Project Update: January 2020

Activity 1: Collecting pre-information on king cobra (*Ophiophagus hannah*) and other medically significant species of snakes from study locations

The short-term monitoring protocol has been developed to evaluate the perceptions and awareness of rural people, general public and monk bodies towards the species of conservation concern before and after the implementation of the project. For this, both open and closed ended questionnaires were developed and target populations were interviewed concerning the above defined parameters.

Interviewing with local communities and religious community on King cobra and other medically significant species of snakes.

For example: what percentages of population were not aware of importance of conservation of king cobra in their locality. This approach was made basically to develop benchmark information to evaluate degree achievement of project's goals at the end of the project period. We visited remote villages within the study locations and discussed about the potential habitats of king cobra and other venomous snakes by sharing local knowledge to make our forthcoming survey activities more successful. Rural communities were informed about the ongoing project and its objectives. We also discussed about problems related to snake bites and public opinion on indiscriminate killing of snakes, particularly species of concern.

Education awareness on conservation of King cobra (Ophiophagus Hannah) and other venomous snakes

Activity 2: Education awareness on conservation of snakes (King Cobra as flagship species) with medical professionals.

Education awareness program has been organised in Tsahigang Hospital which is located in study area. We made presentation on importance of maintaining serpentine fauna including king cobra, snake envenomation, snake bites as medical emergency, first aid on snake bites, and treatment of snake bites. We also discussed about venom profiles of different venomous snakes found in locality, availability of anti-venom in the county and further research in developing species-specific anti-venoms in the country. We discussed about the venomous snakes found in the locality and clinical evidence available in the hospital. The presentation was also made on importance of identifying local venomous snakes to ensure snake bite victim get correct treatment.

Activity 3: Preliminary survey of study areas

Based on our field experiences and local knowledge shared by rural communities, we have visited some of the areas of study site to identify potential habitat of king cobra and other venomous snakes. We have marked all the potential habitat sites that we have visited using GPS for easy navigation in forthcoming field survey. During our field visit we found three individuals of king cobra, two were full grown adult and one was juveniles. Unfortunately, one of the adults and juvenile were found dead. The juvenile was road killed, and cause of death for remaining adult remained unresolved. It appears that killing of this globally threatened species is going in many parts study areas. For this we really want to bring notable changes in people's perception on snakes.

Table 1: list of Some of the snakes encountered during preliminary field survey

Scientific Name	Local name	Venom status	Locality name	Remarks
Ophiophagus hannah	King cobra	Highly venomous	Buna	Adult
Ophiophagus hannah	King cobra	-do-	Tshaling	Adult
Ophiophagus hannah	King cobra	-do-	Rangzung	Juvenile
Trimeresurus gramineus	Green pit viper	Highly venomous	Rolong	Adult
Ahaetulla prasina	Short nosed vine snake	Mildly venomous	Godi	Adult
Oligodon albocinctus	White barred Kukri snake	Non-venomous	Godi	Adult
Ptyas nigromarginata	Green rate snake	Non-venomous	Wamrong	Adult

Left: Green pit viper (Trimeresurus gramineus). Right: King cobra (Ophiophagus Hannah).

King cobra (*Ophiophagus hannah*)

Left: Green rat snake (*Ptyas nigromarginata*). Right: Vine snake (*Ahaetulla prasina*).