

# COMMUNAL FOREST : A MEANS TO INVOLVE VILLAGERS IN FOREST MANAGEMENT IN THAILAND

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— タイ農民を森林経営に組み込む一手段 —

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## FORWARD

There are many reasons to explain why the forest in tropical countries has been depleted at an enormous rate. Among these, the human factor will be rated very high. Those people who live near the forest play an important role in the forest land use due to their dependencies on the forest. The access opportunities to forest areas due to good physical infrastructure and loopholes in management procedures offer the chance to people to convert the forest to other uses due to changes in the socioecon-politics of the areas. As forest degradation tends to be a human-caused problem, this leads to the concept of forest management which recognizes the involvement of those people who live near the forest in the planning and implementing of forest working plans. This is the concept of community forestry.

Community forestry gained its generality in the late 1970's when many international as well as regional meeting and conferences concentrated on the social values of forest activities. Starting from the FAO experts' consolation meeting on the role of forestry in rural community development in 1976, many other meetings at various levels were held in later years. The energy crisis in the beginning of the 1970's, together with the alarming rate of forest degradation in many tropical countries, have led to community forestry becoming more

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accepted as a new field of study and as a new approach to forest resource development. Institutions active in the line of community forestry were established, like ICRAF in Kenya in 1977. Clearer roles of community forestry sprung up at the 8th World Forestry Congress in Jakarta, Indonesia in 1978 which had the theme of "FOREST FOR THE PEOPLE". Many donors, including the World Bank, started to finance projects which are community forestry oriented. Many meetings at the country and regional levels were conducted, resulting in clearer views of the nature and extent of community forestry.

Community forestry consists of various activities with different levels of management. Some activities reflect individual management like the small forest farmers who practice tree farming for supplying wood products to serve themselves or the community. Some activities reflect communal management like communal forest which have been allocated for the common use of the community. The activities in community forestry reflect the level of dependency of the community on the forest resources. This varies from place to place due to the level of the development of the area, the agriculture and forest land tenure system and the group or community organization. The community here will be referred to the villages or the group of villages which directly depend on the forest resources close to their villages.

The forest resources have their roles for those communities. The first is to supply forest products in terms of wood and non-wood products. The activities aimed at this role will be in the area of product-based community forestry. The second role is to provide land for the expanded population. The activities aimed at this role come under land-based community forestry. The last role is to offer services in terms of environmental protection, water resource control, soil conservation, provision of recreational and religious places for the communities. The activities aimed at this role will be in the sphere of environment-based community forestry.

Communal forest, as the activities in the community forestry, is the system of forest management at the community level which shows how the community can be involved in forest activities and how the community can manage their forests to meet the needs of the community. Communal forest management varies from country to country due to the degree of involvement of the rural communities in the national forest management system. As traditional practice and indigenous knowledge, the communal forest management in the country varies from place to place depending on how the villagers can use the forests. The case study on Thailand's experience of communal forestry will show the experience of how the national forest policy and the local traditional practice can be matched in order to make the concept of community forestry practicable.

## **AN OUTLINE OF FOREST POLICY AND COMMUNAL FORESTS IN THAILAND**

Before the establishment of the Royal Forest Department in 1896, all the forest lands belonged to and were controlled by the local town chiefs. In the northern part of the country especially, those who wanted to harvest forest products, particularly timber, had to pay a royalty to the local town chiefs. As there were many disputes between the European timber logging companies and the town chiefs regarding the unfairness of the royalty payments and the lack of proper management of the forests, the Royal Forest Department was established by central government. The mandates of the Royal Forest Department were : ( 1 ) to regulate the timber harvest ; and ( 2 ) to collect the tax payments from the logging companies. Since then the formulation and implementation of forest working plans have been required for all the forest lands of the country. All forest land became government land under the control and management of the Royal Forest Department to meet the nation's economic and environmental security.

In 1961, the beginning of the adoption of the first 5 year national social and economic plan (1961–1966), a policy was established to allocate 50 percent of the national land as forest land. At that time there were about 53 percent of national land left as forest land. However, the impact of rural infrastructure development, such as roads and water reservoirs for agriculture, made access to forest areas easier. These were accompanied by an increase in the population in the agricultural sector which needed more clearing of the forest land for agricultural purposes. Also there was the migration of those hill tribes to the watershed areas in the North from neighboring countries like Laos, and Burma due to the political conflicts in the 1960's. All this resulted in the alarming rate of forest degradation in Thailand which was made manifest through satellite remote sensing techniques. It was calculated that the remaining national forest cover was 43 percent in 1973 and 28 percent in 1988 (See Table 1)

In 1985, the first written forest policy in Thailand was drafted. The policy gave guidelines for reserving percentages of the national land as National Forest Land. Since the remaining national forest land was only 29 percent of the total land area, the forest policy called for all agencies concerned to participate in forest protection and rehabilitation. The policy also stated the involvement of the role of private sector and the local community in forest management, especially in forest plantation and communal forestry in order to raise the area of forest land to meet the stated target of 40 percent of the national land area.

In December 1988, a huge and destructive flood hit the southern part of the country,

Table 1 Remaining Natural Forest in Thailand

Region	Regional area (km <sup>2</sup> )	Regional Forest Land Area in the Region (%)						
		1961	1973	1976	1978	1982	1985	1988
North	169,645	69	67	60	55	52	50	47
Northeast	168,855	42	30	25	18	15	15	14
Central plain	103,900	55	38	33	30	26	25	24
South	70,715	42	26	29	25	24	22	21
Total	513,115	53	43	38	34	30	29	28

Source: Forest Management Division, Royal Forest Department. 1988

resulting in the death of many villagers and the destruction of their property. The government has promulgated a forest law, for the environment security of nation, to stop all logging in forest concession lands, except in the mangrove forest. This has led to the consideration of communal forests as a means to involve the villagers who live close to the forest in the protection and rehabilitation the forest for the sustainability of forest benefits and for environmental security.

### COMMUNAL FOREST DEVELOPMENT IN THAILAND

Communal forests are those which have been managed by the villagers to meet their own needs for products and benefits derived from the forest. The holding and management scale of the forest and management systems of the villagers vary from place to place as a result of variations between the ethnic groups, their believes, cultures and traditions. The benefits from the forest range from direct benefits, like wood and non-wood products, food and medical products; or indirect benefits like water resources for paddy fields, places for recreation and wildlife protection. The harvesting of forest products and benefits range from a means of subsistence basis to a commercial basis.

In the North, some hill tribes in Chiang Mai (the Meo, Lisu, Aka and other ethnic groups), protect the forests as the place of spirits. The forest protection ritual is performed in relation to the spirit. The Karens and Lua groups protect the forest for their water resources needed in the paddy fields. Also the forest is protected as a place for rituals concerning the spirits. For the lowland Thai, forests are often kept for crematoriums. In Nan, the lowland Thai have protected the forest in watershed areas for their downstream paddy fields. The arrangement whereby firewood, edible vegetation, mushroom and bamboo shoots can be collected by the villagers. They in return, agree not to cut the trees. If also, it is

well known that the Buddhist monks have their temples on the top of mountains and protect the whole forest surrounding these temples.

In the Northeast, the forest near the villages have been reserved for rituals concerning the spirits and for ceremonies concerned with agriculture. Before the rice planting season, farmers perform rituals to insure good yields of the crops. The forests are considered the home of their ancestors and must therefore be protected. The forests are called "Don Pu Ta" which means "the place of the grandfather." Firewood, edible vegetation, mushrooms and bamboo shoots can be collected by the villagers as long as the trees are not cut and destroyed. In Sakonnakorn, Ubol Rachatani and Roi Et, there are well known Buddhist temples that protect the forest land surrounding the temple. The word "Wat Pa" is used for the temples which means "temple of forest." The forest serves as a place of nature and silent meditation under the Buddhist worship.

In the Central region, Lopburi, Chainat and Nakornsawan are well known places where Buddhist monks have reserved the forests surrounding their temples. The forests are forbidden places for hunting or "Kait Api Tan" which means "the forgiveness zone" under the Buddhist doctrine. In the western part of the region, in Kanchanaburi, the Karen hill tribes also keep the forest for the water resources and the spirits. On the east coast of Chantaburi the mangrove forests are kept by the villagers as breeding places for sea food. Fishes, crab and shrimp can be caught in the mangrove forest.

In the South the buddhist temple in Suratthani has protected the forest as a place of nature and silent meditation and the "forgiveness zone." In Nakorn Srithammaraj and Songkla, the villagers protect the forest as a source of edible fruit trees. Wild durian, mangosteen and parkia can be obtained from such forests. In Trang, the mangrove forest has been kept as a place of sea food for the villagers.

The communal forests have been protected and the benefits have been allocated through the group efforts in the villages. The mechanism for group management exists in various forms among from the beneficiary groups concerned, mostly through the existing village committee.

In the North, among the lowland Thai in Chiang Mai, the beneficiary group on water use for paddy fields is a very strong group working on communal projects. The group organizes the local people to construct communal dams to protect the forest for their water for agriculture and wood supply. In many cases the village committee, the smallest unit at the village level of administration, is the strong group that functions to protect the forest for the villagers. However, the participation of the villagers in the communal projects mostly depends on the leadership of the villages, the so-called "Pu Yai Ban" or the headman. In

some cases, Buddhist monks also play a great role of leadership to encourage the villagers to carry out communal projects (See Table 2).

Table 2 Traditional Management of Communal Forest.

Region	Forest type	Community objective	Organization	Rule
North	Mixed Deciduous, Dry Dipterocarp, Hill Evergreen, Dry Evergreen	Ritual, Religion, Wood and non- wood products, Food and medicine, Water resources, Recreation	Beneficiary group, Customary group, Village committee,	Customary, Buddhism doctrine, Village agreement, Forest law
Northeast	Dry Dipterocarp, Dry Evergreen	Ritual, Religion, Wood and non- wood products, Food and medicine, Recreation	Beneficiary group, Customary group, Village committee	Customary, Buddhism doctrine, Village agreement, Forest law
Central	Mixed Deciduous, Dry Evergreen, Mangrove, Tropical Rain	Religion, Wood and non- wood product, Food and medicine, Recreation	Beneficiary group, Village committee	Buddhism doctrine, Village agreement, Forest law
South	Tropical Rain, Mangrove	Religion Wood and non- wood products, Food and medicine, Recreation	Beneficiary group, Village committee	Buddhism doctrine, Village agreement, Forest law

There are many forms of rules used for the protection of the communal forest. In some hill tribe communities, the custom is to protect the forest for the spirits. This rule is commonly accepted and leads to no tree cutting in those forests. Also in the lowland Thai villages, nobody is allowed to cut the trees in the crematorium forest. In the Northeast, the forest is reserved for the spirit or "Don Pu Ta". Nobody will cut trees from the forest without the permission of the spirit. In order to get the permission, rituals have to be performed. In some villages, agreements are made among the members of the village, the village committee under the supervision of the headman, and the monks or old-man groups. They use the agreements to protect the forest. A punishment will be imposed on those who break the agreement. The punishment will be in terms of fines.

In many cases, the communal forest is managed for recreation, wildlife sanctuary and botanical gardens. The agreement among the villagers alone is not enough to prevent interference from the outsiders. The existing forest law like the Forest Reserved Act will be used as an umbrella to protect the forest. In some cases, the existing forest law leads to more conflict arising between the villagers who like to manage the forest for their own benefits and the government forest officers who have the responsibility in law to conserve the forest.

#### *Concepts of communal forest*

The communal forest is an area which matches the human communities and the forest communities together. Each community has its own components and linkages which can maintain its sustainability. The co-existence of both communities might result in prosperity or degradation to each other. For better understanding, it is useful to assess the many concepts behind the establishment of communal forests.

#### *Man and forest ecosystem relation*

Man is an important factor in determining the existence of the forest. As the forest benefits user, man has his own use behavior which stems from the cultural economic, political and administrative situations which shape the practice of using the forests. The sustainability of forest products depends strongly on man's behavior. The forest ecosystem has various components which are linked together by various networks. The forest can recover itself from minor destruction arising from inside or outside the system. The benefits from forest can be obtained by people better without the destruction of the forest. These lead to the sound management of the forest to benefit man. Forest is also an important factor in the support of the culture and economics of man. As the communities depend on each other, especially the human community existing in the forest, it is often better to consider these two communities as one single unit of management in order to result in the sustainability of both.

#### *Forestry for rural development*

The livelihood of the rural people depends strongly on the forest. Forests can satisfy the basic needs of the rural communities such as wood for household consumption, food for daily life, medicine, water for agriculture and recreation. The villagers have indigenous practices that can obtain off-farm incomes from the forest. The believes and the activities of rural communities are concerned with the existence of the forest. Many forest activities of rural

communities can be strengthened to assure their development. As rural development strengthens the capability of rural societies for self reliance, the forest activities existing in the community can be part of many activities in the rural integrated development program, especially for these rural communities.

#### *Decentralization in natural resources management*

Forest is considered by most rural people as common property whose benefits can be managed to meet all the needs of various sectors of the country. As the national forests are on government land, forest management is the responsibility of the central and regional government agencies. They have to regulate the forest benefits to meet all needs of the rural communities who live close to the forest. The rural communities have already the ways and means to obtain the benefits from those forests. The need to manage the forest for their own use is crying out. The role of the rural community in managing their own forest is considered one of the forms of management that can be decentralized from the central government administration to the local community administration.

#### *Forest as manageable renewable resources*

As a renewable resource, the forest can be managed for the sustained benefit to mankind. Wood and non-wood products can be regulated by the suitable silviculture system. The forest has many meanings to the rural communities close to the forest. Those needs and desires for the forest benefits can be the objectives in the small scale forest management. The aim is to have sustained benefits for all members of the communities. As there are many needs in the communities, the organization of the villagers will be the local point that can divide the benefits equitably. Also the protection of the common resources has to be arranged. The rules for using the forest will be the tools to offer fair benefit sharing and guarantee the sound forest management by the communities.

#### *Government program for communal forest promotion*

Communal forest is an indigenous practice that evolved not only from the beliefs, but also cultures and traditions of the rural Thai people. It also evolved from different programs of the government in different periods. Experience of tree planting can be shown in the temples, schools, private land boundaries, and the irrigation canals. For a better understanding the chronology of the government programs are shown below:—

- (1) 1941—Start of national-wide promotion of tree planting on the special occasion of na-

tional day; trees were planted in schools, temples, government offices and other available land.

- (2) 1952—The declaration of 24 June as a national arbor day. Tree planting was promoted in various types of land as above.
- (3) 1956—The national land policy in which 20 percent of resettlement land was to remain as a communal forest for the members of the resettlement villages.
- (4) 1970—Promotion of the village supply forest for the villages located near the forest. The village supply forest is managed to supply the household consumption needs of those villages nearby.
- (5) 1976—The start of the forest village program in the degraded forest reserve: those farmers who have stayed in the degraded watershed areas will be resettled in the land that is suitable for agriculture. Infrastructure and basic services from the authorities concerned will be offered. The degraded land in watershed areas or land not suitable for agriculture will be planted under the forest plantation program which can offer employment to villagers. Communal forestry was initiated as a wood supply source for the village.
- (6) 1977—The start of the volunteer for tree planting program: the seedlings were contributed freely to those who needed them. Tree planting was encouraged on the available land of temples, schools, government offices, roadside and village grazing land.
- (7) 1980—The start of communal forest for firewood supply for the hilltribe communities in the government integrated watershed development program.
- (8) 1980—The promotion of the village woodlots in 7 provinces of wood shortage areas in the Northeast: the program was to produce the wood energy for the household consumption of the villagers. The program is under the bilateral agreement between Thailand and United States in the Renewable Non-conventional Energy Project.
- (9) 1984—The start of the national program on community wood supply program in poor rural areas: the program promotes tree planting in the wood-shortage villages in the North and the Northeast regions. The program was a part of government projects in the national rural development program.
- (10) 1985—The promotion of communal tree plantation in the central plains: the program promotes tree planting in communal grazing lands in order to demonstrate the raising and production of trees for the community nearby. It also includes training for the villagers to the establishment of reforestation. The program supported by the Green Earth Foundation of Japan.

- (11) 1987—The start of the national program on communal forest establishment in national agricultural land: the program is designed to strengthen the communal wood supply program started in 1984. The program includes the organization of planting groups, group training and seedling subsidies for communal plantation.
- (12) 1987—The national land use policy was to reallocate forest lands less than 100 ha in land reclassification areas, for communal forests under the supervision of the sub-district council or the village committee.
- (13) 1988—The establishment of the forest extension structure in the Royal Forest Department: the program is supported by the UNDP/FAO/SIDA, 100 forest districts in 47 provinces were equipped with motorcycles and manned by extension-trained forest officers to work with the target villages, 10 mobile forestry extension units were established in 10 regional forest offices for public awareness campaigns in the target villages. The forestry extension demonstration centres were established to be station demonstration and village training centres. Also with support from the Ford foundation, the pilot project on upland social forestry was established in 4 sites in the North and Northeast provinces in order to be the pilot villages for the involvement of the villager in the forestry activities and the study of the coordination between the implementing agencies and academic institutes in solving the rural problems on forestry aspects.

## PROBLEMS IN PROMOTING COMMUNAL FORESTS

Communal forest in the Thailand context is a set of evolutions which have emerged from the traditional practices and the simultaneous promotion and extension programs of the government. There are many lessons that can be learned from the Thai experience. For those who are interested in the setting up of communal forests, some experience will now be explained.

### *Needs of the villagers*

Communal forests are managed to fulfill the needs for the local communities. This will assure the sense of belonging and the participation of the villagers. The villagers will involve in some activities where they can really see their own benefits. Communal forests sometimes meet conflicts among the various needs arising from the village due to the different views that they hold on the forests.

From a survey of 52,909 villages in 58,896 villages all over the country, about 66 per cent of villages used firewood and charcoal for their household wood energy consumption.

The need for firewood and charcoal is different between the regions. A level of wood shortage is also experienced in the villages. From the distance and times the villager spends for firewood collection, about 58.6 percent of village can be considered self-sufficient in firewood, 2.2 percent of villages can be considered to be at the beginning of a wood shortage and about 39.1 percent can be called wood shortage village.

The status of wood shortage villages varies from region to region due to their practice of indigenous agroforestry, communal forest and the existence of natural forest (See Table 3).

Table 3 Sources of Firewood and Charcoal

	North	Northeast	Region Central	South	Total
Number of villages	11,957	24,348	15,496	7,095	58,896
Number of Villages surveyed	10,810	22,564	12,852	6,683	52,909
<i>Firewood or charcoal using village</i>	7,210 (100) (67)	17,211 (100) (76)	4,928 (100) (38)	5,390 (100) (81)	34,739 (100) (66)
Firewood or charcoal used from available sources not more than 5 kms. or not more than 60 minutes walking distance	2,034 (28.21)	10,146 (59.0)	3,742 (75.9)	4,448 (82.5)	20,370 (58.6)
Firewood or charcoal used from available sources not more than 5–10 kms. or not more than 60–120 minutes walking distance	209 (2.9)	421 (2.4)	78 (1.6)	62 (1.2)	770 (2.2)
Firewood or charcoal used from forest resources which are over 10 kms or more than 120 minutes walking distance	4,967 (68.9)	6,644 (38.6)	1,108 (22.5)	880 (16.3)	13,599 (39.1)

Sources: Basic information of rural villages in 1987. Rural Development Coordination Centre, NESDB.

Remarks: Does not include villages which use gas or other sources of energy for household consumption, or buy firewood or charcoal.

However firewood and other non-wood products like mushrooms, edible fruits, or bamboo shoot are considered as by products from the forest which individuals can collect from the forest on the basis of their individual needs rather than communal management. Much evidence has been found that villagers view the forest as a land bank for agriculture. In the survey of 52,909 villages, about 14,022 villages all over the country have members who use the forest land for agriculture with Legal permission. The different views of forest land use among the members of the village have to be considered for the involvement in the communal management of forest activities. Sometimes they need more support from outsiders.

#### *The group efforts for communal management*

Communal forests need more effort on the part of village groups in managing the common property to fulfill all the needs in the community. There is a need for the groups to maintain, rehabilitate and protect the forests. The beneficiary groups can be set up to take care of their common property. If the village is small, the beneficiary group can be the same group as the official village committee. Mostly the influence of the headman or other respected persons in the village like old man, monks and primary school principals will play a great role in the strengthening of the group efforts in communal management.

#### *Management skill of the villagers*

The communal forests have been known as an indigenous forest management in the rural communities. The villagers know how to collect wood and non-wood products without the destruction of the forests. They know the season of collecting edible vegetation, mushrooms and bamboo shoots. However, as the population in the communities expands and the commodity-currency economy penetrate in to the communities the production from the forest can be commercialized due to improved access to urban markets. There is more need for the management skills of the communities in the regulation of the sustained yield of the forest. There is a need to rehabilitate degraded forests under appropriate techniques of silviculture. Also, there is a need for setting up a system of benefit sharing among the villagers who collect the benefits from the forest. The last need requires a capability in dealing with commercial goods from the forest in the outside market. These management skills open the room for extension services which should offer benefits to the rural communities.

#### *Common agreement and forest law*

Communal forests are well protected by the common agreement of the villagers in the rural areas. The common agreement might stem from common believes, religious doctrines

or leadership of headmen. However, as the communities are opened to outsiders there are more contacts and relationships with other communities. The common agreement in one community is not always accepted by the others. This leads to conflicts among the communities over the forest uses. The national forest law can be applied to protect the communal forests but this resulted in conflicts between the villagers and forest officers. There is a call for the promulgation of a new law on communal forests which can provide authority to rural communities for their own natural resources management.

#### *The commitment of the government*

The government should have a clear policy for the community management of their own resources. The communal forest is an indicator of the willingness of the government to decentralize authority from the central administration to the local administration, especially to the village level. The communities still need much administrative infrastructure from the government in managing their forest. Much support is still needed from the government. The technical aspects and materials should be provided through an extension system of the government. It is needed to assure the development of the capability of the communities to practice self-reliance in management.

#### *Role of non-government organizations*

The communities need much more support to strengthen their capability for natural resources management. Group work in the communities is something that has evolved from their beliefs, traditions and the hierarchy of people in rural society. The system of group work varies from community to community. Sometimes communities cannot accept the support provided by government which is not flexible enough to cope with the real situation in these communities. The non-government organizations are non-profit making and aim to help strengthen the communities capability in solving their own problems. The flexibility of non-government organizations can fulfill the need of the communities for strengthening their group work. In many cases, the request for communal management of the forest close to the village has been pushed by the non-government organizations that work in the village. There should be a channel for coordination between non-government organizations and government agencies in working on community forest promotion.

#### *Role of the existing local markets*

Communal forests are sometimes not managed for the subsistence of the communities themselves. As the benefits from the forest, in terms of wood and non-wood products, ex-

ceed the need of the communities, the excess can be sold to other communities. There are many villagers who buy forest products from other villagers. Also, trader/buyers come from the urban areas. Competition between the local merchants and the outsider merchants sometimes results in more destruction of the forest resources. Overuse of the forest land is sometimes experienced. This leads to more support for the village communities to apply stronger rules in the regulation of the benefits from the forest to assure that sustained benefits can be got from the forest. Also there is an incentive for villages to set up their own structure in dealing with the commercial aspects of the forest products. The fairness of prices would then be assured.

### CONCLUSION

Thailand has experienced an alarming rate of forest destruction in last 2 decades. This has pointed to the need to involve local communities in forest management. In order to meet the national target of having 40 percent of national land as a forest land, Thailand will further expand communal forests. Many discussions on various aspects of communal forests by various groups concerned have arisen. The policy issues relating to the involvement of rural communities in natural resources management have been assessed at many research papers, books and several meetings. The nature of the implementation program, involvement of local group efforts, technical services, subsidies and other support measures are also in the process of discussion. As the discussions continue, many considerations should be made to have a clear view of the picture of communal forests in the future.

The Agrarian Land Reform Bill is now in the process of amendment and finalization in Parliament. The Bill will provide the chance of land reform in those degraded forest lands. It aims to assist those farmers who have stayed on forest land to obtain legal land tenure over it. The existing parcels of forest land of not more than 100 ha and degraded forest land will be reserved as communal forests under the supervision of the lead administration. This will hopefully lead to a change in the attitude that the forest, which once used to be common property, can be claimed for individuals properties. In many cases, farmers have encroached into the communal forests. It is a question to communal forest whether it can be kept as a forest or convert it into an agricultural land under the individual property right.

As Thailand rural societies are on the stage of changing from subsistence agriculture into more commercial-commodity agriculture, the experience of produce for sale is also shown. These lead to the attitude of individuals more than the communal one as before. The practice of sharing work is changing to the hiring labor in many communities. Moreover, from

the survey of 52,909 villages all over the country, about 90 percent of the villages have members who look for off farm-incomes from other villages or in the urban areas. Their experience of modern life and the hiring labor system are resulting in the question of the changing in the attitude of the villagers from the communal work to the individual work.

The harvesting of forest products is not just for self subsistence but for commercial as experience from many communities. These lead to the issue of sustainability of the forest products which resulted from the mismanagement of the forest as a communal property. Also the competition among the local traders in buying the forest product not only give an incentive to the villagers to overuse the forest but also indicator of low price that the villagers cannot get from the real market. The question is given whether the establishment of co-operative structure can be introduced to rural communities. Also if it is really introduced to the communities whether it can work well in the rural contexts.

As 20 percent of the people live in the urban communities; their attitude and use behavior are different from those in rural areas. Many trees on the roadside have been cut for expanding or widening the road. Trees in the house yards, well known as home garden agroforestry, have been cut for electricity lines. Many housing projects for the increased population in urban areas have resulted in more trees being cut. More urban communities need parks for their recreation. There are different demands on the forest and different activities that can be promoted in urban areas. Consideration also have to be given to urban forestry for urban communities.

There are still many questions arising in the management of communal forests. It is believed that there will be no single solution for communal forests. As experience has shown in Thailand, practices due to traditions and the modification of systems leads to a varying set of solutions. The baseline surveys of various systems of communal forest management should be carried out. This will result in a more clear view of the management of the forest by the rural people. It is also hoped that the adoption of the practices of the rural people can be a means to involve them in forest management in Thailand.

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## 要 旨

現在、熱帯地域における森林の減少は激しい。タイもまた1961年に国土面積の53%を占めていた天然林が、27年後の1988年にはわずか28%へと大きく減少した。この原因には人間の森林に対する取り扱い、すなわち人口増加に伴う森林の耕地化、燃料採取、商業伐採等が挙げられる。熱帯地域における森林の保全・維持に関して、森林の近くに住む村落住民が自己の用に供するために用益している森林、すなわち村落共同体林が注目される。本論文では、タイにおける村落共同体林について、その現状と問題点について考察する。

タイにおける村落共同体林は、地域により、ところによって様々な態様を示すが、一定の村落構成員が維持・管理・利用のための固有のルールによって村落近傍の一定の森林を排他的に占有し、自給用の木材、燃料材、山菜、キノコ、タケノコ、薬草の採取だけでなく、時には販売用にこれらを採取する森林であり、そのために村落住民自らが施業を行う森林であって、時には集落の水田のための水源林として、土壌流出を防ぐための森林として、さらに現在ではレクリエーション用等にも

供する森林である。

激しい森林の減少が続くタイでは、国土の40%を森林として確保するという林業政策が1985年に策定された。ここで注目されているのが、村落住民が維持し管理してきている村落共同体林である。現在タイ国会では、農地改革法の改正審議が最終段階に入っているが、ここでは森林に農民が入り込んで形成した農村集落に対し、村落共同体林として100ha未満の森林の占有と用益を合法化しようとしている。村落住民を森林経営に直接取り込むことによって、森林の維持回復を図ろうとするものである。

しかし現在のタイ農村では、自給的農業から商業的農業への転換が進みつつある。その結果、従前の伝統的共同労働が雇用労働に取って変わり、農民の農閑期における賃労働従事が一般化してきている。そしてそれとともに農民と都市商人との対立が生じることによって、農民自身による森林の商業的利用が強まり、森林の過剰利用の問題が生じ、農民が販売する林産物価格が低く抑えられるという状況が生じている。このことは、タイの農村集落に協同組合組織導入の必要性という問題を提起している。

タイでは国民の20%が都市近郊の集落に住んでいるが、この住民による森林用益のあり方は地方住民のそれと異なっている。道路建設、電線の設置、住宅建設によって森林の伐採が行われている。ここでは住民による森林のレクリエーションの要求も生じている。都市近郊村落共同体のためには、その要求に合致した村落共同体林活動が推進されなくてはならない。

タイの村落共同体林に関する問題は多岐にわたる。決して単一の解決策はありえない。村落共同体林に関する様々な経営方式についての調査研究がさらに進められなくてはならないであろう。