1. Introduction

The inception of community forestry in Cambodia in the 1990’s was a result of the concern for forest loss in Cambodia at a rapid pace in the recent years. Lack of local community participation in forest management is a factor in forest resources decline. A local community’s demand for forest gradually increases. In order to manage the existing forests, to use them is a sustainable way, to reforest in degraded areas, and to involve local communities in forest management, NGOs and other international organizations are working with local communities and the Royal government of Cambodia at all levels to establish community forestry projects. This is a solution to the local community’s demand for the present time and for the future, in some areas of Cambodia. The current practice of community forestry project in some places increases of other communities.

The understanding of community forestry by local communities helps us to plan, carry out, and get support from them in the future. A community forestry team is established to support and to share information, to get cooperation among all interested groups at a national level, and to facilitate understanding and help among communities to support the ongoing project.

It is important that community forestry team conduct a study of Cambodia community forestry best practices to understand the practices of community forestry, and to establish based information. The community forestry team studies five provinces. They are Seam Reap, Ratanakiri, Kampong Chhnang, Svay Rieng and Koh Kong that these provinces are carrying out community forestry programs.

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2. Goal and Objectives

The objectives of the study of Cambodia community forestry best practice are:

- To document the practices of community forestry by the Royal government of Cambodia, Nongovernmental organization and monks in cooperation with local communities
- To identify problems and look for the solutions that are best to support and develop
the programs in community forestry in Cambodia.

- To strengthen research capacity and to document information for staff of relevant governmental institutes that are involved in the community forestry project.

- To build relationships among the national, provincial and grass root levels, in order to set up a management mechanism for Cambodia community forestry in the future.

3. Methodology

In this study, the team was divided into two groups, the core and field research groups. The core group was responsible for organizing the study, providing technical support and ideas. The field research group was responsible for conducting the field study, methodology, information gathering, analyzing and reporting. The team was comprised of staff the Department of Forestry and Wildlife, The Ministry of Environment and the Royal University of Agriculture, Phnom Penh.

In order to obtain positive result in study of Cambodia community forestry best practices, the team organized a consulting group that consists of expatriate staff who are very experienced in community forestry. All groups discussed and set up methods for the study including making questionnaires, and providing interviewing techniques with local people. Provincial government and NGOs staff were also included in the field research group to supply information and document areas, to support the study through cooperation, involvement in discussions, approaching study areas, scheduling for the study implementation and so forth.

After informing local people of the purposes of the study and the present of the field research group, each group was split into smaller groups to conduct semi-structured interviews, semi-structured walks, and direct observation. The groups interviewed small groups of local people or individuals, within the time constraints given.

4. Results

4.1. Geographic Location

Yak Poy community forestry is in O’ Chum district and it is about 15km north of Ban Lung town. The community forest possesses natural forests in the north of the province. It covers an area of 5500ha.

4.2. Communities

4.2.1. Population

There are six village of ethnic Kroeng participating in the establishment of community forest in Yak Poy. There are 185 families of 886 people, with 308 males and 348 females. The population growth in this community is low due to diseases, high mortality rate, and the restriction of the migration of new comers to settle in their community.
4.2.2. Education

Yak Poy community consists of 10 villages, but only one school is available. The school is situated near the commune office. A logging company, HERO, donated the school. Two teachers, who are the governmental staff at Ratanakiri Education Department, work at this school. Apart from formal schooling, informal schooling in each village is conducted by CIDSE. The informal schooling, intended for illiterates, opens during the night time while time professional training in development occurs during the daytime.

4.2.3. Customs, Traditions, and Beliefs

Traditionally, ethnic Kroeng believe in spirits who take care of the land, mountains, and their villages. A form of the community's tradition is to hold feasts for the spirits (Sen). The feasts that people usually celebrate are Sen Chaek (banana feast), Sen Arak Krae Dai (outside spirit feast), Sen Prei (forest spirit feast) Sen Onch (fire spirit feast), Sen Pouch Sraov (rice spirit feast), Sen Preah Rune (Rune tree spirit feast), Sen Preah Mock or Preah Arnel (roasted rice feast). In addition, they feast spirits when they store rice, harvest rice and cure patients. Marriage depends on the couple, as long as they come along with each other and they seek permission from their parents.

4.2.4. Health Care and Sanitation

Ethnic Kroeng appear not to be aware of health problem that arise from eating unclean food, or from unclean premises. In addition, the health service in the commune is poor. The community has only one health center in Yak Poy, which is required to move another village every three years. There are two midwives working in the center. The center does not have enough drugs supply their patients. People use Sen Naek Ta (offerings of food to spirits) or traditional medicinal cure patients, as some of them do not belief in modern health care.

4.2.5. Livelihoods

The profession of the people is swidden agriculture. They culture rice in long streams or terrain. In additional to their main profession, the people do other jobs as indicated below:

- Non timber forest product collection
- The people collect lianas, resin, rattan, traditional medicine plants, mushrooms, wild fruit, bamboo shoots, wild vegetables, honey, and hunt to supplement their additional needs.

Small Scale Handicraft

The people make Phar Moung, skirts made of silk, baskets, plates, mats boxes, Poenk, clothes, Kro Ma, towels, and blankets for household use and sale in order to generate additional income to meet their needs.

Animal Raising

Chickens, Pigs, cattle, and buffalo are raised for their daily protein needs, as well as offering spirits food, and for sale. In the main, cattle and buffaloes are not the animals that are used in farming activities.
Permanent Farming

Now some ethnic Kroeng are growing jackfruit, mango, orange, banana, coconut, papaya, pineapple, bean, potato, coffee, sesame, pumpkin watermelon, cucumber, and other vegetables.

Selling labor or other contiguous profession

There are not many ethnic Kroeng whose jobs are laborers or moto-drivers because this is not their traditional.

4.3. Land Tenure Status

4.3.1. Private Lands

Land for House Construction

Land is distributed to each family with the recognition of the ethnic head, village, and commune authorities. Legally, laws do not recognizing the land. This means that land can be sold to others when they move to other places. If it is not sold, the land will because public property. However, land can be transferred to relatives.

Land for Home Garden Crops

This is land that is in or nearly their yard. People can grow some fruit trees such as coconut, orange, jackfruit and vegetables to supplement their additional needs. The right of occupation on this type of land is the same as the rights of land use house construction.

Land for Swidden Agriculture and Old Farms

This is forestland that people clear for farming such as rice, potato, pumpkin, watermelon, cucumber and other vegetables. The head, village, and commune authorities recognize this land according to the ethnic tradition. If productivity of the land is poor, people will abandon it. Moreover, the land is called "old farm" The "old farm will be re-utilized when they believe that the land is fertile once again. While the land is abandoned, no one can use this land. Recent provincial policies permit a family to encroach on forestland for agricultural activities, for at most five hectares.

Land for Permanent Farm

This is forestland that people use to do agro-forestry, growing jackfruit, cashews, mangoes, oranges, bananas, coconuts, guavas, tamarind, papaya, coffee, pineapples, beans, sesame, potatoes, pumpkins, watermelons, cucumbers and other vegetables.

Legally, the law recognizes the land and people have a right to use it. People will be offer land use rights as long as they grow permanent vegetation. At present, owners are not allowed to collect non-timber forest products or raise animals in the old farms like in the past. People, the ethnic head, village, commune, district, and provincial authorities recognize the land for permanent farming but it is not legally recognized.

Land for Paddy fields

There are a few paddy fields for cultivating rice in the wet season and for vegetables in the upland of Yak Poy. The people grow rice along the valleys. Before people did not like to
cultivate rice in the wet season. In order to reduce forest encroachment, the provincial Department of Agriculture, the Provincial Department of Environment, and CIDSE explained to the community about growing rice by digging with hoes.

The size of paddy field varies and depends on the size of the family in Krala village. People in the community, the ethnic head, the village and the commune heads according to their tradition agreed on land distribution for paddy fields. The law does not recognize this land distribution yet. For some other villages, the area of paddy field varies depending on encroachment of forestland by each family. According to trial customs. People can transfer their land to their relatives if they were to move to live in another village. But they cannot sell or rent the land. Due to the trial customs, people are not interested to sell their paddy fields. Besides, the paddy field after yields higher rice production than the yield that they get from swidden agriculture. This, the villages said, has contributed to improving their livelihoods.

4.3.2. Public Lands

Land for the School, Commune Office, Meeting Place and Health Center

This is land located in the center of village. It used for public purposes only. People, the ethnic head of the village, and commune authorities recognize the land. No individual can sell or solely occupy the land.

Public Farm land

Each village in the community forestry project can have large or small land depending on the availability of land and labor. The public farmland is a result of clearing forest. The public farmland is utilized for growing jackfruit, cashew, mango, orange, guava, sweet tamarind, coffee, papaya, pineapple, bean, sesame, potato, pumpkin, watermelon, cucumber and other. The products are shared out to those who are unable to farm. No one can sell or occupy it for private use. People, the ethnic head the village, and commune authorities recognize the land, but it is not legally recognized.

Land for a Small Scale Irrigation Dam

There is land covered by semi-evergreen forest around a reservoir in Krala village. The village protects this forest and no one is permitted to cut the forest. The reservoir was build during the Khmer Rouge regime. It can supply water for 20ha of paddy fields after CIDSE and the people in Krala village fixed it. Only the people in Krala village can access resources in this reservoir. However, people are not allowed to fish in the reservoir, or they will be fined as the reservoir is a spawning place for fish. People, the ethnic head of the village, and commune authorities recognize the land, but it is not legally recognized.

Spring Water in Forest Land

The ethnic Kroeng use water from waterfall or stream that flow from forest areas. The community protect the forest in the water source areas because the are is a source of clean water. However, they cannot protect the forest if it is outside the village. Anyone can collect non-timber forest products in the forest on a small scale, but not on a large scale. People, the ethnic head of the village, and commune authorities recognize the land according to the community’s custom and traditional, but it is not legally recognized.

Spirit Forest Land
This land covers mostly evergreen or semi-evergreen forests and they are located in mountains near the community forest of Yak Poy. There are high value species of forest, such as Neang Noun (Papilionacees Dalbergia bariensis), Baeng (Caesalpininess Pahudia cochinchnensis), Thnung (Papilionacees Pterocapus pedatus), Kor Koh (Caesalpinees Sindora cohinchnensis), Ko Ki (Dipterocarpacees Hopea sp.), Dung Chaem (Sterculiacees Terrietia javanica), Trasaek (Caesalpinees Peltophorum fereugieum), Sra Laov (Lythracees Lagerstremia sp.), Trach (Dipterocarpus intricatus), Ta Traov (Loganiacees Fagraea fragrans), Cheu Teal (Dipterocarpus alatus) and other. Non-timber forest products that are available in the forest are lianas, resin, rattan, bamboo, traditional medicine plants, mushrooms, wild fruit, bamboo shoot, wild vegetable, wild potato, honey and others.

Ethnic Kroeng believe that spirits inhabit the forest and no one is permitted to log because if someone logs the forest, the spirit will make someone sick or die. In case of illness, a feast for the spirit is required so that patients can recover. There has never been logging in the spirit forest in Yak Poy. However, logging inside spirit forest in other areas have happened, by logging companies. This cases conflicts between the logging companies and community, and the provincial Department of Environment, the provincial Forestry Office have worked with local authorities to reduce and resolve the conflicts between the logging companies and the communities. The ethnic Kroeng do not log or collect non-timber forest products inside the spirit forests. People, the ethnic head of the village, and commune authorities recognize the spirit forestland according to their custom and tradition, but it is not legally recognized.

Forest Land for Burial

Unlike Khmer tradition, when someone dies, the Kroeng's tradition requires the corpse to be buried. Each village keeps an area of about 5ha to bury corpses of their members only. No outsider's corpse is allowed to be buried in the area and no one is permitted to use forest resources in this area. Villages believe that if someone extracts non-timber forest products or timbers, their members will be sick as they have upset their ancestors. People, the ethnic head of the village, and commune authorities recognize the spirit forestland according to their custom and tradition, but it is not legally recognized.

Community Forestry Land

Traditional, people extract various forest resources to support their daily livelihood. The forest products that people typically extract are similar to the plants and animal species described the "spirit forest land" section above.

All waterways in the community forest connect to Tonle San River. Wildlife living in the area are tiger, elephant, bear, leopard, banteng, sambar, hog, deer, muntjac, wild pig, macaque, gibbon, loris, flying squirrel, civet, squirrel, mongoose, pangolin, monitoring lizard, snake, cobra, green peafowl, jungle fowl and other. Moreover, precious stones are also available in the area.

The area of community forestry is 5500ha. This forest is reserved to support the livelihoods of the local community. Village can cut tree for house construction if it is approved by the committee. The community forest is located inside the concession of the HERO logging company. People, the ethnic head of the village, commune, district, provincial authorities, relevant institution recognize the community forest. Nevertheless, the Department of Forestry, Wildlife and Fishery of the Ministry Agriculture, Forestry and Fishery does not recognize it.

4.4. Establishment and Management of yak Poy Community Forest
4.4.1. The community forest and other Institutions

The Community Forest Management committee

Before the inception of community forestry, people could access the forest freely. They could collect forest or non-forest products as they wanted. This practice led to the quick destruction of the resources. Since the practice does not support short and long term use, people requested the authorities to establish community forestry in their community. The establishment of the community forest came under the facilitation of the Non-timber Forest Products (NTFP) organization, local authorities, relevant in the province and non-government organizations, who aimed to manage the resources for sustainable use.

With the assistance of the NTFP organization, people in each village in Yak Poy select their representative to be a candidate for a central committee for community forestry composed of nine members. An election is organized to elect chief, a deputy chief, an accountant, an administrator, a public relations manager, a ranger, an extension worker, a map specialist, and representative of each village. In addition to the central committee, a community forestry committee of each village is also made. This committee is composed of five members—a chief, a deputy chief, and another three members.

Other Institutions

The establishment of community forestry committee were supported by non-governmental organizations, and other relevant institutions. Some of them were involved directly and indirectly.

Direct Support

The NTFP organization plays a role in providing technical, financial, and training support. Moreover, the NTFP organization, in cooperation with the provincial department environment, the office of forestry and wildlife, and local authorities (of the village, commune, districts and province level) assisted in making the construction, regulations, management plan, and action plan.

Indirect Support

CIDSE support and assists in education, health care, sanitation, construction of water wells, credit and rice banks (interest of 2kg of rice for 10kg loan), and the construction of a commune office. For the construction activities, CIDSE pays the labor cost in the form of rice, cooking oil, canned fish and gardening tools such as hoes rather than cash. Medicines Sans Frontiers helps in health education. The provincial department agriculture in Ratanakiri provides agricultural training in agro-forestry, such as growing mango, cashew, jackfruit, orange and in animal husbandry, such as vaccinations, and animal care. HERO logging company builds a school for the community in Yak Poy.

4.4.2. By-law of the Community Forest

With the facilitation and assistance of the NTFP project and with the input of people, construction was set up for the community forest. Supporters of the by law are nongovernmental organizations, local authorities, and other relevant institutions. The purpose of setting up the by law is legal recognition in the future.

4.4.3. Management Plan
Up to the present, there is no written management plan in Yak Poy. Now the central committee for the community forest is discussing and agreeing in establishing the following protection plan:

**Community Forestry extension Program**

After the establishment of community forestry in Yak Poy. People are aware of the importance of this project as it ameliorates their livelihood. The people would like international organizations or the government to assist in providing professional training, techniques in agro-forestry, fish raising, animal husbandry, and making compost. In addition, the community would like other relevant institutions, local authorities and other outsiders to recognize their project, so that in the future the management and development of the community would be convenient and efficient.

**Demarcation of the Community Forest**

In order to clarify the boundaries of the community forest, people in Yak Poy want to clear forest to make rows where there is no rivers or stream for demarcation, and to set postmark made of cement.

**Suppression Illegal Activities**

The community forestry committee plans to set up a patrolling team in each village in order to stop or suppress illegal. Some money to support this comes from fines, selling forest or non-timber forest products, with an extraction plan that will be utilized to pay the rangers' salary.

**Land Use Rights**

The local community wants their private lands and community forestry land to be recognized by the law. The community is concerned and afraid that the community forest will be taken over by logging companies or outsiders in the future.

**Sources of Funding**

The community forestry committee of Yak Poy raises money fines of illegal persons who remove forest and non-timber forest products from their community forest, as well as from the donation of generous people, rice credits, animal credits, and selling the resources that they extract from their community forest. Until now, no forest or non-timber forest product has been extracted from the community forestry. The committee, in cooperation with NTFP organization and the Office Forestry and Wildlife, are trying to draft guideline for extracting the resources from the community forest. The committee use funds for rangers' salary, building schools, repairing roads, and for building meeting rooms in the village and commune.

**Eco-tourism**

Eco-tourism in the community forest of Yak Poy has not yet begun, since there are no guidelines, or a license has been issued to accept tourists.

**Infrastructure Management**

Under support of CIDSE, each village in the commune has clean water wells, a meeting room and good roads.
Extraction of the resources in the community forest is done according to tradition. That means each family can extract forest or non-timber forest products for household consumption only. As mentioned earlier, the committee is drafting a plan for using the resources in the community forest in the future.

**4.4.4. Benefit Distribution**

Non-benefits have been distributed among the communities yet, since the committees are drafting an extraction plan and benefit sharing policy. However, for the daily needs each family, they can extract forest or non-timber forest products for household consumption only.

**4.4.5. Conflicts and Resolutions**

Before community forestry began in Yak Poy, people were worried about intrusion from logging companies, and forest encroachment because outsiders hunting in the forest. Since they are aware of the problems, they organized this community forestry project in order to maintain the forest in their area for sustainable use in the future. Local authorities, relevant institutions, and non-governmental organizations approve this project. Their effort has improved forest conditions in their community forest.

Recently, conflicts have happened between the community and a logging company because the government issued a license to log in their community forest. In addition, conflicts also arose between the community and outsiders, who enter their community forest to hunt wildlife. Fortunately, the community forestry committee with the cooperation of the Provincial Department of Environment, the Provincial Forestry Office and the local authorities have reached a compromise with the logging company. The authority explained to the logging company about the community forestry project of the community, about historical occupation of the community and about the community's livelihood that depends on the forest in the community forest.

**5. Analysis of Impact of Community Forestry**

**5.1. Impact on Household Economy**

After the establishment of the community forest in Yak Poy, people know to grow long-time crops, how to select seeds. Some ethnic Kroung changed their cultivation traditions from swidden agriculture to permanent cultivation, and some can do wet season rice culture. Some degraded lands are gradually recovering due to the participation of the community in the protection and management of the forest, and there is solidarity between the community and the outsiders in this aim. In addition, the community forest project will find a market to sell their products, which will help to develop the infrastructure in the village and in commune, and to construct roads, schools, meeting rooms, a health center and clean wells. Change and development in the community make the community's livelihood better and more stable.

**5.2. Impact on Equal Access and User Rights to Natural Resources**

At present, the people in Yak Poy collect forest and non-timber forest products in the community forest according to their old customs for household consumption because the community does not have a plan for extraction of forest products. Although they do not have a plan, this does not affect the ongoing community forestry project in Yak Poy. All people, the local authorities, international organization, and other relevant institutions are trying to get project recognized nationally.

Their effort of creating the community forest makes other communities and logging companies respect their right of utilization of the forest resources in the commune. Utilization and management of the forest and non-timber forest products will be effective and progressive in the future, because there is a law on the establishment of community forestry. The community has a constitution, a management plan, human resources and the recognition of other communities of the community forest which all makes the project possible. Moreover, the establishment of the community forestry in Yak Poy commune maintains custom and tradition of having a forestland for burials, spirits, and a water sources. Beside, it also helps to stop forest
encroachment of outsiders that disturbs the happiness of the ethnic community.

5.3. Impact on Natural resource Status and Its Sustainability vis-á-vis Biodiversity and Productivity

Forest and non-timber forest products are increasing through good management of the community forest. In addition, the local authorities, relevant institutions, and the community intervene on time to stop illegal activities such as forest encroachment and exploitation. The resources extraction plan and management plan of the community forest ensures the sustainability, production potential, balance of ecosystems and ground water.

5.4. Impact on Cooperation Between the Community and the Government

The presence of community forestry indicates a positive indicator for community participation in that it has stopped the encroachment on forest for swidden agriculture. Moreover, this accords to the provincial government's policy. Old farms have converted to permanent lands for their daily vegetation, which helps to alleviate poverty. Relevant institutions, the Provincial Department of Agriculture, Forestry and Fishery, the Provincial Department of Environment and NTFP organization assisted in providing training on agricultural techniques. People are aware of the project and actively involved in programs such as water sanitation, rice banks, animal banks, compost, protection and repairing if the infrastructure in the community. The resources extraction plan and management plan of the community forest ensures the sustainability, production potential, balance of ecosystems and ground water.

5.5. Impact on the Status and effectiveness of Local Institutions

Yak Poy community forest has established at the initiative of the community and their participation under the facilitation of NTFP. In this Project, there was an election of the community forestry committee. They play a role in projection of the community’s benefits. The establishment of this project was recognized and supported by the local community, outside, organization, relevant institutions, and the provincial authorities. The committee is planning extract some resources in order to generate an income to motivate members of the committee and to raise the committee understanding of community forestry through training and seminars. All of these factors make the committee take more responsibility in order to protect the community's advantages and to direct the community forestry project efficiently. Furthermore, the income will be used to secure the sustainability of the community forest activities when no financial support is available from organizations and other relevant institutions.

5.6. Impact on General Community Development

The community forest in Yak Poy made the community’s behavior changed from swidden agriculture to cultivation along streams, valleys or brooks in order to create production and to grow strategic vegetation. Animal husbandry with selection, and promotion of home garden crops have ameliorated the community’s livelihood. Besides, the people are coming to trust modern health care more than traditional health care or beliefs.

5.7. Impact on Adjacent Communities

Community forestry did not cause problems to the community or the outsiders since they are permitted to access the resources as long as they respect the constitution and the regulations of the community forest. Community forestry in the Yak Poy is a mode for other communities. For example, Kra La village is preparing to organize community forestry on their land. Community forestry is a mode of natural resource utilization, selecting vegetation for growing such as long-term crops on old farms. The community forestry project makes the community participate in protecting their forest, though currently forestry project with logging companies and outsiders who try to encroach the forest for lands.

6. Conclusions

The people have rights to select committee members for the community forest without intimidation from outsiders in election process. They have rights of utilization, management of the forestland benefits from the community forest. These rights are stated in the community forest by law, regulations, management and action plans. In addition, the community forestry project has built trust within the community. The
management committee relevant that community forestry made the community understand legal systems, techniques, and professions. The project also develops infrastructure, health care, education, and agricultural production. These factors foster family economics. The community forestry committee to find markets to sell their products and ask the local authorities to secure their safety on the way to the market. Their traditions, customs, and beliefs are protected. Some have been changed due to development.

The community forestry project products and rehabilitates forest, consistent with the policy of the Royal government. This provides the committee and other relevant institution with an opportunity to extend development programs and information of the government to local communities. In addition, it is easier for the management committee intervene on time in every activity that my happen in the community. The community's increases interest in improving its own local infrastructure, health care, and education indicates the community's participation in development of their country.

The implementation of the management plan, sustainable use of natural resources, awareness of the advantages of community forestry, encouragement of the government in community forestry, natural resources protection, forest rehabilitation and support of other people in this project are important factors to create the beauty of forest, landscape and a sustainable environment.

7. Recommendations

To keep the community forestry project running smoothly in the future, NGOs, the government, relevant institutions and local authorities should remedy the following gaps:

- The Royal government should adopt the sub-decree of community forestry as soon possible.
- Provide professional training to the local community and the outsiders through seminars, and training course.
- Organize eco-tourism in the community forest that has beautiful landscapes.
- The government should provide security, guarantee and find markets for the community's products.
- Help to build or reconstruct small-scale irrigation so that the people can increase their production seasons.
- Help in agricultural development programs.
- Promote and encourage the community's participation in forest management through providing rights to the community.