The Cultural Resource Study team and Kralah village elders in front a sacred banana grove in Kralah village. The Cultural Resource Study team was made up of people from a number of government department and NGOs, assisted by two international technical consultants.

Information was collected in community meetings with many participants, during forest walks, and in community mapping exercises. Village chiefs and community development committee representatives were present. This process was essential to gaining an understanding of the communities’ views of spirit forests as well as areas where Non-Timber Forest Products (NTFPs) are collected.
Villagers were asked to prepare sketch maps showing spirit forests, areas where NTFPs are collected, and other significant points. This was done in community meetings with the participation of many people who provided input and verification.

In order to transfer information from village sketch maps to standard-format maps, villagers learned how to use GPS units. They then walked to significant sites to obtain GPS readings.

These readings were then used to plot spirit forest centers and NTFP collection areas.
Initial finding were presented back to villagers at a workshop conducted in Kralah village.

This provided an opportunity for all villages to view the plans and ideas presented by neighboring villages.

It also enabled villagers to clarify, review and add to information they had previously given.

Villagers at Kameng village. The vast majority of resources required for Kreung people's lives come from forests surrounding their villages.

Forests are also essential for Kreung religious beliefs.

For many generations the Kreung have retained old growth forests as reserves for forest spirits, as wildlife refuges, and for collection of non-timber forest products.
The chiefs of Svay (left) and Kameng villages. The Kameng village communal meeting hall and sacred banana grove are behind.

Banana spirits are one of many types of spirits respected by Kreung people.

Spirits are thought to be present throughout the landscape. In some areas, structures are built to respect certain spirits.

In other cases, offerings and sacrifices are made.

In all cases, spirits must be treated with proper respect to ensure the health and happiness of the village.
Preservation of spirit forests is key to Kreung religious beliefs.

Spirit forests also represent important wildlife refuge areas and places to collect non-timber forest products.

Large trees are seen as homes of spirits. If these spirits are disturbed or irritated, the effects will be felt by villagers, who may fall sick, or even die.
Fish are a major source of protein for Kreung people. Streams are very important for supporting natural fisheries and wildlife. Streams are also preferred water sources for drinking and for washing.

Kreung people believe it is important to protect the quality streams. Adjacent to streams there are usually many non-timber forest products.

Spirits are also thought to reside in some streams and lakes.

Kreung people's livelihood, their food, their building materials, and their religious beliefs are dependent on forests.
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“There are old spirits, young spirits, big spirits and small spirits. They are everywhere; for example the place where we plant fruit trees. But the mountain is like the village for the arak (spirit) — it’s the place where they meet. In other places they are not so big or so fierce, such as in the village, and can’t affect us so much.”

—Kalay Commune Chief

**SUMMARY AND RECOMMENDATIONS**

In January 1998 the Council of Ministers of the Royal Cambodian Government authorized a twenty-five-year timber concession to Hero Taiwan Company, Ltd. to log 60,150 hectares of forest in O Chum, Vonsai, and Taveng districts of Ratanakiri province. Logging commenced in May 1999.

The concession area is inhabited by almost 10,000 people living in thirty-three villages. Most are members of the Kreung indigenous group who have lived in Ratanakiri for hundreds of years. The Kreung are deeply linked to the forests for religious reasons and because the forests contain the only resources for their subsistence livelihood.

The Hero Company agreement with the Forestry Department states that sites important to culture or tradition, or areas that communities wish to protect, shall be excluded from logging. As of this writing, that requirement of the agreement has not been met.

This cultural resource study of forest areas in Ratanakiri was initiated with the support of Ratanakiri Governor H.E. Kham Khoeun. The objectives were 1) to identify forest areas of religious and cultural significance to Kreung people living within the concession zone, 2) to assess the impact of the Hero logging concession on those areas, and 3) to train provincial representatives of government departments, non-government organizations, and local communities in participatory rural appraisal techniques and report writing, relevant to logging impact assessment.

Research for this report was undertaken by a fourteen-person study team over a ten-day period from August 6-16, 1999, with follow-up mapping conducted in October, 1999. Team members represented a wide range of governmental institutions and local and international non-governmental organizations (NGOs) working in Ratanakiri. Substantial input was provided by Kreung communities affected by the concession. All research, consultation, and mapping took place in six villages in Poey and Kalay communes of O Chum District, Ratanakiri. The study was funded by three international organizations working in Ratanakiri: UNDP-CAREER (the Cambodian Area Rehabilitation and Regeneration Project of the U.N. Development Program), CIDSE (Cooperation Internationale pour le Developpement et la Solidarite), and NTFP (Non Timber Forest Products Project).

This study is not meant to be comprehensive. As a short-term pilot project it surveyed only a fraction of the physical area and populations affected by the Hero concession. (The six villages’ population of 1500 people is only fifteen percent of the total population of 10,000 people living within the concession area). However, by
developing a model and training a study team in techniques used in Participatory Rural Appraisal (PRA) and Rapid Rural Appraisal (RRA), the research can hopefully serve as a guideline for similar assessments in the future in Ratanakiri and elsewhere.

The study finds that 1) the physical environment of the Kreung is fundamentally connected to their religion and culture; 2) while spirits are omnipresent, they are most powerful in specific areas, termed spirit forests, spirit mountains, and sacred groves; 3) spirits also reside in areas where forest products such as bamboo, vines and rattan are collected, along streams, and in agricultural fields; 4) logging has negative impacts not only on the physical environment but on the spiritual landscape as well; 5) Kreung villagers want development, but not at the expense of their religion and culture.

The landscape surrounding the Kreung and their villages — including spirit mountains, graveyards, swidden plots, or areas where forest products are collected — is imbued with spiritual values according to religious beliefs that the Kreung have followed for hundreds of years. This involves beliefs in ancestor spirits, guardian spirits that watch over villages, as well as spirits that reside in rocks, trees, streams, wind, agricultural fields, mountains, wind, and other natural phenomena. These spirits are believed to hold immense powers and, if properly treated, can ward off disease, poor crop harvests, or other calamities. When the spirits are not treated properly, however, the consequences to villages as well as to individual villagers can be severe.

Of utmost importance to the Kreung religion and traditional beliefs is their reverence for and protection of spirit forests, sacred groves, and spirit mountains. Each spirit forest or spirit mountain has its own history and associated legends, which have been passed down verbally from generation to generation through the village elders.

Within the study area — which constitutes only a fraction of the total Hero concession — the researchers find that there are more than twenty sites considered exceptionally sacred to the Kreung. Most of these are “spirit forests,” which hold high religious value for the Kreung communities living nearby, and which would be adversely affected by the logging concession.

Spirits are believed also to reside in areas where wildlife is hunted, streams where fish are caught, and forests where non-timber forest products (NTFPs) such as rattan, resin, vines, and forest fruits are collected. These areas are also accordingly treated with respect. Customary beliefs often regulate hunting, fishing, or NTFP collection practices, and violators may be called on to pay a fine or organize a ceremony to appease the offended spirits. It is believed that spirits residing in these areas can be angered by misdeeds, such as extraction of large logs or excessive wildlife hunting, or hunting of particular species. Fish, wildlife, and forest products, although sometimes plentiful, are harvested carefully by the Kreung in accordance with traditions and spiritual beliefs which have evolved to ensure a sustainable harvest in perpetuity.

Land used for swidden agriculture is also affected by spirits, according to the belief system of the Kreung. Each step of the agricultural cycle is accompanied by ceremonies and offerings to the spirits — often conducted in the swidden plots

themselves — in order to insure a good harvest and protect villagers from harm. In addition, customary beliefs regulate the management of swidden fields. For example the clearing of swidden plots within another village’s cultivation boundaries is prohibited.

In order to show these different zones of use, with their associated spiritual values or intensity, the team has prepared maps of the study area, derived from village interviews and participatory mapping exercises. The study finds that zones of use range from forests of high spiritual value or intensity, to zones of lesser intensity such as NTFP collection areas or agricultural lands. All of these zones will be adversely affected by logging.

The study shows that villagers attribute negative impacts of logging both to the physical effects of logging on the landscape, and to the subsequent angering of resident spirits. When the harmony between humans and spirits is disrupted, the result can be disastrous, provoking epidemics, poor harvests, floods, illness or injury. While the more powerful spirits thought to reside in spirit forests or spirit mountains have the most potential to react negatively to logging, villages report that spirits are also disrupted by logging in NTFP collection forests. Villagers report that when they go to collect NTFPs in an area where the company logged, they suffer negative consequences such as falling ill because the spirits have become angered by the logging.

Villagers express strong concerns that logging operations, in addition to disrupting the spirits, are physically degrading and environmentally harming spirit mountains and NTFP collection forests. This is causing the loss of income and critically-needed products that have been traditionally collected from the forests. Villagers also report that the logging has led to destruction of wildlife habitat and water resources. Finally, villagers state that the logging company, by hiring certain members of villages, is disrupting village society by promoting individual interests over community solidarity. As employees of the company, these villagers have split allegiances to both the company and their village, which is causing conflict and polarization in some communities. Yiyay Lao, an elderly woman from Svay village, explained to the study team: “If the benefit is to an individual, it’s only a small benefit. If we lose the forest, it affects us all. If the companies take the wood, there's nothing left for the next generation.”

Villagers stress that they want development in their villages, but not at the expense of traditional culture. “It’s better to develop step by step than to develop by tricking people the way the companies do,” said Yiyay Lao. “We would like to develop ourselves. We don't agree to have quick development, with promises of markets and such overnight, because they do that by tricking us. They take the trees, but we stay the same. We have to develop according to our ability.”

**Recommendations**

Taking into consideration the concerns of the surveyed communities living within the concession area, the study team makes the following recommendations:

- Hero Taiwan Company must respect its management plan to avoid conflict between the company and local communities
• Hero Taiwan Company should consult, cooperate, and communicate with local communities, as required in the World Bank Draft Cambodian Forestry Code of Practice.

• Hero Taiwan Company should negotiate a plan with local communities to protect spirit forests, NTFP collection areas, wildlife breeding areas, designated community forestry areas, and areas near water sources or along rivers by excluding those areas from logging. This would fulfill the requirements of Hero’s Management Plan and avoid conflict with local communities.

• A provincial workshop should be held to discuss the results and recommendations of the Cultural Resource Study with governmental representatives, local communities, the Hero Taiwan Company and other stakeholders.

• More detailed studies by multi-stakeholder teams should be conducted on cultural resources in the study area as well as in the entire Hero Taiwan concession. In the future Forestry Department staff should participate, in order to increase the efficiency and effectiveness of the studies.

• Detailed studies of local community use and involvement with forest areas should be conducted before forest concessions are authorized by the government, in order to avoid serious impacts on local communities and ensuing conflict.

• The methods used in this survey, if carefully applied, should be used in further cultural resource studies in prospective development areas in Ratanakiri and other provinces where logging concessions (and other natural resource exploitation concessions) are or will be in effect.

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This research study could not have been done without the support of the following people:

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• Mr. Phan Phirin, the chief of the Provincial Rural Development Department, Ratanakiri, who facilitated linkages between provincial departments and the study team;

• CARERE, CIDSE and NTFP-Ratanakiri, who provided funding for the study;

• Mr. Bin Tweun, governor of O Chum district, who gave approval for the study to take place within O Chum district;

• The members of the Cultural Resource Study team, who carried out the research, analyzed the results, cross checked the results with affected communities, and wrote and translated the final report. The study was organized under the technical guidance of Sara Colm, Research Consultant and Graeme Brown, Community Forester with the Ratanakiri Ministry of Environment. The
report was written by Sara Colm, Srey Marona, and Hou Kalyan. Srey Marona and Hou Kalyan (Ministry of Environment, Department of Nature Conservation and Protection, Community Forestry Unit) drafted the Khmer version of the report, which was translated into English by Chea Phalla. The final report was edited by Sara Colm, Nhem Sovanna, Srey Marona, Hou Kalyan and Graeme Brown. Don Muller and Andy Maxwell assisted with proofreading and editing. Mapping work was conducted by Graeme Brown, Sieng Channa, Provincial Environment Department; Mok Thy and Tuy Socheat, Virachey National Park; and Kreung Villagers living within the Hero concession. The study team included Srey Marona and Hou Kalyan, Ministry of Environment, Department of Nature Protection and Conservation; Chea Phalla, NTFP; Dam Chanty, Non-Timber Forest Products Project, Gnim Kim, Provincial Rural Development Department; Ly Kate, CIDSE; Soam Sophal, Sieng Channa, and Kong Sronos, Provincial Environment Department, Community Based Natural Resource Management (CBNRM); Hoeung Koeung, ADHOC (Cambodian Human Rights and Development Association); and Mok Thy and Tuy Socheat, Virachey National Park.

- The Kreung people who reside in Kalay 2 and Kalay 3 villages in Kalay commune and in Kralah, Svay, Santuk, Kameng villages of Poey commune, who provided accommodations and cooperated with the study team to develop the methodology and provide information about local religion, history, and geography during the course of the project.

1. INTRODUCTION

Decades of civil war and internal strife have lead to a rapid decline in Cambodia’s natural resources, especially forest resources. For several years after the general election in 1993, uncontrolled illegal logging decimated large areas of the country’s most valuable forests. In Ratanakiri province, for example, concessions were given to multinational logging companies for more forest land than existed. Many of those concessions have since been cancelled and not all of Cambodia’s forests have been logged yet. Nonetheless, forest cover in the country has dropped from an estimated 70 percent in the 1970s to approximately 35 percent today. That represents an enormous loss of forest resources in a relatively very short time. The remaining forests are crucial for maintaining the cultures and livelihoods of rural Cambodians, including the country’s indigenous minorities. These forests are also important for maintaining pockets of some of the richest biodiversity in Southeast Asia.

Ratanakiri province, located in the northeastern corner of the country, is densely forested and has some of the best remaining forests in all of Cambodia. Seventy-five percent of the provincial population of 72,000 are members of eight different indigenous groups, one of which is the Kreung. The Kreung number approximately 14,000 in the province and live primarily in an area extending from the provincial town of Banlung towards the western part of the province’s central plateau, and towards the Sesan River in the North. They are members of a language grouping that

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includes the Brou, Kavet, and Lun. As with the other indigenous groups in Ratanakiri, the Kreung follow their own religion and subsist on shifting agriculture, supplemented by hunting, fishing and gathering of forest products. They depend on the forests for their existence, and they are directly affected by current and proposed logging.

In January 1998, the Royal Government of Cambodia gave the Hero Taiwan Company, Ltd, a concession to log 60,150 hectares of forest land in Ratanakiri Province. The forest lands are located in O Chum, Vonsai, and Taveng districts, all north of Banlung, the provincial capital.

The concession agreement allows the Hero Taiwan to carry out logging operations under the control of the Department of Forestry and Wildlife (DFW) of the Ministry of Agriculture, Forestry, and Fisheries.

The Management Plan for logging operations (required as part of the Investment Agreement between the company and the government, and written and submitted by the company to the government) states that “culturally important areas [and] areas which the community has requested to be excluded from logging” are to be excluded from the concession area. Section 11.5.1 of the Hero company Management Plan states that forest lands shall be excluded from logging if areas are:

- sites important to culture or tradition;
- areas the community wishes to protect;
- areas where traditional use of forest is threatened by logging;
- watershed areas that serve as water sources for communities;
- lands with slopes greater than 30 degrees;
- lands with slopes less than 30 degrees but vulnerable to erosion;
- areas important for scientific and environmental study or containing a high degree of biodiversity.

In March 1999, conflict arose between the company and Kreung people living in the affected areas. Villagers claimed that logging was taking place in spirit forests and forests where they collected non-timber forest products. Villagers also expressed concerns that the logging would cause the spirits of the forests to become angry, causing illness, misfortune, and natural calamity to the villages. Villagers wanted to protect those forests for future generations to insure a source of livelihood and to preserve sacred sites, and were upset that neither the company nor government representatives consulted with them before logging began. Villagers contacted the Provincial Rural Development Committee (PRDC) and NGOs based in Ratanakiri, and asked them to intervene.

With the governor’s support, the PRDC organized a provincial workshop on July 1-2, 1999 to discuss the forest concession. This resulted in recommendations from provincial officials, NGO workers, and the many Kreung people who reside in the forest concession area and attended the workshop. A central recommendation was for

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3 The Brou, Kreung, Kavet and Lun all belong to the Western Bahnaric Branch of Mon Khmer. Kavet, Kreung and Lun are considered sub-groups of Brou, at least linguistically. See Frédéric Bourdier, “Connaissances et pratiques de gestion traditionnelle de la nature dans une province marginalisée,” 1995.  
4 Master Plan for Hero Taiwan Co., First Revision, 1998.
the province to sponsor an independent cultural resource study to examine the forest area within the concession zone and determine which areas were important to communities to preserve both their traditional religious beliefs as well as their livelihoods. The Cambodia Office of the U.N. High Commissioner for Human Rights, which sent a representative to the workshop, concurred, proposing “that as a pre-condition for further logging by the Hero Taiwan Company in Ratanakiri a full participatory process and a detailed mapping of the areas important to the indigenous communities in Ratanakiri be conducted.”

The Cultural Resource Study was launched as a result of the July 1999 provincial workshop. The research was conducted in the spirit of collaboration between those seeking to develop the province economically, provincial authorities, non-governmental organizations, and indigenous peoples who have lived in Ratanakiri for generations.

2. STUDY OBJECTIVES

The objectives of the study are:

- Provide an overview of the relationship of indigenous people and the forest environment.
- Research and catalogue forest types important to the culture, religion, and livelihood of people living within the logging concession.
- Determine the reasons why these forest areas hold such strong significance.
- Prepare maps showing the significant areas, zoned for qualitative differences.
- Research the history of each area of significance, from generation to generation and from one era to the present.
- Identify the sensitivity of each area in relation to logging authorized by the Hero Company’s logging plan.
- Present the findings to the local communities, the provincial and central governments, NGOs and international organizations, the Hero Company, and other potential commercial operations interested in investing in Ratanakiri.
- Train provincial representatives and local community members in the information-gathering techniques of Participatory Rural Appraisal and Rapid Rural Appraisal, workshop preparation, and report writing skills.
- Create a model and methodology for conducting independent and participatory cultural resources studies that can be duplicated at other sites of potential conflict within the province and in other parts of Cambodia.

By identifying sites with cultural resources for exclusion from logging, these objectives are consistent with guidelines in the Hero Concession Management Plan (see above). The objectives are also consistent with the draft National Forest Policy of Cambodia of 1999, which places high importance on community involvement and includes as primary objectives “assurance of traditional rights and privileges” and

\footnote{A brief technical study in June by an Australian forester working with the Provincial Environment Department also determined that problems existed regarding cultural resource conservation in the Hero Concession, although there appeared to be no technical practices that could not be corrected. See Graeme Brown, “Report on a visit to the Hero Concession Area,” recruited through Australian Volunteers International and working with the Provincial Dept. of Environment, Ratanakiri, with the cooperation of CARERE/IDRC, June 2, 1999.}
promotion of “greater participation of local communities in the protection and management of forests, and community forestry programs.”

By helping to develop more community involvement and participation in forest management, the Cultural Resource Study also falls within with the forest management objectives of the Asian Development Bank (ADB) and the World Bank. The Inception Report of the ADB’s Sustainable Forest Management Project notes that “no effective program has been developed to increase the involvement and participation of rural communities in utilizing and managing … forest resources.” A World Bank-funded report, “Procedures for the Identification of Special Management Areas,” calls for socio-economic surveys of concession areas and their surroundings in order to “gather local knowledge of the presence of wildlife in the area, important plants (perhaps with medicinal value), sites of historic or cultural importance, and other desirable information.” The report identifies the need for specialized training in rural appraisal and consultation with local people, which is consistent with the objectives of the Ratanakiri Cultural Resource Study.¹

The study objectives are also consistent with international covenants signed and ratified by Cambodia in 1992, including the International Covenant on Civil and Political Rights, which guarantees the right to culture and stipulates in Article 27 that “ethnic minorities…shall not be denied the right, in community with other members of their group, to enjoy their own culture [or] to profess and practice their own religion.”

3. METHODOLOGY OF THE STUDY

3.1 Research Techniques

The study followed a modified Participatory Rural Appraisal methodology, including the following:

- Collect existing maps of O Chum district (both formal 1:50,000 topographic maps as well as hand-drawn village maps);
- Collect written information about the Hero concession, Kreung culture, and socio-economic data on O Chum district;
- Organize the research team to plan the study and jointly agree on research objectives and methodology;
- Contact targeted villages to arrange times for site visits, interviews, and forest walks for mapping purposes;
- Convene village meetings and conduct interviews with a wide range of village involvement (women, elders, youth, etc.);²
- Conduct participatory community mapping exercises in the villages, assisting villagers to draw their own rough sketch maps of village lands and

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² ADB/Fraser Thomas. Sustainable Forest Management Project Inception Report, August 1999, pg. 5.
⁴ For list of sample questions used in village interviews, see Appendix 1.
surrounding forests. After sketch maps are prepared, verify details at community meetings.

- Map spirit forest and NTFP collection areas. Train villagers to use Global Positioning System (GPS) receivers to record map coordinates from significant sites, which are then plotted on 1:50,000 topographic maps. In subsequent community meetings, villagers delineate and verify the estimated boundaries of these areas.
- Compile and analyze information and data collected by all study team members after conclusion of field work period.
- Present preliminary results to representatives of villages surveyed, incorporating into the final report the revisions, corrections, and additions from members of the community.

The methodology used in this study was given careful consideration to ensure that reliable, consistent and independent information was collected. Part of this approach involved forming a team composed of people experienced in participatory rural appraisal techniques, together with provincial colleagues knowledgeable about local history, culture, languages, and geography. The team-building process was intentionally participatory. Prior to starting the fieldwork, team members were encouraged to present ideas and provide comments about proposed research techniques. Team members were also encouraged to contribute their input into the final data compilation and analysis. This enhanced open and thoughtful comment, which was also encouraged among Kreung participants in the rural appraisal itself.

The approach provided training for study team members in research techniques, data collection, interview techniques, mapping, and report writing so that similar studies can be conducted in the future in other areas of natural resource conflict.

Community consultation, in the form of semi-structured, informal interviews and mapping exercises, took place in order to elicit detailed and thoughtful responses from villagers in a fairly relaxed atmosphere. People were not initially asked which areas they wished to exclude from logging. Instead, interviews began with open-ended questions about village histories, how villagers made their livelihoods, and how they perceived the boundaries of their villages and surrounding forests. Discussions were for the most part held in Kreung, with translation to Khmer. In each village, a wide spectrum of villagers — elders, younger people, men and women — were given an opportunity to comment and clarify points.

Mapping of forests resources began with participatory sketch mapping, involving as many as twenty villagers at a time. A more detailed map was then produced by going with villagers to vantage points and asking them to identify mountains and other features visible in the landscape. These were then related to features on 1:50,000 topographic maps. These initial maps provided good first approximations. They were not completely reliable, however, possibly due to difficulties in accurately naming distant mountains and difficulties in locating sites from the field on topographic maps.

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Villagers were then trained in use of GPS receivers, which they took into the forests to locate areas of significance. During the GPS mapping process, and as a training exercise, villagers were asked to take GPS readings a number of times in known locations. In addition to this, coordinates of hill tops obtained by use of GPS were compared to those obtained from the 1:50,000 topographic maps. In all cases the data obtained by GPS was felt to be fairly accurate.

Although not carried out in this study, detailed mapping of boundary locations could be a part of future studies. This could include walking all boundaries and obtaining GPS data, and using remote sensing images in order to relate boundaries of spirit forests and NTFP forests to boundaries visible on the images. In this regard, geo-referenced air-photos (distortions in scale having been removed) or geo-referenced satellite images could be used. While this option would be a cost-effective method, it might be deficient in areas where boundaries of forest types visible on the remote sensing images are not close to boundaries of spirit and NTFP forests.

See Appendix 2 for Table of Work Activities.

3.2 Site Selection

Six villages in O Chum district were selected, based on the following criteria:

- Each is located in Coupe 1 of the Hero concession;
- Villagers hold spiritual beliefs related to forests;
- Conflicts between villagers and the Hero Company are reported to have occurred;
- Members of each village have expressed interest in creating community forestry associations.

3.3 The Study Team

The study team was made up of a broad mix of participants, both male and female. Some had training and experience in participatory rural appraisal, while others had strong connections with the provincial government or knowledge of the language, culture and geography of Kreung people living in O Chum District. The team contained members of relevant government departments and NGOs, such as the Provincial Culture Department, Provincial Environment Department, Ministry of Environment, PRDC, ADHOC, NTFP, CIDSE, Community Based Natural Resource Management (CBNRM) project and CARERE. The objective of creating such a team was to provide a balanced and objective approach to the study. While a representative of the provincial forestry department participated in one of the planning sessions prior to the data collection phase, there was no representation by the Forestry Department during the field work at the village level. It is hoped that there will be full participation and representation in future studies by the provincial forestry office as well as the Department of Forestry and Wildlife of the Ministry of Agriculture. (See Appendix 8 for list of participants.)
4. FINDINGS

4.1 Demographics and History of Populations Living in the Hero Concession

Nearly 10,000 people live in thirty-three villages within the Hero concession area. Six of these villages were included in the Cultural Resource Study, representing a sampling of fifteen percent of the entire population affected by the concession. (For individual population lists of all villages within the Hero Concession, see Appendix 6.)

Table 1. Populations of Villages Surveyed for the Cultural Resource Study

<table>
<thead>
<tr>
<th>Village</th>
<th>Santuk</th>
<th>Svay</th>
<th>Kameng</th>
<th>Kralah</th>
<th>Kalay 1</th>
<th>Kalay 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>159</td>
<td>163</td>
<td>317</td>
<td>315</td>
<td>217</td>
<td>346</td>
<td>1517</td>
</tr>
</tbody>
</table>

Source: 1998 Census

The population of 1500 of the six villages surveyed is almost entirely ethnic Kreung, most of whom descend from two ancestral communities going back five generations to around the turn of this century. The first community, consisting of Santuk village (along with Kancheung, Koy, Tangaich, Kreh, Klong and Mas, which were not included in this study), descends from an elder named Ya (Grandfather) Poey. The second community, consisting of the villages of Svay, Kmeng, and Kralah (as well as La’ak, in La’ak commune, which was not included in this survey), descend from Ta (Grandfather) Ka Ol.11

4.2 Relationship between Forest Resources and Community Livelihood

The Kreung people in the study area subsist by swidden agriculture, supplemented by hunting, fishing, and gathering of forest products such as wild fruits, bamboo, vines, honey, resin and rattan. In addition to sites specifically identified as spirit forests, areas used for swidden farming and for collection of non-timber forest products are also intrinsically linked to the spiritual beliefs of the Kreung. Each step of the agricultural cycle is accompanied by ceremonies and offerings to the spirits, which, if not propitiated, could cause a poor harvest. Areas where NTFPs are collected are also treated with respect, as it is believed that resident spirits in those areas can be angered by misdeeds, such as extraction of large logs or excessive wildlife hunting. After heavy logging, for example, it is thought that local people who follow in the footsteps of loggers, (not to log, but to collect NTFPs), may encounter illness or other serious misfortune.

While most NTFP forests were not identified by villagers as places of especially powerful spirits, villagers say that an NTFP forest may also be a spirit forest, although the spirits don't affect people until they are angered. For example, speaking of

11 For oral histories of the surveyed villages, see Appendix 4. According to villagers interviewed in Poey Commune, Ya Ka Ol lived at the time of the war between Cambodia and Siam. He was very poor person and had many children, who made lots of noise. The village hated him because he had too many children, so they pushed him out. First he lived near a spring, and then moved on. Because of the war with Siam, if the Siamese knew where he was they would catch him and take him to Siam to be a slave. Eventually Ka Ol went back to his village, but found no one there, only shoes and some belongings. Then he started his own village. He had six children. Villagers in Kameng can trace their lineage back seven generations, from Ya Ol to Yeak Mun (female) to Yeak Chraw (f), to Yeak Kamboy (f), to Yeak Kmeng (male), to Yeak Cha (m), to Ya Romplang, to Yeak Kanting (m), a 24 year old man who lives today in Kmeng village.
Ramalkhul forest, where Kralah people collect NTFPs, one villager stated: “We don’t know clearly if there are spirits there because we haven’t violated them and they haven’t gotten angry or violated us. We don't know what would make the spirits angry there. We go there just to cut rattan and vines — we never burn the forest, topple large boulders, or cut big trees there. So the arak (spirit) hasn’t affected us. If we cut timber, there could be a problem.”

In several villages, people said that outside loggers would not suffer consequences from the spirits if they logged a spirit forest or a NTFP collection forest. Instead, villagers said, those who would be hurt would be the local people themselves. “The arak won't affect those who cut because they’ll go off to Banlung or wherever afterwards,” said an elder from Kralah. “It will affect the villagers who follow behind to collect the forest products.” The misfortune resulting from angering the spirits, no matter who is responsible, often falls on the villagers.

Villagers in Kalay Commune, where logging has already started in spirit forests and NTFP forests, said that misfortune has fallen on villagers who entered those areas afterwards to collect NTFPs. An elder from Kralah cited the 1992 construction of the hydropower plant in O Chum as another example of local people suffering the consequences of development activity by outsiders: “It was Vietnamese who made the dam, but afterwards it was chun cheat (indigenous people) who had chamkars (swidden plots) in the area and who worked at the dam as police or guards. It was a problem for the people who stayed — the indigenous people — they got sick.”

According to Kralah villagers, seven or eight people from one village alone died after construction of the dam, causing members of the village to ask provincial leaders to provide two buffalos for a ceremony. The Kralah elder felt that the spiritual effects continued today because as recently as 1999 a policeman working at the dam died. “They got a cow to make a ceremony to the spirits because the arak made the policeman die,” the Kralah elder recounted. “Even though the provincial and district medics tried to help, he died.”

NTFP areas are also physically impacted by logging operations. Fallen and discarded logs and underbrush cause the forest understory to become too thick (prey niet), making it difficult to graze cattle or for people to travel through the area to collect firewood and NTFPs. Streams and rivers are also clogged by timber litter, destroying aquatic resources and blocking fish migration. In addition, wildlife living in NTFP collection forests are scared off by logging operations.

For example, Kralah villagers said that logging in Ramalkhul forest, on which they depend for NTFPs, would have a drastic effect on their livelihood: “It would definitely affect us. The vines and rattan, trees would fall into the streams and affect the fish. Everything we use to make our houses and village hall is from there; also malva nut.” All of those NTFPs necessary for subsistence would be negatively affected.

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12 Prey niet is thick tangled forest with tall grasses or thorny vegetation caused by reduced canopy cover.
4.2.1 Swidden Agriculture

The Kreung grow a variety of crops in their swidden plots, including upland (dry) rice, cassava, taro, sugarcane, maize, sweet potatoes, yams, gourds, beans, peppers, sesame, tobacco, pineapples, eggplants, tomatoes, pumpkins and cucumbers. Areas cleared for swidden agriculture (chamkar) are usually not old-growth forest but secondary forest or forest fallows that are eight to twenty years old. In the dry season villagers clear chamkar, drying and burning the timber and underbrush. Chamkars are planted at the beginning of the rainy season and the same plot may be used for one to five years, depending on the quality of the soil. The plots are then left fallow in order to regain their fertility before being cultivated again. On average, highlanders who farm only chamkar have between one and two hectares per family under active cultivation plus another five to six hectares of fallow land.

Land used for swidden agriculture is inhabited by spirits, according to the belief system of the Kreung. The Kreung, like most of the indigenous groups in Ratanakiri, follow spiritual beliefs in regard to farming chamkar. To show respect for the spirits, they perform six or seven agricultural ceremonies each year. They also follow taboos against clearing swidden plots within another village’s cultivation boundaries. If a farmer from one village clears chamkar on the far side of a different village’s chamkar, it is believed that the first farmer and his family — and perhaps the whole village — will fall victim to sickness, death or other misfortune caused by displeasing the spirits.13 (See part 4.3.2 below for a listing of agricultural ceremonies.)

4.2.2 Use and Management of Non-Timber Forest Products

The Kreung have been able to live and subsist in their forests for hundreds of years due to a use and management system learned and carried on through oral tradition. In addition to swidden agriculture, this system includes the use of non-timber forest products. Large-scale logging and cutting of old-growth forests is not commonly practiced, although timber is occasionally collected for house construction. Non-timber forest products are collected from the forest for use as housing materials, food, traditional medicine, and tools. These NTFPs are collected along stream beds, near spirit forests, on mountains, and near village sites.

NTFPs collected from the forest include malva nut (samrong fruit, from the tree Sterculia lychnophora), mushrooms, wild potato, pa’or bamboo (Bambusa sp.), rattan (Khmer: pdao, Calamus spp.), vines, honey, mak prang fruit, koy fruit, wild mango, wild rambutan, roal fruit, resin, bamboo shoots, traditional herbal medicines, wood for knife and cross-bow handles and to make traps (khna), bears, pangolin, small barking deer, common barking deer, water lizard, wild pig, monitor lizard, gaur, lesser mouse deer, squirrel, ground squirrel, snake, monkey and fish.

Construction timber usually comes from a variety of tree species: Dipterocarpus Alatus (Khmer: chhoeuteal tuk), Xyilia dolabriformis (sokram), Diospyros nitida, Dalbergia cochinchinensis (kranhung), Pterocarpus pedatus (thnong), Shorea obtusa (pchek), Anisoptera glabra (phdiek), Afzelia sp. (beng), Dalbergia bariensis (neang nuon), Dipterocarpus intricartus (trâich), Diterocapus tuberculatus (klong), Dipterocarpus obtusifolius (tbeng), and Melanorrhoea laccifera (kroeul).

Non-timber products include those for house construction and construction of tools, such as bamboo, rattan, vines, *kanma* leaf (used for roofing; *Ancistrocladus* sp.), thatch and *beam brung* (used for baskets and *kaphas*, or wicker backpacks).

Forest products, although sometimes plentiful, are usually harvested carefully in accordance with traditions and spiritual beliefs that have evolved to ensure a sustainable harvest in perpetuity. Thus, historically, timber and non-timber forest products have not been in short supply. Populations have been low, demand from external markets non-existent, and until recently there has been very little commercial logging operations to affect NTFP areas.

According to Kreung tradition, NTFPs and wildlife can be collected from certain spirit forests (although not all). In these forests there are taboos in place that regulate the types and amounts of NTFPs that can be gathered or species of wildlife that can be hunted. In one village, Kralah, these customary regulations of land and forest use have been codified in a land and natural resource management plan for use at village level, although this plan has not yet been officially recognized by provincial authorities.\(^1\)

Kreung people living in the study area produce limited income from selling agricultural products, handicrafts and NTFPs. For example during the years that malva nuts are in season (once every seven years), they can be sold for 5,000 riel (about U.S. $1.50) a kilogram. In one season, a family can make 300,000 to 500,000 riel (or U.S. $100-$160). Income can also be made from sales of pangolin or wild fruit, such as *pinyu*, wild rambutan, *koy*, and *rul*. Making and selling handicrafts can also contribute to a family’s income. Handicrafts include *kapha* wicker backpacks, baskets, mats, winnowing trays, and other objects made from rattan, bamboo and vine.

### 4.3 Relationship between Forest Resources and Culture

The unique culture, religion, and subsistence livelihood of the Kreung indigenous group is intrinsically linked to the forests, rivers, mountains, and agricultural lands they have inhabited for hundreds of years. According to Kreung beliefs, spirits are not only found in spirit forests or on spirit mountains. Kreung religion includes beliefs in ancestor spirits which reside primarily in the villages, as well as other spirits that reside in rocks, trees, streams, wind, agricultural fields, NTFP collection forests, and other natural phenomena.

Spirits are believed to hold immense powers, and if properly treated can ward off disease, prevent poor crop harvests, or protect from other calamities. For the Kreung, the spirits can be present everywhere and at any time of day, as evidenced in the fact that many Kreung appeal to spirits prior to such a simple activity as entering a stream to bathe.\(^1\)

\(^1\) Detailed information can been found in the “Draft Regulations for Use and Management of Natural Resources at Kralah village, Poey Commune Ratanakiri,” published by NTFP Project, 1997.

\(^1\) Ian G. Baird, Kaneunngnit Tubtim, and Monsiri Baird, “The Kavet and the Kreung: Observations of Livelihoods and Natural Resources in Two Highlander Villages in the Districts of Veun Say and Ta Veng, Ratanakhiri Province, Cambodia,” NTFP, August 1996.
When illness or misfortune strikes a community, village spiritual leaders who are able to communicate with the spirits are often consulted to intervene. They are called *mey arak* and often specialize in a particular spirit; for example *mey arak brii* would be the spiritual leader in touch with the forest spirits. The *mey arak* can determine what the cause of the problem is, often through a dream. He then organizes the appropriate response, usually in the form of a ceremony or ritual to appease the spirits. A *mey arak* can be a man or a woman, with the role passed along a family line.

A villager from Kalay 2 explained about the *mey arak*: “We know that the spirit has entered the *mey arak* because of their ancestry — their father may have been the *mey arak*, for example. But when the father dies it doesn’t necessarily go to the son but it could go to the grandchild. When the spirit transfers into the person, the person knows how to speak many languages or examine an egg to make predictions, and so on. The *mey arak* is the special person whose dreams tell him why someone has become sick and what to do about it. For example it could be the *arak* in a certain tree causing a child to become ill. The *mey arak* will have a dream and tell the father that the *arak* in the tree was going to take the child up the tree and make the child sick. Maybe the spirit of the tree took the child’s spirit so we cut the tree to get the spirit back. Sometimes the *mey arak* wears a special bracelet and places it across his forehead when he sleeps.”

In addition to the *mey arak*, there are village spiritual mediums who are key to spiritual healing rituals, and who are always women. They know how to consult the spiritual world while conducting a healing ceremony, sometimes by going into a trance or becoming possessed by spirits, and then imposing behavioral taboos on the patient afterwards. Finally, villages may have traditional healers, or *grus* in Kreung, who use herbs and traditional remedies to heal the sick.

Spiritual ceremonies are usually held in the village or the *chamkar*, but they can also be held in nearby forests or on the banks of a lake or stream that is thought to be spiritually potent. According to the requirements of the spirits, a chicken, baby pig, cow, or buffalo is sacrificed and the *mey arak* or village leader will “sein arak”, or invoke the spirits, over a rice wine jar. Depending on the nature of the ceremony different rituals will take place; for example, chanting while dripping rice wine onto axes and knives and dancing with an ax in hand during a ceremony conducted to respect the spirits prior to cutting trees for a *chamkar*. After the formal part of the ceremony villagers may remain together for many hours afterwards, feasting, singing and playing gongs while more jars of wine are brought out to drink.

Beliefs about health and illness are tied to spiritual beliefs, although not always exclusively so. For example during the cholera epidemic in Ratanakiri in 1999, villagers attributed the deaths to cholera, which they said was an infectious disease caused by microbes and poor sanitation. But to explain why some villagers died from cholera and others did not, spiritual factors came into play. In Kmeng village, for example, several villagers got very sick but did not die. The death of the one villager who died of cholera was attributed in part to mistakes he had made in violation of traditional practices. He had taken his cow to the *chamkar* and it had pushed him, making him fall over. Partly in jest, he put the cow on a small hill and circled the


animal, beating a gong, and announcing that he was making an offering to the spirits. After he returned to the village he fell sick and died. “Performing a ceremony in the forest in that way was wrong — he did not follow the proper way to do ceremonies,” explained one Kmeng villager. “He was joking but the spirit was not joking.”

4.3.1 Spirits Respected by the Kreung

In addition to sharing a common ancestry, the Kreung villages of O Chum District share common spiritual beliefs and follow many of the same taboos. Villages are arranged in a circular pattern, with houses opening onto a sala, or communal village hall, in the middle. Each village plants a sacred banana grove near the sala that serves as a place of worship. Taboos exist for certain plants and animals; for example in several villages water taro is not eaten, pythons are not hunted, and wild bamboo (russey prey) is not cut, used, or eaten.

The origin of the wild bamboo taboo comes from the time of Ta Ka Ol, who is said to have found refuge from his enemies in a wild bamboo grove of russey prey during wartime. The story of the taboo against pythons also goes back to Ta Ka Ol, who is said to have asked a python to swallow him when he was fleeing from his enemies. The python declined but asked Ta Ka Ol to kill him because he no longer had any place to live since the forest had been destroyed by war. From that time they made a pact to protect and help each other.18

The Kreung believe in many different types of spirits, which have different powers and intensity. “There are arak everywhere,” said one woman from Kalay 2 village. “There are regular arak, which are not so fierce or strong, living in the water or trees, for example. Other spirits are very powerful, for example those that would become angered if people tried to topple the stone pillars on Charang Yung mountain.”

The chief of Kalay Commune added: “There are old spirits, young spirits, big spirits and little spirits. They are everywhere; for example the place where we plant fruit trees. But the mountain is like the village for the arak — it’s the place where they meet. In other places they are not so big or so fierce, such as in the village, and can't affect us so much.”

Some of the spirits in which the Kreung believe (with names given in Kreung) include:

- **Arak Chendu: Mountain Spirits.** These are the strongest spirits. They can act together with and in the place of other spirits. For example if someone angers the arak nam (house spirit), it might be arak chendu who metes out punishment. “If we don’t respect the house spirit, it can send us to the arak chendu,” explained a villager from Svey. “The house spirit is like the head of the village, while the mountain spirit acts like the policeman. If someone does something wrong in the village, the house spirit can complain to the mountain spirit, who will take action.”

- **Arak Tmar: Stone Spirits.** Spirit found in boulders and large stones; generally thought to have similar power to mountain spirits.

- **Arak Nam: House Spirits.** These spirits take care of people in the home. If treated properly they can protect against illness, either through their own

18 Colm (1997), p.32.
power, or by summoning the stronger elemental spirits such as Arak Brii (forest spirits) or Arak Chendu (mountain spirits).

- **Arak Sarok: Village Spirits.** The village spirits reside in the sacred banana grove in each village. They watch over the village and make sure people don't get sick. The mey arak sarok determines through his dreams the timing and type of ceremony villagers should make to the village spirits of the sacred banana grove. The village spirits and the forest spirits may work together; for example if a villager is beating or cursing his children and does not respect the village spirit, the village spirit might summon the forest spirit to punish the villager.

- **Arak Long: Tree Spirits.** These spirits reside in large trees, not in the smaller trees used for house construction. If illness is attributed to a tree spirit, that particular tree might be cut down or burned because it is thought the tree is trying to catch or take away the ill person’s spirit. Arak chree is a tree spirit that lives in chree (ficus sp.) trees, and which is more powerful than many other tree spirits. Arak chree can give people a strong headache or even make them go crazy.

- **Arak Brii: Forest Spirits.** These are different from spirits thought to reside in particular trees. Ceremonies are performed for Arak Brii prior to cutting chamkar.

- **Arak Glung: Water Spirit.** Found in springs.

- **Arak Kanchung: Guardian Spirit (Arak Devada).** Located in a spirit house at the entrance to the village, where villagers perform ceremonies for this spirit to call for rain.

- **Arak Sy: River / Waterfall Spirit.** The spirits of waterfalls or deep places in streams or rivers. The Arak Sy might be angered if people try to fish from deep places in the river, or if people fish without asking the spirits. If these spirits want someone to die, sometimes no offering can help.

- **Arak Kalaing Daak: Water Spirits that Affect Children.** These spirits affect toddlers or very young children who swim or play around in the water without their parents’ supervision. The spirit might be offended, for example, if a child makes a small dam in a stream. Later the child might develop a fever and loss of appetite, which parents would blame on the Arak Kalaing Daak. Generally these spirits are not angered if children are bathing or playing around a little, but if they do nonsense for a long time it could be problem.

- **Arak Chyal.** These are small spirits that live in the village and around the houses and are responsible for minor illnesses.

- **Arak Payok Payu (also called Arak Kayok): Spirits of the Dead.** These spirits can make people become crazy or possessed (kaelt tmop in Khmer). After someone dies, ceremonies should be performed to encourage the person’s spirit to leave the living world and go on to the next. Otherwise, the person’s ghost may haunt people who farm chamkar near the grave. The ghost might beg for rice or medicine and if the person does not offer anything the

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ghost might get angry. If the person does not conduct a ceremony the Arak Payok Payu might cause the person to die.

4.3.2 Religious Ceremonies

Every stage of the Kreung agricultural cycle, from clearing land to planting to harvesting, is organized around regular ceremonies and feasting rituals to appease the spirits and bring a good harvest. Many of the agricultural ceremonies are held in the swidden plots, or chamkar, itself. Even deciding on the site to plant a swidden plot involves invoking the spirits. “First we walk in the forest and look for a good place,” explained one villager from Kalay 3 village. “We look at the soil and see if it’s appropriate, and then cut a little bit [of the vegetation] there. Afterwards we sleep there or in the village and see what kind of dream we have, in order to decide whether to plant at that place. If it’s a good dream we take the chamkar, if it’s bad we don’t take it. If we dream about making an offering, we make a ceremony.”

There are at least seven ceremonies performed annually in regard to planting chamkar, although this can vary according to family and what their dreams tell them to do. Regular ceremonies performed by Kreung include the following:

- **House Ceremony:**
  If the mey arak has a dream about someone’s house, the family might make a ceremony to insure better health. Usually one pig is sacrificed each year in a house ceremony. If illness persists for several years, a buffalo or pig might be sacrificed as part of a house ceremony.

- **Village Ceremony**
  Village ceremonies are generally held once a year, in January or February, to bring long life, health, and happiness to everyone in the village. During the ceremony outsiders are not allowed to enter the village for five days. The elders sacrifice and eat one black chicken and one white chicken at the entrance to the village, where a “spirit door” is constructed to notify outsiders not to enter. If someone violates the taboo and enters the village, illness may result. Those who enter the village may have to stay for the duration of the ceremony. Additional special village ceremonies may be conducted at other times during the year if everyone in the village gets sick, in which case the path to the village is closed and visitors are barred from entry.

- **Offering to sacred banana spirits**
  Offerings to the spirits of the sacred banana grove in each village are performed to ask for peacefulness for the village. Offerings depend on what is requested by the sacred banana spirit, as communicated through dreams to the mey arak sarok, who is in charge of the sacred banana spirit. During the ceremonial planting of sacred bananas, animal blood may be thrown over the sacred banana to make harmony in the village. Chicken, cow, buffalo, or pig blood is used depending on the wishes of the spirit.

  The sacred bananas are planted by the village elders and the mey arak sarok, who also cut and distribute the bananas to all families in the village when the bananas are ripe.

  During the banana planting, if there is a conflict within the village, the people in conflict should bring a piece of a bottle to the planter, who throws it to the side of the banana. Afterwards, a period of ten days follows, in which it is taboo to speak about
the conflict by all villagers. If this taboo is broken, the person who breaks it will die. After the ten days, the people in conflict can bring the issue to the village for resolution.

The sacred banana grove serves as a barometer of village health and its respect for the spirits. When the sacred banana becomes unhealthy with yellow leaves, people believe that there will be bad events in the village. Villagers will ask the *mey arak sarok* to determine what wrongdoings may have been conducted and determine what offerings should be made to appease the spirit and promote resolution of the conflict or problem.

“If those bananas die, everyone in the village will die,” explained a villager in Kmeng. “These banana groves are like our pagoda — we respect them. No one would ever steal those bananas, and we don’t pick or eat them, unless there’s a ceremony performed by the elders and the *mey arak*.”

Respect for the banana spirits originates in a dream that Ta Ka Ol had many years ago. Belief in the banana spirits has persisted to modern days. Villagers report that when young men from O Chum were sent to the Thai border in the 1980s to conduct dangerous de-mining work, they took with them earth and bits of banana root or stem from the sacred groves to protect them from harm.

- **Offerings to Village Guardian Spirits (Sen arak greydeh)**
  Offerings are made to village guardian spirits at the small “arik devada” cottages outside the villages to ask for rain in times of drought.

- **Offerings to Forest Spirits (sen prey arak)**
  These offerings are organized in February and March. They are made to ask the forest spirits for permission to make *chamkars*. Generally, pigs, chickens and rice wine jars are offered according to the ability of each family.

- **Offerings to Tree Spirits (sen long)**
  These offerings are held in March and April to ask for protection for villagers clearing forest for *chamkar*, for example, to guard them from falling limbs, etc. Generally, chickens and rice wine jars are the offerings.

- **Offerings to Fire Spirits (sen oony)**
  These offerings are in April after forest litter and weeds in a *chamkar* have been collected and burned. Rice wine jars are offered and chickens are sacrificed in order to call rice spirits and encourage a good crop and harvest. Clothes are dried in the sun in the villages. A forest resin (*chor tung hung*) is burned in the *chamkars*, making smoke.\(^{20}\)

- **Offerings to Rice Seed Spirits (sen booch srow)**
  These offering are held in May or June before seed is brought for planting to encourage a good harvest. Some animal blood is sprinkled on the rice seed.

\(^{20}\) The resin collected from the tree is sweet and aromatic. *Chor merak* can be used instead if *chor tung hung* is not available.
• **Offerings to “Rrun” Tree Spirits (sen pare'run)**

These offerings, to the spirits of the *rrun* tree that is used to make *kapha* (baskets), are held in July and August when the rice becomes mature and is in large clumps. *Rrun* trees and other NTFPs are brought to the *chamkars* and chicken and rice wine sacrifices are made. A long thin piece of bamboo is slit and carved into a decorative pole, with tasseled hangings coming off its arched end. It is placed in front of homes in the *chamkar* as well as in the village. Offerings are made to the *rrun* trees to insure a good harvest and good quality forest products to make handicrafts.

• **Offerings to Threshed Rice Spirits (sen preh obok)**

These offerings are held in the *chamkars* in September and October when villagers bring the rice in from the *chamkar* to mill it. The rice spirits are invoked to ask them to provide enough rice to eat for the next year. Rice is cooked and participants in the ceremony offer rice to each other, sometimes putting food in other people’s mouths, until everyone is full.

• **Offerings to the Rice Spirits in the Storage House (sen srow lowng chroomrook)**

These offerings are in October and November. A small ceremonial house is built in front of a *chamkar* and people bring all varieties of rice seed to it. A ceremony is conducted to summon the rice spirits to the rice storage house in the *chamkar* and to request that the spirits keep the rice safe. Rice wine and chicken sacrifices are made.

• **Offerings to Rice Spirits in the Village (sen joh chroomrook)**

These offerings are made when rice is transported from the rice storage house to the village to eat. The offerings are to keep rice in the village safe and to both ask and ensure that it not to be depleted too quickly.

• **Offerings to Heal Illness**

Illness is often attributed to a person’s spirit getting lost or captured, either by an *arak* or by a spirit of the dead. There are many ceremonies to ensure health and to overcome illness. Patients may be brought to a spirit medium, who will use various techniques, such as rubbing a boiled egg on the medium’s body or looking to the medium’s dreams, to determine the cause of illness and possible remedies. In Kreung culture it is customary for visitors to be asked to wipe their forehead with a piece of cotton or a leaf (*chum noin* ritual). Should a child later fall ill as a result of the visitor’s presence, these leaves or bits of cotton are used in a healing ceremony.21

• **Weddings and Funerals**

There may be much feasting and drinking at a wedding, but offerings are not specifically made to the spirits at these times, nor are they summoned in other ways. Weddings may occur after the annual ceremony for the Village Spirits. Young unmarried women often sleep in small elevated houses in front of the main family

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21 White writes that “…following the hilltribe belief that our souls journey out of our bodies while we dream, it is believed that during the journey our soul can be snatched away by another soul belonging to a living person. These latter forces are called ‘byuu’ by the Kreung and are much feared, a common phrase uttered with great gravity at ceremonies being ‘byuu cha bani’ (the byuu eat people). It is believed that the longer such an illness progresses, the closer the patient is to death, as his/ her soul is gradually consumed by the supernatural forces.” White (1995), p. 32.
house, where they may receive male visitors in the evenings. While young people may sleep together before marriage, pre-marital sex and pregnancy is surprisingly rare. Decisions to marry are made first by the couple, who then go to a village marriage mediator (also called an introducer; “ganong” in Kreung and “mey andaelt” in Khmer).\(^\text{22}\) Afterwards the couple tells their parents and seeks their permission to marry. Elders are invited to officiate at the engagement. Traditionally, weddings involve equal payments by both families to cover the cost of the ceremony. Relatives of the bride and groom and village elders are invited to drink rice wine at the bride’s house. This is accompanied by presents of food and drink from guests, as available. Newly married couples live with the family of the bride after marriage for several years and then move to live with the groom’s family for another two or three years, alternating in this way until they set up their own permanent household in the wife’s village.\(^\text{21}\)

For funerals, a pig, chicken or buffalo might be sacrificed, depending on the ability of the deceased person’s family. This is followed by drinking of rice wine, gong playing, and singing. Family members might burn a candle and tell the spirit of the dead person to go to the other world, make new friends there, and not remain around the village. Graves can be located any place, and are not restricted to specific sites.

### 4.3.3 Spirit Forests

For the Kreung people, spirit forests are the most powerful and spiritually significant places in their landscape. They play a central part in the lives of Kreung people and are treated with profound respect. Spirit forests are often identified through a dream, particularly by a spirit medium or mey arak. Sometimes a spirit forest makes itself known as a result of a powerful spiritual encounter in that particular forest. And sometimes a spirit forest is identified after a member of the community falls ill or dies after going to the spirit forest. Illness or bad dreams are often attributed to spirits who have become angered by disruption of the natural environment, for example, after logging or collection of NTFPs in a spirit forest.

#### 4.3.3.1 Criteria for Classification as a Sacred Forest

Characteristics of spirit forests and spirit mountains identified by villagers in the study area included the following:

- Spirit forests often have distinctive physical characteristics, such as large vines, boulders, and large trees. The tops of spirit mountains may be characterized by distinctive vegetation, deep wells or stone columns, as in the case of Charang Yung.

- Preternatural phenomena such as bright lights or loud sounds, or voices, cries, laughter or gong-playing from invisible creatures distinguish many spirit forests. “If we hear the sound of crying it means someone in the village died already and the arak is crying,” explained one elder from Svay.

- When a someone goes to a spirit forest and offends the spirits, that person — or a member of their family — may become ill, crazy, or die afterwards.


• Often the resulting illness has distinctive characteristics, such as blood coming from the nose or mouth, severe pain in the throat or neck, or the person becoming crazy.

• To appease the spirits, it is important to do a ceremony soon after returning from a spirit forest, although that does not guarantee that there will not be repercussions.

• At some spirit forests no one, male or female dares go. In other spirit forests, women and children are advised not to enter; mature males might go to those forests to collect NTFPs, although sometimes traveling in groups for safety.

• Some spirit forests have restrictions on hunting or trapping certain types of wildlife, and whether any wildlife killed can be brought back into the village. In most spirit forests, if one shoots and misses an animal it is advised not to try again because it means the spirit does not want to “give” the animal to the hunter.

• Some spirit forests are thought to have chamau, or forest people, living there. Chamau are often thought to be the source of the sounds of laughter and gong playing that is characteristic of spirit forests. At times, their presence may be known by dogs barking and running around. Chamau are described differently according to the spirit forest where they live. Those living at Phnom (mountain) Dak are described by Kalay villagers as “little white people with blonde hair.” In Svy village chamau are thought to reside on Phnom Tateung, where they are described as long-haired creatures with hairy hands and legs but hands that look like knives, and which can be used to cut through the forest. Chamau are generally seen as fairly benign creatures, although they may chase humans who come into their territory, screaming or laughing at them. Chamau are similar to arak, although unlike arak, humans can occasionally see a fleeting glimpse of them. An elder from Svy explained the difference between chamau and arak: “The chamau is an arak also, but it’s not connected to illness. We can see chamau, but we can never see an arak. However when we dream about an arak, it can look like a person or like our ancestor.”

• Most spirit forests are respected and recognized by the many villages that use those forests. For example, Phnom Ling Ling is recognized and respected by all villages using that forest - Kalay, Svy, Kameng and by other villages in Kachon commune.

4.3.3.2 Local Regulation of Human Interaction with Spirit Forests

Before entering a spirit forest to hunt or collect forest products, villagers often organize ceremonies and make offerings to the spirits in order to obtain their permission. Should calamity fall after someone has entered a spirit forest, appeasement ceremonies can be organized afterwards, although sometimes it is too late to prevent illness or death.

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24 Captain Henry Baudesson noted in his 1932 account of his travels in Indochina that the legends of the indigenous people in both the Malay Archipelago and Indochina told of the existence of extraordinary human beings with a “razor-edged membranes on the forearm which was used to cut down branches obstructing their path.” Henry Baudesson, *Indo-China and its Primate People*, Bangkok, White Lotus Press, 1997, p. 5.
In general the Kreung do not permit the felling of large trees in spirit forests, fearing that the spirits will become angry and cause sickness or death in the village. If hunting or NTFP collection is to take place in a spirit forest, the spirits must be asked first. People believe the reason they are able to successfully shoot a deer or other wild animal is only because they have asked permission first, and that the spirits have “given” that animal to them. In some spirit forests there are restrictions on what kind of wildlife can be hunted and whether the meat can be brought into the village or not. Villagers from Kralah, for example, have a taboo against hunting pythons and believe that if a monkey is shot, its flesh should not be brought into the village. “It has been this way since the time of Ta Ka Ol,” said one villager. “If the dead monkey is brought into the village, the spirit of the forest will follow it into the village. If someone does this we fine them one jar of rice wine and one pig. The tradition comes from Ta Ka Ol, who had a dream in which the arak told him if you eat monkey, you’ll have difficulty, your village will disappear, and you will get sick. If you follow the taboo, your village will have health and happiness.”

In many cases, however, the power of a spirit forest is too strong to allow any human activity at all (visiting, hiking, speaking loudly, hunting, gathering, etc.). Children and women are discouraged from going to some spirit forests. Hunting of certain wildlife that are regarded as representatives or property of the spirits is taboo in certain spirit forests.

4.3.3.3 Forest Types, Wildlife, and Vegetation in Spirit Forests.

Spirit forests are characterized by local people as deep forests with old growth vegetation, large vines, and extraordinary physical features such as large boulders, deep naturally-formed wells, ponds, waterfalls, saltlicks that draw wildlife, and even in one case, stone columns. “Forest people,” or chamau, are thought to reside in some spirit forests, accounting for the voices, laughter, gong-playing, or other evidence of magical or unexplained human activity that villagers encounter in spirit forests.

While villagers can collect non-timber forest products in some spirit forests — but only certain people, and they have to be careful — spirit forests are primarily sacred sites, not resource collection areas. “Spirit forests are not important for our use, but for us to respect,” said a villager from Kalay 2. “Those who do collect NTFPs in spirit forests should ask permission first.”

The spirit forests in the study area are generally semi-evergreen forests with many different types of trees. These include *Afzelia xylocarpa* (Khmer: baeng), *Dalbergia bariensis* (neang nuon), *Shorea hypochra*, *Dipterocarpus intricatus* (traich), *Lagerstromeia duppereana* (sralao), *Lagerstroemia calycultus*, *Lagerstroemia cochinchinensis*, *Dipterocarpus alatus* (chhoeuteal tuk), *Dialium cochinchinense*, *Pterocarpus pedatus* (thnong), *Sindora cochinchinensis* (krakas) and *Shorea obtusa* (pchek).

There are also plentiful NTFPs in the spirit forests in the study area, including malva nut, rattan, vine, bamboo, wild rambutan, koy, rhol, pinyu, mak prang, run tree and traditional medicine. Wildlife includes tiger, bear, small barking deer, common barking deer, lesser mouse deer, bison, snakes, gaur, water lizard, monitor lizard, pangolin, and monkey.
**4.3.3.4 Effects of Logging and Other Impacts on Spirit Forests**

The traditional forest-based culture of the Kreung people remains mostly intact within the area of the cultural resource study. If government agencies and national and international corporations do not consider the impacts of development activities in this area and other areas with forest-based ethnic minorities, indigenous culture could be destroyed in Cambodia.

Communities in the study area believe that adverse impacts of logging operations fall largely on surrounding villages, and not on outsiders working as logging company employees. Villagers said that outsiders are not affected by the environmental degradation or the spiritual repercussions of the logging, because after they finish their work, they generally leave the area to return to Banlung or other parts of Cambodia, or even other countries. Villagers said that when they go into a forest to collect NTFPs after it has been logged, they fear they might fall ill or meet with an accident.

For the Kreung, the physical impacts of the logging operations are intertwined with spiritual repercussions, as in the example of drought or flooding. As one Kalay villager explained it: “If too many trees are cut, then the spirit of the sky gets upset with the people and makes a drought. Or the forest becomes an empty field. When there are no trees to protect from storm or wind, there can be more rain, and flooding. Flooding is also caused when loggers cut the tree and block the stream, which affects the natural flow.”

Villagers believe that logging companies should contact local people before beginning operations in their area. “If outsiders come and cut, they would not get sick, but the village would,” said a villager from Kralah. “Before cutting, first of all they should make contact with the village.”

 Communities within the study area reported the following impacts of logging by the Hero Company:

- People who enter spirit forests or NTFP collection areas that have been logged become sick because the spirits have become angered.
- Loss of wildlife habitat.
- Loss of forest for subsistence income and NTFPs.
- Damaged or destroyed water sources.
- Loss of fish habitat and damage to streams from logging and road construction.
- Loss of soil due to erosion.
- Drought caused by angry spirits and deforestation.
- Difficulty collecting NTFPs because of logging debris.
- More forest fires because of logging debris.
- Loss of land should outsiders make land claims on logged areas.
- Destruction of traditional culture by outsiders who have access to young girls in the villages.
- Loss of village solidarity and sense of well-being as a result of increased self-interest by villagers hired to work for the logging company.
4.3.3.5 History of Spirit Forests within the Study Area

**KALAY 2 AND KALAY 3**

The two villages share five spirit forests: Phnom (mountain) Dak, Phnom Charang Yung, Phnom Ngol, Phnom Nhor, and Phnom Lal. In addition, the head of O Bat stream is seen as a special place for the spirits, causing some people to avoid going there.

1. **Phnom Dak**

Villagers have respected the spirits on Phnom Dak for generations. They also believe that *chamau* (forest people) live there, who are described as “small white people with blonde hair.” After an incident in 1997 when a villager went to Phnom Dak to collect NTFPs, local beliefs became stronger. The villager described what happened: “Two years ago when I was at Phnom Dak my dog barked, and then I heard a laughing voice from the tree. At the same time the wind came up. I looked up, but didn’t see anything, even though the sound of laughter came nearer to me. After looking around I ran away. The screaming didn’t stop the whole time.” After he arrived back at the village, his mother fell sick for two days, and then died. “If an outsider goes to Phnom Dak they will get lost or go crazy,” said one villager. “If local people from the village go, it’s not always a problem.”

Phnom Dak is known for its *sokrom* trees (*Xyli xylocarpa*) — a commercially valuable tree — and the fact that it has a salt lick. NTFPs include bamboo, rattan, vines, *kanma* leaves, and thatch. Wildlife such as monkeys and deer feed there; it is also a breeding area for some species.

2. **Phnom Charang Yung**

Stories about Phnom Charang Yung has been linked with the Kalay villages for many years. “Charang Yung is the birthplace of the big spirit, of the *arak,*” said one villager. The mountain’s origins as a spirit forest go back to the story of conflict between two brothers named Krung and Yung, and another man named Yong. Yong had erected columns of wood at the top of the mountain, to make a house with a clear view of a young girl named Nang Cheang and her sister, Nang Reang, who lived in a nearby village. Krung and Yung were jealous of Yong and started fighting with him. After defeating Yong, Krung married Nang Cheang and Yung married Nang Reang. The wood columns turned into stone pillars, eight of which remain today at the top of the steep mountain. The others have broken and fallen into the valley below.

Most villagers are afraid to go to Phnom Charang Yung. Those who do dare to go are advised to prepare a ceremony for the spirits first. Villagers say that if logging causes the current columns to topple over, there will be much lightning, windstorms and drought.

3. **Phnom Nhor**

In Sihanouk times, a villager went to collect grass on Phnom Nhor to make brooms. When he did not return, others went to look for him. They found his body on the top of the mountain. One month later, another villager went to collect bamboo shoots and died on top of the same mountain. A spirit medium dreamt that the people who died had angered the spirits of Phnom Nhor. From that time, local villagers have held strong beliefs in the spirits of Phnom Nhor.
4. 5. Phnom Ngol and Phnom Lal

Phnom Nyol and Phnom Lal are considered spirit mountains by both Kalay 2 and Kalay 3 villages. If people make noise there or cut trees, villagers believe that they will fall ill. Villagers have seen fires and heard the sound of gong playing from both mountains but when they go to look for the source, they do not find anything. Chamau, or forest people, are believed to live on Phnom Ngol. These two mountains are important areas for wildlife breeding and NTFP collection. In addition, salt licks, which attract wildlife, can be found at the foot of the small mountain near O Tuk stream, and from the apex of O Tuk stream to the foot of Phnom Lal.

When the study team visited Kalay commune in August, the Hero Company had begun to log at the foot of Phnom Lal. Villagers report that since logging has begun, local people who have gone to Phnom Lal to collect NTFPs have had accidents or fallen ill, with blood coming from their ears and noses.

KAMENG VILLAGE

Kameng Village has six spirit forests: Phnom Gong, Phnom Baru, Phnom Em Om, Phnom Pru, Phnom Nang Cheang, and Phnom Krae Deh (listed in descending order of spiritual intensity.) Villagers say that three of the mountains — Phnom Gong, Phnom Nang Cheang and Phnom Pru — are closely related, like mother and children. In addition, there is also a sacred stream, O Bayu (known as O Tamop in Khmer), which is near Phnom Baru and flows into O Lang Touch. Villagers report that the spirits of O Bayu have caused deaths there, confirmed by the dream of a mey arak. In 1997, two people made a chamkar and chamkar house on the banks of O Bayu. One of them fell sick and died, causing the villagers to perform a ceremony at the stream.

6. Phnom Gong

Kameng villagers believe that Phnom Gong is the strongest of all the spirit forests. Stories have been told for generations about the sound of gongs, of crying and of lights on Phnom Gong. While it is not prohibited to go to Phnom Gong, there are taboos against speaking loudly, cutting large trees or a certain variety of bamboo (russey kley), and hunting and eating most types of wildlife on the mountain. In 1994, a villager named Ta [Grandfather] Bling made a chamkar and set some traps at the foot of Phnom Gong, unintentionally catching a monkey. Trapping a monkey is considered bad luck because monkeys are regarded as children of the spirits. Angered at his bad luck, Bling cut the finger off the money and released it. As a consequence, when he returned to the village, his grandchild died.

In the past villagers collected bamboo on the mountain, but that practice ended when some people fell ill afterwards. Prohibitions on cutting russey kley bamboo on Phnom Gong came about after two villagers collected bamboo shoots. That night they dreamed that they should not do this again because the bamboo was like sugar-cane [nourishment] for the spirits. If they did collect again, they believed the spirits would kill them.

Villagers do not cut chamkar on or near Phnom Gong, fearing sickness might ensue. The closest they plant chamkars is 100 meters from the foot of the mountain. Several types of fruit, including ruinh, guey and guey domrey, can be collected on Phnom Gong without repercussions from the spirits.
Kmeng residents insist that if outsiders cut all the large trees on Phnom Gong or even at the base of the mountain, all the villagers will die. They believe that a protective buffer zone of at least one kilometer should be developed around Phnom Gong and its adjacent sister mountains, Phnom Nang Cheang and Phnom Pru.

7. Phnom Em Om

Kmeng villagers did not have strong beliefs in spirits on Phnom Em Om until recently, in part because the mountain is quite far from Kmeng. However, in 1995, a villager named Ramin built a trap (kanah) on the mountain, which injured a gaur (wild ox; kating in Khmer). Another villager, Ta Chin, followed the bloody footprints of the gaur into the forest and killed it. He brought it to the village to eat. A few days later he got sick and died, as did five other people. A mey arak determined that the killing of the gaur at Phnom Em Om caused the deaths of the villagers. Villagers now believe they have to be careful not to disturb the spirits there. If they go to collect forest products, they tend to travel in groups. Phnom Em Om has malva nuts, vines, rattan, bamboo, sunbears, gaur, porcupine, slow loris, and deer.

8. Phnom Baru

Phnom Baru is thought to have chamau (forest people) because villagers can hear the sounds of their screams. In an incident in 1966, a woman named Choy made a chamkar at the foot of the Phnom Baru. Choy had many children who made lots of noise, beating gongs and dancing. This angered the spirits, who made her go crazy. She climbed trees, slept in pig sties, and then died, with blood coming from her nose and mouth. In another incident, a man named Ta Kungchung made several chamkars at Phnom Baru, Phnom Em Om and near O Bayu and O Lang streams, which are not far from Phnom Baru. At O Lang stream, Ta Kungchung fished using poison. He cut chamkar near a deep spirit pool (drongklong brah), at the bottom of which was a gong. People knew a gong was there because when they struck down into the water with bamboo poles, they heard a clanging sound. Ta Kungchung’s cutting of chamkar near a spiritual site and his use of poison to fish angered the spirits, and afterwards he disappeared. Villagers tried to find him by diving under the water but were unsuccessful. The next day they saw his body floating in the stream with 60 kilograms of fish. The gong that was under the deep pool had become a dragon. Villagers say they know this because when they arrived at the stream, they heard the sound of a dragon falling into the water from a chree tree (ficus sp.) near the pool. The chree tree had teeth marks on it, which the villagers attributed to dragon bites. For all of these reasons, villages have great deal of respect for the spirits of Phnom Baru.

Phnom Baru has many types of trees (koki, traich, kra kas, chhoeuteal), kanma leaves, monkey, guar, deer, gibbon, porcupine, sunbear, and slow loris, as well as several types of traditional medicines such as lavang, kadang, and hal. Generally it is not a problem to collect NTFPs at Phnom Baru. “The arak is not angry unless you take the big trees,” said a Kmeng villager. “But we have to be quiet in the forest.”

9. Phnom Pru

Although villagers have long believed that chamau (forest people) live on Phnom Pru, they did not have strong beliefs about the spirits on the mountain until recently. In 1996, a villager named Savath went to place traps (kanah) and collect resin from Phnom Pru. When he came back he got sick. After meeting a spirit medium, he made an offering and then recovered. He went two more times to Phnom Pru to tap resin.
The third time he became seriously ill, with a swollen neck. Even with modern and traditional medicines and many offerings by his family, he did not recover, and died. The spirit medium concluded that he had disturbed the spirits of Phnom Pru too many times.

In 1999, a man named Ta Ngom went to set traps and collect resin at the foot of Phnom Pru. Afterwards, the spirits became angry so he made a ceremony. Then he went a second time. Again he got sick, recovering after making offerings. The third time, he avoided the spirit forest and went to a stream coming from the mountain to fish using poison. When he came back to the village he fell sick and died.

10. Phnom Nang Cheang

In 1971, Tun Village (north of Kancheung Village) in Taveng District joined the Khmer Rouge and moved to the forest on Phnom Nang Cheang to cut chamkar. They cut bamboo, rattan, vines, kamma leaves, trees and thatch in order to build houses. Half the village, or approximately thirty people, got high fevers and headaches and died. The other people left the area because they thought the epidemic started because the spirits had been disturbed. Since that time, nearby villages and Tun village in particular have had strong beliefs about Phnom Nang Cheang.

11. Phnom Krae Deh

Krae Deh means lightning. The mountain got this name and its status as a spirit forest after an incident in 1945, when a villager named Pram came to do swidden agriculture on the foot of the mountain. One day it rained and lightning hit him, causing him to become unconscious, and killing two of his pigs. In 1960, five people, including a man named Blong, went to collect mangoes on the mountain. When Blong returned to the village he became sick because he had violated the spirits by cutting the mango tree. After offerings of a pig and rice wine, he recovered.

KRALAH VILLAGE

12, 13. Prey Arak Tranuk Thom and Prey Arak Tranuk Touch

Kralah has two spirit forests not far from each other, which villagers have respected for generations: Prey Arak Tranuk Thom (Large Tranuk Spirit Forest) and Prey Arak Tranuk Touch (Small Tranuk Spirit Forest). Tranuk is the name of a rare type of tree. During the 1970s when the government was building a road between O Chum and Taveng, construction workers slept under the spirit tree of Prey Arak Tranuk Thom for one night. Three people died the next morning, and two more died when they arrived back in Banlung. In another incident in 1975, a Kralah villager named Ta Pnao cut chamkar near the spirit forests. One day after going to his chamkar to collect crops, he started to have convulsions. Blood came from his nostrils and he started to speak Khmer, Lao, Jarai and Tampuen — languages that he had not known before. Half an hour later he died. After these events, the villagers developed strong beliefs about these forests.

In addition to the trees called tranuk, the two forests have a variety of wildlife, including the white monitor lizard and white squirrel, neither of which is hunted because of taboos. Some NTFPs can be collected but only at the edge of the forests, not in the inner core.
Kralah villagers not only want to protect the two spirit forests, but the patch of scrub forest and fallow chamkar that connects the two areas. “It’s important to protect both the small spirit forest and the large one,” said a Kralah villager. “The spirits can communicate with each other. The area between the two forests is old chamkar. We won’t cut the old chamkar between the two forests because of the arak — we’d clash with the spirits.”

14. Phnom Kapung

Kralah villagers do not believe the spirits on Phnom Kapung are as strong as those in the two spirit forests described above. During the Sihanouk regime, villagers used Phnom Kapung for hunting and collecting bamboo and even for raising cows. Beliefs in the spirits became stronger in 1979 when someone in the village became ill and had a dream that their illness was caused by the arak from Phnom Kapung.

15. Phnom Treng

Although Kralah villagers said that there were spirits at Phnom Treng, they said it was not a very important spirit forest.

SVAY VILLAGE

Svay has five spirit forests: Phnom Ling Ling, Phnom Yol, Phnom Krae Deh, Phnom Bak and Phnom Tateung, (listed in descending order of spiritual intensity).

16. Phnom Ling Ling

Phnom Ling Ling is considered the most powerful of Svay’s spirit forests. On top of the mountain is a field, with large boulders, bamboo, and dry-forest dipterocarps such as tbeng (Dipterocarpus obtusifolius) and khlong (D. tuberculatus). Cucumbers and tobacco grow among the rocks. There is also a well on top of the mountain, but only the lucky can see it. If people try to find it they will be unsuccessful. “If the arak wants us to see the well we will,” said an elder from Svay. “If you feel thirsty and want to find the well you can't unless the arak let’s you. We can drink the water but not take it away or we’ll get lost.”

There are several taboos about hunting wildlife on Phnom Ling Ling. If a villager shoots a monkey he must cook and eat it on the mountain. If he takes the monkey flesh back home, villagers said, “the spirit will follow him and make him crazy and die.” If villagers see a turtle when walking up the mountain, they can catch it and put it into their kapha (backpack) but they must turn back to the village at that point. “If you see the turtle, it means the arak gave it to you,” said a villager. “The turtle is the animal we sein (respect; perform ceremonies for).”

Villagers can go to Phnom Ling Ling to collect NTFPs, but they must be quiet in the forest and not curse. Only small trees like bamboo can be cut, but not in large quantities. If villages collect the tobacco and cucumbers growing around the rocks on the top of the mountain and try to bring these to use in the village, they will lose their way. “You’ll get confused and go in circles in the thickets,” said a villager. “If you leave the cucumbers and tobacco there you’ll find your way.” Villagers recounted the story of how a soldier during the Khmer Rouge regime went to Phnom Ling Ling and absent-mindedly put a cucumber in his pocket. He got lost until he realized he had the cucumber and discarded it; then he found his way.
People from Fang village in Vonsai District once went hunting on the mountain and caught a monkey. They cooked it to eat on the mountain, but cut the head off to bring back to the village. Although they kept the head near them while they ate the rest of the monkey, it mysteriously disappeared. In another incident in 1998, a person collecting malva nuts on this mountain heard footsteps and saw a whirlwind on the mountain. He started to feel sick, so his friend carried him back to the village. His neck became swollen and very painful, and he soon died.

17. Phnom Yol

Phnom Yol, a spirit mountain recognized and respected for generations, has a small pond and boulders on top. Village elders said in the past they used to hear gongs and other noises in the forest, but when they went looking, they did not see anything. “If we hear the sound of crying it means someone in the village has just died and the arak is crying,” said an elder from Svay. Villagers tell the story of a man named Ta Teu, who went to cut timber on Phnom Yol for his house. That night he dreamed that he was not allowed to cut any more trees and that if he did, the spirit of the wild dog would bite him and he would die. Later, in fact, he died. During the Sihanouk regime, Ta Chu from Santuk village went to clear forest on Phnom Yol for chamkar. He cut a small piece of forest and then returned to the village to sleep and learn from a dream whether he had chosen the right spot for his chamkar. That night in his dream the spirits told him not to cut at that site because it belonged to them. In his dream he saw the spirit cut chamkar near where he had cut. The next morning he went to the area and saw that part of it had been cleared already. However he ignored his dream and continued to cut chamkar. He became very sick and as he was dying, people heard his spirit making the cry of a barking deer as it left his body.

During the Khmer Rouge regime, Ta Cheng from Svay dreamed he went to Phnom Yol and found a market and many soldiers in a large building there. He shook hands and chatted with the soldiers, who were spirits fluent in Kreung, Lao and Khmer. Villagers believe that if one dreams about shaking hands with spirits, the spirits will not make a problem with the village. However if a spirit points at someone in a dream, that person will get sick or die. This dream was taken as a sign that spirits were present at Phnom Yol and should be respected.

Villagers from Svay do not go to Phnom Yol very often to collect NTFPs. When they do go, they do not collect very much and collect only at the foot of the mountain because they are afraid. Generally wildlife is not hunted on Phnom Yol. “If you take one animal, the spirits will take one of us,” said a Svay villager. “If the spirit can’t get the hunter, it will get someone else — the spirit doesn’t care.” If outsiders want to go to Phnom Yol they should ask the village first. “They can come and take a look but they can't hunt animals,” said the villager. “We can't allow outsiders to cut the trees or hunt there.” In 1998 after trees were cut with a chainsaw at Phnom Yol, the villagers prayed to the arak. Several months later a child and several adults from Svay, and a villager from Santuk, died. The people dreamed the deaths were caused by the arak.

Phnom Krae Deh (shared with Kmeng Village)

Phnom Krae Deh (Lightening Mountain) has been considered a spirit forest by Svay village since the time of Ta Ka Ol. It is also a NTFP collection area for the village. There is no prohibition against hunting monkeys there and bringing the meat home, although hunters are advised to be quiet in the spirit forest and not shout out when they make their kill. Belief in the spirits of Phnom Krae Deh comes from a mey arak
in Svay, who has attributed sickness in the village to Krae Deh spirits. NTFPs collected on Phnom Krae Deh include rattan, vines, malva nut, different types of bamboo, and kanma leaves.

18. Phnom Bak

Phnom Bak is a spirit forest that people in Svay have recognized for a long time. One month after Hero started logging in Phnom Bak, one of the village elders got sick. He dreamed about the spirit, who came to ask him: “Do you allow the company to cut the forest?” He replied that the village did not allow the company to cut. The elder’s illness was blamed on Hero logging the Phnom Bak spirit forest. Offerings were made and his sickness abated. Also in 1999, a villager guided people to see the forest at Phnom Bak. When he returned to the village and went fishing, he became sick. The spirit medium said that he had violated the spirits in Phnom Bak forest. After an offering of two chickens and rice wine, he started to recover. “If Hero cuts too near the spirit forest, the village will get sick,” villagers said.

19. Phnom Tateung

Tateung is not a powerful spirit forest but is very important for wildlife such as monkey, wild pig, deer, and gaur, as well as for NTFPs such as kanma leaves, malva nuts, vines and rattan. However, if someone cuts a big tree and the sound disturbs the spirits, when the person returns to the village he will get sick. Phnom Tateung is another place where chamau (forest people) are thought to reside. Evidence of chamau includes half-eaten coconuts found on the mountain, as well as the fact that dogs bark and chase something that cannot be seen. “My relative saw a chamau at Phnom Tateung,” said a villager from nearby Kralah. “It had one leg and hops. It has the head of a person but a face like a dog. Its hand looks like a knife, but its leg is like a dog leg and its hands are hairy. It has long hair past its waist. Both males and female have long hair. They eat the tips of rattan and coconut. We used to see it, but not so recently. It doesn’t kill people but it’s cruel. It chases people, screaming. I was chased by one during Pol Pot time near O Ling.”

SANTUK VILLAGE

Santuk villagers recognize four mountain spirit forests, most of which are shared with other villages: Phnom Yol, Phnom Tu, Phnom Rantah, and Phnom Chree (listed in descending order of spiritual intensity)

Phnom Yol (shared with Svay)

Santuk villagers consider the spirits of Phnom Yol as very powerful. If someone violates or disturbs these spirits, they will become sick or die. If the spirits demand something from a person who has disturbed them, the person should comply with an offering. The offering should be exactly that which is requested by the spirits; otherwise it will have no effect. Speaking of the mountain’s power, a villager said: “If the spirits of Phnom Yol want to eat a person or kill a person, even if you make an offering you can't stop them.” Santuk villagers said that at least four people, all of whom farmed chamkar at the foot of the mountain, have died because of the spirits at Phnom Yol.
20. Phnom Toh (shared with Kralah and Kreh)

Tu is a spirit mountain that is quite flat. There are three villages that believe in the spirits of Phnom Tu (Santuk, Kralah and Kreh). People say that even at the foot of the mountain they do not dare cut chamkar. According to one story, the spirit named “Charang Yung” flew from another area to stay at Phnom Tu at a time when nothing was growing on the mountain. When the spirit departed, he left a piece of water-holding bamboo. A number of years later, bamboo and other vegetation started to grow there.

Another story from 1995 tells of a Svay villager, Ta Vel, who cut down a wild mango tree while clearing chamkar on the mountain. Afterwards his brother-in-law developed a painful neck and died three days later. While the brother-in-law was sick, Ta Vel dreamed that the spirits asked for a cow as an offering to the mountain, because he had cut chamkar there. He ignored the dream, but on the third day of his brother-in-law’s illness, Ta Vel killed a gaur at O Lang Thom. He brought the gaur to make an offering in the chamkar, rather than a cow. That night, his brother-in-law died because the offering did not comply with the spirit’s request. Even after Ta Vel stopped clearing chamkar at that site, villagers say they often hear and see people and dogs there. However when they get closer, the people and dogs always disappear. Santuk villagers say that if the spirit demands a specific offering, people should follow the request. In addition, if the spirit is angry, they should be sure to take the offerings to the spirit, instead of calling the spirit to the offering.

In 1993, after a man from Santuk village cut chamkar on the foot of Phnom Tu, his wife fell sick and her hair fell out. At that time, villagers dreamed that the spirit came to ask for one cow from him because he had cut chamkar there. The man did not believe the story and became angry, refusing to make an offering. His wife remained sick until he went to a new place away from Phnom Tu to cut chamkar. In his new chamkar, he made an offering of one cow and asked the Phnom Tu spirit to come and join. Several days later, his wife recovered.

21. Phnom Rantah

Phnom Rantah is far from Kameng village, but is nonetheless considered sacred. Villagers tell the story of a man named Ta Prum from Santuk village, who went to make offerings at the foot of the mountain, where he wanted to cut chamkar. Before he made offerings he got very drunk and fell asleep. While he slept, he dreamed that a spirit came to lick his leg. When he awoke he saw saliva on his leg, which confirmed to him that the spirit had been there. Another story tells about a villager from Kancheung village named Ta Pinyau who became sick after cutting chamkar at the foot of the mountain. Soon after this occurred, another villager went close to the mountain to collect chickens. When it was starting to get dark he heard someone up on the mountain calling him to help tie and carry a trapped wild pig back to the village. Because it was dark, he was afraid to go, and turned back to the village. When he got there he asked if anyone was on the mountain. Villagers told him no one was there, and shortly afterwards Ta Pinyau died.

22. Phnom Chree

Chree is a spirit mountain where people have avoided cutting chamkar for many years, although it is not perceived as having especially powerful spirits. A person from Tangaich village named Ta Chendu recently cut chamkar on the side and top of
Phnom Chree, with no ill effects. His wife had dreamed that because his name was Chendu, which means “mountain” in Kreung, her husband would have no problems, even though anyone else might get sick or die. There are strict prohibitions against hunting large wildlife, especially monkey and brown hornbill, on Phnom Chree, although there are no taboos against hunting them in other nearby areas. Smaller species, such as several varieties of squirrel and mongoose, can be hunted on Phnom Chree. In 1991, two Santuk villagers named Ya Plan and Prrang went into convulsions and died after hunting two monkeys on the mountain.

23-28: During field mapping and the community workshop in Kralah village, Svay villagers added the following spirit forests: Phnom Pelpol (No. 23), Phnom Kakgeul (24), Phnom Cheria (25), Phnom Kuval (26), Phnom Chree (27) and Phnom Tralav (28).
5. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

According to Kreung religious beliefs, spirits are omnipresent, located within villages as well as the surrounding natural environment. Particularly powerful areas are spirit forests, spirit mountains, and sacred groves. However spirits are also found in swidden plots, NTFP collection areas, wildlife breeding grounds, streams, and other natural sites, all of which are governed by traditional approaches to resource extraction. All of these areas require protection from logging or environmental destruction, not only to protect crucial physical resources, but to protect equally important spiritual and cultural resources as well.

Throughout the study it was apparent that Kreung people in the study area maintain a very strong connection with the natural environment, especially the forests. For them it is critical that forests are managed sustainably.

The spirit forests of the Kreung are central to their tradition and religion. If spirit forests are destroyed or violated, it means a loss of tradition and religion to the Kreung, who believe that disaster will strike their villages if the spirits are angered by such activities.

Destruction of spirit forests, NTFP areas, and streams will also have drastic economic consequences for the Kreung, who are completely dependent on natural resources for their survival. This is especially true for forest and water resources, which are regarded as the main sources of livelihood and income from hunting, fishing, collection of NTFPs, and operation of the swidden agricultural system.

Traditional resource management of spirit forests, NTFP collection areas, and fisheries has allowed indigenous people to support their livelihoods for generations. The destruction of these areas will mean a loss of this customary form of community resource management, which has been shown to be not only efficient and effective, but sustainable.

For any logging concession, it is important that environmental, social, and cultural impacts be thoroughly and independently assessed. While this is happening, government, commercial interests, non-governmental organizations and local communities could meet to discuss different options for sustainably managing forest areas in the future. One way to do this could be through “joint forest management” or “collaborative stewardship” of forest resources.

People living in and around the concession area represent a wealth of information about the forest and its values. In many other parts of the world, local knowledge has been recognized and utilized in natural resource management. Fisheries, forests and other resources have been jointly managed by a partnership of local people (particularly indigenous people) and governments. This provides a far more cost-effective and efficient form of monitoring, management, and control of resource utilization.

Joint Forest Management can take many different forms. It is basically a method of resource management agreed upon by local people and government. Ideally, it works with, rather than against, the wishes of local people, and involves cooperation rather than conflict. The Royal Cambodian Government has stated its objective to achieve sustainable forest management and its desire to minimize impacts on traditional users of the forest. The concept of Joint Forest Management may be highly suited to the Hero concession area.
This first pilot Cultural Resource Study was able to meet many of the study team’s objectives, particularly in training provincial representatives in research techniques and providing a model for future studies. Within a fairly brief period the researchers were able to provide an overview of the relationship between indigenous people and the forest environment and identify forest types important to the culture, religion and livelihood of people living within the logging concession. Clearly more work needs to be done to delineate, catalogue and map the areas of significance. Qualitative as well as quantitative differences should be shown for the different areas, as well as their sensitivity to logging.

From this study, the following pre-requisites for methodologies for future successful cultural resource studies can be proposed:

- The team used in the study should be a mix of women and men, with both Khmers and local indigenous people participating.
- Training workshops, team-building sessions, and methodology discussions should precede rural appraisal in the field.
- Interview questions should be prepared prior to community consultation to ensure that they remain objective and relevant. Local language translators and study team participants should be used wherever possible.
- A open, supportive and respectful atmosphere should be encouraged in village interviews and mapping exercises.
- Information from village research should be compiled and collated using notes and verbal input from all team members.
- Information collected in the field should be presented back to villages for verification and for their own use.
- Mapping should be conducted cooperatively with village people to elicit their participation and to draw on local knowledge.
List of Maps
Map 1: Ratanakiri Province
Map 2: Hero Taiwan Concession Area
Map 3: Spirit Forests and Spirit Mountains within the Study Area
May 4: NTFP Collection Areas within the Study Area

Notes to Accompany Maps
These maps were produced in less than optimal conditions. Access to the forest and much of the mapping was conducted by people familiar with the local geography but inexperienced with technical mapping instruments. Sites of interest and importance were located with single points only. Boundaries were not mapped in the field, but sketched onto maps after discussion with villagers.

As a result of this, these maps are not to be considered suitable for operational level use. They are intended only to demonstrate the approximate extent of spirit forests and NTFP collection areas throughout the study area. (NTFP collection areas, for example, are often marked only by a single point, giving a general indication of the location of a NTFP area but not the full extent of the site.) For operational use, the maps would require further verification. This would require marking areas in the field and mapping, with GPS, the location of these boundaries.

In their current form, however, these maps are useful in resource level planning. They can be used in determining the general extent of areas to be excluded from logging, and, therefore, in the adjustment of coupe sizes and annual allowable cuts.
Appendix 1: Sample Questions Used in Village Interviews, Cultural Resource Study

Questions were posed in an open-ended way, not leading informants towards a particular answer. Input was solicited not only from male elders, but women and younger people as well. Some discussions were held in smaller groups so that people felt more free to talk, and then reporting back to the whole community afterwards.

(Note: Questions were not necessarily asked in this order.)

- **Village History:** What is the history of this village? Is there a story that’s told from generation to generation about how this village started, or where the Kreung people came from originally? Where did this village get its name? What happened in this village during the French era, Sihanouk era, Khmer Rouge regime, in the 1980s, before and after UNTAC, before and after the 1998 elections, etc.?

- **Livelihood:** How do you support your families? Where do you farm *chamkar*? Does anyone farm paddy rice? What is the area of village lands, agricultural lands, burial grounds, NTFP collection areas, water resources, and spirit forests? (These questions were typically elicited through a group mapping exercise.) What would be the impact of selective logging of large trees in an NTFP collection forest (i.e. in a forest that does not hold strong spiritual value, but is necessary for livelihood)?

- **Religion and Culture - General:** What causes illness, drought, flooding? What can people do who fall ill? What is the role of healers and *mey arak* in the village? Are there regular religious ceremonies in this village? What are they and when is each held and for what purpose? Are there taboos in this village?

- **Sacred Sites:** Are there areas that villagers consider spiritual? Are there forests where some people don’t dare to go? What are the special stories about those places? Aside from forests, are there places such as streams, waterfalls, fields, etc. that are considered sacred? Where are these places (mapping again), and what is the potency of each, compared to the others (ranking exercises)? What would be the impact on the forest and on the villagers if these places were logged? What happens to villagers who violate the spirit forests? Is it possible to collect NTFPs or hunt wildlife in spirit forests? If so, are there special guidelines to follow?

- **Wildlife:** Where are the village hunting areas and wildlife breeding grounds? Are there any taboos on hunting any particular types of wildlife, or bringing the meat into the village? Are there local village restrictions on hunting certain wildlife, and what happens to people who violate the prohibitions?

- **Relations with the Logging Company:** Open-ended questions about how / whether / when / why the company got in touch with villagers and what the nature of the interaction was. Do any local people work for the company, and has that caused conflict within the village? Are there any benefits of the logging company to the village (i.e. road building, promises of construction of village halls, jobs, etc.) Have there been any detriments? How has the logging and the company’s presence affected village solidarity? What does the word...
“development” mean to you, and is it something that your village strives for? What is the relationship between a village becoming more “developed” and retaining its culture, traditions, and religion? Is it possible to have development while preserving cultural traditions, or are the two mutually exclusive?
## Appendix 2: Study Team Table of Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Comments</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Research existing documents.</td>
<td>Documents relevant to HERO company and information related to Kreung people's traditions was collected to assist in study and report writing. Meetings were conducted with relevant institutions in Phnom Penh and Ratanakiri with experience with indigenous communities and PRA research.</td>
<td>August 1-4</td>
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<tr>
<td>Team Building</td>
<td>Organization of the study team for two days at in Banlung with representatives of relevant NGOs and government departments. Goals were to brainstorm ideas and exchange experience and knowledge on information collection in the field. The study team agreed upon the research methodology to be used in collecting and analysing information.</td>
<td>August 5-6</td>
</tr>
<tr>
<td>Field Work; Kalay 2 and Kalay 3 villages</td>
<td>Interviews, sketch mapping, some GPS work.</td>
<td>August 7-8</td>
</tr>
<tr>
<td>Field Work; Kameng</td>
<td>Interviews, sketch mapping, some GPS work.</td>
<td>August 8-9</td>
</tr>
<tr>
<td>Field Work; Svay</td>
<td>Interviews, sketch mapping, some GPS work.</td>
<td>August 10-11</td>
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<tr>
<td>Field Work; Kralah</td>
<td>Interviews, sketch mapping, some GPS work.</td>
<td>August 11</td>
</tr>
<tr>
<td>Field Work; Santuk</td>
<td>Interviews, sketch mapping, some GPS work.</td>
<td>August 15</td>
</tr>
<tr>
<td>Team information compilation and analysis, Banlung</td>
<td>Field data was discussed, integrated, and analyzed by study team members to prepare for community workshop and writing the research report.</td>
<td>August 12-13</td>
</tr>
<tr>
<td>Commune-level workshop on preliminary study results, Kralah village.</td>
<td>Representatives from all villages in the study area were invited to a community workshop to discuss the preliminary findings of the survey. Ideas were shared and gaps in information were filled in.</td>
<td>August 14</td>
</tr>
<tr>
<td>Additional GPS mapping work by villagers in the study area.</td>
<td>Villagers were trained in the use of GPS’s, which they then took to the forests to mark the locations of spirit forests and NTFP collection areas.</td>
<td>September-October</td>
</tr>
<tr>
<td>Report Writing</td>
<td>The first draft of the report was prepared in Khmer, then translated to English. A second draft was then prepared, with final, edited versions completed in both Khmer and English.</td>
<td>September-December</td>
</tr>
<tr>
<td>Preliminary Report Dissemination</td>
<td>Cultural Resource Study report released to government officials in Ratanakiri and in Phnom Penh before the report is publicly released.</td>
<td>January 2000</td>
</tr>
<tr>
<td>Provincial Workshop</td>
<td>The plan is to hold a workshop in Banlung to discuss the study results and plan next steps.</td>
<td>February 2000?</td>
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</table>
Appendix 3: Kreung Community Proposals, 14-8-99 Workshop, O Chum
A number of the proposals were raised by Kreung villagers living in the study area at the Commune Workshop on August 14, 1999, when the initial study findings were presented:

KALAY 2 AND KALAY 3
Foresets that people want protected:
- Phnom Dak forest
- Phnom Ngol forest
- Phnom Nhor
- Phnom Tuk forest
- Phnom Charang Yung
- The forest close to the village, between O Pou and the villages

Reasons:
- Spirit forests.
- Full of NTFPs essential for daily life.
- Animal grazing areas.
- Rich in wildlife habitat.
- Important water-source areas.

Suggested management for these areas:
- Inform and educate all villages how to protect these areas.
- Exclude logging for 100 meters around the base of the spirit forests.
- Monitor what is happening at all times.
- Mark boundaries with signs.

KRALAH
Foresets that people want protected:
- Prey Arak Tranuk Thom and Prey Arak Tranuk Touch
- Watershed forest, the headwaters of O Tang, along O Tung and O Krachoy, burial site forests, between O Ekau and O Preav, forest around the village and Phnom Japrik. They also want the area adjacent to O Tang down to its junction with O Ramalkhul.

Reasons:
- Includes important burial sites.
- Places to collect NTFPs.
- Protect water-sources for daily use and for agriculture.
- Protect against strong winds.
- Avoid making spirits angry.
- Important wildlife habitats.
- Important for house construction material collection.

How to protect the proposed forests:
- Provide information and education for villagers.
- Forbid cutting chamkar or lighting fires in protected forest.
- Convene meetings to appoint village committees to manage land and natural resources.
- Create management regulations for each zone.
- Obtain recognition from all levels of local authority for protected areas.
• Legal logging companies who come to log should communicate and cooperate with villagers.

KAMENG

Forests that people want protected:
• Forest to the east of Kameng
• Phnom Nang Cheang
• Phnom Gong
• Phnom Krae Deh
• Phnom Pru, Phnom Baru
• Phnom Kwivah
• Phnom Em Om
• Phnom Deylow
• Phnom Chree
• O Bayou, O Lang Thom, O Lang Touch, O Kooun, O Chalaoo, O Teltol,
• Burial forest
• Trapeang Pi

Reasons:
• Protect spirit forests.
• Protect against floods and droughts.
• Protect NTFP sources.
• Protect wildlife.
• Allow women to collect NTFPs near the village.

Suggested ways to protect these areas:
• Mark the boundaries of protection areas.
• Map the areas clearly.
• Calculate the size of the areas.
• Report any violations, notifying people who commit violations.
• Create a village committee for protection of these community forests.
• Develop rules and management guidelines for all areas.
• Increase cooperation with local authorities and NGOs to assist in development of community forestry.
• If there has to be road construction, good bridges should be built to avoid impacts on streams.
• Protect both sides of streams for 300 meters on either side.
• Protect mountain areas for 500 meters from the base of each.

SVAY VILLAGE

Forests that people want protected:
• Phnom Kabung
• Phnom Lol
• Phnom Bak
• Phnom Chree
• Phnom Tateung
• Phnom Krae Deh
• Phnom Nyol
• Phnom Pelpol
- O Berhijee, O Tamaich, O Tabor, O Tumpriang, O Tarul, O Chahleyo and O Halang.
- 500 meters from the foot of all mountains and 50 meters along streams.

**Reasons:**
- These are spirit forests.
- They are full of NTFPs.
- To protect resource and cultural areas for future generations.
- Important for coffin timber.
- Important habitat for fish and wildlife.
- Protect the natural environment.
- To support good climate.

**Suggested ways of protecting these areas:**
- Put signs around the foot of mountains and other protected areas: 500 meters around spirit mountains, 50 meters along the side of streams.
- Develop community forestry by discussing the idea with village people.
- Ban fires in the area.
- Organize a committee to ensure protection.

**SANTUK**

**Forests that people want protected:**
- Phnom Yol
- Phnom Tu
- Phnom Chree
- Phnom Rantah
- O Lang Thom, O Lang Touch
- Phnom Kovheng
- Phnom Balat
- Phnom Srok
- Phnom Hangkeak

**Reasons:**
- Avoid angering the spirits and protect against illness and death.
- Important areas for collection of products for house construction and coffins.
- Important for wildlife habitat and NTFPs.
- Important water source.

**How to protect these forests:**
- Mark 200 meters from the base of spirit mountains and 100 meters on both sides of the streams.
- Organize a village committee to protect the village forest.
- Fine any violators who breach the spirit forests and NTFPs forests rules and regulations.
- Cooperate between villages and villagers to report any violations to relevant authorities such as the Departments of Forestry, Department of Environment, and NGOs.
- Disseminate information to villagers to increase their understanding and participation.
Appendix 4: Oral Histories of Villages in the Study Area

ABOUT YA KA OL

Ya Ka Ol was a very poor person who had many children, who made lots of noise. The village hated him because he had too many children, and pushed him out. First he lived near a spring, and then moved on. At that time there was war with Siam. If the Siamese knew where he was they would catch him and take him to Siam to be a slave. Eventually Ka Ol went back to his village, but found no one there, only shoes and some belongings. Then he started his own village. He had six children. Villagers in Kameng can trace their lineage back seven generations, from Ya Ol to Yeak Mun (female) to Yeak Chraw (f), to Yeak Kamboy (f), to Yeak Kmeng (male), to Yeak Cha (m), to Ya Romplang, to Yeak Kanting (m), a 24 year old man who lives today in Kmeng village.

The shared respect of Kreung villagers in O Chum District for sacred banana groves planted in the middle of villages derives from the time of Ya Ka Ol, who is said to have dreamed about performing a ceremony to respect the banana so that villagers could have health and happiness. Taboos against killing pythons and bringing wild taro into the villages are also said to originate with Ta Ka Ol.

KALAY 2 & KALAY 3

The name “Kalay” comes from the name of the person who started the village. “Before we used to be at Angkor Wat, in Siem Reap. There was a war many centuries ago so we made a village here,” said one elder. During the French regime and Sihanouk times, there were nine villages in what is now Kalay Commune: Kalay Tavong, Kalay Vong, Kalay Thom, Kalay Vy, Kalay Knao, Kalay Sipoun, Kalay Kralah, Kalay Chos, and Kalay Ruom. In 1968 all Kalay villages moved to the forest, moving from place to place all the time, because of the U.S. bombing. When the bombing finished in 1973, all of the villages were moved to Vonsai, near O Ling forest. During Pol Pot time the villages became Kalay Co-operative located in Region 102, at the place where Vong village is today. The name was then changed to District S-34. These areas are now called O Ling forest, O Vong and O Vy. From 1979 to 1983, Kalay people lived in five villages along the Sesan River, close to O Baku, behind Fang village above the level the Koprow Mountain. They farmed paddy fields in Trapeang Pankum, Vonsai District.

Since 1983 most Kalay villagers have returned to stay in their original, ancestral area in three villages — Kalay 1, Kalay 2, and Kalay 3 — although some people stayed in Vonsai district.

KAMENG VILLAGE

The name of Kameng village comes from the former village chief during the time of King Suramarith, more than 100 years ago. Kameng’s father, Ta Blain, was a Kreung from the La’Ak area who was descended from Ya Ka Ol. During the time of King Suramarith the village was located 200 meters from the current location. During Sihanouk time the location changed to 50 meters from the present location. In Pol Pot
time villagers were removed to live in the location of the current Kachone village (along the Sesan River in Vonsai District).

KRALAH VILLAGE
Kralah village originated in the French regime period of Cambodia’s history and was established by “grandfather Kralah.” In Pol Pot time, villagers were forced to move into a co-operative in Kachone village’s current location.

SVAY VILLAGE
Svay village was originated many years ago and was established by “grandfather Ta Ka Ol.”

SANTUK
Santuk was established by Ya Poey, an ancestor who created Poey Commune, including Tangaich, Poey, Kancheung, Kreh, Koy villages. Santuk is named after a nearby pond or swamp. “Santuk” means “pond” in Kreung. One hundred years ago, Santuk separated from Krupur village because an elder died and some people were afraid of his body. The village moved the present-day site of Tangaich village. In Lon Nol and Sihanouk times, the village was located next to Trapeang Rungchih. In Pol Pot time villagers were relocated to do paddy farming at Karathan Banpong along the Sesan River in Vonsai district. After the Khmer Rouge regime, they returned to near Trapeang Santuk. They stayed there for seven years and then moved to the current location.
Appendix 5: NTFP Collection Sites in the Study Area

KALAY 2 AND KALAY 3 VILLAGES


O Chavung is a water source for Kalay 2. O Chumlum is a water source for Kalay 3.

KAMENG VILLAGE

NTFPs and timber for housing construction are collected from Phnom Ter, Phnom Tru, Phnom Gong, Phnom Pru, Phnom Nang Cheang, Phnom Baru, Phnom Krae Deh, Phnom Gwivah, Phnom Paison, Phnom Yol, Phnom Ta Lau, Phnom Em Om, Phnom Chree, Phnom Ling Ling, O Bayu, O Lang Thom, O Lang Touch, O Poun, O Krapu, O Koon, O Tang, O Bleng, O Ten-nang, O Cheloa and the forest adjacent to the village.

KRALAH VILLAGE

People collect NTFPs and timber for housing construction at Phnom Chaprit, Phnom Krayah, Prey Arak Tranuk Touch, Prey Arak Tranuk Thom, Phnom Sruuk Sruuk, Phnom Traing, O Ramalkhul, O Krachoy, O Klang Hear, O Tamat, O Tang, O Tung and the forest around the village.

SVAY VILLAGE

People in Svay village collect NTFPs and timber for housing construction at Phnom Ling Ling, Phnom Yol, Phnom Tateung, Phnom Krae Deh, Phnom Kakeuel, Phnom Pelpol, Phnom Cherai, Phnom Kabung, Phnom Ngong, Phnom Perkhayee, O Tarklok, O Prolong, O Koy, O Bot, O Ramalkhul, O Kum, O Tacorl, O Ha’ling, O Chaley, O Kapoo, O Daboor, O Kampling, O Angching, O Tamaich, O Krang Yung, O Chree, O Karp, O Perp, O Tatok, O Tumpliang, O Takruel, O Holang, and the forest close to the village.

SANTUK VILLAGE

Santuk is located in the middle of Poey Commune and is further from forest areas than the other villages. Villagers collect timber and NTFPs in some sections of old-growth forest close to the village that have not previously been cut for chamkar, and in mountain forest areas far from the village. Sometimes they collect NTFPs in sections of forests used by Kameng, Svay, and Kancheung, and within the Ya Poey community forestry area.

The main locations for NTFP collection are along O Lang Thom, O Lang Touch, Phnom Chree, Phnom Yol (close to village), Trapeang Santuk, Phnom Srok, Phnom Rantah, Phnom Kovheng, Phnom Pru, O Ta’plie, O Rawneang, Phnom Tu and Phnom Kea.
Appendix 6: Populations within the HERO Concession

Note: These figures are to be considered to be indicative only. No clear map of village locations exists to determine which villages are in the concession area and which are not.

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Source: 1998 Census
Appendix 7: Summary of Results, Excerpted from Minutes of the Closing Session, Provincial Workshop on Hero Taiwan Concession, July 1-2, 1999

Summary of the results of the workshop by Mr. Nap Bunheng, Chief of the Provincial Cabinet office:
Mr. Nap Bunheng summarized the results of the workshop based on the outputs from the group and plenary discussions on 01-02/7/99. The main points were summarized as follows:

Plenary discussion:
- There are problems with regard to the demarcation of sacred forests (spirit forests).
- With regard to the size and location of spirit forests, it was requested that the communities should focus their thinking and define clearly the boundaries.
- Workshop members requested that the Hero Taiwan company consider possible benefits to communities (e.g. road construction) from forest concession companies.

Groups’ discussion sessions:
Four questions were discussed. The summary of the discussions were:

1. Roles and Responsibilities of Communities
   - Communities should participate in the demarcation of the boundaries of forest concessions. It was also requested that the company recognize spirit forest areas that the communities have identified in the three districts of O Chum, Vonsai, and Taveng, as noted in the results of the first discussion group.
   - Local communities would like to be taught some of the technical practices in order to participate in monitoring logging operations.

2. Problems Encountered with the Company
   - Logging occurred within spirit forest areas that the villagers had requested be excluded from logging operations.
   - Company employees have threatened the villagers. Also the company did not keep their promise to local communities.
   - Community solidarity between commune, village authorities and villagers has been damaged.

3. Information systems
   - Lack of information and poor information or reports from commune and village authorities when villagers contact them.
   - The workshop suggested that any problems that occur in the future in the forest concession should be reported through local authorities — village, commune, district, and province respectively; as well as through human rights organizations and the forestry office of the Agriculture Department.
# Appendix 8: List of Participants, Cultural Resource Study Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>Ms. Sara Colm</td>
<td>Project consultant</td>
</tr>
<tr>
<td>Mr. Graeme Brown</td>
<td>Technical consultant for mapping</td>
</tr>
<tr>
<td>Mr. Chea Phalla</td>
<td>Non Timber Forest Products Project</td>
</tr>
<tr>
<td>Mr. Tuy Socheat</td>
<td>Park Ranger, Virachey National Park</td>
</tr>
<tr>
<td>Mr. Mok Thy</td>
<td>Park Ranger, Virachey National Park</td>
</tr>
<tr>
<td>Mr. Sieng Channa</td>
<td>Staff, Provincial Environment Department, through Community Based Natural Resource Management Project (CBNRM)</td>
</tr>
<tr>
<td>Mrs. Hoeung Koeung</td>
<td>Administrator, Cambodian Human Rights and Development Association (ADHOC)</td>
</tr>
<tr>
<td>Mrs. Gnim Kim</td>
<td>Staff, Provincial Rural Development Committee</td>
</tr>
<tr>
<td>Mrs. Soam Sopal</td>
<td>Staff, Provincial Culture Department (CBNRM)</td>
</tr>
<tr>
<td>Mr. Kong Sronos</td>
<td>Staff, Provincial Environment Department (CBNRM)</td>
</tr>
<tr>
<td>Mr. Srey Marona</td>
<td>Staff, Ministry of Environment, Department of Nature Conservation and Protection, Community Forestry Unit</td>
</tr>
<tr>
<td>Ms. Hou Kalyan</td>
<td>Staff, Ministry of Environment, Department Nature Conservation and Protection, Community Forestry Unit</td>
</tr>
<tr>
<td>Mrs. Dam Chanty</td>
<td>Staff, Non-Timber Forest Products Project</td>
</tr>
<tr>
<td>Mr. Ly Kate</td>
<td>Community Organizer, CIDSE</td>
</tr>
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</table>
Appendix 9: Comments by Yiyay (Grandmother) Lao, 65, Svay Community Representative at Provincial Workshop on the Hero Concession, July 2, 1999

“According to the tradition of the Kreung people, we protect the forest and conserve natural resources. There are many kinds of forest products that we use, such as bamboo, vines, rattan, kanma leaf. We Kreung people don’t have money so we rely on the natural resources from the forest. Cutting the forest has violated our rights. The Hero Company has money. Why do they need to cut the forest? The company claims that Hun Sen gave them permission to cut. I don’t know about this, but the Governor and chief of the district are responsible for giving instructions to the company and the government in order to protect the environment and our livelihood.

“We indigenous people are different from the lowland people. We don’t have pumps for irrigation. If there is drought because the forest has been cut, then our crops will die. The Hero Company went to our village and intimidated us. The first time we saw them they said they were only going to take photographs of the forest. Then they came with a tractor. When we asked them about the tractor they said were taking it to Taveng. But later we saw it at the crossroads to our village. We reported this to the commune and district but there was no response so we captured the tractor. After that the company called a meeting at Svay and Kralah Village. They told us that anyone who spoke out would go to jail. The chief of the commune signed the agreement [to log the forest] because he was afraid. But the villagers did not agree to sign. One of the company subcontractors was also there, but the villagers still did not agree to sign.

“We have seen on television the wildlife from other countries and how people are diligent to protect the forest. Why isn’t our country diligent to love the forest like them? Because we lost hope that the authorities would stop the concession, we requested the company to help us build three or four meeting houses and schools. We requested them not to log within a four kilometer radius around our village and swidden fields. We also asked the government to mediate with the company to ensure that the benefit from the logging goes to the company as well as to the local villagers. Finally, we request the company and the local authorities to recognize and protect our spirit forests.”
REFERENCES


