

# ELEPHANT CONSERVATION NETWORK (ECN)

Human-Elephant Conflict Mitigation Project

to

Improve Elephant Conservation in and around the  
Salakpra and Tham Thanlod Protected Areas

Kanchanaburi Province

West Thailand

Report on

## 1st Community Feedback Meetings

27 & 29 June 2006

“Human-Elephant Conflict:

The importance of data and collaboration

for solving this problem”



by

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August 2006

## Meeting Objectives

The key objectives of the feedback meetings are:

- To share crop-raiding information gathered in last dry season (Feb-May 2006) with affected villagers and all stakeholders at local level;
- To enable participants to have a better understanding of the crop-raiding situation in the area;
- To encourage participants to appreciate how important data and systematic data collection of relevant information are for helping solve the human-elephant conflict problem in the long-term; and
- To raise awareness among participants about work done by ECN in the area.

## Meeting attendance

The meetings were held on June 26 and June 29, 2006. Our choice of meeting places and locations is based on practical reasons of distance and transport from/to local communities. This is to encourage people to attend. Of the 50 people invited to the first meeting 41 attended, and of the 40 people invited to the second meeting, 23 attended. For the June 26 meeting, HEC affected villagers formed the largest group of attendees (21 persons or 51% of total number), followed by governmental officers (9), ECN volunteers (5), representatives of sub-districts and heads of villages (6). Attendants of the second meeting comprised affected farmers (13 or 56% of the total number), representatives at sub-district and village levels (6) and a local teacher (1).

## Meeting venue

Both meetings were held at local hotels with conventional style and facilities. The distance from meeting place to participants homes ranged from 10 to 50 kilometres. The indoor meeting rooms of both hotels can seat 50-60 persons, are well equipped with audio-video equipment, air-conditioner, in a slightly formal atmosphere.

## Meeting Content

Topics presented and discussed at the meetings include:

- Human-elephant conflict situation in Thailand;
- Power point presentation about ECN's work and HEC issues. Information on crop-damage assessment and impacts
- Financial impacts of crop-raiding in the last dry season were also provided;
- HEC: success and lessons learnt from Kui Buri National Park (by Dr. Mattana Srikrajang, wildlife researcher of DNP);
- Crop-raiding prevention and protection in use by local farmers;
- Discussions, comments and recommendations from the participants.

## ECN presentation

Jittin Ritthirat, project manager/community coordinator, started with the powerpoint presentation on the following issues: introduction and the current HEC project of ECN, HEC situation in Thailand, HEC around Salakpra WS, data on crop raiding incidents and crop damage collected over the last dry season (Feb-May) from the affected villages, threats to the sanctuary and its wild elephants, and potential causes of crop raids by wild elephants at Salakpra.



## DNP presentation

The morning session of the first meeting (June 26) ended with a presentation by Dr Mattana Sirkrajang, DNP wildlife researcher. However, at the second meeting (June 29), Jittin presented the Kui Buri case on Dr. Mattana's behalf as she could not stay longer to attend the second meeting. Her presentation is mainly about the royally initiated project to solve the human-elephant conflict problem in Kui Buri NP, in the upper south of the country. The 3 main points Dr. Mattana brought up from Kui Buri case study are:

- 1) Any problem-solving action based on assumption only without a proper study of the issues will worsen the situation, as was clearly the case in Kui Buri.
- 2) Patterns of crop raiding vary from one place to another and action taken to solve the problem must be based on the local situation and characteristics.
- 3) Crop-raiding cannot be solved just by a one-off activity/project. No magic bullet has been found so far that can solve it. The problem must be solved through a participatory approach that involves local people.

## Kui Buri Project

The Kui Buri project was set up immediately after two wild elephants were shot dead by angry pineapple farmers. The HEC mitigation project is based on the assumption that crop raiding is caused primarily by a shortage of water and food in the national park. This assumption led to a project initially aimed at improving water and food for wild elephants. So the 16 sq. km. of cultivated land illegally occupied by local farmers (about 9,000 rai) were taken back to set up the project and several man-made ponds were dug around that land. This project was jointly supported by WWF and the National Research Fund. Unfortunately, it caused more crop raiding by wild elephants which then split into smaller herds to raid crops in other areas around the park.

## Local voices and concerns

In the afternoon, before discussions, local farmers, ECN volunteer and representative from the sub-district administrative organisations, shared their experience with the rest of the attendants on how they have solved the crop-raiding problem in their villages, both individually and collectively.

## Salakpra WS presentation

At the second meeting (June 29), a representative of Salakpra Wildlife sanctuary also came to provide information on the following issues:

- some of the problems facing the sanctuary to date including land encroachment, logging, bamboo cutting and cattle grazing, of which livestock inside the sanctuary seems to be of more increasing concern; and
- their present efforts to help solve the crop-raiding problem. These include reactive action to the crop-raid incidents when reported, and habitat improvement by improving/building water sources and planting elephant food in the two prime elephant habitats: Salakpra field and Thung Na Mon plateau.

## Questions and discussion of HEC at Salakpra (raised by participants)

- Which agency will compensate local farmers affected by crop raids?
- Why are certain farms regularly raided by wild elephants?
- Does the increase in crop raids mean the wild elephant population is increasing?
- Is crop raiding caused by wild food shortage in the forest?;
- Are raiding elephants ones from Surin that have been freed? (Surin is a north-eastern province known to have the largest population of domestic elephants)
- Are the raiding elephants domestic ones that have been released into the PA?
- What was the elephant population before the dam was constructed?
- How much forest was lost to the dam construction?
- How can the government and private sector collaborate more?
- Where several plots of farm land are scatter around, not close to each other, what would be the best method to prevent them all from being raided?
- Bamboo cutting and logging must be controlled as the forest has become almost a desert around the area of Chong La/Ta Thung (southern part of the sanctuary).

## Key issues regarding crop protection measures

- Local farmers from Nong Ped sub-district administrative organization (a GO) demonstrated well how collective action can solve, at least for a while, the crop raiding problem at four adjoining villages in this sub-district in the north-west of the sanctuary. Three years ago, the villagers discussed the problem among themselves and put together a proposal asking for financial support for solving the problem and submit it to the sub-district administrative organization. The proposal was approved and they started putting the modified electric fence along the exit trails on the edge of the sanctuary. For the last three years, the fence has proven to help relieve the problem; the elephants stop coming out in that area.
- However, the villagers learned that for the electric fence to work effectively, it must be guarded constantly and fully charged all night. Consistency and proper maintenance are a must, or the elephants learn that they can still get through the fence without being hurt too much, and once they learn this, they keep coming.
- Since then, Nong Ped sub-district has annually allocated 30,000 Baht for buying supplies needed to maintain the fence. Some of that money was spent hiring villagers to guard the fence at night (200 Baht per person per night) to make sure that the fence works as effectively as intended.
- The electricity supply to the modified fence from rechargeable lorry batteries was found to be too weak to effectively deter wild elephants. So electricity now comes directly from the main power line but goes through an adapter.
- To make sure this electric fence method of protection does not encourage more crop raids in nearby villages, the same method had to be used by adjoining sub-districts. This led to cooperation by the two adjoining sub-districts later.
- In other sub-districts with crop raids due south of the sanctuary, some local farmers individually hire villagers to be in charge of a similar electric fence. A combination of these protection measures seems to work well and the farmers mostly succeeded in preventing their crops (sugarcane) from being raided.
- Just guarding the field at night has also proved effective according to local farmers from some villages south of the sanctuary. Other methods combined with field guarding include patrolling by car/tractor around the farmland and using lights to deter elephants.



## Comments/Recommendations

### Future meetings:

- Urgent meetings between affected farmers with heads of villages, sub-districts and districts needed;
- Future meetings should be held more often in villages affected by crop raiding. It should be held every month at each affected village; and
- Big meetings between all affected villages from every district should be held so that the local villagers will have a chance for exchanging their ideas and learning from each other.

### Collective action for long-term solution:

- Affected villagers would like to form a collaborative conservation group of Thai elephants that should also comprise representatives from sub-district level and such NGO as ECN and then seek help from the government;
- A 3-year plan at sub-district level should be drawn up by a working group of affected farmers and stakeholders from various villages. The plan must involve villages in at least two sub-districts as required by law;
- A quarterly meeting must be conducted to monitor and evaluate the activities implemented based on the 3-year-plan;
- Affected farmers should call for financial assistance from the sub-district local administrative organization (*Or Bor Tor*) to build a modified electric fence powered by portable battery units;
- Affected farmers should try to seek help from local governmental agencies at village and sub-district levels before approaching the central government; and
- The affected villages should submit the problem to DNP as the department already has its plan, in theory, to solve the crop-raiding problem all over the country. But in practice, how much budget it can put aside to tackle the problem is unknown.

### Prevention and protection measures:

- The sanctuary should step up their prevention measures or monitor crop raids aggressively only in the mango season (April) as there is no crop raid in the other months at Mo Thao village;
- Canal should be made around the edge of the sanctuary to prevent elephants from coming out of the forest. The canal would also benefit agriculture in the affected areas, particularly the villages in Srisawat district sitting next to Srinakarin reservoir but suffering water shortage;
- Make new water sources for the elephants in the sanctuary; and
- Build travel route/passage from the sanctuary to Srinakarin reservoir so that the elephant can get access to the water and local people can benefit from the elephant presence as it would attract more tourists (in Mong Kratae area).

## Other issues relevant to forest conservation management

### Livestock:

Cattle grazing is increasingly becoming one of the main threats to the sanctuary. Though it is illegal by law, a large number of cattle left roam freely in the protected area and causes problems including habitat degradation, destruction to vegetations and dirt tracks, and carrying diseases to wildlife when the cattle die in the forest. Some recommendations concerning livestock issues in the protected area are the following:

- Form a cooperative group of cattle grazers and allocate public grazing area in the village. In so doing, it would reduce pressure to the forest caused by unregulated grazing;
- Those with big herds of cattle should consider to sell some and the money earned from selling the cattle should be spent on buying land and plant grasses to raise their cattle;
- Livestock or agriculture agencies should be concerned about grazing management, not just only promoting livestock without management plan;
- The sanctuary should give villagers a notice informing them when they have to stop grazing in the forest.

### Alternative living/career development

- Bamboo plantation in some part of local farm land should be promoted.
- Fish farms may be possible at a landless village like Mong Kratae as it is done now at Pu Nam Priaw village, next to Thung Na.

## **Results of Erawan group discussions**

(Prepared by Supitcha Kiatprajak to inform main report by Jittin Ritthirat)

- Group 1: Khao Singto and Khao Daeng (Bo Ploi sub-district, east)  
Group 2: Tha Manao + Wangjaan (Wang Dong sub-district, south)  
Group 3: Khao Daeng + Chong La (Wang Dong sub-district, south)  
Group 4: Chong Krating, Pong Pad, Tha Pong (Chong Sadao sub-district, southwest)

**Note:** No information on protection efforts from group 4. HEC affected farmers (mostly absentee and large scale) did not attend the meeting. Those on this group are TAO representatives from Chong Sadao area.

### **Group 1: Ban Khao Singto, Bo Ploi district**

#### **Background**

- Elephant come down at Salang point
- Were around 42 elephants in group, used to breed, baby died in eucalyptus forest
- They come down all year round

#### **Protection method using in the present day**

- Method      1. Burning tires.  
                  2. Using fire-crackers.
- Difficulties  1. Lack of officer or worker.  
                  2. Lack of budget.
- Efficiency    1. Work out just for short term.  
                  2. When using it too often, the elephant will use to the sound.

#### **Protection method wanted in future**

1. Using solar-cell.
2. Constructing efficient electric fence.
3. Guarding
4. Use red ant nest on elephant way. Plant trees that red-ant love to live on.

#### **Interaction of government, private sector and communities to solve HEC**

1. Government should send more officers to take care at the site.
2. Need the government to take responsibility.
3. Communities should help each other to guard.

#### **How to set up community and sub-district fund to solve problems in long term:**

1. Asking for support from the government.
2. Government, private sector such as Forest Department, TAO, District office, etc. Should work together and set up a fund

<b>Percentage of budget</b>	Government	60%
	Private Sector	20%
	Communities	20%

## Group 2: Ban Ta Manao, Muang district

### Background:

- Village is about 17 km. far from Ladya.
- There are many points where elephant come out along 5 km. long
- When elephant come, they are chased to River Kwai and cross river to Ban Chong Krating.

### Protection method using in present day

Method

1. Electric fence around the problem site and other sites around 1 Km.
2. Forest ranger and local guard.
3. Using fire-crackers, cartridge, shouting to scare elephant.

Efficiency:

1. Only electric fence is not 100% efficient, need to have guard as well
2. Using fire-crackers, cartridge, shouting too often, elephant will get use to
3. Guarding need many people but no one interested, they prefer to guard their own land only

Difficulties

1. Lack of budget.
2. Lack of workers.
3. The tools are not efficient, easy to break.
4. Elephant is fast learner; have to think of new method all the time.

### The protection method wanted in the future

Short term

1. Guarding.
2. Fire-crackers and cartridge.
3. Making loud noise.

Long term

1. Zoning; elephant home.
2. Planting elephant food trees and build water supplies deep in forest
3. Constructing efficient electric fence (like in Kenya)
4. Protecting the forest, not allow people to get in to cut down trees.
5. Persuade people to appreciate and love forest.

### Interaction of government, private sectors and communities to solve HEC

1. Communities should work together to set up a group or association so they can
  - Help each other
  - Ask the government for help
2. PA officials need to be in villages more often to learn about problems and help find s way to solve them
3. Help by planting elephant food trees and build water supplies in the forest

### Way to set up community and sub-district fund to solve problems in long term

Budget should come from:

- TAO
- PAO
- EGAT
- Forest Department
- Farmers

Percentage of budget

Government	70%
Private sectors	20%
Farmers	10%





### **Group 3: Ban Wangdong (Khaodaeng), Muang district**

#### **Background**

- Many elephants disturb fields, seem to be more than 10
- Moo. 11 has no elephant problem.
- Elephant come to Palad forest, pass Moo.6 to eat sugarcane at Chongla, and then come to Ban Khao Daeng
- Want to dig a 4 Km. long ditch, protecting fields from the elephant.

#### **Protection method using in the present day**

1. Guarding with spotlight.
2. Electric fence for short way.
3. Using fire-crackers hen elephant come.
4. Make a way around the field to drive check.
5. Asking for help from the rangers (but there is too few officers).

- Difficulties
- All methods now using lack of budget.
  - No organization is directly responsible
  - Lack of public relations
  - Lack of information and knowledge about elephant
  - Lacks of efficient tools

#### **Protection method wanted in future**

1. Dig a deep ditch
2. Plant elephant food trees and build water supplies in deep forest
3. Construct efficient electric fence
4. Ban cattle and people from getting into the forest.
5. Make one organization directly response for HEC

#### **Interaction of government, private sectors and communities to solve HEC**

1. Set up an elephant lover group.
2. Need government to take responsibility and work with local people
3. Need NGOs to take care.
4. Government, private sectors and communities should work together.
5. Persuade people to appreciate and love forest.

#### **Way to set up community and sub-district fund to solve problems in long term**

1. Find funds; get donation from private sectors.
2. TAO, PAO, Provincial resource department and etc.
3. Having activities finding money into the fund
4. Having a fund for community guards

# Evaluation of June 2006

## Community Feedback Meetings

After the community feedback meetings held on 27 & 29 June, participants were given a questionnaire (attached) in which they were asked to assess the meeting they had attended. Our aim was to evaluate the usefulness of the meeting so as to improve the content, design or location of future meetings, thereby increasing the support and collaboration of local people in our efforts to tackle human-elephant conflict. The components assessed were:

- the choice of meeting place and time
- the distance and transport to the meeting venue
- the content of the feedback meeting
- the meeting presentation and style
- clarity of the data presented during the meeting
- usefulness to them of the meeting

As well as being asked to evaluate these components, participants were also asked to comment on the following:

- their willingness to attend future meetings organized by ECN
- the meeting place they would like to recommend in future
- people they think should be invited to any future meeting
- their willingness to participate in future ECN's activities

### **Meeting attendance**

In order to make it easier for people to attend, we held two meetings instead of one; one on the south side of Salakpra (inviting those from HEC villages on the south and southeast sides of the sanctuary) and one on the west side (inviting those from the west and north-west sides of the sanctuary). There are, at present, no known cases of human-elephant conflict on the east or north-east side of the sanctuary.

The meetings were held on a Tuesday and Thursday, because these were the most practical days for local villagers. Of the 50 people invited to the first meeting 41 attended. Of the 40 people invited to the second meeting, 23 attended.

### **Evaluation response**

Regrettably, we did not think to evaluate these meetings until the day of the first one, so we prepared a questionnaire the following day and asked every participant at the second meeting to complete one and hand it in before they left. All 23 participants did so. The fact that we were also reimbursing travel costs may have encouraged compliance, as that gave us the opportunity to ask again for a completed questionnaire.

The weekend after these workshops, we began the wet season set of forest surveys, so it was not until early August that we posted a questionnaire to those who had attended the first meeting. We included an explanatory covering letter and a stamped addressed envelope to encourage a response. A little over half of these participants (26 of 41, or 63%) returned completed questionnaires.



Both groups evaluated their satisfactions on the topics concerned by ranking levels of appropriateness/satisfaction (most appropriate = 4 to least appropriate = 1) that they feel suit their thoughts most.

## Evaluation results

Some results of the evaluation are shown in the tables below. Overall, the feedback is favourable with approximately 70% of total responses (n = 593) being extremely or very satisfied, while another 26% was reasonably satisfied. Clearly it is useful to hold such meetings, and out formula would seem to be appropriate, but there is also room for improvement as indicated by the comments and recommendations below.

### Number of participants

Five respondents (22%) at the second meeting would have liked more people to attend, especially from other agencies, including EGAT (where the meeting was held). They felt that a number of participants was too few to facilitate a really useful discussion.

### Content, style, clarity

The style and content of the presentations, as well as their clarity, received high marks from most people and all but two respondents thought the language easy to understand. However, additional comments revealed that, in future, participants would like to learn more about human-elephant conflict, especially about HEC prevention and protection measures (see below).

**Table 1: Evaluation of the June 26 feedback meeting**

Topics evaluated	Most appropriate /satisfied	Very appropriate /satisfied	Fairly appropriate	Not appropriate/ not satisfied	Total s
<b>1. Meeting venue and time</b>					
• type of meeting room	12	8	5	-	<b>23</b>
• size	8	9	8	-	<b>25</b>
• atmosphere	8	10	6	1	<b>25</b>
• time of the meeting	6	11	7	1	<b>25</b>
• number of participants	4	7	4	3	<b>18</b>
<b>2. Getting to the meeting</b>					
• distance from home	8	10	6	-	<b>24</b>
• mode of transport to meeting	11	6	8	-	<b>25</b>
<b>3. Content</b>					
• human-ele conflict in general	8	10	5	2	<b>25</b>
• crop damage @ Salakpra	7	8	8	1	<b>24</b>
• prevention/protection methods	6	8	9	2	<b>25</b>
<b>4. Presentation</b>					
• style and equipment	6	12	6	-	<b>24</b>
• clarity and language	5	12	5	2	<b>24</b>
<b>5. Comprehension</b>	7	11	7	-	<b>25</b>
<b>6. Benefits from the meeting</b>	7	11	5	2	<b>25</b>
<b>Totals (from 26 respondents)</b>	<b>103 ( %)</b>	<b>117 ( %)</b>	<b>80 ( %)</b>	<b>14 ( .%)</b>	<b>337</b>

**Table 2: Evaluation of the June 29 feedback meeting**

Topics evaluated	Most appropriate /satisfied	Very appropriate /satisfied	Fairly appropriate	Not appropriate /satisfied	Total
<b>1. Meeting venue and time</b>					
• type of meeting room	16	6	-	-	<b>22</b>
• size	11	8	1	-	<b>20</b>
• atmosphere	8	8	2	-	<b>18</b>
• time of the meeting	6	8	6	-	<b>20</b>
• number of participants	-	1	12	5	<b>18</b>
<b>2. Getting to the meeting</b>					
• distance from home	6	5	11	-	<b>22</b>
• mode of transport to meeting	3	7	10	-	<b>20</b>
<b>3. Content on</b>					
• human-ele conflict in general	2	13	5	-	<b>20</b>
• crop damage around Salakpra	4	11	5	-	<b>20</b>
• prevention/protection methods	1	9	11	-	<b>21</b>
<b>4. Presentation</b>					
• style and equipment	5	12	3	-	<b>20</b>
• clarity and language	2	15	1	-	<b>18</b>
<b>5. Comprehension</b>	4	14	4	-	<b>22</b>
<b>6. Benefits from the meeting</b>	6	13	2	-	<b>21</b>
<b>Totals (from 23 respondents)</b>	<b>74 (26%)</b>	<b>130 (46%)</b>	<b>73 (26%)</b>	<b>5 (2%)</b>	<b>282</b>

### Benefit of feedback meetings

A total of 42 people thought the meetings beneficial and of those, 36 people (77% of all respondents) thought them highly beneficial. Only two respondents thought the meetings a waste of their time. These two men came to the meeting hoping for more compensation.

The benefits people mentioned included: learning more about elephants, information on crop raiding, a good chance to brainstorm with others on how best to solve the crop-raiding problem, a better understanding of the HEC situation in a broader perspective (national and international), getting results from systematic data collection which has not been done by other organizations in the past, and a chance for them to help conserve the elephant.

### Future ECN meetings/activities

Except for three participants in the first meeting, all respondents indicated that they will attend other meetings if invited and will participate in other ECN activities in the future. A majority (25) of respondents noted that they had learned a lot about elephants and human-elephant conflict from these meetings and would attend other meetings/project activities to gain an even better understanding. Some people also noted that they are keen to help solve the problem of human-elephant conflict.

Those who gave negative feedback and declined to join future ECN meetings said they saw no reason to attend because no one came from the relevant government agencies and those who did come cannot solve the problem. They felt the meeting was a waste of their time.

In contrast, most other respondents believe that our project activities (recording accurate crop-raiding data over time and sharing it and other information with everyone affected) not only taught them a lot about the issue but could also help find a sustainable long-term solution to the problem of crop-raiding around Salakpra. As several people observed, no one has ever done this before.

## Recommendations

### 1. Participants: involve more stakeholders

Many respondents felt that **all** stakeholders, including relevant government agencies, should be invited to future meetings. In addition to those who attended both these meetings (representatives from villages affected by crop-raiding and from local administrative organisations), other stakeholders mentioned include:

- Salakpra Wildlife Sanctuary (represented at the 2<sup>nd</sup> meeting but not the 1<sup>st</sup>)
- Department of Conservation (represented at the 1<sup>st</sup> meeting but not the 2<sup>nd</sup>)
- EGAT/Srinakarin Reservoir (Electricity Generating Authority of Thailand)
- Policy/decision-makers relevant to this issue at whatever level of government
- Provincial government (including the governor)
- District chiefs & village committee members
- Royal Forest Department
- Highway Authority
- Other forest users including bamboo cutters, loggers, cattle owners, miners
- Young people

### 2. Meeting location

Asked what kind of meeting venue they would like in future, 12 respondents (52%) from the first meeting opted for a hotel or resort, while four recommended a public meeting hall in a village and the rest gave no preference. While eleven respondents (46%) from the second meeting thought a village meeting place would be the best venue, eight people (35%) favoured a hotel, school or temple.

### 3. Information on HEC prevention/protection methods

At future meetings, many participants would like to learn more about effective crop-raiding protection/prevention methods used elsewhere.

### 4. Crop-protection/prevention/mitigation

- Government should do more to help solve the problem now
- Protection or control measures should be established as soon as possible
- Long-term solutions must be sought by the government agencies in charge
- Monthly meetings should be held at every village affected by crop raids
- Electric fencing or trenches should be put along the elephant exit trails
- Affected farmers should get help from agencies concerned before the problem worsens and human-elephant conflicts cause death or injuries to both parties