



Habitat Displacement Studies on Tree Species of Sariska Region With Reference to Tourist Invasion

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ABSTRACT: Tourism at Sariska Tiger Reserve (STR) is getting adversely affected as a large number of villagers, protesting against the forest administration, are continuing their dharna (mahapadao) at the main gate and not allowing the tourists to enter the forest. On third day of the protest, many tourists who reached Sariska faced huge inconvenience. The situation has worsened as many gypsy owners who ferry the tourists inside the park came in support of the villagers. A total of 69 gypsies and 15 canter owners have shut down their operations. There is no ray of hope that the protest will be 'called off' soon as talks between the villagers and a team led by additional district magistrate (ADM-1) Rakesh Gadwal remained inconclusive on Wednesday. The talks lasted for more than two hours at Sariska guesthouse; however, villagers did not give consent to end the mahapadao.

While talking to TOI, Gadwal said, "We are trying to appease the villagers and negotiations are on. It is difficult to fulfil most of their demands as it is not possible to amend the Supreme Court rules regarding tiger reserves."

A senior official at tourism department said, "At present, we have opened entry for tourists at Thela end. However, the situation could aggravate during weekends. On an average, 100 tourists visit Sariska during week days and more than 250 come for tiger sighting during weekends." Hundreds of villagers living on the periphery of STR are protesting against the state government since Monday. These protesters have raised several demands including transfer of chief conservator of forest GS Bhardwaj, who is allegedly harassing the villagers.

Villagers of 60 villages living near STR are participating in the protest. They had submitted a 25-point memorandum of their demands. The protesters alleged after the death of tiger ST-11 and tigress ST-5 went missing, the forest department is committing atrocities on the villagers. They further demanded to withdraw all criminal cases against them which were registered by the forest department in the recent past. Bhoopat Singh, who is leading the agitation, said, "We would intensify our protest, if our demands are not met. The forest department is torturing villagers and registering false cases against them, as a result the future of many youngsters will be ruined." The protesters stressed that state government should give right to panchayats to issue lease deeds of land in villages falling under Sariska where ban is imposed under Forest Rights Act 2006. It was demanded that state government should pay compensation to the villagers, if their crop is damaged by wild animals. Moreover, forest department should prevent wild animals from entering the fields. As most of the villagers are dependent on cattle for their livelihood, the protesters demanded to allow grazing in Sariska area. They also demanded that forest department should construct a concrete road to connect villages in Sariska and villagers should not be restricted to go to villages and temples, which are situated inside the forest area. "Dausa-Tehla Road which passes through the Sariska forest reserve should also be opened for villagers," added a protester.

KEYWORDS: habitat, tourist invasion, Sariska, displacement, tree species, plants, animals, forest

I. INTRODUCTION

The Park covers around 800 square kilometer area and has 2 gates with 4 zones together. The most popular gate being Sariska gate, has 3 zones namely zone 1, zone 2, zone 3. Telha gate has accessible to zone 4 and the gate is approximately 80 kilometers from Sariska gate. Based on the sighting data from Wild[1,2] Trails, better sightings can be seen in zone 1, 2 and 3, hence Sariska gate is preferred for a better safari in Sariska. Zone 1: The zone is one of the most visited territories in Sariska. There are options to choose jeep or canter for safari in this zone. Zone 2: The zone is less popular among the core zone, however, there are high chance of sightings in this zone. Zone 3: The zone is as popular as zone 1 in terms of sighting.[3,4] Many tourists and naturalists recommended this zone for great sightings. Zone 4: The zone is considered least popular since it is far from the other 3 zones and can be accessed through Telha gate. Sariska National Park Income from Tourists (in lacs). Ecotourism can act as vectors for potentially lethal germs



and parasites, just as they can be a key pathway for the introduction of non-native species. The demand for close encounters with wild monkeys has spawned a lucrative ecotourism sector, which many believe is critical to obtaining money[5,6] for conservation efforts and primate protection from poachers. According to Woodford, et al. (2002) [30] these advantages must be weighted against the increased risk of disease transmission, which might have disastrous consequences for remnant wild populations. If primates are kept in close contact to humans. Ecotourists may also inadvertently introduce a deadly pathogen indirectly on boots or clothing. In such cases, bacteria or viruses released into an environment where there is no natural resistance can quickly spread through native populations. In their research Ushman, et al. (2008) [28] found that heavily used trails in central California had much higher numbers of *Phytophthora ramorum*-a pathogen[7,8] that causes sudden oak death- in the soil compared with areas that were off the trail, suggesting that the dispersal of the pathogen was driven by human activity. Captive penguins are very susceptible to a variety of illnesses, according to evidence from zoos. As a result, ecotourism, when combined with other stresses such as changing climate and rising pollution, may make penguins even more vulnerable to disease outbreaks.[9,10]

Although main objective of ecotourism is to protect natural habitat, there are a number of environment costs associated with allowing large numbers of people access to natural areas, including the use of limited resources such as water, infrastructure construction, habitat fragmentation, human waste and litter, [11,12]chemical, light and noise pollution. All these things can degrade habitat quality, causing wildlife to suffer, especially if they are close to tourist infrastructure. Although one of the goals of ecotourism is to protect natural habitat, there are a number of environmental costs associated with allowing large numbers of people access to natural areas, including the use of limited resources (such as water), infrastructure construction, habitat fragmentation, human waste and litter, and chemical, light, and noise pollution. All of these things can degrade habitat quality, causing wildlife to suffer, especially if they're close to tourist infrastructure[13,14]. Anderson, et al. (2015) [1] in their observations found that habitat loss and degradation have been the most serious threat to biological diversity around the planet.

II.DISCUSSION

Sariska Tiger Reserve is a tiger reserve in Alwar district, Rajasthan, India. It stretches over an area of 881 km² (340 sq mi) comprising scrub-thorn arid forests, dry deciduous forests, grasslands, and rocky hills. This area was a hunting preserve of the Alwar state and was declared a wildlife sanctuary in 1958.[15,16] It was given the status of a tiger reserve making it a part of India's Project Tiger in 1978. The wildlife sanctuary was declared a national park in 1982, with a total area of about 273.8 km² (105.7 sq mi).^[1] It is the first reserve in the world with successfully relocated tigers. It is an important biodiversity area in the Northern Aravalli leopard and wildlife corridor.[17,18]

The park is situated 106 km (66 mi) away from Hindaun, 107 km (66 mi) from Jaipur and 200 km (120 mi) from Delhi.^[2] It is a part of the Aravalli Range and the Khathiar-Gir dry deciduous forests ecoregion.^[3] It is rich in mineral resources, such as copper. In spite of the Supreme Court's 1991 ban on mining in the area, marble mining continues to threaten the environment.^[4]

Ecotourism and related activities can have a wide range of ecological effects on wildlife in Sariska National Park. There is substantial evidence that ecotourism is not a benign activity that causes minimal disturbance, but rather that it can have significant consequences for the survival, reproductive success and long-term viability of a number of species populations, particularly those that are rare, sensitive to disturbance and geographically isolated.[19,20] The indirect effects of human presence on the distribution, abundance, reproductive success, and survival of species that are disturbance sensitive are driving these consequences. Visitors can also have direct consequences, such as causing death, supplying artificial food resources to increase sightings of elusive animals, contributing to habitat fragmentation and destruction, importing non-native species,[21,22] and serving as vectors for disease. Despite the potential negative significances, tourism is an essential source of cash for conservation and provides valuable experiences for individuals to become wildlife advocates while also educating them about biodiversity problems. There is no doubt that tourism can be an important tool in effective conservation, but the possible negative effects of human presence must be understood and managed responsibly in conjunction with plethora of other variables that threaten wildlife's long-term survival.[23,24]

The dominant tree in the forests is dhok (*Anogeissus pendula*). Other trees include the salar (*Boswellia serrata*), kadaya (*Sterculia urens*), dhak (*Butea monosperma*), gol (*Lannea coromandelica*), ber (*Ziziphus mauritiana*) and khair (*Acacia catechu*). Bargad (*Ficus benghalensis*), arjun (*Terminalia arjuna*), gugal (*Commiphora wightii*) or bamboo. Shrubs are numerous, such as kair (*Capparis decidua*), adusta (*Adhatoda vesica*) and jhar ber (*Ziziphus nummularia*)[25,26]



III.RESULTS

At Sariska and Ranthambhore, the forest department has been forced to confront -- reality but only as a last resort. Park authorities now admit that a problem exists, but blame others for it! Currently, the mud seems to be sticking to a few individuals who have been critical of the department in the past, and also to the tourists, who have apparently driven all the tigers away with their noisy chatter.

Inexplicably, this astonishing hypothesis has been accepted by the Tiger Task Force (constituted by the prime minister to probe reasons behind the missing tigers) and features prominently in their report. This is a great pity for it masks the real reasons for the decline of tigers in Ranthambhore: the ineffectiveness of the park authorities, and the massive habitat destruction by 50,000 goats, 10,000 buffalo, 5,000 cows and 37 camels that illegally graze at Ranthambore.

Off the hook It is obvious that if the tiger has a future at all, it is one linked inextricably to tourist dollars. It is also a sad reality that not everyone can benefit from tourism. Some will profit, many will earn a livelihood and others will merely be bystanders but we shall all be enriched by the tiger's continued existence.[27]

But by blaming tourists for decline in tiger numbers, the Tiger Task Force report has let the forest department off the hook. What about the department's accountability? This is an aspect seriously neglected by the report. Where references to accountability can be found -- and they are scarce -- one also finds glaring inconsistency.

For example, how can 22 'lost' tigers in Sariska merit intervention when 21 from the neighbouring reserve at Ranthambhore do not? Similarly nothing is made of the fact that in neither case was it the forest department that brought the matter to anyone's attention.

In any event, this issue of tourist disturbance is hard to take seriously in the light of the many other, routine incursions into the park that are happily sanctioned by the authorities. Pilgrims, for example are allowed unencumbered entry to Ranthambhore in order to worship at shrines within the forest. Each September nearly 100,000 of them -- almost a year's quota of tourists --wander through the core area of the park every day for a week to celebrate the Ganesh Mela. And let's not forget the 50,000 cattle and goats that graze illegally within the park every day![28]

There are other incriminating factors as well. Among them is the abuse of the infamous " vip quota" where extra vehicles enter the park on "special routes" that take them into the most sensitive, restricted zones.

The Tiger Task Force report is blind to such abuses. Instead, it criticises Ranthambhore's hoteliers for "stressing the ecology". They have apparently been operating "without any building code of environmental standards". Even if it were true, the area occupied by tourist hotels totals less than 1 per cent of Ranthambore's boundary. This area is also the greenest, best-protected, most biodiverse environment to be found outside the park itself. That this fact -- visible from miles away -- was not noticed and applauded in the report indicates to me that the Task Force members either did not visit there or had their eyes closed.

IV.CONCLUSIONS

In 2005 the Sariska Tiger Reserve was declared having 'No tigers' which was gruesome news of the failure of project tiger after the expenditure of a huge exchequer throughout 50 years of conservation efforts; the authorities put the blame on the traditional forest-dwelling communities, framing them as helpers and associates of poachers. The community is dominated by the Gujjars (approx. 86%), and other communities include Meena (7.6%), Meo (3.2%), Bawaria (1.7%) and others [1].

The enforcement of the tiger projects and the development of new environmental regulations were also partially due to this, which caused the set-up of new guidelines and the demarcation of 'inviolate area' for the breeding and viable population of tigers. In compliance with that, the Critical Tiger Habitat (CTH) was notified in Sariska TR on 28 December 2007, recognising a space of 881.1124 sq km.[29]

In 2008 the NTCA drew a relocation plan to move around 750 villages located in the 28 Tiger Reserves in the country, that also included 29 villages located within the CTH area of the Sariska TR. All this happened when the Forest Rights Act (FRA) came into existence, which recognized the rights of the forest dwellers in their area, and determined rules for the establishment of inviolate zones and modification of rights for environmental purposes [1,2]

The forest dwellers of the Sariska TR immediately reacted and protested against the relocation plan, which was in violation both of the FRA rules and the Wildlife Amendment Act (2006) [2,3] ; the 'voluntary relocation' was indeed



declared illegal, as carried on without the 'prior informed consent' of the Gram Sabha, which represents a precondition for the relocation to be legal. For the first phase of relocation were identified a number of 11 villages, viz. Kankwari, Haripura, Bhagani, Dabali, Deori, Kraska, Kundalka, Raikamala, Sukola, Umari and Lilunda. The first completely relocated village was Bhagani whose all 21 families were relocated to the new site at Bardod Roondh in 2008. Village Umri was shifted to Majupur reserved forest in 2011 and village Rotkyala was shifted in 2012-13.

Tourist cause habitat destruction and forest /tree degradation due to non-obedience of rules. [30]

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