

Ecotourism and Conservation Strategies in Protected Areas and Park vs People Conflict: A case Study of Desert National Park

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Abstract

The protected areas considered as the last bastion of nature that promised not only to protect nature but also seeks to provide green income to local people through ecotourism and other sustainable activities in the fragile environment. However, the strategy popularized by rich industrial countries in the global south have resulted into contrasting picture. The modern conservation strategies have intervened into the life of the local and traditional people and the Ecogovernmentality imposed by the government upon local inhabitants resulted into park and people conflict. The present study examine the ecotourism and conservation strategies in Desert National Park of Rajasthan state of India.

Introduction

Rajasthan, the Desert state of the India has established itself as an important tourist destination; not only in India but also in the world. The entire landscape of the state is popular among tourist. The cultural landscape of Royal Palaces, Forts, Temples, colorful festivals on the other hand and natural landscape ranging from forest to desert on the other hand make the state unique on the map of tourism. The Desert National Park, notified in 1980, is a part of Thar Desert has unique place of remarkably striking location with diverse flora and fauna of desert ecosystem with distinctive natural and cultural heritage. The DNP area (3162 sq. km) covers part of Jaisalmer and Barmer districts of Rajasthan is the second largest protected area in India.

Ecotourism Policy of Rajasthan

To boost the tourism sector, under the Rajiv Gandhi Tourism Development Mission (2001) state become one of the first state to announce 'the Tourism Policy of Rajasthan in 2001. The policy discusses about promotion of ecotourism to form various tourism advisory bodies. However, behind the rhetoric of ecotourism the main focus of policy to encourage private players in the tourism sector with huge concessions and incentives. Huge investment in tourism infrastructure made with partnership of private sector. Tourism sector was granted the status of industry in 1989 to provide all concessions and facilities of industry to tourism unit of the state.

Introduction of New Hotel policy in 2006, offers provision of land use changes and tax concessions to support hotel industry. State government may also venture with private partnership to bring out new hotel project as well as converting palaces and havelis to operate as hotel with heritage category.

To accelerate tourism in the state Rajasthan Tourism Development Corporation Ltd. (RTDC) registered under Companies Act 1956 is company owned and operated by state government to manage restaurants, hotels and transport in the state. The RTDC also organizes package tours, fairs, festivals, and transport services. In the protected areas where norms are tough for private players RTDC make access possible by leasing, acquiring sp notified areas and developing hospitality and recreational use of space.

The government of Rajasthan in 2010 notified Ecotourism Policy. Growing concern of visitor's sensitivity towards nature conservation and wellbeing of local people, state government intent to formulate a policy framework to regulate and encourage the ethos of ecotourism. To attract more visitor with achieving conservation goals and local people participation the ecotourism policy focus to sensitize public, government agencies and civil societies about philosophy of ecotourism. The stated objectives of the policy are to promote ecotourism in protected areas with focus on conservation and education tools; to encourage visitors to appreciate nature and conservation; to aware masses about the need of conservation; to preserve heritage properties by promoting education among visitors and to empower local communities to manage ecotourism with generating alternate employment to promote conservation.

The village forest and management committees (VFPMCs)/ Ecodevelopment Committees (EDCs) are proposed to engage in conservation and sustainable development activities. Required ecotourism facilities and activities are proposed to be developed by engaging multi stockholders. Government, private partnership and local community will be engaged in development and operation of ecotourism activities in the destination area. Required education and training will be provided to all concerned stakeholders to create capacity building for ecotourism activities.

The state is promoting and permitting various activities under ecotourism i.e. wildlife/ nature observation as nature walk, trekking, Safari (Animal Back, Vehicle) trail along chosen tracks; bird watching, camping etc. it is proposed that limited number of sites shall be identified to develop basic level of ecotourism facilities with trained staff and local guide to assist ecotourist at the site.

To facilitate and promote ecotourism, Rajasthan Ecotourism Development Society (REDS); headed by the forest minister of the state is proposed to establish to facilitate and promote ecotourism in selected sites. The eco-development committee (EDC) and self help groups (SHGs) have key role in managing ecotourism in these sites.

Local people will also be trained about the flora and fauna, biodiversity and conservation efforts of DNP of the area so that they could adopt new occupation of ecotour guides, camel safaris, nature trails and eco-education centers.

"Introduction of ecotourism in and around the Desert National Park area will be an important activity to improve livelihood conditions of local people and will be an appropriate strategy for conservation of flora and fauna of the desert.

To fulfill the strict the strict ecotourism standards Local Advisory committees (LAC) can be involved in managing these facilities -

- The vehicles used for tourism in PAs will be registered and administered by the park management as per instructions/ directions/regulations issued from time to time.
- Trained nature guides registered with park administration with every tourist vehicle will be mandatory. Rural People from PA adjoining area will be preferred and trained as guides
- Entry Fee collected will be solely used for protection, management of PA with focusing on human wildlife conflict, employee's welfare appraisal and Sustainable development activities in nearby rural areas.
- The infrastructure development around the PAs will follow the National norms of the ecosensitive zone
- Any core area in a PA from where relocation happened will not be used for developing tourism facilities

- All facilities located within five kms. of a Protected Area must adhere to noise pollution rules under ‘The Noise Pollution (Regulation and Control) , 2010 issued by the Ministry of Environment and Forests.
- To remain effective, ecotourism guidelines need government and people partnership (Van Bhagidaari) over a long period of time.
- A wide network of stakeholders needs to be consulted for conservation efforts as well as development of local community.
- Ecotourism can be effectively promoted in the state by identifying areas of ecological and cultural importance.
- Trekking routes can be developed, and safaris organized to give a real feeling of wilderness to the visiting tourists.
- Effective medium should be adopted for popularization and advertisement of ecotourist places. So not only new tourist spots will be operationalised but the pressure of tourist traffic on select PAs will be dispersed.
- PA management will conduct tourism impact studies at least once in three years. The study should preferably be assigned to competent institutions or persons, and the study results should be used for determining management prescriptions.
- Tourism infrastructure must conform to environment-friendly, low impact architecture; renewable including solar energy, waste recycling, water management, natural cross ventilation, no use of asbestos, zero discharge of sewage, minimal lighting, and merging with the surrounding landscape.
- However, alike Uttaranchal, the ecotourism policies of Rajasthan also remain rhetoric only. At policy level it is studded with beautiful and proactive words but at implementation level, community linkage is missing and even misused by private players on the name ecotourism.

Conservation Practices in Desert National Park

The Desert National Park, notified in 1980, is a part of Thar Desert has unique place of remarkably striking location with diverse flora and fauna of desert ecosystem with distinctive natural and cultural heritage.

The DNP area (3162 sq. km) covers part of Jaisalmer and Barmer districts of Rajasthan is the second largest protected area in India. Thar Desert has rich of geological history representing the different stages of evolution. “It is only place where Rajasthan State Bird (Great Indian Bustard), State animal (Chinkara) and State tree (Khejri) and State flower (Rohida) are found naturally.”The DNP is the most important place for rare and threatened Great Indian Bustard (GIB).

The Great Indian Bustard (GIB) or Godavan is one of the heaviest flying bird is endemic to the Indian subcontinent. WWF-India is providing inputs in developing the ‘*Guidelines for the State Action Plan for Resident Bustard Recovery Programme*’ to protect the endangered bird IUCN granted this area as protection status because of representing unique desert ecosystem with variety distinctive flora and fauna (**Criteria vii**); presence of wood fossil dating back to Jurassic period at Akal (**Criteria viii**) and exceptional and rare fauna i.e. GIB, desert fox, Indian Gazelle, desert monitor, reptiles etc. (**Criteria x**) It also has fossil evidences dating back to the Jurassic Period (180 mya) indicating hot and humid climate characterized by dense forests. The fossilized remains of these 180 million-year-old forests are preserved in Wood Fossil Park at Akal, located 17 km from Jaisalmer, in the outskirts and under the jurisdiction of the Desert National Park. Despite huge effort of the government machinery, the GIB is close to extinction

because urgency of efforts required ensuring the bird's survival is high and efforts are too slow. The main threats are the human population pressure and resultant encroached habitat in form of industrialization, mining, and intensive agricultural practices. Electric transmission lines are also a big region of their mortality. Unregulated windmills outside DNP are posing great danger to GIB. More than Rs. 600 million has been spent within 10 years to increasing the numbers of GIB. Governments of India, Japan International Cooperation Agency (JICA) are main contributor to the fund. However, the population of GIB is declining from estimated 1300 in 1970 to 300 in 2009. In DNP, the population of GIB is estimated fewer than 100.

To scientifically conserve a GIB or Godavan Conservation Breeding Centre has been opened in Sam village for captive breeding of GIB. In a combined effort of Wildlife Institute of India (WII), Dehradun, International Fund of Houbara Conservation, Abu Dhabi and Rajasthan wildlife department, had conserved eight eggs, collected from DNP and nearby Ramdevra area for hatching at Sam breeding Centre

Ecotourism Potentials and Pitfalls in DNP

The DNP Wildlife Sanctuary offers excellent opportunities for ecotourism. The activities like wildlife viewing, visitor exposure of sand dunes, camel safari and interaction with rural village lifestyle and culture. Guided tours would be conducted for visitors coming to Jaisalmer by developing ecotourism mechanism involving EDCs of management units. Such an heavy pressure of people and livestock on limited resources of the desert and conservation necessities makes ecotourism the first and last viable economic option for the local people. Ecotourism is only in the budding stage in the sanctuary as there are restrictions in entry of tourists into many areas. Non Indian tourists have to get a clearance from various government agencies as most of the parts of DNP are strategically crucial. This has been the major reason for very low number of tourists visiting the park. A part of Sam sand dunes is situated inside the DNP where tourism has been happening in a less regulated manner.

The following destinations of tourism value are accessible to the general tourists -

- (i) Khuri – Potential for camel safari, desert safari and sand dune trekking
- (ii) Sam – Potential for camel safari, desert safari, desert cultural centre, cafeteria, memento shop, interpretation centre
- (iii) Sudasari – Camel cart wildlife safari, hide photography, observation towers, vehicle safari along outer peripheral roads of closures
- (iv) Gajaimata – Sand dune trekking, camel safari, sunset watch point
- (v) Kanoi – Desert safari, camel safari

Main problem of the ecotourism development in the area is ignorance of people. They are not fully aware of the conservation [practices and tourism potential of the desert landscape. Trained wildlife guides are only a few and the flow of tourists to the sanctuary is not regular. Absence of a visitor interpretation center and the approaches and access to the sanctuary are difficult. The Park lies near the international boundary of the India and Pakistan. The foreign tourists cannot stay overnight in the area. To get permission for entry to the park the tourist has to pass through many legal formalities in the offices of Home Ministry in Govt. of India, local administration and Intelligence department.

The future of ecotourism in the DNP Wildlife Sanctuary lies in the involvement of local people and preparedness of Eco Development Committees to develop suitable ecotourism models without adversely affecting the desert ecosystem and generate employment opportunities.

A major setback to the efforts to promote ecotourism has been the role of 'Touts' locally known as 'Lapkas'. Tourists are brainwashed and misled by the Lapkas to destination that offer maximum profit to them.

The Desert National Park is a bird watcher's paradise where landscape is dominated by rocky terrain and fixed sand dunes the Desert National Park in Jaisalmer is an ideal escape for the hectic cosmopolitan life. Activities of thrilling jeep safari, Camel Safari, Camping and bonfire are main attraction in and around DNP.

Chinkara, Blackbucks, Wolf, Desert Fox and Wild Cats, Lizards and Reptiles are commonly sighted fauna in the DNP. Watching the tall, heavy and graceful GIB or **Godavan** is the major highlight of the park as it is rarely seen in any other location in India.

Entry fee of 100 rupees per head by all the visitors charged for entering into Desert National Park. Hiring a jeep or a car costs another 100 rupees and hiring guide costs 200 rupees extra.

The best time to visit the park is winter season from October to March. Summers of Thar are too hot to visit. The daytime temperature remains very high and usually above 40 degrees in summer. Nights are relatively cooler, typical of the arid desert climate. Winters in Jaisalmer are comparatively cooler with day temperatures remaining pleasant while nights are chilly with the temperature falling below 10 degree Celsius. The monsoon is almost negligible and the area remains dry for whole year.

Sand Dunes are the most popular sightseeing in the study area. The ocean of sand stretched until the horizon. The dunes are beautiful and an absolute delight to watch. It is necessary to witness the sunrise/sunset in the desert. Local people couples the visit with songs and dances. The desert has very rich and colorful culture of music.

Activities at Desert National Park

Cultural Night at Desert

The most important motivation of visitors to DNP area is experiencing colorful culture of desert. Folk music, folk dance, local cuisine with bonfire and royal reception amid mesmerizing natural surroundings are memories to cherish for lifetime. Rajasthan folk music are about glories of kings and heart warming welcome of tourist coupled with *Ghoomar* and *Kalbeliya* dances in colorful attire continues till the night fall brought the live display of local culture. Rajasthan desert festival, which held during winters in every year, is one of the most fascinating festivals in India. Camel plays a very vital role in the desert life therefore their presence also honored in the Desert Festival.

Camel Safari: Laid-back Camel safaris are a very popular way to experience the national park. Sitting atop a colorfully dressed camel, and riding across rolling dunes is the experience that attract the most visitors to this area. The maximum populations of the study area are engaged in camel safari business. This is the business of very short span of time with fierce competition. Tourist hire camel safari only evening time to see the sunset. Otherwise, daytime is too hot and no landscape view. Entering the DNP, visitors surrounded by different camel herders offering rides at a negotiable price (usually starts at INR 100). Visitors ride the camel rides for hours and enjoy the sunset from the camel back. The lure of taking good pictures while watching stunning sunset from atop of camel is major motivation of visitors to visit this area.

Jeep Safari: adventure ride by 4x4 jeep in the undulating sand dunes is new attraction for visitors. Jeep is more costly investment but easy to maintain in the harsh climate of Jaisalmer. Due to advertisement of

jeep safari on social media portals, jeep safari craze is growing day by day. Camel owners are now trying to have jeep also to remain in competition. The Safari runs on a 12 km trail and takes around 30 minutes to complete. The jeeps are four-wheel drive vehicle for the wildlife Safari and registered to DNP. No outside vehicle allowed inside park.

Due to extreme weather area, some preparation and special gears needed to visit this area. Hat, Sunglasses, sunscreen are required to face scorching heat as warm clothes are also needed for cooler nights.

Connectivity of the area is easily accessible with air, rail and road. From tourism point of view, this area is part of tourism triangle of Jodhpur, Bikaner and Jaisalmer. The nearest airport is Jodhpur. Connectivity with train is very good to Jaisalmer.

Forts, Havelis, Lakes, Gardens, Temples, Museum, ancient towns are other attraction around the DNP.

Discussion and Results: Park vs People and Tracing the Ecogovernmentalities

The Thar Desert is the most densely populated desert in the world, with a population density of 83 people per km² compared to other deserts of the world with population density below 07 persons per sq. km. However, human population within DNP is below 20 persons per sq. km and the livestock population is 105 /km².

DNP is not only one of the biggest national parks of the country but also have record number of human habitation inside the park. The park expanded in two districts of Rajasthan sharing international boundary of Pakistan; namely Jaisalmer and Barmer

DNP Wildlife Sanctuary is spread over 3162 square kilometers in which 1400 km² falls in Barmer and 1762 sq.km. in Jaisalmer district. In Jaisalmer part of the sanctuary, there are 35 villages out of which 14 villages lie completely inside and 21 villages lie partially inside the park. In Barmer part of the sanctuary, there are 53 villages out of which 31 villages lie completely inside and 22 villages lie partially inside the park. A total population of more than 50,000 and the cattle population of approximately 4, 00,000 is dependent on DNP

The presence of large human population remained a big hurdle in its status of National Park because according to WLP Act, zonation and human population free core area is necessary precondition of NP. People's unwillingness to leave their area, huge amount of compensation and political support to the local agitation were the major reasons that kept the DNP a 'proposed and intended' \ national park. Therefore, the park authorities have to change the status of DNP into a Wild life Sanctuary where the restriction on human habitation and resource utilization is comparatively less restrictive. The present name is DNP Wildlife Sanctuary. However, the state government submitted a proposal under the UNESCO - Man and Biosphere Program in 1988; to constitute 'The Thar Biosphere Reserve'. The intended biosphere identifies twenty thousand square kilometers area of Thar Desert and could be constituted without dispossession of local population with permission to limited resource utilization. However, there has not been any further action by the State concerning the proposal.

There is also a ban on basic amenities like water, electricity, roads in the villages falling in the DNP area. As a result, development has been a dream for park dwellers. Every time in the elections, the leaders made a lot of promises for local people rights, but so far they have not even been able to get the basic facilities waiver. Not only this, the right to endorse land and take loans has been taken away from the farmers here. For this reason villagers living in DNP area are imprisoned. Basic facilities are also not

available in - Water: In this area, the government made GLR (Ground Level Reservoir) by spending crores of rupees. Villagers have been struggling with drinking water crisis for years due to lack of water supply. The situation is that the people of the villages are forced to quench their thirst with water of berries on their own. The people of border villages preserve every drops of water. For this, stitches have been made in every house.

- Electricity: The biggest issue is electricity. Even today 30 villages and 200 dhanis have no electricity. For people forced to live in the dark, TV, fridge, fan is just a dream. The special thing is that solar charging plates have to be installed for mobile charging and some people go to other villages to charge mobile.

- Road: The road clearance has been banned for 38 years. The old roads are closed to the screw work. 40 villages and 150 dhanis are not yet connected by asphalt road. In such a situation, people have to travel four to five kilometers on raw roads or gravel road and catch a bus.

- Medicine: There is not a single CHC (Community Health Services) and PHC (Public Health Services) within a distance of 20 km from the villages and dhanis of DNP. There is a sub center somewhere, but due to the absence of ANM (Auxiliary Nurse Midwife), people are not getting the benefit of health facilities. The situation is that in emergency the patient does not get any treatment. This causes many serious people to die midway.

- Network: The biggest dilemma is that of mobile networks. There is no network of any company due to lack of towers in the villages adjoining the border. People in some villages have to climb up on sand dunes or trees to catch the mobile network.

- Water crisis continues for 60 years in the Indo-Pak border area villages. The government spent millions of rupees on paper and made the GLRs (Ground Level Reservoir) by laying lines, but even once water supply was not started. In this situation people have to quench thirst with berries water. Most people are forced to order a tanker by paying 500 to 700 rupees.

The villages within DNP that is dependent upon the same natural resources that are being protected. The importance of agriculture is increasing rapidly by replacing animal husbandry as major type of land use. However, livestock population registered huge growth over the past decades and a proper grazing management system is lacking.

Park authorities of DNP exercise management practices by not providing any further land allotment to local people to prevent access for agriculture or livestock grazing. Crop raiding by wild animals inside DNP is not registered by authorities. These activities are creating park people conflict.

No effective measures are taken by park authorities to aware local population about conservation practices in DNP. It resulted into failure of achieving park working plan objectives. The conflicting goals of park management are a big hindrance to launch an integrated approach to involve local people. But without involving local people DNP objective of conservation of nature and sustainable development of the area cannot be fulfilled.

People's movement against park succeeded in 1998 when people living inside the DNP allowed by court to continue their practices of animal grazing and agriculture if practiced earlier. But the sale of land and land use change could not be permitted as restricted by WLPA. However, the administrative procedure to take permission for economic activities was prolonged and exhaustive.

Conclusion:

In India, Protected area management plans present a contradiction in terms by wanting to benefit local communities only after they have been relocated, and attempts to do so by limiting any form of resource use from within the PAs. Protected areas exclude local community involvement in how natural resources

can be preserved or utilised by clearly separating conservation and development goals. Conservation has become protectionism in national parks and management is not considerate of local community knowledge, their interpretations and their perceptions of natural resources.

Protected areas have met the increasing problem of encroachment by local people primarily by 'policing' activities meaning stricter enforcement of PA regulations. Increasingly the management of natural resources is being taken over by the State, involving formal conservation in establishing protected areas. Sanctuaries and national parks perform a vital role by giving legal recognition and status to protect genetic, species and ecosystem diversity. PA establishment also provides other multiple uses including educational, recreational and scientific

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