

Vultures in Tripura- Need for Conservation

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Vultures are revered in Indian mythology. Ramayan epic has the mention of Jatayu the king of vulture who was wounded in his attempt to rescue Sita from Ravana. Zorostrians(Parsis) put the dead human bodies into towers called "Dakham" which are eaten by vultures. This form of disposal of corpse not only ensures food for vultures but also fulfils their concern of charity. Vultures play an important role in cleaning and maintaining ecology. These are basically scavenging birds feeding on carcasses of dead animals. A group of vultures gathered around a kill is called a wake and when in flight they are addressed as a committee, venue or vault. They feed exclusively on the kills of larger predators and animals that have died due to injury or illness. As on date, unfortunately the vultures are among the most endangered birds on earth. They can be easily located in battlefields or drought/ flood affected areas. Their excellent motion-sensitive eyesight allows them to scan the entire landscape below and the kins circling beneath them. Different species of Vultures are endowed with different strength of bills to minimise the chances of inter-species feeding competition as well as to co-exist with mutual dependence. They also stagger the time of feed with different foraging patterns. Interestingly, large body-sized vultures having powerful bill (e.g., Red-headed Vulture and Cinereous Vulture) tear the upper layer of a carcass. Once the tough skin is removed, an opened carcass and soft flesh of visceral organs becomes favourable for Gyps species. Thereafter, the smallest species of vultures i.e. Egyptian Vulture, steps in to clean the carcass. It prefers to feed on tendons, ligaments etc. Finally, Lammergeier cleans up the remains of the carcass by consuming bones. Apart from bill and strength, they are perfectly adapted for the job of cleaning. Their bald heads and bare necks prevent blood, bacteria and parasites clinging to their necks while feeding, greatly reducing their chances of

infection. On the digestive end, their stomach acid is potent enough to cope with feeding on rotten meat. Vultures reportedly show unique behavior called urohidrosis. They urinate on their legs and feet which help them to provide cooling effects on hot days. The urine is worth as antibacterial and anti-parasitic substance beneficial to vultures that often walk through carcasses and can get badly infected. This restricts the infections for the nests and sibling.

Vultures do not carry prey to their chicks in nests. Instead, they gorge at a carcass and regurgitate food to feed their young ones. They can eat over 10% of their body weight, i.e. up to 1 kilogram. Some species as Turkey vultures reportedly forage by olfactory sense (by sense of smell). They fly low (near the ground) to pick up the scent of ethyl mercaptan, a gas produced during the process of decay of carrions. This accentuated ability to detect odors allows it to detect carrion below the forest canopy.

Usually the vultures can have only one sibling every year. So the breeding attempts are slow to regenerate the population. The decrease in population has been reported due to use of Diclofenac amongst animals. The use of diclofenac was banned in 2011. The majority veterinarians informed that the substitutes as "Ketoprofen" or "Carprofane" are known to be as harmful as "Diclofenac". In Tripura, we may declare vulture safe zone in at least 100 Km radius which is designed as natural habits of wild vulture and made free of the presence of drug diclofenac or any other. It will enable us to provide safe zone for vultures to survive in natural environment.

The decrease in number of vultures is also attributed to the loss of habitat. The habitat necessary for vultures are big and tall trees with branching to serve them as safe place for perching and nesting as long standing semul tree (*Bombax ceiba*), *Ficus* trees. Further, the space is open devoid of high density of trees.

So far Tripura is concerned, mainly *Gyps bengalensis* species of vulture is found. Earlier common sighting occurred in Khowai, West and Sepahijala area of Tripura. Nowadays common sighting exists in Kalyanpur and Khowai area of Khowai district, Lembucherra in west district. In the last 2 year common sighting occurs 10-15 times with population of 100. Sighting is common in around 25-30 in a group. White rumped vulture continue to have presence in Kalyanpur and Khowai area.

The State Board of Wildlife, Tripura under constant guidance of Hon'ble Chief Minister has decided to ensure the effective conservation of valuable endangered species in Tripura. In pursuance, MOEF&CC has also agreed to establish a conservation breeding centre with technical help from Bombay Natural History Society, Mumbai. The forest department is trying

to generate awareness amongst local masses so that they don't fell the tall trees from their private lands. Department is making attempts to protect the trees and paint/ colour these adopted trees for sensitization of people towards vulture conservation. The roosting and nesting trees need to be protected at all costs. The existing trees may be adopted by the keepers for nesting of vultures. An effort is being made to do census of existing population in Tripura and associated students/ people may be designated as "Garud Mitra". In other vulture inhabited areas in other parts of the country as Gujarat, vulture restaurants are operating wherein cattle carcasses are served to vultures for showing it to tourists and visitors. The tourist influx to these restaurants has vastly improved livelihoods for the local communities. The conservation effort is going to be real feast for the bird watchers and nature lovers. We shall attempt to establish such restaurant in Tripura. Tripura Forest Department with effective handholding with Bombay Natural History Society, Mumbai and Central Zoo Authority will start conservation breeding centre in Khowai District. These beginnings will go a long way in conservation of vultures in Tripura and help the bird watchers, nature lovers and tourists a different experience to know vultures from close quarters.

