Talk on Conservation Efforts in Saving the Critically Endangered Gyps species of Vultures in India

The IIT Mandi Colloquium Team arranged talk on Indian Vultures, an endangered species on 11th August 2017. The talk was delivered by Dr. Vibhu Prakash, Deputy Director and Principal Scientist [Ornithology] with Bombay Natural History Society. He has an experience of over 37 years in the field of Ornithology. He has headed the vulture conservation project of the Society and currently based at Pinjore, Haryana.

He started his talk explaining the migration, biodiversity of critically endangered species vultures. Vultures were once the most abundant large birds of prey and nature's scavengers across the world, including Indian subcontinent. But today they are one of most endangered bird species. This has not only resulted in the near total disappearance of a magnificent bird from our skies, but also jeopardised health and cleanliness in the countryside and caused unnatural changes in the natural food chain. Vultures are obligate scavengers. They only eat on dead animals or snatch the prey from predators. They can consume food almost equal to the quantity of their body weight. However, they are social bird.

The Gyps species of vultures are obligate scavengers and never ever kill. The three resident Gyps species of vultures, Oriental White-backed Vulture (*Gyps bengalensis)*, Long-billed Vulture *(Gyps indicus)* and Slender-billed Vulture (*Gyps tenuirostris)* were very common in India till a couple of decades ago but their populations crashed in the mid-1990s and by the year 2007, 99% population of the three species had disappeared.

A veterinary non-steroidal anti-inflammatory drug, diclofenac was found responsible for the crash in vulture populations. Vultures get exposed to diclofenac when they feed on carcass of an animal which had died within 72 hours of the administration of the drug. The drug is extremely toxic to vultures and causes renal failure. The ban on the veterinary diclofenac and the initiation of conservation breeding were the two important recommendations of South Asia Vulture Recovery Plan, 2004 and the Vulture Action plan of Government of India, 2006. The diclofenac as a veterinary drug was banned by Government of India in 2006 after an alternative drug called

meloxicam was found to be safe for vultures as well as cattle. Safety testing of meloxicam was carried out at Vulture Conservation Breeding Centre, Pinjore in 2005 in collaboration with Indian Veterinary Research Institute.

However, it was observed that in spite of the ban on veterinary drug diclofenac, the multi-dose vials of human formulations of diclofenac had filtered in the veterinary sector and were misused for treating cattle. The Government of India restricted the packaging size of the drug to 3 mL vials in July 2015. This has been a great help in vulture conservation. Conservation Breeding Program was established for all the three species to provide a life boat support to the species to save them from possible extinction. All the three species were breeding in captivity and double clutching and artificial incubation techniques were established to increase the productivity in these slow breeding and long living birds. The release program is expected to begin in 2017 in the area around the Vulture Conservation Breeding Centres.