Initial Assessment of Community Resource Use in Pourapet Village

1. BACKGROUND

1.1 General Situation

Pourapet Village is located in Mondulkiri Province in an upland area with altitude of 500 meters above sea level. Primarily ethnic Phnong minorities populate the community. The village is rich in natural resources such as forests, NTFPs and wildlife. Besides shifting cultivation, the people depend upon the collection of natural resources such as wildlife, fish, NTFPs and timber products.

1.2 Location

The village is located in Krong Test Commune, Pich Chenda District, Mondulkiri Province. It is 29 kilometers from the Provincial Town of Sen Monorom. The village border is delineated as follows:

- in the north, with the Sre Pok River, which marks the border with Ratanakiri Province;
- in the south, by Kram Kach Village;
- in the east, with the O’ Plai stream; and
- in the west, with the O’ Rai stream.

1.3 History

Before the Sihanouk regime, the village was named Prey Ngort Paet, meaning the slow flowing stream. It was established in 1959 with 10-20 households and characterized by frequent shifting of residences. In 1972 the Khmer Rouge collected and educated the people, but in 1973 all the people were forced from the village to live in Koh Nhek District while the Khmer Rouge kept the village for a military base, Number 105.

The Khmer Rouge regime fell in 1979. By 1981 people were gradually returning from Koh Nhek District to the village. In 1993 the Leu Phum village was split into three groups, Sre Tae, Krong Chitoul and Pourapet. The split was due to an outbreak of disease (probably cholera) causing many deaths. The villagers believed that by moving the spirits would help them avoid the fatal illness and the people could survive. In 1995 the villagers moved to O’ Tae. In 1996 the provincial authorities asked the villagers who had moved to Krong Chitoul, Sre Tae, O’ Plai and O’ Tae, to return to Pourapet Village.

1.4 Population

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<tr>
<th>Pourapet Village</th>
<th>Families</th>
<th>Population</th>
<th>Male</th>
<th>Female</th>
<th>Children age 1-6</th>
<th>Children age 7-12</th>
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There are 262 people including 185 females and 75 males living in the village. Most are ethnic Phnong. Only 2% is ethnic Khmer who are wildlife traders, middlemen, resin traders or shopkeepers.

1.5 Occupation

Most people practice paddy rice cultivation, shifting cultivation, collect timber and non-timber forests products to support their living.

1.5.1 Agriculture

Rice Cultivation
The people learned to grow paddy rice during the Khmer Rouge regime when they were forced to live in Koh Nhek District. After returning to the village in 1981, people cleared the forest in Pourapet Village for paddy rice cultivation.

The people grow rice depending on the rain. No irrigation system is available in the village. The rice is planted along streams and in the deciduous forest. Rice production is the main occupation of the people. The rice harvest is both for family consumption and for sale. Two or three families may work together in growing the rice, clearing the forest, plowing and harvesting. The rice yield is between 25-30 containers (sah or basket) per ha and 5,000 riel per container.

Shifting Cultivation

The villagers have practiced swidden or shifting cultivation for centuries. The people grow rice, corn, beans, pumpkins, eggplant, etc. Depending on the rain, they are able to harvest only one crop per year. At present the people say they do not plan to shift to other new areas, but continue to cultivate their crops in the same plots near their village, as there is increasing pressure to not cut new cultivation sites. Each family has 2-3 plots for farming. Each plot is one ha. Normally they can cultivate one plot for 5-9 years, depending on the fertility of the soil. The Village Chief reported that there are only 10 families practicing shifting cultivation while the others do permanent paddy rice cultivation since they feel that shifting cultivation is time consuming, difficult and has a low yield. Rice produced on the swidden sites is for consumption only, not for sale.

Fishing

The people fish in streams, rivers or lakes using traditional techniques such as net, fishhook, traps or poisoning the water with the bark of the Reang Tuk (Barringtonia acutangula) tree (known locally as Chimang). The villagers reported that the latter technique did not excessively pollute the water or cause a decline in the fish population. Outsiders using electric shock, mainly soldiers and policemen, have caused the reduction of fish, they say. The decline in the fish resource has become a major concern, both for the present and the future.

Livestock raising

According to the statistical data from the year 2000, Pourapet Village has 69 cattle, 36 buffaloes, 5 elephants and numerous pigs, chicken and ducks. These animals are for sacrifice (spirit ceremonies) and used in agricultural activities. Besides the income generated by farming, other sources of income are from timber and NTFP collection. The latter source of income is used to buy food and other household necessities.

1.6 Income Generation and Expenditures

Expenses

The people spend their money on food, medicine, tobacco, and agricultural tools such spade, knife, ax, and so forth. Some of them spend the money on land clearance for housing.

17 Traditional Belief and Religion

The ethnic Phnong practice Animism and generally when someone is sick a spirit ceremony is performed, asking the spirits to intervene and to take the illness away. If the patient does not recover they may use traditional medicines or go to the traditional healer who uses traditional healing techniques. They can also go to the health center located in Kong Test Commune. There are four types of spirit ceremonies: 1) paddy rice ceremony, highland rice ceremony, spirit and animal release.

Rice Ceremony

During the paddy rice cultivation season the people hold three ceremonies asking the spirits for help to have a plentiful rice harvest. The first is held in August-September. They hold a sacrificial ceremony with two jars of rice wine and two chickens. They do this in hope that their rice will grow well and to protect their draft animals from disease. The second ceremony is held in November-December. As before they sacrifice a chicken and drink rice wine in hopes for a high rice yield. The third ceremony is held in January when they ask for protection from pests and vermin that might eat their store of rice, jeopardizing their hopes for food security and happiness.

Highland Rice Ceremony
For those who do shifting cultivation, they hold four ceremonies a year.

- The first takes place when they start growing the rice. They sacrifice one chicken and drink from a jar of rice wine. They mix the chicken blood with the rice seeds and pray for happiness and high rice production.

- The second ceremony begins when the rice is near the blossom stage. They sacrifice two chickens and drink from two big rice wine jars. They pray for the spirits to help the rice crop to grow well and to protect it from insects, birds and other pests.

- The third ceremony takes place when harvesting rice in hope for high production. They sacrifice one chicken and drink one large jar of rice wine.

- The fourth ceremony is held when storing rice.

**Spirit Ceremony**

The people hold this ceremony twice a year at the spirit house. All people participate together. The first ceremony takes place in July-August before the rice ceremony. They drink rice wine and sacrifice chickens or pigs depending on the capacity of each family. They ask for rain. The second ceremony is held in January. They pray for everybody's health and well-being. This ceremony is celebrated only one day. The traditional village leader, in consultation with the other village elders determines the day to hold the ceremony. During this ceremony they play traditional music. Customarily, no one is allowed to leave or enter the village during the ceremony day.

**Thanksgiving ceremony**

They celebrate this ceremony when one requests to use the land of another, for using another's well or when his wife gives birth. They feast to thank the owners for their generosity or the midwife for her assistance in the successful birthing.

1.8 Marriage

Marriage rites for ethnic Phnong are similar to ethnic Khmer. Of note is the fact that parents generally do not arrange the marriage. The bridegroom's family will give some property such as money, land, cattle, buffalo or elephant to their son so that he has the capacity to ask the girl for marriage. Boys ask girls to marry by providing the gins with clothes, necklace, bracelets, comb, knife, cream, powder, 2 chickens, and 2-3 clay rice wine jars. The wedding is celebrated in the bride's house in the presence of their relatives. After marriage the couple have to stay with the bride's family for at least one year before they can have their own house. Before they leave the family they have to hold a ceremony praying for happiness for the new family.

1.9 Fines and Penalties

Traditionally when there is a divorce, the party who asks for the divorce has to pay compensation to the other partner. This is payable in chickens, pigs, cattle, buffalo, or elephants depending on the request of the other party. If there is a rape, the traditional village head will fine the offender based on the request of the victim.

1.10 Death

When someone dies the body is covered by a white cloth and kept in a coffin for 2-3 days before the corpse is buried. During this period they sacrifice chickens and drink rice wine in honor of the spirits, depending on the family's capacity. It is not a big ceremony. Before the corpse is buried they place two large rice wine jars in the coffin, one at the head and another at the feet, in the belief that in the next life cycle he or she will be able to remember their family.

1.11 Education

Most villagers are illiterate since no schools, teachers, or other education exists in the village. If the children want to study they have to go to Panh Yar Village in Krang Keb Commune, where two grades of classes are available. Not all the children go to school since they need to help their parents. There are only two teachers at the Panh Yar Village School. One teaches children while another teaches illiterate adults. UNESCO supports them.
1.12 Health

The village does not have a health care center. The people sleep without mosquito nets, drink un-boiled water and do not have toilets. As a result they are sick frequently. The people experience malaria, colds and cholera. These diseases occur year round but mostly during November-December. In 1999 WHO and Red Cross vaccinated the children three times. This was repeated in 2000. In 2000 nurses from Sre Ampole village distributed mosquito nets under the support of NOMAD. If the villagers have a serious illness they can go to Krang Kes Commune where there is a Commune Health Volunteer who can prescribe some medicines. The medicine is free of charge if the provincial hospital or NGOs provides them. Other than this service, no health care center is available in this commune.

1.13 Water Source

The people use water from the O’ Plai and O’ Tae streams as well as lakes and wells Lakes and streams dry out in the dry season Only the spring water in the forest can be used throughout the year. It starts raining in April with heavy rains starting in September/October. The rain gradually reduces in November and stops in December This is good for fanning and rice cultivation.

1.14 Infrastructure

The village can be accessed only by ox cart or by foot during the wet season since the road is very rough and slippery and cut by many streams. However, a 4-wheel drive vehicle can access the village during the dry season. The people use footpaths from the village to other nearby settlements. In the dry season they can reach the Sre Pok River by ox cart or a 4-wheel drive vehicle. It takes two days by foot or elephant to reach the Sre Pok River during the wet season.

1.15 Interaction with other Nearby Villages

Relationships between villages are made through marriage, ceremonies, events, social gatherings, trade and visiting. At present some villagers go to Krang Kach Village to sell wildlife, resin and others NTFPs. They can buy household goods such as food, wine and coffee. Other outside communication comes from commune and district authorities.

1.16 Other Employment Opportunities

Beside farming and collecting timber and non-timber forest products, the villagers engage in construction, logging or selling construction materials. In addition, they can work for a private agro-industry company.

1.17 Social Structure

Both traditional and State authority characterizes decision making in the village. The “Poranhbom” is the traditional village leader. He is a village elder, well versed in Phnong tradition and respected for his wisdom. There is also a Village Chief, Commune Chief, District Chief and Provincial authorities. Any problem is first dealt with at the grassroots level with the participation of the Poranhbom. If he cannot resolve the problem he will refer it to the Village Chief. If not resolved at this level it will be passed on to the commune level, district level and finally to the provincial authorities.

1.18 Outside Support

The village doesn't receive much assistance from outside except from the government and some NGOs who occasionally provide some medicine, vaccine and mosquito nets.

2. LAND USE AND CLASSIFICATION

2.1 Land Use and Land Title

The following is the land classification traditionally used in Pourapet Village:

- paddy field
The people use paddy fields for rice cultivation in the wet season. Besides cultivation, this land is used for animal grazing. The soil is composed of clay and loam.

Shifting cultivation farms are used to grow rice, corn, beans, sesame, potatoes, eggplant and pumpkins. Animals graze there in the dry season. Each family has 4-5 shifting cultivation plots and each plot is no more than one hectare.

Surrounding the village houses the people plant fruit trees and raise animals.

The forest area is used for collecting NTFPs such as wild potatoes, farming and grazing as well as cutting new swidden plots. There are large trees for timbers. The soil in this area is sandy.

The burial forest is located in the Krong Kanh forest. Only Pourapet Villagers are permitted burial in this area. Outsiders are not allowed to use it.

Animals use the salt lick and hunters do not disturb them, as they believe it to be an area inhabited by the spirits.

The spring water is a source of water throughout the year and is used by both domestic animals and wildlife.

Selecting an area for shifting agriculture is based on the types of trees present, as they are an indicator of the soil's fertility. Land may also be selected if a person has a dream that the area will bring luck to them.

2.2 Land Management by Government Authorities

Officially recognized areas are the lands allocated for house construction and paddy field. These areas are recognized by the village and commune authorities without need for an official land title. Villagers only need to only claim a place and inform the village head.

2.3 Land Management by Traditional Practice

The Pourapet Village is rich in forest, streams, mountains and lowlands. This richness allows the villagers ample room for farming or construction. No official permission or document is needed. Any villager can use these lands by only informing the Village Chief. The only prohibition is not using someone else's land that is already in use. People mark their land or make a fence for their house. According to the law of the Royal Government of Cambodia all lands belong to the government and are distributed with document, but this process is not used in the village.

Rights on Land Use and Management

Traditionally, the Phnong people have a right to use land in the village without restriction. If they haven't the five hectares allowed by law they may encroach into the forest. The people can clear forest wherever they want without getting permission from the local authorities. Presently, the people can sell or pass farmland or homeland to their children without any legal document. Even though they don't have any legal document for the shifting cultivation land, within the village they recognize their belongings and can sell or transfer to any other
villager without permission from the local authorities. Sale or transfer to an outsider is not allowed.

3. ETHNOBOTANY (Relationship between community and forest resources)

3.1 Forest Sector

From the transect survey it is indicated that the village forest is dry deciduous and has not been exploited yet except for household consumption. As demand for NTFPs has increased the people have increased the collection of NTFPs such as resin and encroached more of the forestland for agricultural.

3.1.1 Forest Classified by Scientists

Scientists classify forest as evergreen, semi-evergreen, deciduous, and so forth. The forest in the Pourapet Village is mostly dry deciduous and semi-evergreen.

3.1.2 Forest Classified by Local Communities

However the ethnic Phnong classify the forest by its use. Although not all ethnic Phnong may classify forests the same way, the general classification is as follows:

**Mountainous forest** is used for construction materials, resin tapping or for grazing. The tree species in this forest are:

- Pchek
- Reang
- Chhlik
- Tnhong
- Thbeng

**Spirit forest** is revered as the home of the spirits. The species in this forest are:

- Choeuteal tuk
- Trach
- Sralao

**Degraded forest** is used for rice cultivation and is mostly scrub.

**Salt lick forest** is where animal, come to lick the salt hunting is not allowed in this area a, the people believe that they hunt animal from this forest they will be sick with abdominal pains and other similar ailments

**Burial forests** are used for burying the village's deceased. This forest is rich like the mountainous forest.

3.1.3 Differing Perspectives of the Forest Community and Scientist

The Community View

The people understand that the vital importance of the forest for their survival as they depend on the resources for their livelihoods

The Scientific View
The scientist calls an area forest as long as it has two layers and only 20% of sunlight can penetrate and each species grows and organizes into group and categories. It has economic and environmental importance.

### 3.1.4 Forest Resources

The use of forest resources by the people in this village is for subsistence only, not for commercial purposes.

#### Non- Timber Forest Products (NTFPs)

Besides the main activities such as hunting, fishing and farming the people collect NTFPs such as resin, bamboo, lianas, rattan, honey, wild fruit, mushrooms and potatoes.

#### Resin

The people collect resin from Trach (Dipterocarpus intricatus) and Choeuteal tuk (Dipterocarpus alatus) trees that are available in many parts of the forest. Some collection areas are distant and it takes them about two days to get to these places. Access is particularly difficult in the wet season. Usually they go in a group of 2-3 families. They select around 100-150 trees. They can tap each tree with 1-4 holes. They place a fire in the hole for a minute or so. Within 3-4 days they can collect 5-6 litters of resin per tree depending on the tree. One plastic container of resin, 30 litters can get 13,000-15,000 riel. In 1999 one container could get up to 20,000 riel. The highest quality of resin is during the dry season. The people use ox cart or elephant to transport the resin from the forest to the village where they sell their resin. In the dry season traders come to buy the resin in the forest.

#### Dry Resin

Villagers collect the resin throughout the year. The highest quality is in the dry season, this resin comes out from the bark of trees such as Pohek and Reang Phom that are available around the Village. The people use back baskets to collect the resin. One kilogram of resin can bring 500-600 riel. The people have collected this resin since 1994 when traders first came to buy in their village.

#### Bamboo

Bamboo can be harvested throughout the year. Usually people collect bamboo during January-February since fewer insects are present that can damage the bamboo. Bamboo is readily abatable along stream, and around the lake. The people use bamboo for construction materials, basket, containers and fishing equipment. This is for household consumption only, not for commercial purposes. Usually only men collect bamboo.

#### Hunting

The people have been hunting for years but for subsistence only. But since 1979 this has changed. As a result the wildlife in the area has declined drastically and some species are almost extinct. The people hunt throughout the year but most actively during August-September because it is easier to follow the animal tracks. Hunters are usually middle age men or adolescent boys. The people hunt the following animals:

- Sambar
- Muntjac
- Guar
- Bear
- Banteng
- Wild Pig
- Turtle
- Porcupine
- Monitor Lizard
- Birds

Traders come to buy wildlife in the village and later sell in the provincial town. Some species are used for traditional medicine. The people also snare elephants for domestication and for their tusks.

**Honey**

The people, mostly men and young boys, go to collect honey during March-May because during this time honey has high quality. A liter of honey can be sold for 5000-6000 riels in the provincial town. They collect honey in the forest near streams and in dry deciduous forests.

**Thatch**

Thatch is used for making roofs. Usually women go to collect thatch from the field near the village and in the dry deciduous forest during the months of November-January.

**Wild Fruit**

Mostly women and children go to collect wild fruit such as Ku, Chambok, Pring, Rambutan and others. Wild fruit is for household consumption only.

**Wild Vegetables**

Mostly women and children go to collect wild vegetables such as bamboo shoots, Nob leaves, Prich, Kom Plo and rattan shoots. These vegetables are for household consumption only.

**Mushrooms**

The people collect this for household consumption, not for sale, during the months of November-January. Mushrooms are found growing on trees and termite mounds.

- The typical mushroom species are
  - Ngear
  - Kanh Chou
  - Kra Ngaok
  - Krahchak Sla
  - Tracheak Kranh
  - Kramoun
  - Pengpors
  - Kbal Chungkong
  - Chlus
  - Toulnnhut
  - Russey
  - Klaeng
Wild Potatoes

The people collect wild potatoes during May-June as a basic diet especially in times of food shortages.

Forest Products

Besides collecting NTFPs, the people also collect timber for house construction and agricultural materials and equipment. This is for household purposes only not for commerce. Mostly men go to collect these products using ox carts to transport timbers from the forest to their houses. This activity usually takes place during November-December since it is most convenient for transportation. Some people hire outsiders to cut the trees for them for approximately $65/m³. Typical species cut are Choqueteal tuk, Sokram, Pchek, Sralao, Koki, Kvao, Reang, and so on, available in the deciduous forest, along streams and in the resin collection forest.

3.1.5 Forest Management

The forest law in the Cambodia determines the rights of forest and non-timber forest product users in forest concessions or community forests for private industries or local demand. In addition the people have the right of traditional use of the forest, but they must have permission.

Nevertheless, the use of the forest and non-timber forest products in the Pourapet Village is without permission from the State technical authority. Some households have hundreds of resin tapping trees and no one else can claim them.

3.1.6 Legal Forest Use Rights

Before the 1975 the forest was highly intact without excessive logging. However, with the anarchic logging of the past few decades the Department of Forestry and Wildlife has drafted a new forest law for forest management and use the forest resources. The followings are articles as stated in the proposed law:

Article 12, Chapter 1 states that the forest in Cambodia is under the management of the government and classified as protected areas such as national park, wildlife sanctuary, protected landscape, multiple-use area, forest concession, land concession, community forest, forest in publics, agro-industry center and private forest.

Article 28, Chapter 9 states that exploitation of timber and non-timber forest products in cultural areas, especially by the people living in the upland areas, is prohibited.

Article 34, Chapter 10 states that any transportation of timbers must have prior permission from provincial towns or cities, with endorsement of the Provincial Department of Agriculture, Forestry, and Fisheries.

Article 55, Chapter 15 states that confiscation shall be carried out for any illegal collection of timber and non-timber forest products even though for household or public use and for any sale or over harvesting in excess of approved purpose. If one still repeats this offense in the protected areas, reserves or conserved forests then one shall be fined and the evidence confiscated.

3.1.7 Customary Forest Resources Use Rights

Until the new forestry law is adopted the old one is in use throughout Cambodia. However, even the present law has not been publicized in the remote areas. As a result, forest management in the Pourapet Village is based on traditional practices without obtaining permission from the local authorities.

4. CONCLUSION

- 99% of the people in the village are ethnic Phnong. Traditionally they have practiced shifting agriculture. Population increases and market demands have influence them to change their livelihood activities so that people are now collecting resin, encroaching further into the forest for expanded agricultural
cultivation and hunting for sale.

- Education and health care in the village are very poor and as a result there is a high rate of illiteracy and general poor health.

- Spirit forests and collecting resin does not destroy the forest. In reality these practices help to maintain the forest if technical guidance is provided.

5. RECOMMENDATIONS

- To reduce encroachment into the forest shifting cultivation should be changed to permanent cultivation;

- The provincial technical office should work with the local authorities to control guns that people use to hunt wildlife;

- The villagers should work together to build at least a school and request teachers from the Provincial Department of Education to teach children and illiterate adults;

- The technical department in the province should issue a land title for farmland for each family; and

- To maintain fishery resources in the village, the villagers should not allow the use of electric shock to harvest fish or allow outsiders to fish in their village using illegal modern techniques.