

VIEWS AND EXPRESSIONS

MANAGEMENT OF HUMAN ELEPHANT CONFLICT IN DIFFERENT STATES

Heavily used infrastructures through protected areas and reserves, loss of corridors and conflicting cropping pattern on the edge of the forests are the main reasons for human elephant conflict in any area.

Apart from southern states of Karnataka, Kerala and Tamil Nadu, some human dominated landscapes of Uttarakhand, Chhattisgarh, Jharkhand, Odisha and West Bengal are affected by human elephant conflict. The responses of human vary in different regions. While in southern states, public is generally aggressive and target the elephant herd with the gun shots, tribal in Jharkhand and Sarguja region of Chhattisgarh never show any aggression and do not use gun during anti-depredation operation. It has been observed during my tours to Jharkhand and Uttarakhand that villagers do not have a tendency to chase the herd. By and large they clear the passage and elephants move away silently. Whenever elephants were chased violently, using sound crackers etc, lot of damage to mud houses were inflicted.

Elephant Mortality and Criminals go unpunished

Conflicting cropping pattern on the edge of the forests is the main reason why elephants move out of the reserves. With the growth of human and cattle population, many buffer areas between the forests and agriculture lands have now been occupied for tea and coffee estates, agriculture etc. Paddy, sugar cane, banana crops, shade trees of *Kyrata urens* and jack fruits in coffee estates etc attract elephants. The pith of banana plant and *Kyrata urens* are very much liked by elephants. Once the herds visit the area hundreds of acres of banana crop are damaged. In the attraction of *Kyrata urens*, the elephant herds trample coffee plants and inflict lot of damage. Elephants also like jackfruit. When there are fruiting in jackfruit trees, the smell goes for a long distance, and elephants are attracted.

Elephant herds straying in human dominated landscape move during nights and damage crops and other properties, while they hide themselves in tree groves during the day time. Elephant herds also stay in coffee estates such as in Coorg and Hassan, where estate owners open fire at them while chasing, as against the normal practice of Forest department using crackers to chase them. Bullet injury in some cases leads to septicemia, which is followed by maggot formation and ultimately the death of the elephant. Some of the land owners on the fringes of the Elephant Reserves protect their crop by running a wire on the periphery of the field



and connecting the wire illegally with the nearest power line. Many a time's elephants straying in such landscapes touch the wire and get electrocuted. In the morning, when forest officers reach the spot, they find that the wires are removed and there is hardly any direct evidence to take up a criminal case against the accused persons. Land owners booked in many such cases have succeeded in going scot free, as the conviction rate is hardly 10%. There is therefore, no deterrence and the crime goes on unabated.

In Purulia, Bankura and Midinapur districts of southern West Bengal, tribal target the elephant herd with the bow and arrow. Once again the injury leads to septicemia, followed by maggot formation and death of elephant. Identifying the culprits in these cases is difficult. The question of booking them and securing conviction is further difficult.

Management Action

Villagers' retaliation is also on account of Forest Department's apathy towards the suffering of the people owing to death and crop losses. Adequate and timely compensation should be provided and next of kin should be consoled by senior officers in all death cases. I found compensation being paid in Uttarakhand in human death/ injury cases even inside the forests, which is against the norms in other states.

Attempts are made by Forest departments across the states to construct and maintain barriers to prevent straying of wild elephants outside forests. Elephant proof trenches and solar powered fences constructed on the periphery of forests have been rendered ineffective for variety of reasons. Each village has people with conflicting interest. While one group would fill up trenches to provide passage for themselves for collection of fuel wood and for their animals to graze, other group would advocate maintenance of barriers for their crops. Elephant proof trench in patches where soil is loose or at the crossing of streams or in high rainfall areas where soil is brought down



by rains and deposited inside the trench, are rendered ineffective. Solar powered fences in high rainfall areas are also rendered ineffective due to excessive weed growth. Elephant herds push a tree on solar wire and damage the same. Now the Forest Department is adopting more expensive techniques such as concrete structures and barriers using rails etc. However, there are reports from the ground that elephant crosses the rail by sneaking through two parallel bars. This way, one by one the entire herd crosses. The latest thinking in the department is to put spike in the rails. Elephant proof walls are being built on the periphery of forests in the northern state of Uttarakhand.

Tribal for Conservation

During my tour to Jharkhand and Chhattisgarh related to Management Effectiveness evaluation of some sanctuaries, I was pleasantly surprised to have a different experience all together. Tribal in Sarguja region of Chhattisgarh never target the elephants with bow and arrow / gun shot. They use crackers and make noise to chase the elephant. Some of the herds are found establishing their home ranges in Tamor Pingala sanctuary of Surajpur district. The examination of elephant dung in this sanctuary reveals that leaves, bark, fruits and roots of tree species such as *Chloroxylon swetinea*, *Cochlospermum religiosum*, *Boswellia serrata*, *Ziziphus moritiana*, *Bredellia retusa* are consumed by elephants. The dungs were located in patches where the trees of above mentioned species were damaged and uprooted by

elephants. It is concluded by the experts that a herd of fifteen elephants have established Tamor Pingala sanctuary as their home range.

In Khunti district of Jharkhand, the place at a distance of nearly 35 kilometers from Ranchi and birth place of river Subarnarekha, there is cluster of villages surrounded by forests having relatively higher elephant density. These villages are Lohagirvi, Derang, Churdag, Jeetpur, Telo, Mahuatoli situated in Torpa block of Kunti district of Jharkhand state. Wildlife conflict cases of these villages are dealt in Giriga Range of Kunti Forest division. The Oraon, Korva and Munda tribe are the inhabitants of these villages. They have great sense of responsibility towards environment and do not like to harm Forests and Wildlife in any way. The tribe argues that the elephants have right over the crop, as cultivation is done in areas originally belonging to Wildlife. They do not claim any compensation for the damages done by elephants to their crops and any other properties. They also do not show any action in retaliation of any human death caused by elephants. If in a particular year elephants have not raided their paddy crop, they do not commence harvest. On the contrary, they request Range Forest Officer Giriga Range to drive herds to their paddy field so that the elephants get their share and remaining crop can be harvested.

The example of these villages of Khunti district should be spread in heavy conflict areas, whenever State Forest departments take up education and awareness program for conservation of Wildlife.

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