

HECx Education Programmes in Bhutan

Human Elephant Coexistence Programme at Sarpang School, Bhutan

We are very grateful for Zoo Outreach Organisation making us a part of the HECx workshop in CNR Lobesa. It was a great morale boost for us as we could participate and interact with the personnel of other departments which was a rare opportunity. We organized the School-based In-service Program on HECx in two groups. The first group consisted of 41 teachers and a few forest personnel.

They participated actively and were very happy with the program. The Principal suggested that we display the "Ele-do's and Ele-don'ts" chart in each classroom, so that every child could be aware of what they need to do in case of confrontation with the elephants.

We conducted the 2nd HECx session with the students of classes 7 and 8 consisting of 250 students. The students liked performing HECx drama and the Information on Elephant Conservation in Bhutan. The refreshment fund for both the programs were provided by the Forest Division Sarpang. The Chief Forest Officer of Sarpang Forest Division was impressed with the HECx awareness program conducted by the school. The director of the forest division also expressed his gratitude for the initiatives taken in organizing HECx awareness program by the school in the elephant-prone area. One of the participant teachers who attended the program, Mr. Dorji, recently got promoted as the Principal of Tarethang community school, which is an elephant-prone habitat and she is also going to conduct HECx awareness campaigns with the students, parents and the community. As a token of help we handed over to him the 150 Ele Kits and the HECx manual. With this we hope



Mini dramas depicting human elephant coexistence

to achieve the holistic objectives of HECx workshop. Thanking you once again for inviting us and educating innovative skills training to us in changing our thinking, attitude towards getting along with elephants. **Submitted by Sonam Lhamo, Kezang Choden & Chogyel Dorji, Sarpang, Bhutan. Email: tashik@yahoo.com**

Photos continued on next page...





Mini dramas performed by teachers on human elephant coexistence



Difference between Asian and African elephants explained



Elephant habitat shown in the map of Bhutan



Comparing human tolerance level towards problem elephants and rodents



Assessing participants attitude towards elephant



Usage of Ele-kit packet materials demonstration

Awareness & sensitization on Human-elephant conflicts in to coexistences in Umling Geog, Sarpang Dzongkhag

Background: A day-long awareness-cum-sensitization exercise was given the farmers of Umling Geog on 24th June 2010. A total of 15 participants including 2 NFE instructors, 4 park staff and 1 GFO had attended the day-long program which was held at GUP Office located at the heart of the Geog. The program commenced with a welcome speech on behalf of the program coordinator followed by input from the successive facilitators. "This type of awareness and sensitization associated with crop-raiding elephants is one of the most informative & heart-soothing program that we hadn't conducted so far in elephant-prone places, especially in Sarpang Dzongkhag", the coordinator exclaimed. Every year, communities located along the migratory routes of an elephant lose about half of their cultivated crops to elephants, especially during summer and autumn crop season. Therein, farmers and elephants share their paradoxical relationship even today. Hence, our expectation from the awareness delivered on how to transform HEC into HECx through consecutive education on its ecology & behavior of elephants would be to further understand the problem of an elephants and change our attitude towards them. GFO, Taraythang Geog in collaboration with RMNP had conducted the sensitization on the above theme.

Objectives: The main objectives of the program are:

- To acquaint farmers about the basic ecology, distribution and behavior of an elephants
- To document their attitude towards elephants
- To gather the common constraints faced by the farmers & mitigation measures



Farmers performing drama on Habitat Loss

being adopted at the society-level

- To address age-old human/elephants conflicts and bring into peaceful coexistence between humans and elephants through this awareness and sensitization program

Meeting approaches/

methodology: The meeting was considered to be two-way communications as a means to learn more on the topic. Presentation on basic ecology and elephant's behavior had

been made based on the information prescribed in the HECx manual through displaying of successive charts by the facilitators. Further, to deepen and expand their understanding, we had distributed Ele-kits to the participants and directed them to portray mini-drama on what leads to human-elephant conflicts. At the end of the day-long program, attitude assessment was applied so as to assess their learning and understanding of the participants from that program.



Yeshey Wangdi interacting with the farmers



Participants and organisers of the programme

The major topics for awareness & sensitization program: A day-long program covers packages of topics commencing from the peculiar characteristic and behavioral aspect of elephants till the common mitigation measures adopted at the social level. Further, the detailed activities are below.

Keynote address by Program coordinator (Mr. Yeshi Wangdi, Sr. Ranger, RMNP)

Firstly, the program began by welcoming all the participants and briefly introducing the age-old inevitable human-elephants conflict which is one of the major contemporary issues in some parts of the world. In fact, HEC

existed in the beginning of the early civilization however, the scale of depredation was minimal and remained unnoticed for centuries. Likewise, Bhutan also confronts such major depredation. "HEC has no real solution, but prevention is possible", we were told by the training coordinator. Different communities have adopted different mitigation measures. So our program here is mainly to change the behaviour resulting from the conflicted mind of the farmers against an elephants and to bring peaceful coexistence between the human and elephants in the future.

Introduction on basic ecology & description of behaviour of an elephants: In the world, there are two species of elephants i.e. African & Asian elephants; they are being differentiated base on the disparity of their physical appearances.

African elephants

- Have one rounded dome
- Ear size is relatively large
- Both male & female have tusks
- Skin is slightly wrinkled

Asian elephants

- Have 2 rounded on head domes on head
- Ear size is small & rectangular
- Only males have tusks.
- Skin is very wrinkled

Asian elephants are prominent in tropical ever-green forests, moist deciduous forests, etc. All Asian elephants are generalists, feeding on large amounts of tree bark, leaves, fruits and, as per the scarcity of food in the forest, they also feed on both horticultural and agronomical agricultural crops. An adult elephant normally eats 150 kg/ day and drinks 225 liters of water per day. Hence, elephants have a tough time to fulfill their requirement of food other than to enter inside the agricultural fields to subside his elastic stomach. Elephants give a birth only every after 3-5 year; hence elephants cannot multiply its offspring within a short span of time.

Main causes of the HEC & mitigation adaptation at local level: Today India has the highest numbers of elephants among Asian countries whereas only 60-100 elephants occur in Bhutan. Samtse, Chukha, Sarpang, some part of Zhemgang & Samdrup Jongkhar are the places where we find elephants. Initially, all those places were once covered with tropical vegetation where elephants have settled as their main biological corridor and habitat. Suddenly, a resettlement program was initiated by the Government of Bhutan and with that, a major biological corridor and habitat was offset by this human settlement. Hence, elephants had no other option than to invade the agricultural fields damaging crops along his way. Next came habitat fragmentation caused by population explosion and extension of the cultivated area. Due to the shooting cost and demand of the animals products, poachers along the border area kill the high-valued animals for money and with these a number of elephants die annually in Bhutan as well as in other countries. Meanwhile, do's & don'ts when one encounters an elephant were also disseminated to participants. A solar fence around the agricultural field, bonfires, exploding tins and crackers as well as squads of farm guard are the main mitigation measures being practiced especially in Umling & Taraythang Geog.

Portraying of mini drama:

Preparation and portrayal of mini-dramas was mainly to learn the attitude towards elephants after their enormous depredation of crops. Farmers mostly had an aggressive relationship with an elephants but with this sensitization program, farmers would understand the real problems of elephants and develop positive reactions which favours experience of peaceful coexistence in the near future.



Post evalaution by Attitude Assessment

Overall assessment & evaluation: During the day-long sensitization, participants were involved and engaged completely. To assess the participants' performance of their learning, understanding and accountability an attitude assessment was conducted so as to gauge the success of the participants as well as program organizer.

Findings: Despite HEC, farmers are standing aside and using measures to resolve these age-old conflicts. Mass awareness on basic ecology and behaviour of elephants is needed to bring peaceful coexistence. Lack of funds to create awareness and disseminate useful information to the stakeholders. Streamline the awareness focus directly to the farmers (who are the real implementers) and schools.

Conclusion: Participants found the day-long programme an important and significant event in educating the farmers who had become impatient with the HEC. Sensitization encompasses both theoretical as well as practical aspect. Even farmers can handle and apply the do's & don't which are reflected in the manual. Participants were optimistic that they could transform HEC into HECx successfully in course of

time. However, duration of the exercise was too short where farmers couldn't catch up all those points. Participants expect longer programs henceforward.

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