

Public Lecture

On

“The Magnificent Vulture – End of the Road?”

Date: 20th March, 2013

Time: 6:30pm – 8:30pm

India International Centre, New Delhi

Vultures have existed for eons – as part of our mythology, amongst Egyptian Pharos and Greek legends. Yet in a short span of 20 years, they are close to extinction in South Asia and beyond. Today they are classified as critically-endangered by the International Union for the Conservation of Nature (IUCN) as the population of vultures has declined by an alarming rate of over 99 per cent during the last two decades.

How did this happen? Is there any hope of a recovery?

In an attempt to address some of these pertinent question and find out ways to preserve these birds, Toxics Link and India International Centre organized a film screening and panel discussion on **“The Magnificent Vulture – End of the Road?”** at India International Centre on 20th March 2013.

The lecture was preceded by the screening of the film **“Vanishing Vultures”** directed by Mr. Mike Pandey, which depicts the loss of an important scavenger due to the use of a veterinary drug -Diclofenac. Dr. Vibhu Prakash (Principal Scientist, Bombay Natural History Society) was the speaker and the session was moderated by Mr. Ravi Agarwal (Director Toxics Link).



Mr. Agarwal emphasized on the catastrophic decline of vultures and the dismal story of an impending ecological threat. Till the late 80s they could be seen breeding in Talkatora garden as well as in large hoards in various parts of the city. “Once they were very common and we were worried about their excessive

numbers. But that has changed. The population has witnessed an alarming crash over the past few decades.” However, almost 99% of the vultures are on the verge of extinction today, he added. Vultures are a fine specimen of a very hardy evolutionary species that has stood the test of times. While today we have almost decimated them .The alarming decline in their population is attributed to the use of diclofenac, a veterinary drug which is extremely toxic to the birds which feed on the cattle carcass recently treated with the drug. He expressed deep resentment on the kind of industrial power the chemical companies have which was reflective of what we, the mankind, are doing to the planet.

Echoing the concerns raised by Mr. Agarwal, Dr. Prakash further elaborated that vultures are long living and slow breeding birds and their annual mortality is not more than 5%. The species started declining in mid 1990s and by 2000, 90% of the vulture population had already disappeared. Thus this kind of mortality rate can cause extinction in such species.

Pointing out the significant role these birds play in maintaining equilibrium in our ecology, Dr. Prakash shared that the vultures were scavengers who keep the environment clean by feeding on the carcass dumps. A colony of vultures can finish off a full grown cow within minutes. A dead animal is a culture medium of fungus and bacteria which starts growing and multiplying as soon as the animal dies, they form spores and penetrate into the soil and water and spread disease.

He further briefed on the different species of vultures and how they depend on each other to exploit the resource (animal carcasses). Talking about the Gyp Species of the vultures, he pointed that they formed 99% of the vulture population and feed on soft tissues and vital organs which form the bulk of animal body. Talking about the Long Billed vultures he said these birds nest on the cliffs and is found only in India and some parts of Pakistan and thus if the species disappear, they will become extinct. The slender billed vultures, one of the

rarest vultures in the world, remain less than thousand today.



However, the population of the resident vulture has crashed radically over the years due to the use of Diclofenac. He further explained that the drug gets ingested in their body when they feed on the cattle treated with Diclofenac and form white crystal of uric acid deposits on the vital organs. Their body is unable to excrete uric acid, resulting in kidney failure and eventually they die of dehydration. In India,

76% of the vultures that died when examined showed symptoms of visceral gout. All of them had residues of diclofenac in their body. The drug is 30 – 40 times as toxic to Vultures as cyanide is to rats. Taking into consideration the vulture ecology, Dr. Prakash pointed that even less than 1% of the carcass which has the drug can cause the kind of crash in the population which we have seen in the country.

India is largely an agricultural country and dairy farming is an important source of livelihood. Diclofenac is an extremely useful drug for cattle and humans, thus the government was very reluctant to ban the drug, Dr. Prakash said. However, there were suggestion for the use of Meloxicam which is used to treat the birds and raptors. This was found to be safe for vultures.

Briefing on the initiatives taken by BNHS and other scientist, Dr. Prakash shared that a recovery plan for the vultures was formulated by the group. Similarly, the Government of India in 2006 came up with the *Vulture Action Plan* with some key recommendations that included ban on the use of diclofenac, use of an alternative drug to diclofenac and initiate a conservation breeding plan.

Though the drug was banned for veterinary use in India in 2006, it continues to be sold and used illegally today. Despite the ban, the human formulation of the drug in multi-dose vials is available which are being used to treat the cattle.

The teams of scientists continued to monitor the drug and collect tissues of the cattle even after the ban. They found that even after the ban, 6% of the cattle had diclofenac residues. The present situation is that there are number of companies manufacturing meloxicam, an alternate drug for veterinary use, yet human formulations are being used for treating livestock which is a dangerous situation for vultures which continue to die. Meloxicam, compared to diclofenac , is an expensive drug.

Dr. Prakash also elaborated on the vulture conservation breeding program which has saved a number of vultures. Dr. Prakash explained that if 600 pairs of each of the three species are released in the wild that will form a genetically viable and self sustainable population. And to get 600 pairs, we need to breed 150 pairs of each of the three species. One of the major problems with these breeding centers is that the birds have to be kept in captivity. This means they cannot soar in the sky. This, in turn, causes problems in the feet. They have already bred 50 birds in the centre under the breeding program.

This was followed by a question answer session where numerous pertinent questions were raised. There were questions on the situation of vultures in European countries, Pakistan and Nepal; the incubation period of the vultures; the reasons for marketing Diclofenac only

in South Asia. Participants also raised question on how the farmers get access to human drug scheduled H without a prescription.

During the discussion, the participants identified lack of implementation, strong lobby and power equation as some of the major reasons which is preventing the drug from being wiped off completely. There were suggestions that targeted advocacy and awareness generation could help in banning Diclofenac completely. Also the side effects of the drug on human body could be used and run as a parallel campaign. There were suggestions that films and puppet shows could be used as an effective advocacy tool to ban the drug completely and generate awareness.



Mr. Agarwal in his closing remark expressed his resentment on the fact that the drug is still being marketed only in India and its complete ban remains a big question. He said that a royal bird like vulture has a right to live and we do not have the right to kill them.

The lecture saw an overwhelming response with more than 40 participants attending the lecture which included representatives from BNHS, Film makers, Delhi University, Educational and Research Institutes, Universities, Media houses, Civil Societies and schools.
