

CAMBODIA COMMUNITY FORESTRY BEST PRACTICES STUDY

Kompong Chhnang Province Chomka Prey Sne, Preah Ream Reang Sei, and Trapeang Trach Community Forests

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1. INTRODUCTION

The inception of community forestry in Cambodia in the 1990's was a result of a 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 resource decline. A local community's demand for forests gradually increases. In order to manage the existing forests, to use them in 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 interest 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 a community forestry team conduct a study of Cambodian community forestry best practices to understand the practices of community forestry, and to establish a based information. The community forestry team studied five provinces. They are Seam Reap, Ratanakiri, Kampong Chhnang, Svay Rieng and Koh Kong that these provinces are carrying out community forestry programs.

The Sustainable Management of Resources Project in the Lower Mekong Basin (SMRP-MRC/GTZ) provided financial and technical support for the study.

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, Non governmental organizations and monks in cooperation with local communities
- To identify problems and to 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 projects.
- To build relationships among the national, provincial and grass root levels, in order to set up a management mechanism for Cambodian community forestry in the future.

3. METHODOLOGY

In this study, the team was divided into two groups, the core and the 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 from the Department of Forestry and Wildlife, the Ministry of Environment and the Royal University of Agriculture, Phnom Penh.

In order to obtain positive results in the study of Cambodia community forestry best practice, 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 NGO 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 presence 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

4.1.1 Chamcar Prey Sner Community Forest

The Prey Sner Community Forestry Project is about 30 km south of Kampong Chhnang town, on National Road No. 5. It is in Kompong Tralach District. Five villages—Trapang Krasang, Svey Bakaov, O' Rong, Kanh Choe and Sarai Andaet—participate in the project. The first four villages are in Ta Ches commune and the last village is in Chrey commune. It covers an area of 817 ha. of degraded deciduous forest stretching in lowland area. Some of the forests have been cut for firewood and construction wood, some areas have been cleared for farming and rice paddy fields. Soil in this project site is gray sand.

According to a request of the Department of Forestry and Wildlife, CONCERN Worldwide started a reforestation project on 150 ha. of degraded land in 1991. Since there was a problem in forest management, in 1995 CONCERN Worldwide redirected the project and changed it to a community forestry project, which focused on community-based sustainable forest management and community development.

After the reforestation and establishment of the community forest in the area, the forest began to recover with some tree species commonly used in construction, such as Tbaeng (*Diperocarpacees Dipterocapus obtusifolius*), Kor Koh (*Caesalpinees Sindora cochinchinensis*), Pcheuk (*Diperocarpacees Shorea obtusa*), Sokrom (*Mimosees Xylisa dolabriformis*), Thnung (*Papilionacees Pterocapus pedatus*), Popel (*Diperocarpacees Hopea recopei*), Pdeak (*Diperocarpacees Anisoptera glabra*) and so on. Non-timber forest products that were seen in the community forestry of Chamcar Prey Sner are rattan, lianas, mushroom and others. In addition, many species of wildlife have returned to the community forest, especially wild pig, jackal, jungle fowl, green peafowl and so forth.

4.1.2 Preah Ream Reang Sei Community Forest

This community forestry is located in Chreybak commune, Rolier Phier district, Kompong Chhnang province. The east of the area borders with National Road No. 27; the west borders with Trapeang Kravan village; the north borders with Phnum Damrei Romeal and the south borders with Tranpeang Tasok. It covers an area of 180 ha. of degraded lowland deciduous forest. Soil in this area is sandy. Before 1970, the village had a small population and a good forest and wildlife community. At present, these forest resources have become degraded due to heavy logging and clearing for farm lands and paddy fields. Some species of wildlife are almost extinct.

4.1.3 Trapeang Trach Community Forest

This community forest is located in Trapeang Trach village, Rolier Phier commune, Rolier Phier district, Kompong Chhnang province. It borders with Trapang Tach, O' Thom, Prey Cheur, Krous villages and Plaov Chas. It covers an area of 76 ha. of degraded lowland deciduous forest. Soil in this area is sandy. The degradation of the forest in this area was caused by encroachment of people clearing the forest for farm lands, and paddy fields and by people collecting firewood.

4.2 Socio-economics

4.2.1 Population

Chamcar Prey Sner community is composed of 5 villages and 790 families. Trapang Krasang village has 195 families. O' Rong village has 50 families. Svey Bakeow village has 276 families. Kanh Choe village has 181 families and Sarai Andaet village has 88 families. The communities have seen significant population increase in the post- Khmer Rough period. Some factors contributing to this were migration into the communities and increased family sizes.

4.2.2 Education

Most villages of the three community forestry projects and including the two villages outside of the project sites (Snai and Somrong village) have primary schools. Nevertheless, the schools have only three grades. The schools in ethnic Cham villages in the project provide Cham language lessons in addition to the regular curriculum. None of the schools in the area offers lessons to raise children's awareness of the community forestry projects in their communities.

4.2.3 Customs, Traditions and Beliefs

In the Prey Sner Community Forest, Khmer and Cham communities are involved in the project. The other two community forestry projects involve Khmer villages only. In the Cham communities there are mosques. However, there is no Buddhist pagoda in the project sites. Khmer communities can visit Buddhist pagodas in other nearby communities that are four or five kilometers away from their villages. Neither the mosque nor pagoda has a program to promote community forestry. There is a good forest area in Snai village. No one has ever extracted resources in this forest because people believe that forest spirits reside there. People use this forest to worship and to praise for happiness and peace.

4.2.4 Health and Sanitation

At present, there is no hospital or health center in the three community forestry project sites, as well as in the other two villages outside the community forestry program. Traditional village doctors dispensing traditional medicine is common practice in the villages. Midwives, in addition to delivering babies, often treat various ailments in the villages. If a person is seriously sick, he will be referred to a hospital in a district town or in the provincial town. No health care extension program has been carried out in the project sites, except some infant vaccination activities.

4.2.5 Livelihoods

All members of in the three community forestry projects do various types of job according to the seasons. Their main livelihoods is farming. They grow rice in the wet season and in the dry season, they do other jobs to supplement their livelihoods, such as palm sugar production, fishing, being a laborer, collecting firewood.

4.3 Land Tenure Status

4.3.1 Chamcar Prey Sner Community Forest

Local land use practices could be divided into six categories. They are residential lands, paddy fields for dry season and wet season farming, private forest lands, public lands and community forest land.

- **Residential Lands**

Village authority distributes this land to villagers to build houses. Villagers also grow fruit trees and vegetables on the land. The size of each family determines the amount of land it receives, that is, larger the family is allotted a larger piece of land. Villagers can sell or transfer the land to their descendants. Typically, the village authority issued an informal receipt of land ownership to the head of each household. Nevertheless, this is not enough to be legally recognized.

- **Wet Season Paddy Fields**

The paddy field is distributed to each family based on family size. This land was distributed in the 1980's. People can grow rice in the wet season only but not in the dry season because water is not available in the season. However, the field is used for animal grazing by the communities.

- **Dry Season Paddy Fields**

Beside wet season rice production, people continue doing dry season rice production. The paddy field is available near Tonle Sap River, which is far from their residence. Therefore, people temporary move to settle near their fields to grow the rice and then return to their residence when they finish harvesting.

- **Private Forest Lands**

This is degraded forest land next to the community forest. People own this type of forest before the creation of the community forest. Although owners do not have a license, village authority, village members and their neighbors recognize that the forests have owners.

- **Public Lands**

These lands are used by the communities for public purposes. In the Chomka Prey Sner Community Forest, three villages (O' Rong, Khan Choe and Svey Bakaov) have public lands. In Khan Choe village, a mosque was built on the public land .

- **Community Forest Lands**

Previously the land was under the jurisdiction of the Department of Forestry and Wildlife, but now the department has consent to have it managed as a community forest by the local communities. However, any benefits derived from the community forest are shared between the communities and the Department of Forestry and Wildlife.

4.3.2 Preah Ream Reang Sei Community Forest

Local land use practices could be divided into four categories. They are residential lands, paddy fields for dry season and wet season farming, public lands and village land.

- **Residential Lands**

Village authority distributes this land to villagers to build houses. Villagers also grow fruit trees and vegetables on the land. The size of each family determines the amount of land it receives, that is, larger the family is allotted a larger piece of land. Villagers can sell or transfer the land to their descendants. Typically, the village authority issued an informal receipt of land ownership to the head of each household. Eighty five percent of villagers have ownership receipt to their lands.

- **Wet Season Paddy Field**

The characteristic of the land is similar to that described under section 4.3.1. Please see the above section for description. In addition, sometimes the land is further divided by the family itself to distribute a portion of it to a newlywed couple in the family.

- **Public Land**

The public land of Preah Ream Reang Sei is the site of a Buddhist pagoda.

- **Village Land**

It is a field that the commune distribute to the village for agricultural purposes. The villagers and village chief chose a degraded area to be reforested. Before the community forestry project was established, people used to access the forest freely. They extracted resources in the forest for household purposes and for sale. This unrestricted access to the forest had caused considerable degradation. After the creation of the community forest, the forest management committee agreed to manage and use the resources of the forest in a sustainable way. The committee prohibited the cutting of valuable timber the encroachment of forest land and so forth. The committee allowed people to continue to collect non-timber forest products in order to ameliorate the communities' livelihood.

4.4 Organization and Management of the Community Forests

4.4.1 Establishment of Community Forest Management Committees

The procedures for establishing a community forest management committee in each project site are different depending on the situations and conditions there.

4.4.1.1 Establishment of Management Committees of the Chomka Prey Sner Community Forest

Chomka Prey Sner was initially a reforestation project of 150 ha. of a degraded forest area, supported by CONCERN Worldwide. Forest grew back very well. Unfortunately, the project had problems protecting the project site, because villagers living near the area did not respect the project and continue to intrude the area to cut the replanted forest. They thought that the forest was the property of CONCERN Worldwide. Recognizing that villagers living near the forest had minimal involvement in the maintenance of forest, CONCERN Worldwide collaborated with the local communities to establish a community forestry project, utilizing the reforested site for the project.

In organizing the community forest management committees, CONCERN Worldwide advocated a bottom-up approach. CONCERN Worldwide assisted each village in the project organize village family groups, a village forest management committee, and a joint community forest management committee. The establishment of committees is based on democratic principles.

- **Establishment of Village Family Groups**

Each group has 10-20 families and the number of groups in each village depends on the population of the village. Participation in the community forest project is optional. Each group elect a member to be its leader.

- **Establishment of Village Forest Management Committee**

The leader of each family group must be the group's representative to be a candidate for a village-wide election to the village forest management committee. The committee is generally composed of two to three individuals, depending on the decision of the village. The committee would have a chief, a deputy chief, and so on. The committee members elect their own officers (chief, deputy chief, etc)...

- **Establishment of Joint Community Forest Management Committee**

Each village forest management committee selects one of its own member to represent the village at the joint community forest management committee. This committee has five members, one from each village in the project. It chooses its own chief, deputy chief and other officers. During the selection of committee's officers, the village and commune chiefs also take part in the process. With assistance from CONCERN Worldwide, the committee and villagers established a community forest by-law, a management plan, measures for forest protection and a policy for the use of non-timber forest products in a sustainable way in their area.

4.4.1.2 Establishment of Preah Ream Reang Sei Community Forest Management Committee

The inception of community forestry in Preah Ream Reang Sei is a result of villagers' concerns in forest loss due to encroachment of people clearing the forest for farm lands, doing illegal logging, and due to an increase in demand for firewood for making palm sugar. Realizing the rapid loss of their village forest land, the community requested CONCERN Worldwide to assist them establish a community forest so that they can protect their village forest. However, before establishing the community forest, the villagers and village authority decided to set up a management committee first. CONCERN Worldwide initially provided tree seedlings and seeds to the community for reforesting of the degraded areas in their village forest. Even with the establishment of the community forest, outsiders continue to enter the forest to cut trees.

The process of establishing the single-village Preah Ream Reang Sei Community Forest is different from the establishment of the Chomka Prey Sner Community Forest because Preah Ram Reang Sei has already had experience in setting up various development projects in the village, such as community micro-credit and rice bank supported by Prasak and the World Food Program. There are seven members in the management committee. The members already held posts in other committees, for example, three are from the community micro-credit committee, another three are from the rice bank committee, and one is a village chief. The committee itself selected its own chief and deputy chief and CONCERN Worldwide helps facilitate the process. The communities was not involve the selection process.

- **Establishment of Interested Group**

Each group has 17-20 family members. Participation in the community forestry is optional. Each group has a leader who is elected by their members and an approval of the forest management committee members.

4.4.1.3 Establishment of Trapeang Trach Community Forest Management Committee

After collapse of Khmer Rouge regime, the commune authority distributed forest lands to villages. Trapeang Trach village received a forest land of 70 ha. The forest was destroyed after the village authority distributed to individual families. The forest was depleted to meet the needs of each household. Further land distribution stopped when villagers became very worried over the loss of their forest lands. In addition, in recent years the villagers' farm lands and rice paddies have been threatened by encroachments from businessmen, local authorities, and government officials of the Office of Geology. These situations have compelled the villagers, village chief, village elders, and farmer's cooperative chiefs to seek a way to immediately protect their private lands and the forest lands. They approached CONCERN Worldwide to request it to assist them to establish their own community forest. CONCERN facilitated the process of establishing the community forest management committee, which is composed of seven members. In the consultation process with the villagers, it was agreed that the committee should consist of the chiefs of the farmers' cooperative (six), and the chief of the village police, who shall be chief of the committee. An election was not carried out in setting up the management committee.

4.4.2 By-law of the Community Forests

4.4.2.1 Establishment of the By-law of Chomka Prey Sner Community Forest

CONCERN played an important role in facilitating and drafting the by-law of the community forest in cooperation with local authorities. The by-law was taken to discuss with members of the community forest, village forest committee, and the joint community forest management committee before it was adopted. Once all concerned parties agreed on the elements of the by-law, they adopted it and applied it to the management of the community forest.

4.4.2.2 Establishment of the By-law of Preah Ream Reang Sei Community Forest

The community forestry of Preah Ream Rangsei has been created for one year or so, but the community has not made a constitution of the project. The commission of the community forestry is drafting a constitution in relation to reforestation and community forestry protection.

4.4.2.3 Establishment of the By-law of Trapeang Trach Community Forest

In Trapeang Trach village, people adopted the by-law to manage their community forest and to ensure the forest's benefits are distributed appropriately for their community. The by-law also would ensure the community's rights to using the resources of the community forest. Currently, this by-law has not been signed off by the commune chief because he wants to take the community forest land to distribute to other villages.

4.4.3 Management and Action Plans

4.4.3.1 Management and Action Plans of Chomka Prey Sner Community Forest

At first, people in the five villages of Chomka Prey Sner decided to patrol the community forest together. This practice does not work because the area is so large. Therefore, they decided that each village manage and patrol its section of the community forest. The forest management committee of each village requested that their members pay 300 riels per month so that the money could be used to pay village forest rangers to protect the forest. However, due to severe poverty faced by some of the villagers, they were unable to afford to pay the monthly fee. Consequently, the committee decided to stop the forest patrol program, whose rangers were paid 70,000 Riels per month. The committee decided to request the members of the project to protect the community forest on their own.

4.4.3.2 Management and Action Plans of Preah Ream Reang Sei Community Forest

Although the commission has created a by-law for the community forest, the committee further developed a management plan with the following elements:

- Create a 900 m² demonstration agro-forestry plantation in the community forest. This area shall be fenced off by wire.
- Demarcate the boundary of the community forest with post markers.
- Protect natural forest by prohibiting logging, wildlife hunting and other inappropriate activities in the area.
- Publicize the policy of the community forest to neighboring communities.
- Fine or educate those who commit illegal activities in the community forestry.

- Manage the other 120 ha. degraded forest land that is outside the community forest in the same manner as the community forest land.
- Reforest in the community forest.

4.4.3.3 Management and Action Plans of Trapeang Trach Community Forest

There are farmlands and paddy fields inside the community forest. These rice paddies have been there before the establishment of the community forest. Owners of paddy fields were allowed to continue using their lands, but they are not permitted to expand their fields farther into the forest.

- No one is allowed to encroach or cut the forest for farm lands or paddy fields.
- Cutting of trees is prohibited.
- Transferring of forest land to descendants is prohibited.
- Demarcate boundary of the community forest with post markers.

At present there is no benefit distribution from the community forestry since the project was just established. However, the villagers can collect non-timber forest products.

4.4.4 Benefit Distribution

4.4.4.1 Benefit Distribution in Chomka Prey Sner Community Forest

The joint forest management committee of Chomka Prey Sner Community Forest decided that local community members and outsiders may access the community forest to collect non-timber forest products such as rattan, lianas, traditional medicinal plants, wild fruits, mushroom, and small trees for firewood. The members of the project are allowed to tree cut branches for firewood, but non-members are not allowed. The committee will determine the schedule for collecting the forest and non-timber forest products. At present, extracting forest products for commercial purposes—that is, logging, is prohibited, but in the future the management committee would permit extraction of forest timber. Extractors must follow regulations set in the by-law.

4.4.4.2 Benefit Distribution in Preah Ream Reang Sei Community Forest

Since the community forest in this village was just established and a by-law has not been developed yet, the benefit distribution issue has not been addressed. However, local villagers and outsiders may collect non-timber forest products and firewood for their own use.

4.4.4.3 Benefit Distribution in the Community Forestry of Trapeang Trach village

The situation at this community forest is similar to Preah Ream Reang Sei. Please see description above.

4.4.5 Conflicts and Resolutions

4.4.5.1 Conflicts and Resolutions at Chomka Prey Sner Community Forest

Outsiders who used to exploit the forest of Chomka Prey Sner are not happy with the establishment of the community forest because they are no longer allowed to enter it to collect non-timber forest products. However, the people in the community forestry project consider this to be a minor problem because more people are becoming aware of the project and its importance and they are respecting the objectives of the local communities.

4.4.5.2 Conflicts and Resolutions at Preah Ream Reang Sei Community Forest

Most valuable forest resources have been depleted here that most people have gone elsewhere to extract resources, therefore conflicts associated with utilization of the community forest do not exist at this time. Only non-timber forest products and small trees for firewood are still available in the community forest. After establishment of the community forest, the community maintained a policy of allowing local villagers and outsiders to continue to enter the forest site to extract resources.

4.4.5.3 Conflicts and Resolutions at Trapeang Trach Community Forest

The inception of the community forest in Trapeang Trach village arises from the community's desire to protect the remaining forest so that they can benefit from it in the future. At present, there is no problem or conflict among members, non-members and the committee in the village.

However, there are conflicts between the community and outsiders and the commune chief, who does not recognize the community forest. The outsiders are not happy with the project. They tried to destroy the boundary markers of the community forest and continue to invade the forest to collect forest resources as much as they want. The committee has been trying to persuade the commune chief to recognize the project by approving the by-law, but so far he has refused. He argued that at the moment, there is no community forestry law and he would like to take the forest land and distribute it to neighboring villages. In addition, some of the forest land have been sold or have become private property of some powerful persons. The community declared that they would continue the project in their community until a sub-decree of community forestry is adopted.

5. ANALYSIS OF COMMUNITY FORESTRY

5.1 Impact on Household Economics

Before the establishment of the community forests, household income of most families consisted of extractions from the forests in the area. They cut trees in the forest for construction timber for firewood, and they hunted wildlife without worrying about whether the resources would be in the area in the future or not. Eventually, over exploiting of the resources and encroachment for lands have caused forest degradation. However, the establishment of community forest raised local people's awareness of the importance of their local forest. So community forestry is an effective strategy that reduces illegal activities in the forest and its reforestation program is increasing the forest cover of degraded forest areas. Now, the utilization of land by local communities is better than before because they know how to make compost to improve the soil quality of their farmland and increase production. People have stopped encroaching on the forest to establish paddy fields and farmlands. Through this project, gradually the communities will be able to protect their forest from outsiders, businessmen, and powerful persons. People are still allowed to enter the forests to gather non-timber forest products, but not timber. The local communities in the project expect that they would benefit from selling the timber in the future, which would improve their livelihoods.

5.2 Impact Equal Access and User Rights to Natural Resources

The Chomka Prey Sner, Preah Ream Reang Sei, and Trapeang Trach community forests were created under the initiative of each community, not for any political reasons. The members must respect the by-laws of the community forests. All resources such as natural forest, reforested forest and wildlife are the properties of the communities. Rights and use of the forest resources are clearly stated in the by-laws in order to ensure sustainable practices in the future. People actively participate and follow the policy of forest protection of the government so that there will be fair benefit-sharing between the communities and the government. The committee and the members have equal rights to use their forest resources.

The Chomka Prey Sner Community Forest, the villages organized a central committee for forest management, and each village organized family groups, which elect members to form the village forest management committee. In Preah Ream Reang Sei and Trapeang Trach community forests, the respective villages organized village level forest management committee as each project involved only one village.

The followings are rights and responsibilities of the committee of Chamcar Prey Sner:

- Make and change conditions, regulations in the by-law of the community forest
- Ensure equality and fairness of access and utilization of forest resources to members
- Solve problems or conflicts relating to the community forestry project
- Plan, implement, and evaluate the project
- Manage income and expenses
- Issue an approval for collecting forest and non forest products when it is appropriate
- Punish or fine those who have committed illegal activities in the project, depending on their crime

Unfortunately, the community forest in Trapeang Trach village is threatened by their neighbors because the project has not yet got recognition from the commune authority. This makes the by-law and the rights of management and use ineffective. However, in the other two community forestry projects, local authorities

support their goals and objectives through the recognition of the by-laws and management committees.

5.3 Impact on Natural Resource Status and its Sustainability vis-à-vis Biodiversity and Productivity

Before the establishment of the community forest at Chomka Prey Sner, some parts of the project site covered by shrub, some were bare, and some were heavily extracted for forest and non-timber forest products. Some parts of the project were encroached on by local villagers for farm lands. They cut forest for construction and firewood for use in households and for sale. Habitat lost and hunting has caused the wildlife to be extinct from different areas of the project site. After Prey Sner Community Forest was established, encroachment of the project site has largely ceased, and hunting and logging have been prohibited. Degraded areas have been reforested by the members. Some of these degraded areas have seen some wildlife population and forest cover returned; the vegetation have acted to protect the water sources. Judging from the rebounding forest, the soil of the project sites appear to be more fertile. The biodiversity in the area is currently recovering. After five years, the forest in the project appears to be recovering from a period of intense exploitation. Even though the communities are not allowed to access timber forest, they can access non-timber forest products.

5.4 Impact on Cooperation between the Community and the Government

Community forestry is an organization created by the community's willingness to restore forest and its products for future use. The inception of this project is a result of community participation in forest protection that this is consistent with the policy of the Royal government which encourages forest maintenance while banning illegal logging. The community forestry project promotes cooperation between the community and the local authorities, and to some extent links to the national level through its interaction and collaboration with the Department of Forestry and Wildlife. Moreover, the project facilitates the government and other organizations in extending agricultural techniques, health care, education, and so on. The community forest project allows people to understand the importance of the forest and how to protect, reforest and use it sustainably.

5.5 Impact on the Status and Effectiveness of Local Institutions

- The establishment of the community forest management committees
Different communities have different approaches in establishing the community forest management committees, depending upon the situations and conditions in each of the project site. (See section 4.4). The communities elect their own management committees to manage and protect their community forests and to try to ensure that benefits from the forests would be distributed as fairly as possible.
- Sustainability of the committees
The sustainability of the community forest management committees depends on the support of the participating communities, local authorities, and other government agencies at all levels, including provincial and national. But also the support of NGOs and international organizations are essential because they have the financial means to support the community forestry projects and the committees. The committees play a key role in directing and managing the project, and extending knowledge, techniques and contacting other relevant institutions and other organizations to support the project.

5.6 Impact on General Community Development

Community forestry has had a considerable impact on agricultural systems as forest improves soil quality and protects water sources. The leaves of trees growing in yards, fields, or along dikes can be used to make natural compost. The project makes people stop swidden agriculture and use agroforestry techniques, as they recognize the importance of forest for the environment, and that it provides shade for human.

In addition, the community forest improves livelihoods as people can collect non-timber forest products every day. People strongly hope that in the future, they will generate income from timber and other non-timber products and their community will develop.

5.7 Impact on Adjacent Communities

A community forestry project does not only develop its own members, but also provides a model for outsiders to have opportunities to learn, listen, and observe the project. Moreover, it makes the outsiders see the benefits of community forestry, such as the presence of increases in rainfalls, improved soil quality, and enhancing habitats for wildlife.

At present, the number of outsiders in adjacent communities going to the community forest in the commune has reduced as they become aware of its existence through extension programs carried out by the management committees. The people in the adjacent communities are still allowed to enter the community forest to collect non-timber forest products to supplement to their livelihood. Some of these people are aware of the importance of having reforestation and agroforestry through CONCERN who helps the community forestry project. People are not permitted to collect timber, but they respect this prohibition since they understand that at least they can access non-timber forest products. Furthermore, they are more aware of importance of the forest in improving the environment and in the development of the communities.

6. CONCLUSIONS

6.1 Factors in which community forestry seems to provide benefits to the community

The people benefit from the community forestry as follows:

- They have rights to manage the forest directly
- They know how to make decisions and discuss issues
- They understand the importance of having forest
- They know how to deal with the local authorities and other relevant institutions
- They know how to improve their home-gardening
- Their livelihoods improved

6.2 Factors in which community forestry seems to provide benefits to the government

Up to 1993, the government managed the forests in the communities, during which time the forest was almost completely destroyed. After the community forestry project was created, it brought many benefits to the government, as follows:

- It builds good cooperation with international organizations, and has attracted funding support
- People reforest and protect natural resources more effectively
- This responds to the policy of the government and other international conservation organizations, especially in forestry
- It improves cooperation with other institutions
- It facilitates cooperation with other institutions
- It strengthens communities (rural development) through helping to extend agricultural, educational and health care programs

6.3 Factors in which community forestry seems to provide benefits to ecological sustainability

- Both local people and outsiders understand the importance of the forest and support the project
- Biodiversity increases
- Cooperation of local authorities and other relevant institutions

7. RECOMMENDATIONS

- The Community Forestry Sub-decree should be adopted as soon as possible (situation at Trapeang Trach Community Forest would be benefit from the passage of the legislation as it could compel the commune to recognize the community).
- Assist in solar energy techniques in palm sugar production of Somrong village, located outside of the community forestry project sites.
- Provide professional training on community forestry through seminars and training courses to improvement understanding and the management of the community forest.
- Help to build or reconstruct small-scale irrigation systems so that people can increase their production in the dry season.

- Assist in developing tourism (Kampong Chhnang has beautiful landscapes of mountains).
- The government should conduct market research for products generated from the community forests.
- Help in development programs such as composting, plantation and agricultural techniques.
- Help to build infrastructure such as schools and roads (*villagers often mentioned road improvement rather than new construction*).

Appendix 1: Schedule of Activities

Date	Place	Activity
Monday 03/01/00	Phnom Penh – Kampong Chhnang	Arrived in Kampong Chhnang and meeting with CONCERN
Tuesday 04/01/00	Kampong Chhnang Town	Meet relevant institutions (Provincial Department of Environment, Office of Forestry, Wildlife and Fisheries) Meet with provincial research assistant Set up a schedule and plan for the study
Wednesday 05/01/00	CONCERN Office	Interview the community forestry committee of Chamcar Prey Sneri
Thursday 06/01/00	Trapeang Krasang village	Interview Trapeang Krasang community
Friday 07/01/00	Sarey Andate village Kanh Choe village	Interview Sarey Andate community in the morning Interview Kanh Choe community in the afternoon
Saturday 08/01/00	Somrong village Snai village	Interview Somrong community in the morning Interview Snai community in the afternoon
Sunday 09/01/00	Preah Ream Rangsei village	Interview Preah Ream Rangsei community and the commission in the morning Group discussion and analysis of information in the afternoon
Monday 10/01/00	Trapeang Trach village	Interview Trapeang Trach community and the commission in the morning Group discussion and analysis of information in the afternoon
Tuesday 11/01/00	Kampong Chhnang Provincial town	Check information gathered Organize analysis and enter information
Wednesday 12/01/00	Kampong Chhnang Provincial town	Present results of the study to relevant institutions (Provincial Department of Agriculture, Provincial Department of Environment, and CONCERN) Return to Phnom Penh