

Active Learning Activities and What They Can Do? Changing Attitudes and Behaviour of Villagers living in Elephant Conflict Areas in Tamil Nadu

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Background:

In 2007 US Fish and Wildlife Service (USFWS) sponsored a series of workshops on Human Elephant Coexistence (HECx) in India, Bangladesh, Bhutan and Nepal. The focus of the project was reduction of death and injury by the simplest thing ... teaching and convincing the local people that they must be careful! As part of the project a survey was conducted in Human Elephant Conflict areas nearby Coimbatore, T.N., e.g., (Varapalayam, Jammukandi, Thoomanoor, Sembukarai, Anaikatti, and Alanthurai). The survey was intended to understand human attitudes towards the issues of Human Elephant Conflict. (Box 1: short report). Interviews of villagers indicated that many of the encounters with elephants which turned into conflict, death and injury, could be avoided entirely with the application of a bit of discipline and common sense. The interview also revealed that HEC in Coimbatore areas was increasing with the intensity of the problem varying from place to place. Utilizing information gathered through interviews and information, a teaching guide was developed. The interviews were conducted by partners of the project that understood the vernacular.

International Elephant Foundation, IEF, sponsored a series of three training programmes in Coimbatore. Three educators skills training programmes were conducted in July 2011 in areas covered by the survey. The workshops were organized at Thoovaipathy Village covering several nearby villages also. Local organizations and NGOs, Nilgiri Biosphere Nature Park (NBNP), Anaikatty, The Tulsi Trust, and South Indian Consumer & Human Rights Protection Council, Kalampalayam Branch, and Iyarkkai Pathukappu Nala Sangam, Madathur, Coimbatore collaborated to conduct the programme. The teaching guide and supplementary materials for the programme such as education packets and drama kits were developed exclusively for this audience and translated into local language.

The objectives of all the training series were:

- to educate people living in elephant habitat to change their attitudes and behaviour towards elephants to avoid confrontation and conflict;
- to deliver innovative educational tools for this purpose;
- use the tools to train interns,



Procession - a method to convey conservation message



Age no bar for drama

educators, forest wardens, biologists, etc. to bring about better understanding of the conflict and its impact;

- to train participants to use information for education more effectively; and
- to create a momentum which would continue long after the workshops.

The goal is to provide opportunity for participants to learn a variety of techniques, such as know each other, assessment tools, elephant facts, drama on elephant ecology, map

activity on historical and current distribution of Asian elephants, information about forests in Tamil Nadu and elephant habitat, understanding the history of Asian elephants through drawings, role of elephants in Asian culture, etc. Participants bring valuable experience and ideas to workshops. The structured mechanism of this training for sharing experiences

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and expertise is an integral part of this programme. The education tools are easily reproducible without much expense and hence the participants after the training can organize programmes with minimum or no budget. Ultimately the programme encourages the development of networks among that persists beyond the event.

Active learning methods and what they do?

The training begins with a 'know each other' activity. These activities are designed for about 35 participants to break down social, get people to let go

of self-importance, and relax by humor. This also helps participants to identify others of their interest and form a bond to help with future programmes in the locality.

Assessment tools are the most important activity in the training. The tool assess whether teaching is effective and measure acquisition of facts, comprehension, feelings and impact on behaviour. Three assessment tools viz., brain/concept map, attitude assessment and content survey are used because they work well with literate as well as non-literate people of all ages. The attitude

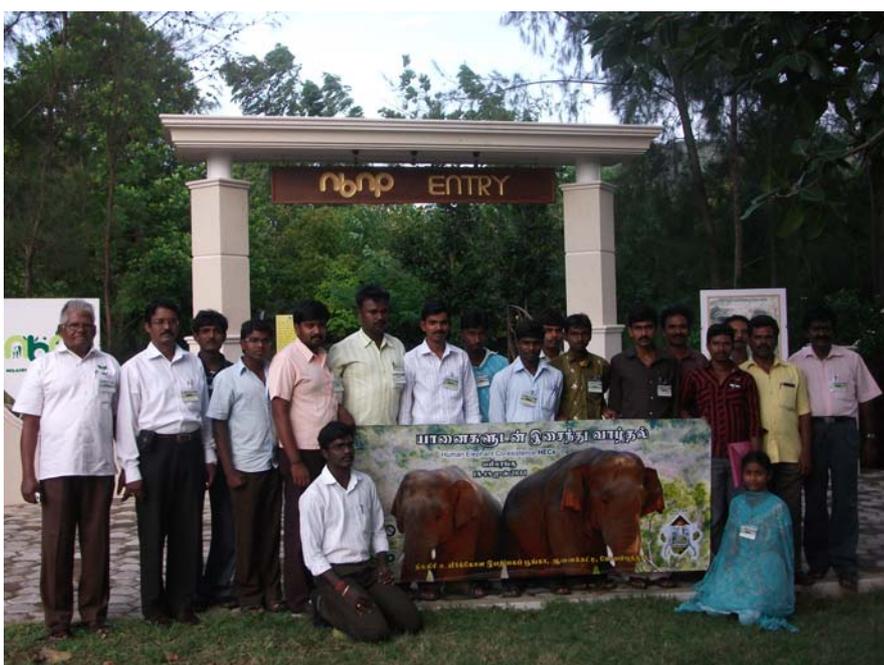
assessment helps the organisers to understand individual and group opinions about HEC. Attitude assessment tools help the group share their thoughts and experience on HEC without any barrier. Participants clearly understand how people's attitudes differ from one another based on their experience and knowledge. At the end the group can easily identify the person who has negative attitude. This way of sharing their experience on the issue of HEC help the organizers to establish a platform and to introduce the objectives of the workshop. The Brain map help the participants to record and compare their knowledge before and after the workshop thereby this help to develop confidence among them about the subject that they will be sharing with their audience after the training.

Most of the participants know that there are two kinds of elephants in the world i.e., Asian and African. But during the **Elephant facts** session they are amazed to know the morphological difference in the head, ears, trunk, skin, tusks, foot and height. It is known from the feedback that good number of the participants learn the difference between these two species at the time of programme and it is an eye opening for them. This activity can be easily used to introduce and teach high scientific facts such as taxonomy and species. This session attract many questions from the participants and hence they get a sense of participating in the workshop. Illustrations of animal body parts help them to understand the basic difference between these two kinds.

Drama is a powerful education tool used during this training. It has an emotional and intellectual impact on both the participants and audience members. A group will enter in to a workshop mood during Drama time. Drama, being a group activity, help them to get close to each other and also help them discuss more about the details of the issue or the theme that they perform. The dramas give them a chance to visualize the real situation and enact. These help them understand the subject in detail and to look for creative ways to convey the message effectively. A minimum of three dramas are played in a workshop. The main idea behind drama is to make them understand certain scientific facts and practical species issues such as poaching, life history, species ecology and causes of human elephant conflict. Some of the titles performed during these workshops are: Human elephant Conflict, Poaching and hunting, why does my village attract elephants! and



Colouring activity helps participants identify with the problem and to change their attitude towards elephants



NBNP the first workshop venue

rescuing elephants-avoid dangers. It takes a minimum of 30 minutes to rehearse and practice and about five minutes to perform. This also help them to identify the hidden skills since they bring in creativity to make props such as masks, trees, and any other properties that they use in the drama. At the end they learn how to create their own dramas in a simple way. The participants, after the performance, are very much satisfied about their involvement since they receive appreciation from rest of the groups.

Another group activity, which attracts much attention from the participants, is the **Map**. This activity helps the participants to learn about the past and present distribution of Asian elephants and to understand the dramatic decrease in the Asian elephant in its home-range. This activity is related to 100 years of elephant history. They discusses in groups to list out the past and present elephant range countries. The process helps them to assess their level of knowledge in geography and political boundaries where elephants lived historically. At the end they learn and understand terminology such as extinct, fragmentation, population, threats, decline rate etc. A thought process is initiated among the participants, which at most of the time lead them through discussion on ecology and survival status of the elephants. Depending on the interest of the participants further discussion is done to understand the threats and causes of decline of Asian elephants. The cause of Human-elephant conflict is also discussed.

The teaching guide has a set of activities under '**elephant characteristics**' that aid to understand some of the adaptive characteristics of Asian elephant. People learn easily when they compare a subject with a fact familiar to them. For example, when we demonstrate how many men equals weight of an elephant by way of simple mathematical calculations, it is easy for them to remember and appreciate elephant size. It is always a surprise when the group calculates and find out about 75 men with an average weight of 60kg will make an elephant weight!

Comparing running and walking speed of elephant with that of human being is another way to teach them about the ability of elephants. In real elephants can walk and run faster than human but it is hard for us to believe that it can walk at a speed of 20km/hour and run at a speed of 30 km/hour.

CASE STUDY: VISIT TO HEC AREAS IN AND AROUND COIMBATORE DISTRICT, INDIA

An exploratory visit by Dr. B.A. Daniel and R. Marimuthu to three different nearby HEC localities in Coimbatore District in February 2008 revealed a very wide variation in attitudes, experience and mitigation methods. The areas were Varapalayam, Thoomanoor/Sembukarai and Aalanthurai. Although this visit was not intended as a genuine survey, it is still very much indicative of the need to take care NOT to lump together HEC or HECx instances, individuals (neither people or animals), or localities. A summary of the Report, highlighting this variety in HEC / HECx may give an inkling of how far we are or ever will be from a model solution.

Area 1. Varapalayam

The village Varapalayam comes under Periyayanakanpalayam forest range and has a population of about 2000 persons, with the primary occupation, agriculture. There is a temple called Ponnuthamman at which as many as 20,000 people gather and celebrate the harvest and other festivals. The temple has a permanent water source which attracts elephants, particularly during dry months until Monsoon showers. About 28 elephants are roaming in a hilly area about 2 km away from the Temple.

The Varapalayam village has experienced elephant visits for the past two years and this year in particular the visits have increased with daily visitation also in several adjoining villages. The villages around Varapalayam have fertile cultivable land owned by the villagers and some of the lands are electric fenced. Only big land owners who can afford to put fencing can protect their crops which are maize, samai, sugarcane and ragi.

The villagers experiencing this situation for the past two years were interviewed, informally. As a whole they are sympathetic towards the elephants, especially as a living creature which needs food and water for its survival. A villager named Selvakumar said, "... we understand the sufferings of human beings to fill one foot long stomach, and so we could understand and accept the problems of the elephants which has a huge stomach."

According to villagers, elephants are entering this area mainly for water and in the process of entry they damage and also eat some crops. The government is giving compensation of 10-15 thousand rupees per patta land but the scheme may be being misused by large landowners.

Mitigating efforts by the villagers:

In Varapalayam, villagers initially used to shout at the elephants in groups to drive them away, then began using crackers. Currently the elephants do not react either to crackers or shouting, nor torches (flashlights).

So far no death of a human being has been reported from these villages but there is a farmer who had his land taken away by the government due to the death of a tusker due to electrocution. There is no time frame for the elephant's visitation.

Area 2. Thoomanoor and Sembukari

Thoomanoor and Sembukarai are two small tribal settlements with a population of 477 people in 134 families. The huts at Thoomanoor are clustered but the huts at Sembukari are scattered. Each family owns their own land of about 10 to 12 acres to cultivate. Their main occupations are agriculture and cattle rearing. Their family size is very small.

Interviews with these villagers about elephant visits indicate that they do not take it as a serious issue. They said that elephants are lured to their huts by their pet dogs. Their dogs bark when the elephants pass their settlement areas. The elephants become irritated by the barking sound and get angry and charge the dogs. The dogs run to the settlement for shelter and thus the elephants enter their area.

Some beliefs/behaviour towards elephants by the settlement people:

1. The tribal people believe that the elephants can understand their language. It is believed that abusive words against elephants should not be used. Even if we use abusive words at low voice it can be heard by the elephants and they may harm people. So they do not use any abusive words toward the elephants.

2. They believe that the elephants do not harm them and one of the observers explained how one lady responded to an elephant's visit. Once an elephant visited the settlement area and stood in front of a small hut where an old lady was resting inside. She could just see the elephant's trunk and legs inside the hut. When she realized the presence of an elephant in front of her hut she took a thin stick and gently touched the trunk and told the elephant without fear "Poo samy, Poo samy..." (Poo = go; Samy - God or title to call an elderly person with respect) repeatedly. The observer said that after a few minutes the elephant left the hut without disturbing it.

3. Another old lady who was around 80 years was interviewed. She confidently told that elephants in no way disturb them. According to her, elephants are considered as Gods and they are allowed to eat that which the villagers cultivate. The leftover crops can be taken by them. She explained one interesting event that happened at her hut. Once a mother elephant with its baby visited her hut. The hut which is very small has a very narrow entry. The baby elephant which was standing next to its mother suddenly tried to enter the hut which was barely big enough for its body. Noticing this, the mother elephant suddenly pulled away the calf using her trunk and prevented it from entering, which would have destroyed the hut! The mischievous calf tried repeatedly but the mother did not allow it to enter the hut. While this was happening

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Elephants can run as fast as a sprinter. This understanding helps them not to compete with elephants when they are in trouble or to challenge an elephant. Similarly senses, trunk and communication games are certain activities enable better understanding about elephants.

The most colourful activity of this programme is '**Illustrated history of Asian Elephants**'. The objective of this activity is for the people to understand the relationship that human being had with elephants since time immemorial and to understand the status of the elephants. This is the best indoor activity that any teacher can use in a classroom set up. An advantage is that the illustrations can be displayed for any number of days. The data from elephant history that we provide to a participant allow him/her to visualize the situation and to make it in to an illustration. Participants find it very interesting even if they draw for the first time. When they display all their illustrations, they try to understand where and when Asian elephants might have affected during their history, causes of decline of elephants, how elephant lost their habitats, some threats affect elephant population and hopes for the survival of elephants etc. This activity take about 60 minutes to trace back 4000-year-old history. Time to work individually during the training allows participants to reflect and to make progress on adapting workshop content to their own needs.

Role play and debate are two different tools used in the teaching guide to understand the elephant, the social impact of conflict issues, and conflict management practices. In general people have different views about elephants. Views about elephants vary from person to person and their perceptions vary based on their experience with elephants. The objective of these activities is to utilize this difference in perspectives of people and use them effectively to educate and involve them in resolving elephant issues. Understanding their perspectives will also help us sympathize with their attitude. In role play participants take different characters of different stakeholders and express their perception and view about elephants. Through role play participants understand how elephants influence human culture in art, music, songs, products, politics, religion etc while debate models a conflict-resolution process.

Examples of how the training can be applied in a classroom or in HEC areas have been practically valuable

the lady was just watching from the side of the hut. She was so happy to praise the good manners of the mother elephant and explained the whole incidence with much enthusiasm.

She said that they are seeing elephants at their vicinity only for the past 15 years. She does not remember seeing elephants around their living area during her childhood. Another family told us "we used to see the elephants at a distance of about 500 mts and they do not harm us. When we see them at a distance we worship the elephants."

4. The settlement reports two human deaths caused by elephants. The first death was about 10 years ago where a lady was killed in the forest while she was collecting some produce. The incidence took place in the forested area and they do not know the reason for the death. The second incidence took place at the Sembukarai settlement about 5 years ago. A lady who was sitting in the hut saw elephants eating the crops and so she ran towards them shouting aloud to drive them away. The elephants did not expect this, they charged and killed her on the spot.

Coexistence with the animals:

The settlement people on experiencing their crops being eaten by the elephants have now changed their crops and now mostly beans are cultivated. They used to cultivate maize, ragi, samai etc.

Area 3. Aalanthurai

We went to another village **Valayan Kuttai, Alanthurai**. We interviewed the villagers and met the Deputy President of the Town Panchayat. We learned that the elephants are visiting their village only for the past four years. On the day of our visit many elephants paid a visit to the village. A total of 30-35 elephants visit their land everyday throughout the year. The villagers consider this as a nuisance since they damage all the crops. Crops like sugarcane, maize, paddy, ragi and groundnut are cultivated in this area.

Since the villagers are small farmers they take a loan or borrow money from some other source to cultivate. The elephants damage all the crops in a day or two. This leads to frustration among the people. They said that two subsequent crop damage in a year will lead to poverty of the family. The villagers send their children for education and some of their children are settled in cities. If this problem continues for a long time they may sell out the land and settle in city. They feel that fencing entire forest area can prevent the entry of elephants.

Behavioural changes among the villagers:

The people who live in this area used to move freely even during midnight by foot. Nowadays, due to prevalence of elephants in the cultivated lands they have almost stopped coming out of their houses at night. Since the crops on both the sides of the road are tall, the presence of elephants inside the cultivated land cannot be noticed, but so far no human death has been reported from this area.

Mitigating measures:

A few years ago people used torch lights to drive the elephants then later used fire lamps. The elephants are used to these things and they do not bother. Now crackers are used to drive the elephants. The small farmers cannot spend 100 Rupees daily to keep off the elephants from their land and in any case, the elephants are accustomed this kind of noise and it is not so effective. The forest department has allotted guards to keep off the elephants from the cultivable land.

Beliefs:

The villagers believe that the elephant population has increased, and this trend is the cause for the entry of elephants into human habitations.

resources for participants. Trainings may produce a wide variety of results ranging from changes in teaching practice and development of new learning resources to school-level planning and community-wide action. In all cases, training time devoted to planning next steps is critical. During the training considerable amount of time is spent to give ideas about **planning an education programme**. We cannot expect the participants to practice all the contents of the teaching guide. We emphasize not to get in to trouble by planning three days programme instead suggest them to split the contents of the teaching guide and to cover in different times of an academic year. We encourage them to choose activities so as to plan one or two hours programme or half a day programme or one day programme on special occasions like Wildlife week or

to cover all activities over a period of six months at different intervals during an academic year. The ele-kit packets and drama kits supplied to them are always a boon and encouragement for them to plan an education programme before they forget the training.

At the end of all training programmes, individual **commitments** are solicited. A commitment card is given to all the participants and they are requested to write any two immediate action that they can do with in six months from the date of the training. This is to ensure that participants leave the workshop with specific plans for immediate action after the training

Workshop **evaluations** tell us that our most successful training sessions are those taught with good method and practice of teaching.