



Harmony with the Feathered Bipeds: Tale of Todi Village of Jhansi, Uttar Pradesh, India

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(Received 16 Oct, 2015; Accepted 24 June, 2016; Published 27 June, 2016)

ABSTRACT: Birds are admirable and reliable companion of humans. They have been serving mankind since time unmemorable. With the changing life styles man has become self-centered, living only to fulfill his desires. This leads to the depriving situation of other species on the Blue planet. There have been constant Laws for the conservation of wildlife in India. This paper brings to light the harmony of the inhabitants of Todi village in Moth Block of Jhansi District, Uttar Pradesh, India. The site is being continuously monitored since 2013. Jhansi district is rocky with undulating topology; a lower proportion of its Total Geographical Area is under agriculture i.e 70%. Approximately 7% of the area is under forest, a bulk of which is degraded forest. The Todi village has a rocky cliff that is about 1 km long and 450-500 feet high. It is an ideal abode for the Critically Endangered, Long-billed vultures (*Gyps indicus*), and Endangered Egyptian vultures (*Neophron percnopterus*). The village is a appropriate habitat for the National bird, Peacock (*Pavo cristatus*). The recently diminishing House Sparrows (*Passer domesticus*) are flourishing in the village. Besides these, the common birds are also reported in this site. The cliffs, the agricultural fields are apt for these feathered bipeds. They are breeding successfully with constant care and concern of the villagers. The villagers (the Yadav community on one side and Adivasi on the other side of cliff) do not disturb these birds. They also provide grains and water for peafowl. The sick and injured birds are taken care of till they are healthy enough to survive. The older generation have sown the seeds of harmony with Nature in the minds of younger generation too. The children never tease or hurt the birds for amusement. The threat that this beautiful abode for man and birds is facing is mining that needs to be stopped before this paradise is lost. The Biodiversity Management Committee (BMC) can be formed in Todi village for better conservation. Ecotourism development programme can be taken up and tourism revenue earning and benefit sharing schemes for additional livelihood option creation can also be executed to develop economic condition of these communities.

Keywords: Conservation; cliff, harmony; birds and community.

INTRODUCTION: Birds are admirable and reliable companion of humans. They have been serving mankind since time unmemorable. With the changing life styles man has become self-centered, living only to fulfill his desires. This leads to the depriving situation of other species on the Blue planet. There have been constant Laws for the conservation of wildlife in India. The protected areas include National Parks, Wildlife Sanctuaries, Conservation Reserves and Community reserves. Besides the protected areas wild biodiversity is also found outside these boundaries with favorable and supportive habitats that are proficient to fulfill the requirements of the species. The unprotected areas with rich biodiversity are prone to the devastating effects of anthropogenic activities that include poaching of fauna, cutting of trees, mining, illegal constructions and so on. This paper brings to light the harmony of the inhabitants of Todi village in Moth Block of Jhansi District, Uttar Pradesh, India. It reflects how the local residents outside the protected

areas involve in the wildlife management and its conservation.

MATERIALS AND METHODS:

Study Area: Often called as the heartland of India, the Bundelkhand Region of Central India has always commanded an eminent place all through the Indian history. Apart from its rich cultural heritage the region is also known for its socio-economic backwardness. Jhansi District is one of the 13 districts that form the Bundelkhand Region. It is situated between the rivers Pahunj and Betwa between North longitudes 24°11' and 25°57' and East latitudes 78°10' and 79°25'. It has an average elevation of 284 metres (935 feet). Jhansi district is rocky with undulating topology; a lower proportion of its Total Geographical Area is under agriculture i.e 70%. Approximately 7% of the area is under forest, a bulk of which is degraded forest. The district also has a lower proportion of wastelands (16.95%), ha being classified as "land with scrubs".

Moth is located at 25.46°03.73"N 78.58°33.06" E. It has an average elevation of 191 metres (626 feet). Todi is a small village in Moth [Figures 1(a) & (b)]. The geographical feature is a huge cliff that is about 1 km long and 450-500 feet high. The cliff has people living on both the sides. Todi has a total population of 1,460 peoples. There are about 248 houses in Todi village. Jhansi is nearest town to Todi which is approximately 65km away (<https://villageinfo.in/uttar-pradesh/jhansi/moth/todi.html>). The main crops include wheat, paddy, til, bajra, and mustard. The villagers have livestock that includes mainly cows, buffaloes and goats. Some people have domesticated hen, ducks and goose.



Figure 1(a): Todi village and the cliff (Source: Google earth).



Figure 1(b): View of Todi village from above the cliff.

Method: The monitoring of Todi in Moth is being carried out since 2013 and is continuing. This site is selected because it fulfils the criteria that the villagers have taken initiative on their own for conserving wildlife & its habitat. The methodology includes the collection of primary and secondary data. Regular discussions were held with villagers. Information was collected through interaction with members having knowledge of conserving biodiversity, Group discussion with villagers and group meetings. Intensive field visit in the villages were carried out to collect the data about the fauna particularly the bird species and interaction with experienced elderly of Todi who believe in the ethical values of Nature and conservation of species.

RESULTS AND DISCUSSION: It is an ideal abode for the critically endangered, Long-billed vultures (*Gyps indicus*), and Endangered Egyptian vultures (*Neophron percnopterus*). The village is an appropriate habitat for the National bird, Peacock (*Pavo cristatus*). The recently diminishing House Sparrows (*Passer domesticus*) are flourishing in the village. Besides these, the common birds are also reported in this site. Bird species such as Indian Roller (*Coracias benghalensis*), Pied cuckoo (*Clamator jacobinus*), Alpine Swift (*Tachymarpis melba*), Eurasian Eagle Owl (*Bubo Bubo hemachalana*), Woolly-necked stork (*Ciconia episcopus*), Asian Openbill (*Anastomus oscitans*) are also reported in Todi. The cliffs surrounded by the agricultural fields are apt for these feathered bipeds. They are breeding successfully with constant care and concern of the villagers. The villagers (the Yadav community on one side and Adivasi on the other side of cliff) do not disturb these birds (Figure 2). They also provide grains and water for peafowl. The sick and injured birds are taken care of till they are healthy enough to survive.



Figure 2: The people of Todi: Yadav community on one side and adivasi on the other of the cliff.

Conservation of Long-billed Vultures (*Gyps indicus*): One of the most common birds of India, the Long-billed vultures are now in the list of Critically Endangered Species and included in Schedule I of Wildlife Protection Act, 1972. In Todi every year there are 15-20 nests of *Gyps indicus*. The population ranges between 50-60 individuals. The Long-billed vultures inhabit old monuments and rocky cliffs. The roost and breed in the monuments and cliffs. The Todi cliff is an ideal habitat for *Gyps indicus*. The cliffs are straight and high as such it is not possible to reach up to their nests and cause disturbance. The Adivasi of Todi are well aware of vulture declines. They feel privileged that the Long-billed vultures are breeding and surviving in their village. They keep monitoring the nests during the breeding period. These people take care not to cut or destroy the wild plants that are used by the vultures for nest construction (Figure 3). This aids in energy consumption of the breeding pair that avoid flying over long distance for the nesting material. In the months of May and June, the temperature in the region is extremely high with hot local winds "Loo". The temperatures at times exceed 48 °C. This is the time when the vulture fledgling learn to take their first flights. Sometimes the fledgling take flight and come at the foot of the cliff but being beginners, they are unable to fly back to the high cliffs and their nests. They may also be heat stroked and starved at times. This condition may lead to them to death and they are prone to attacks by the feral dogs. The Todi people especially Ramnath, take care of these fledglings (Figures 4 and 5). They provide them with water and ORS as well as arrange for the food that is free from any contaminants harmful for the fledglings with the help of Forest Department and the Research team. Within a period of 5-7 days the fledglings recover and gain energy and take their flights successfully.

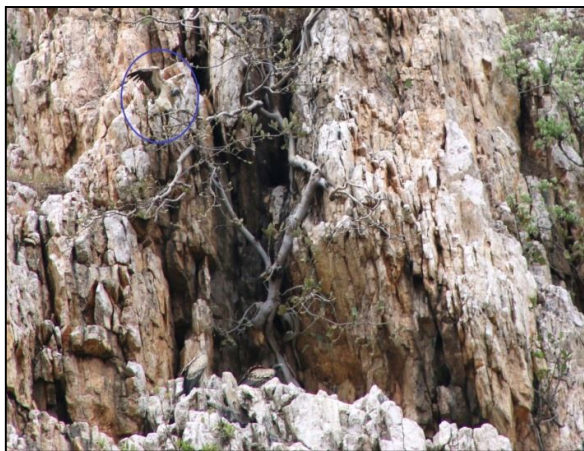


Figure 3: Vulture collecting sticks for nest construction from a tree growing in cliff.



Figure 4: Todi people taking care of the vulture fledgling.



Figure 5: Ramnath taking care of a vulture fledgling.

Conservation of Egyptian Vultures (*Neophron percnopterus*): The Egyptian Vulture (*Neophron percnopterus*) also known as Gobar giddh and Safed giddh is now the most common vulture species. However it has been now placed in the Endangered category of the IUCN. The Egyptian vultures are dwelling with the Long-billed vultures in the cliff (Figure 6). They receive the same concern and conservation as the Long-billed vultures. Every year 3-4 nests of Egyptian vultures are seen. The population ranges between 10-12 individuals.



Figure 6: Nest of Egyptian Vulture in cliff.

Other Vulture Species in Todi: Apart from Long-billed vultures and Egyptian vultures, the migratory species Eurasian Griffon (*Gyps fulvus*) are also observed from December to February [(Figure 7(a)]. The number varies between 5-6 individuals. The Critically Endangered Red Headed vulture (*Sarcogyps calvus*) is seen occasionally and do not reside in the cliffs [(Figure 7(b)].The Eurasian Griffon are seen roosting with the Long-billed vultures [(Figure 7(c)].



Figure 7(a): Eurasian griffon.



Figure 7(b): Red-headed vulture.

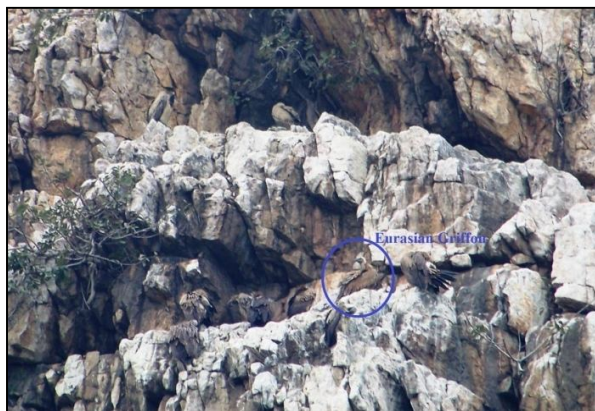


Figure 7(c): Eurasian Griffon are seen roosting with the Long-billed vultures.

Conservation of Peafowl (*Pavo cristatus*): The National Bird Peacock (*Pavo cristatus*) comes under Schedule 1 of Wildlife Protection Act 1972. There have been no scientific censuses for peacock in India as such the current status is not known. However there have been reports of decline from several places. The local people particularly the Yadavs have taken the initiative to protect the birds as they are commonly known to be associated with Lord Krishna in Hindu culture. During morning hours the peafowl come down on the house roofs from the roosting trees and then start moving to the foraging sites [Figure 8(a)]. The peacocks forage in musters in the agricultural fields without any riot [Figure 8(b)]. They feed on insects and do not cause any harm to the crops. By evening they return back to the village and roosts on high trees of neem and chirol [Figure 8(c)]. The villagers keep water in earthen pots for them and also provide them grains to feed. The vibrant birds do not hesitate and move about freely in the agricultural land, outskirts of village and the rocky cliffs in search of food [Figure 8(d)]. The population of peacock has increased due to protection by local community. At present, the population comprises of more than 100 peafowl.



Figure 8(a,b,c,d): Peafowls in Todi.

Conservation of House Sparrows (*Paser domesticus*): The house sparrow had started vanishing from many parts of the country. The occurrence of house sparrows is decreasing with increasing buildings and paving (Kanaujia *et al.*, 2014). The thatched houses are also declining that provide the nesting sites for House Sparrows. In rural areas the sparrows are dominant where cattle are kept and around granaries. Some rural areas are also losing the house sparrows because of excessive use of pesticides. This result in

loss of insects those are necessary for the chicks of house sparrows. The Sparrows in Todi are part of daily life at the village [Figure 9(a)]. They nest in the thatched houses and are thriving in the village. They can be seen all around the village twittering and flying about, foraging and roosting in flocks [Figure 9(b)]. The people of Todi are tolerant towards these chirping birds and do not remove the nests from their houses. The construction pattern of houses in Todi is such that the nesting places are available for the birds [Figure 9(c)].



Figure 9(a): Sparrows are part of daily life.



Figure 9(b): Sparrows foraging on rice.



Figure 9(c): Sparrow nesting in house crevice.

Kanna *et al.*, (2011) emphasized on creating space for community-based conservation initiatives (CBCLS) in

conventional academics. He focused on hundreds of villages across India that has communities that protect heronries such as Sareli in Uttar Pradesh., Nellapatu in Andhra Pradesh and Chittarangudi in Tamil Nadu. The villagers in Tamil Nadu are protecting the 700 ha Chittarangudi tank that attracts storks, ibises, herons, egrets, cormorants and other migratory birds. The hunting is prohibited by the villagers and no one is able to even steal the bird eggs. They avoid disturbances by saying no to crackers during Diwali festival, and avoid commercial fishing so that there is no food scarcity. There conservation by local people may be concerned with a number of species and the habitat or a single species may be provided protection such as in Khichan village of Rajasthan, the local population provides refuge and food to a wintering population of up to ten thousand demoiselle cranes, ungrudgingly spending up to several hundred thousand rupees annually on food grains to feed them (Pathk, 2009). It is essential to educate the people that the needs and benefits of conserving wildlife is crucial so as to gain support for conservation endeavors and to gain the public's participation in the conservation initiatives (Mir *et al.*, 2015). Involvement of local communities in conservation of endangered wildlife populations is known as an effective wildlife steward. Inspiring and enthusing local people for conservation of the cheetah and its habitats in Iran are giving new hope for long-term survival of the critically-endangered species in Iran (ICS Letter 2014-2015).

CONCLUSION: In recent years there has been progression in the conservation strategies with the involvement of local people and communities. When community based conservation is applied it results in twofold values i.e. more effectual and righteous. The older generation have sown the seeds of harmony with Nature in the minds of younger generation too. The children never tease or hurt the birds for amusement. This small village is conserving a number of species that plays an important role in the food chain. The Todi village has set an example for others too. The threat that this beautiful abode for man and birds is facing is mining that needs to be stopped before this paradise is lost. The Biodiversity Management Committee (BMC) can be formed in Todi village for better conservation. Ecotourism development programme can be taken up and tourism revenue earning and benefit sharing schemes for additional livelihood option creation can also be executed to develop economic condition of these communities. It is also recommended to designate a proper name for the life supporting cliff in Todi, so that people know and recognize it for its conservational value.

ACKNOWLEDGEMENT:

The Authors are thankful to the Forest Department of Jhansi for their co-operation. We acknowledge the local people for their assistance during the study and for their concern for the diversity in Todi.

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