

AD A02-113

**Conservation International  
Grant No. 497-G-00-01-00058-00  
Orangutan Conservation through Public  
Awareness, Anti-Poaching Training and  
Community Involvement in North Sumatra**

**FINAL REPORT**

**Partner Organization: Conservation International  
Contact person: Sunarto  
E-mail: [sunarto@conservation.or.id](mailto:sunarto@conservation.or.id)  
Telephone: 62-21-78838624; 78838626 ext. 117**

**Orangutan Conservation through Public Awareness, Anti-Poaching Training and Community Involvement in North Sumatra**

**USAID Grant No. 497-G-00-01-00058-00**

---

Partner Organization: Conservation International  
Contact person: Sunarto  
E-mail: sunarto@conservation.org  
Telephone: 62-21-78838624; 78838626 ext. 117

---

**Summary of Project Impacts**

At the conclusion of this two-year project Conservation International-Indonesia (CI-I) was successful in improving the protection of approximately 52,000 ha of orangutan habitat in North Sumatra's Leuser Ecosystem. Below is a summary of project impacts:

- Increased protection of orangutan habitat in the Leuser Ecosystem as shown by the following indicators:
  - Increased awareness among local people with regard to the importance of conserving the orangutan (based on responses following campaign events). For example, after attending the mobile unit presentations, some people in the refugee concentration area promised not to extend their agricultural land to the areas where orangutans live. We recorded and documented the improved knowledge of local people who participated in the awareness campaign sessions.
  - Improved knowledge and skills related to orangutan protection of law enforcement personnel. Following CI-run training sessions, 37 personnel (from the first session) and 34 personnel (from the second session) including forestry rangers and other law enforcement personnel were better equipped with knowledge and skills to enforce the laws pertaining to protecting the Sumatran orangutan and its habitat. The training topics covered: new laws and regulations related to orangutan conservation; updated conservation policy of the Ministry of Forestry (MoF); and current issues in orangutan conservation. The skills training focused on improving investigating and documenting legal cases pertaining to conservation, patrol techniques, navigation, and survival.
  
- Increased awareness of the importance of conserving orangutans among the following target groups:

- The general public in four districts in the vicinity of orangutan habitat in the Leuser Ecosystem (Deli Serdang, Langkat, Dairi, Pakpak Barat). This was accomplished through a variety of campaign activities implemented through the mobile unit including showing movies, interactive games, distribution of fact sheets and other printed materials, field trips, guided forest interpretation tours, and discussions.
  - The refugee community from Aceh, which currently occupies an area bordering orangutan habitat. This was accomplished through awareness and campaign programs similar to those described above.
  - Decision makers at all government levels (e.g., the heads of provincial, district, sub-district, and other administrative areas) through visits, discussions on the importance of environmental roles and regional economy issues, and dissemination of campaign materials such as fact sheets, posters, etc. Media campaign programs highlighting the importance of forest conservation in the region were also used to target this group.
- Mobilized partners and networks to support orangutan conservation. activities included:
- Building alliances with five local NGOs to draft a provincial spatial plan to ensure protection of the remaining forests in the area (including orangutan habitats).
  - Developing networks with individuals and NGOs, namely JAMPOH (Jaringan Penyelamat Orangutan; a network to save the orangutan), and Jaringan Mitra Taman Nasional (friends of national parks) to support the protection of orangutans and their habitats.
  - Conservation Office (BKSDA I) in Medan with the help of Yayasan Kanopi has formalized a network among conservation cadres. The network facilitates improved communications and collaboration among the cadres.
  - Collaboration among Yayasan Kanopi, BKSDA I Medan, and CI to conduct an Article Writing Contest and Photo Rally.
  - Involvement of local and national journalists in orangutan campaign programs.
  - At least two volunteers from local NGOs and from North Sumatra University were involved in each Mobile Unit education and awareness campaign providing "hands on" learning opportunities.
  - Full engagement and partnership with Yayasan Kanopi (Kanopi Foundation) to conduct awareness campaign programs. This is one of the most active local NGOs that has broad networking with other local NGOs and governmental institutions
  - Sharing information related to orangutan and habitat conservation with government institutions and other NGOs (e.g., Yayasan Ekosistem Lestari and Leuser Management Unit). This was identified as an important mechanism to ensure high quality orangutan conservation activities, as well as leveraging the network and its activities.

- Three local NGOs (Yayasan Gerakan Masyarakat Lestari/GEMA LESTARI, Yayasan Ekowisata Sumatra/YES, Yayasan Pemantau dan Pendidikan Lingkungan/YPPL) were engaged to assist in conducting an awareness needs assessment.
- Increased participation of local stakeholders, including:
  - Conservation volunteers from different institutions (including university students from USU, and Sibolangit villagers) were involved in running the Sibolangit Environment Interpretive Center.
  - Support from various community members around Gunung Leuser National Park, particularly those in Bukit Lawang and Tangkahan, to enforce the laws pertaining to protecting orangutans and their habitats.
  - Support from the BKSDA office in Medan to collaborate with CII in developing and running the orangutan conservation interpretive center in Sibolangit (funded by CEPF, USFWS, and a private donor).
  - Full engagement of Bapedalda (Regional Planning Board), the BKSDA office in Medan, and nine local NGOs in the development of a network of personnel / NGOs concerned with northern Sumatra biodiversity issues. We also engaged these groups to develop a Sumatra regional network for environmental education.
  - Engagement of nature lovers and interest groups from local universities as well as villagers in conservation education activities.
  - Engagement and support from Gunung Leuser National Park and the BKSDA office in conducting law enforcement training series with the help of CI-I law enforcement training personnel.

### **Summary of Key Activities:**

- Operated an orangutan conservation mobile unit with repeated visits focused on local communities, including refugee areas bordering the orangutan habitat.
- Completed a series of radio talk shows discussing orangutan conservation and other related topics.
- Completed the production and regular broadcasting of radio spots or Public Service Announcements (PSAs) on orangutan conservation and related issues on selected radio stations.
- Completed document to review and evaluate the implementation of the Orangutan Program.
- Completed document on lessons learned in implementing mobile unit program.
- Completed guidelines for monitoring and evaluation of mobile unit awareness campaign activities.
- Completed training module for law enforcement for orangutan and habitat protection as well as on the survey and monitoring of orangutan populations.

- Completed series of law enforcement training workshops, classroom training, and field training.
- Published and disseminated a variety of education and awareness campaign materials including a series of fact sheets, six posters on orangutan conservation, displays, PowerPoint presentations, and several editions of Buletin Dakwah (sermon sheets) to promote the importance of protecting orangutan and nature from the perspective of Islam and Christianity.
- Produced and collected additional education and awareness campaign materials and programs to be used for mobile units, including a series of movies, talks, games, stories, and role-playing exercises.
- Conducted events such as drawing competitions, photo rally, and field visits to increase public awareness concerning orangutan conservation.
- Completed a workshop to initiate the development of the Mitra Taman Nasional ("Friends of the National Park") Network.
- Completed awareness needs assessment for general public (including refugees) and key decision makers.
- Completed law enforcement training needs assessment.
- Participated in various events organized either by CII, government, or other institutions to promote the protection of the orangutan and the habitat in Gunung Leuser National Park/Leuser Ecosystem. The events, funded by this and other projects include:
  - Medan Fair, conducted by North Sumatra Provincial Government, Medan, March-April 2002.
  - Presentation for school children in Bogor Expatriate School, organized by BES, 2002.
  - Presentation in Training for Interpreter in Pusat Pendidikan Konservasi Alam (PPKA) Bodogol, West Java and Sibolangit, North Sumatra.
  - International Primatological Society Congress in Beijing, August 2002.
  - Eco-tourism Workshop organized by the Leuser Management Unit in Medan and Bukit Lawang, October 2002.
  - Primate Day Exhibition, organized by Konus, a national NGO based in Bandung actively campaigning primate conservation, Bandung, November 2002.
  - Series of meetings to establish and implement an Environmental Education Network organized by Bapedalda in Medan, October-November 2002.
  - Man and the Biosphere Program meeting, Bogor, December 2002.
  - A Series of meetings among NGOs and government agencies to discuss issues and develop coordinated actions to respond to the Ladia Galaska road network organized by CI-I, October 2002 - January 2003.
  - Nature Interpretation Training, Sibolangit Orangutan Interpretive Centre, North Sumatra, 19 January 2003.
  - Exhibition at the Sumatran Threatened Species Conservation Assessment and Management Plan workshop, North Sumatra, 24-26 February 2003.
  - Presentation on CII Orangutan and Related Programs at the Universitas Negeri Medan, North Sumatra, 4 March 2003.

- Exhibition at the GEF-funded Indonesia Forest and Media campaign launching, Jakarta, 18 March 2003.
- Exhibition at the Water Day Celebration, Jakarta, 20 March 2003.
- Exhibition at the Jalan Kemang Festival, 7 June 2003.
- Exhibition in Sustainable Development organized by Ministry of the Environment, 19-23 June 2003.
- Photo Rally and Article Writing contest, North Sumatra, February-May 2003.
- Information Session on current forestry issues in Nanggroe Aceh Darussalam, Banda Aceh, October 2003

### **Project Background**

As a result of the high rate of deforestation caused by development activities and illegal logging, the Sumatran orangutan (*Pongo abelii*) population has rapidly declined as demonstrated both by broad surveys throughout its broad habitat (Rijksen and Meijaard 1999) and detailed studies of smaller areas in Leuser (van Schaik *et al.* 2001; Y. Robertson and van Schaik 2001). Because it is a species distinct from the Bornean orangutan (*Pongo pygmaeus*) and is critically endangered under the IUCN-The World Conservation Union status (Hilton-Taylor 2000), the Sumatran orangutan merits special attention.

In the 25,000 km<sup>2</sup> area within the Leuser ecosystem, which covers approximately 75% of the Sumatran orangutan's distribution and is the most important stronghold, population numbers of the Sumatran orangutan have plunged in the past decade from an estimated 11,000-12,000 individuals to perhaps as few as 6,500 or less (van Schaik *et al.* 2001). During 1998-99, the loss of Sumatran orangutans occurred at the rate of about 1,000 animals a year. The rate of population decline is estimated to have been more than 50% in the last 8 years (Hilton-Taylor 2000). Assuming that this decline is independent of population size, the species could be functionally extinct within the next 8-10 years if current trends persist.

Experts agree that habitat loss due to agricultural conversion and logging is the leading cause of the species' decline. In addition, the key threat to orangutan population viability is illegal poaching, and in particular, the loss of adult females (Tilson *et al.* 1993). Hunting and capturing orangutans are a consequence of increased access and the presence of loggers in orangutan habitats, as well as internally displaced persons (IDPs) who opportunistically captured animals for trade or kill them for food. Finally, catastrophes have also contributed to the decrease in orangutan numbers; approximately 5% of the total fire hot spots on Sumatra occurred within orangutan habitats in 1997 and 1998 (Yeager 1999).

Indonesia is home to at least 90% of the world's wild orangutans and therefore is a focal point of measures to save the species. To be effective, measures must be swift, innovative, and multi-dimensional, incorporating stepped-up protection of the species and its habitat combined with raising awareness of wildlife and forestry issues among key stakeholders. Local action combined with awareness building is the most promising means to involve local communities and local authorities in conservation efforts. At the same time, it is essential to obtain continued support at the national level from key decision-makers.

The goal of this project was to take immediate, integrated action to enhance the survival of the Sumatran orangutan. Gunung Leuser National Park, Sumatra, Indonesia was the focus of this work. CI Indonesia planned to employ three parallel components to: (1) create an upwelling of interest, greater understanding, and increased concern among the general public (from internally displaced persons (IDPs) to key government officials), regarding the potential terminal loss of orangutans and other species representative of Sumatra's unique biodiversity if forestry management and anti-poaching practices are not significantly and immediately improved; (2) build capacity through education and training in anti-poaching and enforcement techniques for park rangers in Gunung Leuser NP, as well as for appropriate law enforcement personnel; and (3) build a core force of community-based assistants within Gunung Leuser NP that can enhance the ability of Park Guards to monitor and protect the orangutan and its habitat.

This multi-dimensional approach was expected to have immediate impact in the broad range of sectors that needed to be reached to rapidly reverse the negative trends that affect orangutan survival ability.

Due to the successes and challenges in the mid-period of the project during the project's first year, the initially proposed activities were revised. The key changes were:

- For the awareness component, producing and disseminating additional, targeted education/awareness materials for internally displaced persons (IDPs) and decision makers.
- For the law enforcement-training component, reducing the scope of the originally proposed activities to two training courses in total, the extent of the commitment already made with CII's working partners.
- Deletion of Component 3 of the original proposal, "Strengthening Gunung Leuser National Park Protection System for Habitat and Species Loss Monitoring".

The project began with a series of activities to develop a better picture of the problems, identify the effective method to approach the target groups and address the key issues, and initiate collaboration with partners. We started with Knowledge, Attitudes, and Behavior (KAB) surveys for both the general public as

well as key decision makers and an assessment to identify the training needs for law enforcement personnel.

We conducted an internal workshop to formulate a plan for further activities based on the results of the initial assessments. What follows was the detailed project implementation, by component and activities and of lessons learned.

## **COMPONENT 1** **INCREASING PUBLIC KNOWLEDGE THROUGH ESTABLISHING AN** **ORANGUTAN-BASED AWARENESS PROGRAM.**

Our variety of campaign programs, particularly the Mobile Unit, had not only successfully raised the awareness among the target audience but also received a very warm welcome from communities in the area. The Mobile Unit visited villages and refugee camps in four regencies in North Sumatra. Hundreds of people attended each session of the Mobile Unit campaign, particularly the movie viewing. The Mobile Unit also served as the entry point to reach local decision makers, particularly those in Kabupaten Dairi and Pakpak Bharat. We conducted a series of meetings and visits to key decision-makers in North Sumatra. In terms of reaching a wider audience, we used mass media extensively, primarily radio and newspaper. We broadcasted public service announcements as well as conducted talk shows on selected radio stations.

By the end of the project, we successfully integrated the orangutan program with other CII programs, particularly in terms of sustainability. The Critical Ecosystems Partnership Fund (CEPF) approved our proposal to continue our campaign programs. In the proposal to CEPF, we combined the Mobile Unit program with the program at Sibolangit Interpretive Center for Conservation Learning. These programs, combined with other initiatives such as RARE/Kent University-CEPF conservation campaign program built up a rich combination of activities with the purpose to raise awareness and promote knowledge of conservation issues within a wide range of audiences in the region. The education and awareness campaign programs will be integrated further with other initiatives and activities under the umbrella the Northern Sumatra Corridor (NSC) Program. The integration will increase the effectiveness of the conservation programs in the region including the orangutan awareness campaign.

Following are details of each activity under the awareness component structured according to the work plan.

## **Activity 1**

### **Assessing the level of knowledge concerning orangutan conservation in the area surrounding Gunung Leuser National Park**

Surveys on the level of knowledge, attitude, and behavior of the community were conducted to develop a foundation upon which a targeted campaign strategy could be developed. The surveys were conducted in three Sub-districts (Bohorok, Sibolangit, and Tiga Lingga) bordering and in the proximity of orangutan habitat. The total number of respondents was 360 people, 48 of which were the formal and informal leaders of the community. In addition, we also conducted another assessment specifically designed to evaluate the knowledge, attitude, and behavior of decision makers.

We faced a number of notable constraints particularly in accessing the entire list of targeted decision makers. Decision makers were mostly busy people, and some of them were very difficult to approach. In addition, introductory activities were needed before we proceeded with the interviews. Understandably, many individuals did not respond or participate until they understood the survey and the purpose of the interview as well as obtained assurances that their information would not be abused. In addition, their locations were scattered with normally only one person in a single place. This resulted in a considerable amount of time needed to conduct each interview. As a result, only 16 out of 42 decision makers listed as the target respondents participated in our survey.

The survey results suggested that the communities in Sub-district of Tiga Lingga had the lowest level of knowledge on forests, orangutans, and the relationship between the two. In most of the study areas, the decline of clean water (the availability and its quality) was the most important concern and a bigger priority for people interviewed. Most of the respondents perceived that their (current) welfare was their number one priority with a lesser concern for forest destruction (See Table 1. Summary results of the KAB survey). They did not oppose logging activities, for example, as these activities enabled them to fulfill their basic needs.

The results of the assessment are an important foundation to develop an effective education and campaign strategy for the conservation of orangutans and their habitat.

**Table 1. Summary results of the KAB survey**

Description	General Public and Community Leaders (incl. Refugees)			Decision makers
	Bohorok	Tiga Lingga	Sibolangit	
Location of respondents	Rural bordering habitats	Rural bordering habitats	Rural and urban Villages close-to but not bordering orangutan habitats	Decision makers from the provincial and district level. Leaders of youth organizations
Characteristic of respondents	Male (73%) 31 - 40 years old (43%) Elementary school graduates (43%) Junior high school	Male (90%) Elementary school graduates (50%) Farmers (64%)	Male (78%) (20 - 50 years old) Elementary school graduates (27%) Junior high school	Male (87%) Junior high school graduates (25%) College graduates (75%)

Description	General Public and Community Leaders (incl. Refugees)			Decision makers
	Bohorok	Tiga Lingga	Sibolangit	
	(31%); Farmers (63%); Ethnicity (Malay, Karonese, Javanese)		(23%); Senior high school (45%); Private sector (39%); Farmers (33%); Ethnicity (Karo)	
Knowledge on orangutan	Mostly knew the whereabouts and the habitat of the orangutan, but did not know their role and function.	90% respondents had seen orangutans ( <i>mawas</i> in local language), and mostly knew their habitat. Mostly did not know the role and function of the orangutan	Mostly knew the whereabouts and the habitat, 20% had seen orangutans.	Mostly (81%) knew that orangutans were critical to extinction due to habitat loss. Mostly (75%) knew the status and role of the orangutan.
Knowledge about forest	Mostly knew the role and function of forests (such as to prevent flood, erosion, and draught; watershed hydrology. Some also mentioned the mystical functions.	Not applicable	Mostly knew the function and roles of the forests. Many respondents also witnessed that forests had been destroyed due to logging and encroachment	Mostly (94%) were aware of the bad forest condition in North Sumatra. Mostly (56%) perceived illegal logging, while some (25%) cited land conversion as the main cause. Solution proposed: Law enforcement (69%), re-greening (12.5%)
Attitude on orangutan	Fond and proud of (43%); Scared and hate (50%); Nevertheless 60% mentioned they need to be protected. Note: <i>Conflict between orangutan and people occurred in Bohorok</i>	Mostly (90%) fond of orangutan. Although they could not mention the role and function, they agreed for protection as they considered orangutans as unique and akin to human	Fond of (53%); Scared and hated (23%); However (94%) supported the protection	Mostly (62.5%) concerned and many of them (31%) supported the protection. Solutions proposed: Habitat protection (37.5%), law enforcement (25%), and awareness campaign (18.8%)
Attitude on forest	90% of the respondents mentioned the need for forest protection. Notes: Some people felt threatened/unhappy when their farming areas were to be converted into protection forests	Mostly considered hunting, extraction of forest products medicinal plans, opening agricultural land, and logging for subsistence are not causing forest destruction. They are considered destructive if it is commercialized	98% respondents mentioned the forest need to be protected. They were against forest destruction except for agricultures and settlements purposes	Mostly supported protection. How? Law enforcement (31%), re-greening (25%), awareness (25%)
Key issues from their perceptions	Poverty (55%); Unemployment (22%)	Fresh water availability, road, and electricity	Limited land for agriculture, electricity, and road	Economy (44%), low income (25%), forest encroachment and illegal logging (12.5%), refugees from Aceh, security
Characteristics of media used as sources of information	From 19:00 – 22:00; TV, mainly movies; Morning and afternoon; Radio (RFC, Sikamoni, dan Turang). Most favorite type of music dangdut dan pop karo	Mostly listened to radios (Kamasutra, Sikamoni, Turang, RBN, TBK) for news, agricultural issues, music (Karo, Batak and Pakpak); Occasionally newspaper when it's available at local cafés	Mostly (46%) watched TV for movies, 38% read newspaper for news on politics; 16% listened to radios (Sikamoni dan Andiko), mostly in the morning and for pop Indonesian songs.	33% watch TV; 33% read newspaper Waspada (36%), Sinar Indonesia Baru (27%), Kompas (18%); Meetings (24%); Radio (10%)

Description	General Public and Community Leaders (incl. Refugees)			Decision makers
	Bohorok	Tiga Lingga	Sibolangit	
Persons whose messages are considered reliable	Head of villages and Religious leaders	Informal leaders (community and religion)	Head of villages, media, friends and relatives	Supervisors and staff, religious leaders
Those considered responsible for orangutan and forest protection	All components	Not applicable	All components (44%) Communities (30%)	Forest All (75%), LMU and the government (6%) Orangutan: the government and the people (81%)
Other relevant findings	They prefer information that uses illustration and in local language. Social activities were mostly conducted on Saturday.	They prefer direct information dissemination	Some community leaders perceived direct information dissemination was more effective than using media	Most leisure activities sport
Possible implication for the campaign	Messages to be linked with community welfare issues. Need to highlight the positive role of the orangutan and forest. Mystical role of the forest that they believe might also be supported). Target: increase knowledge	Information about orangutan was easily understood. Messages can be linked with the similarity between orangutan and human (emotion). Highlighted the role of forest conservation and water supply. Target: increase knowledge	Messages to be linked with community welfare issues. Highlighted the positive roles and functions of orangutan and forest. Target: increase knowledge	Content of message: To urge and support law enforcement, policy favorable to orangutan and forest conservation. To promote the balance between forest exploitation conservation and community welfare Target: To encourage real actions being undertaken
Notes	They did not know the function of orangutan, yet support the protection		Inconsistent between knowledge and attitude Different from two other areas in terms of higher level of education and that information come mostly from external sources	

Number of respondent: General public: 360 (including 48 community leaders); Decision makers: 16

## **Activity 2**

### **Creating and disseminating awareness campaign materials**

The creation and dissemination of awareness campaign materials focused on three categories of awareness activities, which were based on responses from the target groups.

#### **Adult members**

The first category, targeted specifically at adult members of the general public including IDPs, included the creation of illustrated information / fact sheets, posters, the production of *lembar dakwah*/sermon sheets, the development of information boards in the *kedai*/ local café, and movie playing-sessions and discussions. In addition, we also collaborated with partners such as INFORM

Consortium to produce and distributed additional materials such as Video News Release (VNR), posters, t-shirt and a variety of souvenirs. The mobile unit team administered these campaign programs.

### Decision makers

The second category, targeted specifically at decision makers, included a series of meeting programs and visits. Among the target decision makers were the *bupatis*/heads of districts, members of parliament, forestry officials and other institutions bordering orangutan habitats. We presented the importance of forest conservation and how they might accommodate this in development activities. Additional subjects were explored and adjusted to local needs as well as relevant current issues, such as the importance for the local parliament to adopt existing forest protection status into provincial regulation.

We conducted awareness campaign programs in Sub-district Salak, District Pakpak Barat in collaboration with Yayasan Kanopi. Kabupaten Pakpak Barat is a new district in North Sumatra. In this decentralization era, districts have more authority to manage the natural resources, including its forest resources. However, without proper understanding of conserving forest resources for long-term objectives, new districts might look at forests as additional income generators. Therefore, we approached the decision makers in this area and sought possible ways of assisting them in drafting the district's spatial plan.

We also conducted a series of visits to key decision-makers in Kabupaten Langkat. We met with Head of District (Bupati) Langkat and reinforced the importance of his support of orangutan conservation. We visited members of the local parliament in Langkat to discuss their critical role in orangutan conservation. We also conducted a discussion session with the leader of KNPI (Komite Nasional Pemuda Indonesia), a youth association known to be influential in the local decision making process. All of the decision makers visited verbally expressed their support for conservation programs; CII maintained these relationships beyond the scope of this project in order to work towards influencing policies and decisions that take into account conservation needs.

We also allocated our time to respond to new orangutan conservation opportunities that arose in Kabupaten Madina. New populations of orangutans were recently discovered in the area (Padangsidempuan, Tarutung, Sibolga Area – published by Wich *et al.* in *Oryx* Volume 37 No. 1, January 2003; and Batang Toru, unpublished report) by groups of researchers with whom CII maintains close communication and collaboration. Following a series of field visits to the area and meetings with stakeholders, Dr. Jatna Supriatna, CI Indonesia's Regional Vice President, met with Bupati Madina to discuss possible collaboration in developing a new protected national park for this district. Key stakeholders, including community leaders and members of the local and

provincial parliament, supported the idea. CII is facilitating and continuing to work towards putting the technical aspects in place.

We worked with key stakeholders in the region to enhance relationships and program integration. For example, we were involved in a series of discussions with the Gunung Leuser National Park management and the Leuser Management Unit/Leuser International Foundation. We worked closely with government officials in the field and at the central level to ensure program integration across all project stages; planning, budgeting, implementation, as well as monitoring and evaluation. For example, we were involved in the Directorate General of Forest Protection and Nature Conservation (PHKA) technical meeting, which produced their commitment to provide matching funds to CII Programs.

### Broad-based campaign

The third category of the campaign program targeted both decision makers and the general public using local mass media. This included a variety of activities, mainly using newspapers and radio. We identified popular radio stations, developed and distributed environmental news-clips, and conducted interactive conservation quizzes. We made an agreement with RRI (Radio of Republic Indonesia) *Program 1* and Radio Delta to continuously broadcast these fillers. RRI is the government-owned radio station that has an extensive network and coverage across the country, including remote areas such as villages bordering orangutan habitats. We also conducted a series of talk shows discussing various issues related to conservation in *Radio Delta*, *Radio RRI Pro 1*, *RRI Pro 2*, *Radio Sonya FM*, and *Radio RPC in Binjai-Langkat*.

The Orangutan Project Team collaborated closely with other CII staff and PHKA staff to manage the Sibolangit Conservation Interpretive Center, primarily in conducting the conservation educational activities highlighting the importance of orangutans. (Sibolangit is a former botanical garden that had been neglected for several decades. Now, it is an exceptionally beautiful forest site). The 25-ha Sibolangit Center is surrounded by the approximately 100-ha Sibolangit Nature Reserve, which is a prime source of visitors to the Center. The Center is located on one of the prime tourism routes running from Medan to Lake Toba. This route is regularly traveled by large numbers of domestic and foreign tourists, who are key customers for the Center's conservation activities. We developed and conducted conservation outreach and education programs for park rangers, students, and other visitors to the Sibolangit Recreational Forest. This has strengthened our partnership with PHKA. CI Indonesia has renovated and operates the Center, which re-opened early this year through the support of several donors. Since the opening of Sibolangit, we have recorded an increased number of visitors, which has created more opportunities for educating the general public, such as students, teachers, community members and tourists. CII has also trained some local people to become interpreters and guides for

Sibolangit visitors. In collaboration with the mobile outreach unit, CII has expanded site visits to villages in the vicinity.

We used local newspapers to influence public opinion through providing in-depth information that would lead to better levels of understanding concerning the need for orangutan conservation. Several approaches were used. First, we collaborated with the World Bank/GEF-funded Indonesia Forest and Media campaign (INFORM) consortium to gather environmental journalists in Sumatra and equipped them with necessary skills and knowledge to improve their capabilities in identifying, analyzing and writing about conservation issues. We used these gatherings to highlight orangutan conservation. A total of 32 journalists participated in two training sessions conducted respectively in Medan, North Sumatra 18-21 April 2003 and Sungai Penuh, Jambi 21-24 May 2003. We expected both long-and short-term impacts from this activity. Short-term impacts were reflected in the increase in media coverage on orangutan conservation and related issues documented that quarter, particularly those from North Sumatra, as well as a six-fold increase in media coverage over the life of the project to-date.

The second, step-wise approach had been to organize a series of field visits for the journalists, including those participating in the training described above. The Orangutan Project Team organized a series of field visits, mainly visiting villages and refugees living adjacent to orangutan habitats in North Sumatra. In addition to the training participants, we had taken six journalists from six different media groups (*Analisa, Waspada Sinar Harapan, Medan Bisnis, Portibi DNP, and Mediator*) on field visits. These visits exposed the journalists to the on-the-ground realities and problems faced both by orangutans and humans. We expected that such exposure to the realities of the field would facilitate a better understanding of the issues among journalists, as well as increase their analytical capabilities, which in turn would yield sound articles. Ultimately, this investment would lead to an increased awareness of the readers, including decision makers on conservation issues, particularly in the plight of the Sumatran orangutan.

The third tactic was to organize a writing contest for the media. This event received a very enthusiastic response. The theme of the contest was "The roles of community in conservation and protection of the orangutans as the endangered species and their habitats". The targets were the journalists, students, and the general public. We set the following criteria for the competition:

1. The articles had already been published in *Waspada, Analisa, Kompas, SIB, or Media Indonesia* newspaper between February and May 2003.
2. The articles had to be original and not previously submitted to any other competition.
3. The deadline for submission was 31 May 2003.

We received 16 articles from 14 participants, and announced the winner of the Contest during Hari Lingkungan Hidup (Environmental Day) on 5 June 2003 at the Sibolangit Environmental Interpretive Centre. The winners of the contest were:

- ❑ Delphius Ginting (category public) who submitted the article entitled "*Partisipasi Masyarakat Benteng Terakhir Perlindungan Orangutan dan Habitatnya*" – The community participation, the last frontier in conservation of orangutan and the habitat.
- ❑ Jekson Simanjuntak (category student) who submitted the article entitled "*Pusat Penelitian dan Objek Wisata Orangutan Bukit Lawang*" – Bukit Lawang, the centre for orangutan research and tourism".
- ❑ Andi Siswanda (Category journalist) who submitted the article entitled "*Habitat Orangutan Semakin Terancam*" – The increasingly threatened orangutan habitat

Journalists were invited to the event and five representatives of prominent newspaper offices attended.

We also maintained the significant role of mass media in our campaign program. We did this through continued networking with our media contacts. We gathered significant support from the media to advocate for an amendment of Provincial Regulations on North Sumatra's Spatial Plan. Through an alliance with local NGOs, we conducted a series of advocacy activities including conducting a legal review, writing an open letter to the Governor of North Sumatra, rallying at the parliament building, and organizing a press conference. These efforts attracted the attention of the local media. As a result, at least five articles on these issues were published in the media. We believe that this effort has forced parliament's decision to revise the draft of the Provincial Spatial Plan with intention of giving more recognition to the remaining protected areas.

The *Orangutan Team* also produced articles on orangutan conservation that were published by the national media.

To enrich our program, we collaborated with various institutions to gather and exchange campaign materials. From The Nature Conservancy (TNC), for example, we received copies of books, leaflets and posters. From Green Leaf Foundation, we received a set of movies in VCD format featuring the illegal logging and the causes and impacts of forest fires. From Wana Media, we received several high quality movies promoting the conservation of Gunung Leuser National Park and Kerinci Seblat National Park to be used in the mobile unit's campaign sessions. Furthermore, we developed an informal agreement with KONUS, Primate Centre, Orangutan Rehabilitation Center of Nyaru Menteng (Central Kalimantan), Wana Media, PANECO, Yayasan SET/Visi Anak Bangsa and the OFI Orangutan Project in Tanjung Puting for exchange and collaboration in the distribution of campaign materials. In addition, we also regularly procured relevant materials such as books, movies, dolls or other

campaign /education tools to augment and improve the ongoing orangutan campaign.

Although many can be accommodated, we occasionally faced constraints in following up recommendations suggested by the Knowledge Attitude Behavior (KAB) survey. Results of the survey recommended that we conduct the campaign at different radio stations for different areas. We faced technical problems while doing this such as, the willingness of the station to cooperate, the fees etc. At the same time, the packagings of the programs were still in need of adjustment into their existing programming. We finally implemented the campaign mostly on the RRI network, which transmits to most of our target areas.

We were able to successfully complete the proposed activities including creating campaign materials by the middle of the project period. We did realize however that there was a need to continuously update and refresh campaign materials for the program to be most effective. For this reason, we continued to explore opportunities to enrich the campaign by creating new materials or exchanging materials with other organizations. For example, in quarter seven the Orangutan Project Team started to develop simple and targeted documentary films that would enrich the mobile unit's ability in the long run. In the past, we had mostly used films produced by other organizations. We recognized the need to have films that are more locally relevant and reflect local needs as well as our mission. Other additional materials produced included a series of Bulletin Dakwah for the Moslem community, a series of Sermon sheets for the Christian community, a revised edition of the Orangutan fact sheet, t-shirts, stickers, and posters.

### **Activity 3**

#### **Developing, staffing, and operating a mobile education outreach unit**

The development and staffing of the mobile unit was completed in June 2002 with continuous improvements throughout the course of the project. Two experienced environmental educators, A. Hamid and M. Hasby H., were recruited to operate the mobile unit. These staff as well as volunteers from local universities and NGOs participated in a series of training sessions in the operation of the unit.

We equipped the unit with the tools needed to conduct information sessions in a practical way at any location. The unit used a four-wheel drive vehicle, which was able to reach remote villages bordering orangutan habitats, which usually have poor road conditions. The vehicle was decorated with hand painted orangutans to make it look appealing and friendly to the communities visited. The vehicle was equipped with a wide variety of equipment and tools including an electric generator, a VCD player, a projector, an outdoor projector screen, a sound system, and camping equipment. The team also carried with them materials related to the conservation of orangutans and their habitats including

movies, books, and other materials suitable for the target audience. Equally important were general interest popular materials that could be used to attract the attention of potential audiences.

The mobile unit operated in each area typically using the following standard procedures. First, the team identified the target areas and the target groups based on, among other criteria, proximity to orangutan habitats. Once an area was selected, we then conducted a ground survey to get a better understanding of the community. The team visited local leaders to introduce themselves as well as to explain the purpose of the visit. This introductory process also helped us gather knowledge concerning the villages, and helped the mobile unit staff to gain trust from the local leaders.

The team then discussed the possibility of conducting awareness campaign sessions with the local leaders and explained the objectives of the project. Together with the leaders and villagers, the team selected the venue, time, and specific activities to be conducted. Depending on the situation, on some occasions the team visited people individually to introduce themselves and conducted pre-visit surveys and distributed campaign materials. Once all aspects of the campaign were organized, the team then invited the broader public to come and attend the sessions. The sessions typically included showing films and discussing orangutan conservation issues. As most of the people worked during the day, the sessions were normally conducted in the evening. Whenever possible post-visit surveys were conducted immediately after the session or the following day(s). Follow-up discussions were normally conducted either in groups or individually. Such discussions usually took place in an informal setting such as the *kedai* (local café). In some instances, we identified the need to conduct a follow-up visits to implement additional campaign activities. In these cases, we developed additional programs and materials based on the feedback we received from people in the community and results of the post-campaign evaluations. We believed that adapting our program in this way made the outcomes even more successful.

The mobile unit team visited remote villages and refugee camps in four Kabupatens in North Sumatra. These included villages in Kecamatan/Sub-district Sibolangit (Kabupaten/District Deli Serdang); Villages and refugee camps in Kecamatan Besitang, Kecamatan Sei Lengan, Kecamatan Batang Serangan, and Kecamatan Bahorok (Kabupaten Langkat); Villages in Kecamatan Gunung Sitember, Kecamatan Parbuluan, Kecamatan Siempat Nempu Hulu, and Kecamatan Sidikalang (Kabupaten Dairi); And villages in Kecamatan Sitelu Tali Urang Jehe and Kecamatan Salak (Kabupaten Pakpak Bharat).

Selection of the areas the team visited was primarily based on their proximity to orangutan habitats. Conflicts between humans and orangutans over natural resource utilization have been reported in most of these villages. In some areas.

orangutans have been reported to raid some villagers' gardens, particularly during the durian season.

Among the areas visited, the villages of Dusun Kuala Buluh and Kuala Gemuh, in the Tangkahan area (Kabupaten Langkat) were of particular interest. These villages had already committed to protect the forests in which orangutans were found. This commitment had been formalized in the form of establishing an organization called Tangkahan Tourism Organization or Lembaga Pariwisata Tangkahan (LPT). The prevailing motivation behind the protection was the community's goal to develop the region as a tourism site. However, their knowledge and understanding of forest resources and orangutans was limited. We were concerned that failure to develop the tourism site as they have imagined could lead to the withdrawal of the local support for forest protection. Therefore, the mobile unit tried to address this issue by conducting several visits with a series of awareness activities to improve local people's understanding concerning the importance of protecting the forest with the long-term aim of increased income from tourism.

The unit received an enthusiastic response from most visited communities. Between 150 and 300 people typically attended each event. (Figure 1. Mobile unit team in action). To encourage attendance and further interest in the activities, we took advantage of important occasions, such as public festivals, traditional parties, etc. In Pakpak Bharat the level of attendance on one occasion went over 1,000 people.



Figure 1. Mobile unit team in action

In conducting the activities, the Mobile Unit Team worked closely with local partners (e.g., those from Yayasan Kanopi and members of nature lover's groups). The involvement of local partners is important because it helped us deliver the program more efficiently and effectively. It also served as a means to transfer the knowledge and skills in conducting the awareness program to the partners. We believe that this will help to ensure the program's continuity after the project term.

#### **Activity 4**

#### **Conducting information sessions/workshops for the decision makers concerning the threat of the Ladia-Galaska and related road network and its long-term implications for both orangutans and humans.**

During the course of the project we came across both positive and negative issues regarding the Ladia-Galaska road development. On the positive side, we saw results from our campaign and advocacy work. In collaboration with allies of international NGOs, we sent a letter to President Megawati to seek her support to stop the progress of the Ladia-Galaska road development until a thorough cost-and-benefit analysis as well as a reliable environmental impacts assessment is made. The letter and other petitions have been followed up by a series of meetings. Among these was a meeting on 14 February 2003 between the members of Leuser International Foundation and President Megawati, who was accompanied by the Minister of Environment. As a result, the President supported re-consideration of the plan to develop the road network. The President, who had been widely reported to be in support of the construction of the road project, denied all reports and asked the Minister of Forestry to re-evaluate Ladia-Galaska. President Megawati made three substantial comments during the meeting:

1. She had not given any approval for the Ladia-Galaska road project, as was previously widely reported in the media.
2. She was very concerned with the destruction of the forests, which leads to natural disasters in Indonesia.
3. She asked the Minister of Environment to re-evaluate the project.

These comments received coverage in both national and local papers.

On the negative side, there is still a great deal of work ahead. First, the appeal to Megawati must be followed up, otherwise she might be influenced again to change her mind and support the project. Second, although there has been positive support from the central government, the main problem lies with the local government, in particular the Governor of Nanggroe Aceh Darussalam (NAD – formerly Aceh), who continues to push the project. On the ground, it has been reported that road development activities are still taking place, despite the lack of official consent and funding support from the central government. Unfortunately, due to the security situation in the area, field checking was too risky to carry out.

The local social and political situation, particularly in NAD, remained highly dynamic during the course of the project. Therefore, conducting the information session in an ordinary format was quite a challenge, particularly for an issue as sensitive as Ladia-Galaska. This was demonstrated by the fact that two events, in Medan and Banda Aceh, during which the status of Ladia Galaska was to be

discussed, had to be cancelled due to pressure from the local government and other groups.

*Adapting to the situation and taking advantage of partnership opportunities, we incorporated the information session into an event organized jointly by Flora Fauna International, INFORM consortium, and CI-I's Northern Sumatra Corridor team in Banda Aceh. In this event, we presented the results of CI-I's economic assessment on NAD resources in order to make participants aware of how rich their province is. We demonstrated a cost-and-benefit analysis of different resource utilization scenarios that produced understanding that maintaining NAD forests is still significantly profitable in the long-run compared to converting the forests to other land uses. We showed that benefits from implementing conservation principles would outweigh other scenarios. Attendees of this session included local government officials, local community leaders, NGOs, University staff and others. After the session, CI-I personnel (e.g., Dr. Jatna Supriatna, and Dr. Didy Wurjanto) visited some local government officials and decision makers in NAD to present economic options and to discuss the possibility for the local government to play a greater role in various conservation issues with the purpose of gaining more support from local people, including – whenever considered appropriate – Ladia-Galaska issues.*

### **Activity 5**

#### **Monitoring and evaluating the impact of this component.**

*We monitored the impact of this project using two different indicators. The first indicator was 'increased level of media coverage (e.g., newspaper articles) concerning orangutan conservation issues'. The second was 'increased knowledge of target audiences regarding orangutan and habitat conservation'. In addition, we also conducted an independent review to evaluate the project implementation.*

*To monitor the impact of the project, we initially planned to conduct the knowledge, attitude and behavior (KAB) survey not only in the beginning but also during the middle and end of the project. However, we reevaluated this plan based on our experience with implementing the first KAB survey which had taken a significant amount of time to complete. An internal analysis suggested that direct pre and post activity surveys provided more tangible, rapid, and accurate information regarding the impact of the activity. At the same time, we realized that measuring the effect of the campaign was difficult for some activities. For example, measuring the impact of radio programs was difficult and impractical. We determined that it was more fruitful to measure the changes in our audience's knowledge at the time we conducted the campaign activities for specific audiences. Therefore, we redesigned the evaluation of these activities to include systematic pre and post visit evaluations. In addition, for the impact of activities that were difficult to measure, we improved our documentation system by documenting all levels of the efforts that we have made.*

### Media coverage

We monitored media coverage devoted to orangutan conservation and related issues over the course of the project and documented a significant increase in coverage from the beginning to the end of the project timeline. Media coverage data for the 6-month period prior to project implementation was extracted from media clippings compiled by the Leuser Management Unit (LMU). These data included 11 media sources (Analisa, Jakarta Post, Kompas, Mediator, Perjuangan, Radar Medan, Realitas, Republika, SIB, Waspada and Tempo Magazine). CI-I continued to monitor these sources to be able to compare coverage between quarters. Included in the compilation was any coverage in the media sources listed above that mentioned one or more of the following keywords: Orangutan, Leuser Ecosystem, Gunung Leuser National Park, Illegal logging in North Sumatra, or Illegal logging in Nangroe Aceh Darussalam (NAD). Applying those keywords to the above-mentioned media sources, we documented 13 related articles during the 6-month period prior to the project implementation (12 during the first three-month- and one during the subsequent three-month period).

Although the figure has fluctuated, there has been a significant increase in the overall number of publications on these issues over the course of the project. During the first three quarters of the project's implementation, we documented a total of seven articles, with three of these in the first quarter. In the second and third quarters, two articles were documented in each, respectively. In the fourth quarter, the number of published articles leapt to 26. There has been a continued increase on the number of relevant articles, and in the fifth quarter we documented 40 articles. In quarter six we documented 69 articles, while in quarter seven we documented 65. The increase in quarter six was mainly attributed to the controversial plan of the NAD government to develop the Ladia Galaska road network. Meanwhile, a significant number of articles published during quarter seven were directly related to our orangutan campaign activities. As mentioned in the above section, we have considerably increased the participation of mass media in the orangutan campaign activities, such as through the article-writing contest. We also maintained our networks with the media during quarter eight. As a result, we documented another significant increase in media coverage, with 90 articles documented during that period.

### Pre -and-post visit questionnaire

CI-I developed its campaign programs by evaluating the baseline data collected since the beginning of the project. These data showed, overall, that while the level of knowledge on orangutans, the forest, and other conservation-related issues was relatively limited among the general public, decision makers were relatively aware of the issues. Therefore, for the general public including refugees, the goal of our campaign was to increase and improve their knowledge of conservation issues. For decision makers however, our campaign needed to

be designed to encourage them to take necessary actions/decisions to improve protection of the orangutan and its habitat.

We documented significant changes in the knowledge of the people attending the awareness campaigns conducted by the mobile unit team, as evidenced from the pre –and post surveys conducted during mobile unit visits. For example, the survey conducted in Desa Gundaling documented a 40% increase following an awareness session, in the number of people that answered the orangutan related multiple-choice questions correctly. At the same location, there was a 30% increase in the number of people who answered correctly a question related to the inter-birth interval for adult female orangutans.

At other locations we also documented a similar increase in the knowledge among the audience on orangutan conservation and related issues following our campaign programs. For example, questioned about what orangutans were all about, prior to the session, 29.3% of the respondents from Dusun Panampean answered: "do not know". That figure dropped to 11.8% after our session had been completed. Increased awareness was also indicated by a larger percentage of respondents in the same area who answered correctly questions about the whereabouts of orangutan distribution, orangutan diets, etc. We also documented a significant improvement in the knowledge level of the target audience in other places such as Desa Sibande, Kecamatan Sitelu Tali Urang Jehe Kabupaten Pakpak Bharat.

#### Independent evaluation

We finalized the evaluation process of the overall project implementation with a focus on activities of the mobile unit. The purpose of the review was to improve project management and to prepare follow-up activities for the next phase of funding. We reviewed the lessons learned from implementation of the current orangutan project in Sumatra. We examined project successes, new opportunities, partner expectations, potential institutional/political support, and the capacity building needs of field staff. We conducted a detailed review of the implementation of the program with the goal of improving the orangutan mobile unit program design to enhance the results we deliver in the future. The review covered the following aspects:

- Approaches and methods used to implement the program
- Methods used to monitor and evaluate the program
- The perception of the local community/government
- Opportunities identified to further develop the program (including: human resource capacity, networking, infrastructure, etc.)

The review unveiled some important findings to be considered in the subsequent project implementation. Among the findings were:

- Planning process: The reviewer identified that knowledge of the orangutan team of real field conditions could have been improved if baseline data

had been more accurate; Consequently, more time was spent learning the conditions of target villages and the communities before actual campaigns could be conducted; Monitoring and evaluation process could have been better designed.

- Implementation process: The reviewer identified that the acceptance and welcome from the communities of CII and its field staff were extraordinary. This was mainly due to the exceptional caliber of our field staff who have considerable related experience and strong interpersonal and communicational skills.
- Monitoring and evaluation process: It was recommended that improvements be made to the pre and post visit questionnaires. Recommended changes included making the questionnaires more suitable to different field conditions yet still scientifically acceptable to be compared across locations and different situations. It was found that generalized questionnaires, which were easier to analyze, were not always easy to implement in the field due to the unique characteristics of different localities (such as sensitivity of local cultures, languages, psychologies, etc.).
- Others: The reviewer also recommended that field staff continue to keep up-to-date on relevant issues and skills throughout the course of the project, including those for the purpose of campaigning as well as for monitoring and evaluating the program.

Based on the results of the review, we plan to design follow-up activities for the mobile unit program by revising the following components: approach and method, content and format of the campaign materials, program monitoring and evaluation, and human resource management (including volunteer management).

## **COMPONENT 2.** **STRENGTHENING LAW ENFORCEMENT ON ORANG-UTAN POACHING**

The goal of this component was to build capacity of forest rangers as well as other key law enforcement personnel (e.g., police, local courts, customs officials) to be able to address and enforce existing laws protecting the orangutan and its habitat. Improved knowledge and skills among these personnel were expected to improve the enforcement techniques that would slow, and eventually halt, the downward spiral of both the orangutan and its habitat.

We facilitated the training of forestry rangers to strengthen orangutan and habitat protection by delivering information on related topics such as forest and protected area surveillance, investigation of illegal forestry and wildlife activities, apprehending forest crime offenders (especially those harming or capturing orangutans), international and Indonesian laws protecting orangutans, including enforcement. The training also covered issues related to patrolling and field

investigation, such as navigation, photography and radio communication. Training took place in Medan and field sites in Gunung Leuser National Park in North Sumatra.

Details of each activity under this component are structured according to the work plan is as follows:

### **Activity 1.**

#### **Assessing the training needs of Gunung Leuser National Park rangers and local law enforcement personnel.**

We assessed the training needs for more effective law enforcement related to the illegal activities threatening the orangutan and its habitat in North Sumatra. The assessment was made by consulting a cross-organizational group of relevant stakeholders individually as well as collectively in a formal meeting/workshop. The individuals consulted include those from local authorities, NGOs, lawyers, scientists, law enforcement practitioners on wildlife (e.g. Rhino Protection Unit) as well as related in-house experts from CII, such as CII's Policy Analyst and Species Conservation Specialist. We explored their views on how to run an appropriate training program (e.g. in terms of materials, participants, and method of delivery) for more effective law enforcement.

The consultations identified some basic problems that have caused the ineffectiveness of current law enforcement. These include:

- Poor knowledge and awareness of conservation law enforcement officers.
- Discrepancy in the existing laws and regulations.
- Poor capacity, coordination and commitment among the law enforcement officers (*i.e.* forestry rangers, police, attorney, and judges) to properly enforce the law.

From this assessment, we identified the need to train personnel with current information related to law enforcement of wildlife and forest protection. In addition, if needed, members of the cross-organizational consulting group could work to build better relationships among key law enforcement personnel and institutions that in turn could generate better coordination in handling conservation legal cases. As identified by the group, one of the key problems in enforcing environmental law is the lack of coordination among key personnel.

It was recommended that training sessions be designed for those directly working to enforce the law. The potential trainees included personnel from local Offices of Conservation Section (BKSDA), personnel from Gunung Leuser National Park (GLNP) Management, related police officers, prosecutors/attorney, judges, and other law practitioners.

Trainers and materials to be delivered were also identified. Recommended trainers included the head of GLNP Management, a representative from the

Police Department, a representative from the Office of Attorney, a representative from the Department of Justice, a representative from the Tiger Patrol Unit, a representative from the Rhino Patrol Unit, and representatives from other related NGOs (e.g. WCS, PANECO, FFI). It was agreed upon that delivered materials should cover the following subjects: "Refreshing the basic knowledge on environmental laws", "Government policy in national park management and species protection", "The effect of recent decentralization on environmental law enforcement", "Field techniques on enforcement of environmental laws", "Legal procedures (e.g. investigation, intelligence, prosecution, court processes)", "The importance of networking in the enforcement of environmental laws", and "Conservation status and ecological aspects of the orangutan". A majority of the consulting group suggested a training program that included both classroom training and fieldwork. A few participants suggested that the training program should include real law enforcement activities such as confiscation, arrests, etc.

### **Activity 2. Implementing training courses.**

As recommended, the first training was conducted both in the classroom and in the field. Qualified and experienced trainers from different institutions (including IHSA-Institute for Law on Natural Resources, Directorate General of Forest Protection and Nature Conservation (PHKA), Police Department, Leuser Management Unit) were invited to participate. Trainers made presentations and led the discussions on a wide range of subjects necessary to improve law enforcement in the field. The subjects included "patrolling techniques", "field legal cases investigation procedures", "methods in legal cases documentation", "prosecution procedures", "park management", and "species protection". Additional subjects necessary for field survival such as mapping, navigation techniques, and other jungle survival tips were also covered. Invited participants included local law enforcement personnel including forestry rangers, police personnel, representative from attorney offices, judges, members of NGOs, and other law enforcement stakeholders.

After one year of project implementation, CI-I recognized that the enforcement component required more thorough and in-depth baseline information concerning enforcement problems before it could address the highest priority issues. Training was part of the solution, however, it would only adequately address the robust problems surrounding this issue if we first clearly defined where the breakdown occurred in the enforcement chain and when other, complementary programs were in place. For these reasons, CI-I re-scoped this component by reducing its intensity. One more training session was conducted to comply with commitments already made by our partners and local stakeholders. To prepare and develop a better training format, we internally explored and discussed this issue, as well as holding discussions with external stakeholders.

We convened the second training jointly with the Local Conservation Office (BKSDA) I Medan. In consultation with local stakeholders, we designed the training using a more in-depth focus on illegal wildlife trade (including orangutan).

The training was designed to suit both those who previously attended the training and new participants. The purpose of the training was to deepen the understanding of and increase capacity to deal with illegal wildlife trading.

More specific objectives of the training included:

- To share information on illegal trade of protected animals in Medan among government institutions, law enforcement components and NGOs
- To motivate law enforcers to support conservation efforts and to strengthen the coordination among conservation institutions
- To improve awareness and to build the capacity of local communities to participate in law enforcement to protect the orangutan and other wildlife species
- To improve the capacity and strengthen the commitment among the legal forces to protect the orangutan and other protected species

The resource persons of the training were:

- Ir. Memet Atibaharuddin (Dinas Kehutanan, North Sumatera)
- Ir. Kurnia Rauf (Kasubdit Konservasi Jenis dan Genetik, Ditjen PHKA)
- Gunawan Alza, S.Hut (Gunung Leuser National Park)
- R. Butar-Butar (Kaditserse – Tipiter, Police Department, North Sumatera)
- Suer Suryadi (Conservation International Indonesia)
- Ahmad Zulkani (Head of 'KOMPAS' Daily Northern Sumatera branch)
- Ir. Suhery (Sumatran Orangutan Conservation Program-YEL)
- Drs. Sudaryono Sady, MM (Head of BKSDA SU II)
- Ir. Awen Supranata (Head of BKSDA SU I)
- Deni Purba, SH. LLM (Leuser management Unit)

Training Materials delivered included:

- Regulations and laws on conservation and environmental (*Pengetahuan Dasar Peraturan Perundang-undangan Kehutanan Bidang Konservasi dan Lingkungan Hidup*) by Ir. Memet Atibaharuddin
- Poaching and illegal wildlife trading in North Sumatera (*Perburuan dan Perdagangan Satwa di Sumatera Utara*) by Ir. Kurnia Rauf
- Forest patrol technique to respond the decline of orangutan population and their habitat (*Tehnik Pengamanan Hutan dan Hubungannya dengan Menurunnya Populasi Orangutan dan Kerusakan Habitat*) by Gunawan Alza, S.Hut
- The Principles of Investigation and Prosecution (*Dasar-dasar Penyelidikan dan Penyidikan*) by R. Butar-Butar
- Legal Case Tracking System (*Sistem Pengarsipan dan Pemantauan Kasus*) by Suer Suryadi
- The Role of Media in Anti-Poaching and Monitoring of Wildlife Trading (*Peran Media Dalam Pengawasan Perburuan dan Perdagangan Satwa*) by Ahmad Zulkani

- The Anatomy of Orangutan Trading in North Sumatra (*Gambaran Umum Mengenai Perdagangan Orangutan di Sumatera Utara*) by Ir. Suhery
- Fauna and Flora Trafficking (*Lalulintas perdagangan Flora dan Fauna*) by Drs. Sudaryono Sady, MM
- The Pattern of Natural Resources and Ecosystem Managements (*Pola Pengelolaan Kawasan Konservasi serta Sumber Daya Alam dan Ekosistemnya*) by Ir. Awen Supranata
- The Principles of Monitoring and Investigation (*Prinsip-prinsip Monitoring dan Investigasi*) by Deni Purba, SH. LLM

The training attendees were law enforcement personnel from BTNGL (5 persons), BKSDA SU I (9 person), BKSDA SU II (3 persons), BKSDA NAD (2 persons), Dinas Kehutanan (3 persons), Kepolisian Daerah Sumatera Utara (1 person), Local Court, Medan (1 person), Marine Customs, Belawan (1 person), and representatives from related NGOs (9 persons). Many participants wanted direct field experience by confiscating protected species during the training. We were able to create an opportunity for the participants to conduct field investigations of wildlife trading in local markets, but we could not facilitate participation in a confiscation process due to various logistical constraints.

As indicated by the questionnaire, most of the participants felt their knowledge improved. We conducted a pre-training survey to assess the level of knowledge of the training participants. We also conducted a post-training survey to assess the changes in knowledge of training participants. From the survey, we not only documented an increased knowledge among the participants upon attending as compared to prior the training session, but also documented better perceptions and attitudes. For example, prior to the training session, some of the participants (11,5%) thought that there was no sufficient regulation to protect the wildlife. No respondent mentioned that a lack of regulations was the problem in stopping the wildlife trade. After attending the training, many of the participants (22%) also stated that they would put into practice the lessons learned as soon as possible to protect wildlife. This was considered a significant improvement compared to their attitudes prior to the training session. As revealed from the pre-training questionnaire, the majority (53%) of the respondents was pessimistic and mentioned that the protection of the wildlife was far under expectation.

#### **Reference:**

- Hilton-Taylor, C. 2000. *2000 Red List of Threatened Species*. Gland, Switzerland: IUCN – The World Conservation Union.
- Rijksen, H. D. and Meijaard. E. 1999. *The vanishing relative: The Status of Wild Orang-utans at the Close of the Twentieth Century*. Kluwer Stichting Tropenbos.

- Tilson, R., Seal, U.S., Soemarna, K., Ramoo, W., Sumardha, E., Poniran, S., van Schaik, C., Leighton, M., Rijksen, H. and Eudey, A. (Eds.). 1993. *Orangutan Population and Habitat Viability Assessment. Final Report*. Apple Valley, MN: Conservation Breeding Specialist Group, IUCN/SSC
- Van Schaik, C. P., Monk, K. A. and Yarrow Robertson, J. M. 2001. Dramatic decline in orang-utan numbers in the Leuser Ecosystem, northern Sumatra. *Oryx* **35**(1): 14-25.
- Wich, S. A. , I. Singleton, S. S. Utami-Atmoko, M. L. Geurts, H. D. Rijksen and C. P. van Schaik. 2003 The status of the Sumatran orang-utan *Pongo abelii*: an update. *Oryx*, **37**(1), 49–54
- Yarrow Robertson, J. M. and van Schaik, C. P. 2001. Causal factors underlying the dramatic decline of the Sumatran orang-utan. *Oryx* **35**(1): 26-38.
- Yeager, C. 1999. Orangutan Action Plan. Dit. Gen. PHKA, WWF and CERC. Jakarta, 34 pages.