review the manner in which ecotourism has entered the sector of wildlife management in order to justify the order of choice of area for implementation of tourism related programmes to serve people better without conflict with conservation objectives.

4. Lessons from History of Wildlife Conservation

The target areas for ecotourism relating to wildlife are the Sanctuaries and National Parks. These legally recognized protected areas have 'managed' tourism within limits, but without any policy approval.

Even though the Tiger Reserves had no legal status until 2006, Project Tiger tried to maintain authority for conduct and control of tourism in Tiger Reserve through respective Field Directors. These were sorts of 'managerial arrangements' and not policies.

4.1. Advisory body for wildlife conservation didn't promote 'tourism'

In the year 1952 the 'Central Board for Wildlife' was constituted with 25 members. The body was renamed as Indian Board for Wildlife (IBWL) later that year, and now it is the National Board for Wildlife (NBWL). It is the main statutory body for advising the Union Government in matters of wildlife policy in the country. In confirmation to their recommendations, the state governments have parallel State Board for Wildlife (SBWL).

From the beginning, one of the functions of the Board was "to promote public interest in wildlife and the need for its preservation in harmony with the natural and human environment". Accordingly, the Board have recommended celebration of Indian Wildlife Week during which lectures, publicity through media, film shows, conducted tours, essay competitions in schools and colleges are organized. Some of the other activities for public education are 'nature clubs' in educational institutions, inclusion of the subject of environmental conservation in syllabus adopted by NCERT and schools and colleges. The UGC initiated actions for setting up of faculties on wildlife education in selected universities (Saharia, 1982:64-68). The duties of the National Board have since been identified under Section 5C

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of the Wildlife Act. Nowhere in these is 'Tourism' an explicit subject on which the Board was expected to advise.

4.2. Protected Area network didn't have 'tourism' mandate

Although the national board performed the function of advising the government in policy matters relating to wildlife conservation very early after its constitution in 1952, the field level serious phase of actions began after the Wildlife (Protection) Act was enacted in 1972. Steps were initiated to establish a network of carefully identified 'protected areas' (PA) called sanctuaries and national parks for protecting, propagating or developing wildlife or its environment. The PAs are viewed as the best guarantee for survival of wildlife free from destructive anthropogenic use or pressure of any kind, whatsoever.

The 'Tiger Reserves', initially nine in numbers were declared in connection with the launching of 'Project Tiger' in the year 1973. At that time the areas covered within Tiger Reserves had the legal status of either Reserve Forests, or were sanctuaries contemplated and under process according to the Act. 'Tiger Reserves' got separate legal status of 'Protected Area' after the Wildlife (Protection) Act was amended in the year 2006. Prior to the launch of project tiger some of the Tiger Reserves were already in the popular tourist circuits (for example, Sahai, 1979). Declaration of Tiger Reserves brought with it a set of managerial actions that would favour tiger conservation.

4.3. Tiger doesn't welcome onlookers

Action plans for conservation of tiger keeps 'tiger' on priority, not people or visitors. The tiger in its state of wilderness doesn't like to give appearances before human beings. It avoids human beings unless conditioned over a long period of time. The tiger's biology is such that no one ever knows when a tiger is born or when it dies. Therefore, although sighting a wild tiger generates its own thrill, with such a secretive animal, a visit to a Tiger Reserve in its state of wilderness cannot form a part of the itinerary for a normal merry-making visitor. Therefore, offering of a promise for 'sighting a wild Tiger in its wilderness state' is not an appropriate agenda under 'popular ecotourism'. It is possible when our types of visitors change in their numbers and expectations from a wildlife sanctuary. This holds true for other large carnivores and herbivores, as well.

Although African examples have long been cited to elucidate earning of revenue for the country from 'wildlife tourism', in the Indian context wildlife students have urged to show restraint and caution while promoting tourism in Tiger Reserves (Deb Roy, 1979; Panwar, 1979; Sahai, 1979), and therefore, wildlife sanctuaries in general.

4.4. People have participated in wildlife projects

Involving the people in wildlife conservation projects is a very old practice. Animal tracking, machan-construction, boating, capture and supply of live fish for crocodile hatchlings, assistance in ethno-botanical explorations etc. are some of the activities involving traditional skill which is available with local people and these have been used in wildlife projects.

The national projects of Project Tiger and Crocodile Conservation were launched in 1973 and 1974, respectively. Here, conservation of the species and their habitat formed the major priorities. In both these projects, and later in Project Elephant, local people participated in census, management and protection (Singh, 1987, 1993a,b). Crocodile projects were a few steps ahead in involving the people. Egg-eating tribal people were involved to search crocodile nests, maintain hatcheries for egg incubation, and

help in husbandry of crocodiles until young crocodiles were restocked in natural waters. The local fishermen were inducted as crocodile guards to observe crocodiles in nature, maintain records and patrol crocodile habitats (Singh, 1987).

Visitors who came to have firsthand experience of the success of conservation pursuits were limited in numbers in those days. They were curious about the projects, serious in their intentions and made bits of contributions towards economic development of local people by way of local assistance or purchases (Singh, 1977). It was correctly assessed that inflow of visitors and interest of people towards wildlife projects were expected to rise and managers were cautioned to keep anthropogenic activities in sanctuaries within limits.

During the last 10-15 years, 'wildlife conservation' actions are initiating or projecting objectives for offering alternate livelihood and benefiting the people living in and around protected areas. In this direction, ecotourism is one of the activities. That is laudable as long as the wildlife department doesn't get overburdened with work beyond its primary objective of wildlife protection, conservation and research. Exaggerated anthropogenic bent to wildlife management handled by limited staff-resource is diluting or losing the passion and commitment to strive for survival of wildlife and its habitat.

Wildlife management is made to pass through stages of unintentional 'compromises'. It is argued that people should recognize that the wildlife department is performing village welfare activities so that people are dissuaded from any kind of destruction of forest and wildlife. In such case, a separate set of sociologists or rural managers should be doing these jobs, not the persons who have remained in the wildlife organisation sometimes after much persuasion. Over time, only a few staff turn out to be hard core wildlife practitioners, and they should not be lost for jobs which others can perform. Village or rural development plans and tourism-management shouldn't overshadow the mandate of activities of wildlife staff.

The original intention to educate public or 'visitors' about wildlife conservation projects' and elicit public cooperation have gradually got 'extended' to accommodate 'ecotourism' which is theoretically the greener version of tourism.

4.5 National Wildlife Action Plans: Tourism included for the Plan 2002-16

This trend is well evident from the differences in strategies in two National Wildlife Action Plans. The first Action Plan, structured on the basis of knowledge and experience gained till the year 1983 had ten components namely,

- (1) establishment of a representative network of protected areas,
- (2) management of protected areas and habitat restoration,
- (3) wildlife protection in multiple use areas,
- (4) rehabilitation of endangered and threatened species,
- (5) captive breeding programme,
- (6) wildlife education and interpretation,
- (7) research and monitoring,
- (8) domestic legislation and international conventions,
- (9) developing a national conservation strategy in line with world conservation strategy, and collaboration with voluntary bodies.

None of these components suggested tourism to be managed by wildlife managers.

The next National Wildlife Action Plan, of 2002, was an improvement over the previous one in many respects but it has given a clear and bold niche to wildlife tourism. The various components of the new Action Plan are as follows.

- (1) Strengthening and enhancing the protected area network;
- (2) effective management of protected areas;
- (3) conservation of wild and endangered species and their habitats;
- (4) restoration of degraded habitats outside protected areas;
- (5) control of poaching, taxidermy and illegal trade in wild animal and plant species;
- (6) monitoring and research;
- (7) human resource development and personnel planning;
- (8) ensuring peoples' participation in wildlife conservation;
- (9) conservation awareness and education;
- (10) wildlife tourism;
- (11.) domestic legislation and international conventions;
- (12) enhancing financial allocation for ensuring sustained fund flow to the wildlife sector; and
- (13) integration of national wildlife action plan with other sectoral programmes.

When tourism is assuming a regular feature of protected area management, various other prescriptions and strategies are developing to regulate tourism through season, route, compatibility, regulations, restrictions, monitoring, improved maintenance of rest houses, etc., which have the additional advantage towards protection of wildlife in protected areas. This may be true, but 'tourism', in manner would grow and jeopardize the objectives of a protected area.

4.6. Eco-tourism should not be governed by ad hoc administrative convenience

In an attempt to comply to the over all policy of the Government, or mandates fixed in this direction, or for facilitating the functioning of another department, the areas where wildlife-based ecotourism have been aimed till now include only the Sanctuaries (Mohanty *et al*, 2004; Patnaik, *et al*, 2009). That appears to be primarily because of convenience in compliance. A base of infrastructure and a set of 'disciplined' staff are already available in sanctuaries. These staff may appear willing to implement the policies, but this affects their original mandates relating to wildlife conservation. The willingness or ad hoc arrangements for sharing of resource of staff or infrastructure for 'ecotourism' is neither in the interest of wildlife conservation nor in the long term sustainability of ecotourism objectives. The required number of staffs for wildlife work have to be positioned first, and then a separate set of staff have to be deployed and suitably trained for specific ecotourism activities.

Ecotourism or Nature tourism is distinguished from mass tourism by requiring lesser infrastructure development and a lower impact on the environment. But in practice, when fund is available from different sources infrastructure development seem to get preference. Such developmental pursuits are often directed at pitching series of tents on otherwise serene sand banks or "cost effective" diesel-run power boats in a crocodile sanctuary, gorgeous camping places, etc.

Ecotourism should respect the cultural values of local people. It is disappointing to find that children of villages around Barheipani waterfall in Similipal who normally kept away from visitors, or should have been in a school, seem to be shedding their 'fear' or inhibitions and running behind jeeps or gyrating around a camping site awaiting the camp to pack off. They are running after visitors to sell nuts

collected from the forest. These are, sadly, indicators of eroding cultural values because of proliferating ecotourism close to villages inside a sanctuary. Now the management of Similipal have helped parents to admit and maintain children in schools having hostel facilities. I have often said that educating the children of Similipal to higher level would help them build their personality and career in modern terms, and also in the long run the sanctuary would be populated by a fewer human being and left for better wildlife conservation.

This sounds to be a managerial manoeuvre. But three decades back no one ever thought that the Field Director of a Tiger Reserve who should be a 'wildlife scientist' would get engaged in programmes which are normally the domains of departments concerning rural development, education, or human resource development.

The administrative convenience of thrusting all ideas into areas identified and already developed since 1970s for wildlife conservation and management should be avoided. Here, the term 'wildlife conservation' is used for the group of activities meaning 'wildlife, biodiversity or nature conservation'.

4.7. Ecotourism should steer away from PAs

Ecotourism is necessary for wildlife areas as it is considered to be one of the media to highlight the tangible and intangible benefits of wildlife conservation. Of late, it is also increasingly being projected as a means to offer the scope for alternate livelihood for local people. It is one of the acceptable sources of earning some revenue for the wildlife organization which is otherwise termed as an expenditure department that (only) spends funds for conservation. However, ecotourism in areas known for wildlife and biodiversity conservation is yet to create a niche that is acceptable without dispute or conflict with the conservation objectives.

Tourism in sanctuaries are governed by 'tourism season' and 'tourism route'. Therefore, with 'round-the-year-tourism' in mind, attention has to shift away from the sanctuary, to its periphery, to its linkage-corridors, or to the adjoining villages where people are excelling in participatory forest management. Adequate survey and assessment is necessary to identify locations, judge the potentialities, develop meticulous plans and implement the projects for screening serious 'eco-tourists' and reduce burden on sanctuaries. People willing to devote time and go for wildlife-oriented ecotourism can proceed from periphery to the sanctuary. Places used for camping should be away from places used by 'wildlife'. The wilderness or 'wild' (natural) responses should not be robbed away from wildlife on the road to promoting tourism as 'ecotourism'.

At strategic locations outside protected areas it is necessary to develop infrastructure and aspects of interest for tourists. This would take off pressure from the PA and also help people living in the periphery of PA.

National strategies and guidelines for management of ecotourism in sanctuaries offer broad principles, objectives and streamlined administrative mechanisms. On another front, where available, micro-level site-specific studies and case histories, topped up with experience and field knowledge of a few specific individuals who have served long years in protected areas, enhance the quality and effectiveness of management. In such cases, there is value addition in more than one manner aiming at sustainability of ecotourism as well as efforts for biodiversity conservation.

Any guideline should ask to clearly steer away the pressure of ecotourism from sanctuaries, national parks and tiger reserves to other areas. From the foregoing discussion added to my own inference from studies and experiences I suggest that the order of implementation of ecotourism programmes should be as follows. Programmes should be such that results of biodiversity or wildlife conservation are demonstrated as well as the local people are involved round-the-year.

- (1) Areas showing fruits of biodiversity under Participatory Forest Management
- (2) Wildlife Corridors or Habitat-linkages
- (3) Periphery of wildlife sanctuaries
- (4) Wildlife sanctuaries, national parks and tiger reserves

4.8. Tourism research and monitoring for guiding ongoing process and future planning

Tourism in wildlife areas needs to be constantly backed by research and monitoring. With respect to Similipal Tiger Reserve, Orissa, lessons learnt in the past from elephant sighting trend have strengthened the cause for clamping 'closed season' and a definite 'tourism route' in the TR (Singh, 1988, 1991, 1995). A four year study (Prusty and Singh, 1997; Srivastava and Singh, 1998) conducted in the same reserve on profile of tourists and the vehicles they used offered several managerial tools aimed at making tourism in the Tiger Reserve eco-friendly and orient the drivers of hired vehicles to make the trips safe, interesting and memorable. It also highlighted the benefits due to tourism transferred to the people and the consumer market existing at the entry points markets. Analyses were also made of occupancy rates of different facilities for night camping. All similar studies should be carried out for all areas where ecotourism is a mandate for management.

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An Eco Friendly Project, Mysore Zoo

<http://www.starofmysore.com/main.asp?type=news&item=29001>

Mysore Zoo a.k.a. **Chamarajendra Zoological Gardens** is getting an eco-friendly project, with plans to establish a Bio Gas Unit in association with JNNURM's community participation programme. The tripartite agreement in this regard was signed between the Zoo, MCC and NIE-CREST (Center For Renewable Energy & Sustainable Technologies). The Zoo Executive Director K.B. Markandaiah, JNNURM Superintendent Engineer Suresh Babu and CREST Director Shyamsundar signed the agreement.

The estimated cost of the Bio Gas Unit is Rs. 20 lakh, for which Rs. 18 lakh will be provided under the community participation programme, with the Zoo contributing the remaining Rs. 2 lakh. The Unit will utilise about 1.5 tons of animal waste besides a considerable quantity of in-house waste everyday. Bio Gas generated by the facility will be provide energy for the Zoo's kitchen and canteen and the surplus gas will be used for operating a Diesel Generator. The waste generated from Bio Gas Plant will be used for the manufacture of vermicultured fertiliser, according to Markandaiah and Suresh Babu, the signatories to the agreement.

K.B. Markandeya, Director of Mysore Zoo, presenting a copy of tripartite agreement to establish a biogas plant at the Chamarajendra Zoological Gardens to N. Ramanuja, Chairman, NIE-CREST, while Shankar, Assistant Executive Engineer, JNNURM; S. Shamsundar, Director, NIE-CREST and Suresh Babu, Superintending Engineer, JNNURM look on.

