

CHARACTERISTICS OF PARTICIPATORY FOREST MANAGEMENT SYSTEMS IN SOUTHEAST ASIAN COUNTRIES

Makoto Inoue*

1. Introduction

Since the late 1970s a number of participatory forest management systems have been attempted in the tropics, because professional foresters noticed that they could not manage the forests sustainably under the principles of conventional and industrial forestry. According to an initial definition, social forestry (Pardo 1985) and community forestry (FAO 1978) were defined similarly as any situation which intimately involves local people in a forestry activity for rural development.

These days, however, it seems that the term social forestry involves a wider range of comprehensive participatory activities, and the term of community forestry implies collective activities rather than individual activities such as farm forestry. However I would like to use the term "participatory forest management system" (PFMS), in order to focus on local people's participation.

The purpose of this paper is to clarify PFMS's characteristics of Southeast Asian countries under common criteria. An analytical framework, consisting of three common criteria, will be presented first. Then PFMS in each country will be studied.

2. Analytical framework

Three common criteria of elements for the comparison among Southeast Asian countries are discussed here (Note 1).

2-1. Legal status of land

Generally, forest policy can be effectively implemented on the assumption of certain legal status of land, consisting of land classification and land owner. If a portion of the land is not classified as forest land, it may be converted to agricultural residential or some other use, which would be beyond the control of forest policy. This is why it is important to consider the legal status of land for the analysis of participatory forest management systems.

Usually, legal owners of land and forest may be individuals, organizations, villages, outsiders, and governments (district, state/provincial, or national). Participatory forest management systems can be adopted under any legal status of the land. Provisionally this study regards the land of different legal status to be either individually owned land, organizationally-owned land, village land, or governmental land.

2-2. Forms of participation

In order to implement a program at the local level, organization of a labor force is necessary. The following "forms of participation" or work organization can be identified:

- **individual participation:** individuals participate in the activities voluntarily
- **temporary group participation:** individuals take the initiative in participating, while temporary groups of families for equivalent labor exchange are formed for

* Laboratory of Forest Policy, The University of Tokyo, Japan./ Institute for Global Environmental Strategies, Japan. E-mail: minoue@fr.a.u-tokyo.ac.jp

each operation.

- **fixed group participation:** groups of individuals, bodies of members of temples, schools, and other organizations take the initiative in participating and the members are mobilized to the activities.
- **community participation:** villages take the initiative in participating, and collective labor supply systems or labor mobilization systems are applied.
- **wage labor participation:** individuals are employed as wage laborers.

Temporary group participation, fixed group participation, and community participation theoretically may be called "**collective participation**". In a broad sense, all forms mentioned above can be regarded as participation. In this paper, however, wage labor participation is not considered to be participation because forest laborers usually can not take the initiative in forest management.

2-3. Types of forest management

In order to evaluate the character of participation, it is very convenient to take the management responsibility and initiative into consideration. In terms of management responsibility and initiative, sociological "types of forest management" are classified as follows;

- **peasant forestry:** managed by individuals/peasants living in the village.
- **functional group forestry :** managed by functional groups such as forest users' groups, cooperatives, schools, temples, women union, elder's group, etc.
- **fundamental group forestry:** managed by fundamental groups such as relative's groups, natural villages, indigenous cultural communities.
- **village forestry:** managed by an executive body of formal village.
- **private forestry:** managed by outsiders and corporations.
- **public forestry:** managed by local and national governments.

Actually, peasant forestry on private farm land is called "**farm forestry**"; functional group forestry, fundamental group forestry, and village forestry are included in "**community forestry**" that is based on **collective management**. Public forestry in cooperation with local people is called "**joint forest management (JFM)**" that is based on **co-management**. Unfortunately, local people usually do not take management initiatives in some of the JFM. Public forestry and private forestry, and some of the JFM, can not be regarded as participatory forest management system because it implies that local people participates as wage labors.

2-4. Possible combination of three elements

In this paper "types of forest management" are given first priority in order to consider the possible combination, because who takes initiative and responsibility in managing forest shows direct and manifest characteristics of management.

"Forms of participation" depend on "types of forest management" and can vary from place to place. Possible forms of participation can be predicted, giving consideration to existing labor organization and labor mobilization systems in target countries.

"Legal status of land" where participatory forest management is implemented depends on the legal systems in each country. Generally, however, "peasant forestry" can be applied only to individual land. "Functional group forestry" and "fundamental group forestry" can be adopted at organizational land, village land, and governmental land. "Village forestry" can be applied at village land and governmental land.

3. Participatory forest management systems in each country

3-1. Indonesia

In Indonesia "social forestry" is an umbrella terminology of governmental participatory forest management programs. Only community forest program and individual forest program, out of the governmental social forestry programs, however, can be regarded as participatory forest management systems (Inoue, 1999). In addition to the governmental social forestry, NGO-supported "community-based forest management system" will be discussed here.

Community forest (*Hutan Kemasyarakatan*) program

The program is practiced by the people, specifically cooperatives of the people living within and near the forests which obtain a "community forestry concession (HPHKM)". The concession, of which a period is 35 years, is granted on production forests, protection forests, and conservation areas such as national parks, in the national forest which are free of other rights. All the activities of producing wood and non-wood forest products, including planting, tending, protecting, harvesting, and marketing, for the purpose of self consumption and sale, are regarded as community forestry activities. It is concluded that community forest program is regarded as "functional group forestry" on national forest land, probably through "fixed group participation", "community participation" and sometimes "wage labor participation".

Individual forest (*Hutan Rakyat*) program

The program is practiced on private land of which the people hold a certification of the landownership, outside national forest. The main activity of individual forestry is re-greening or afforestation and *Paraserianthes falcataria* is planted by many people subsidized by reforestation fund. The program can be regarded as "peasant forestry" on individual land, probably through "individual participation" and sometimes "wage labor participation."

Community-based forest management system (*Sistem Hutan Kerakyatan:SHK*)

NGO-supported SHK is defined as customary forest management systems by the local people, especially the indigenous peoples. The people depending on the forests have initiative, form organizations, and develop customary regulations to manage forests. The SHK can be regarded as "fundamental group forestry" on national forest land, probably through "community participation".

3-2. The Philippines

Land categories in the Philippines by land ownership are "public domain" owned by the state, "ancestral land and domain" owned by Indigenous Cultural Communities (ICCs) or Indigenous Peoples (IPs), and "private land" owned by individuals and organizations. The public domain consists of "alienable or disposable lands" or non forest lands, and "forest lands" that is classified into "permanent forest (forest reserve)" and "public forest" or unclassified public domain.

Forest policy in the Philippines consists of three components: Community-Based Forest Management (CBFM) for the purpose of conservation and production, industrial forestry for the purpose of timber production, and National Integrated Protected Areas Systems (NIPAS) for the purpose of conservation. Participatory forest management can be seen in CBFM, Socialized Industrial Forest Management Program in industrial forestry, and protected areas management in NIPAS.

Community-Based Forest Management (CBFM)

In 1995, through Executive Order No. 263, the government of the Philippines adopted

Community-Based Forest Management (CBFM) as the national strategy for the purpose of sustainable forest management and social justice. Nine million hectares or 58 percent of total forest land will be allocated for CBFM by the year 2008. CBFM will integrate and unify existing people-oriented forestry programs such as Integrated Social Forestry Program (ISFP), Regional Resource Management Program (RRMP), Ancestral Land and Domain Program, Community Forestry Program (CFP), Forestry Sector Program, etc.

Under the CBFM, two types of forest management are acceptable. Firstly, ICCs or IPs acquire Certificate of Ancestral Domain Claim (CADC) or Certificate of Ancestral Land Claim (CALC) and make Ancestral Domain Management Plan (ADMP) in order to control and manage the forest. ICCs/IPs have rights to claim ownership of land, to develop lands and natural resources, to stay in the territories, and of self-governance and empowerment. This type is basically regarded as “fundamental group forestry” on ancestral land and domain, probably through “temporary group participation” and “community participation.”

Secondly, the residents living in the uplands and the coastal land, in public domain including permanent forests, create a People’s Organization (PO), conclude a CBFM Agreement (CBFMA) or 25 year production sharing agreement with the government, and make a Comprehensive Resource Management Framework (CRMF). Individuals can manage forests within the area of CBFMA after acquiring Certificates of Stewardship Contract (CSC) from the PO. This type is regarded as “functional group forestry” and sometimes “peasant forestry” on public domain or national land, probably through “fixed group participation”, “community participation”, and “individual participation.”

Socialized Industrial Forest Management Program

To implement the policy to promote rehabilitation and restoration of forest lands and the establishment of plantations for wood supply, the Department of Environment and Natural Resources (DENR) launched Socialized Industrial Forest Management Program (Argete, 1998). The program allows individuals/families and associations/cooperatives to participate in forest plantation development from forest areas ranging from 1-10 ha and from 10-500 ha by providing them security of tenure through the issuance of a Socialized Industrial Forest Management Agreement (IFMA). The program is regarded as “peasant forestry” and “functional group forestry” on forest lands for the purpose of wood production, probably through “individual participation”, “fixed group participation”, “wage labor participation”.

Protected areas management in NIPAS

According to “National Integrated Protected Areas System Act (Act No.7586, 1992), the DENR shall have no power to evict indigenous cultural communities from their present place of occupancy nor resettle them to another area without their consent. ICCs can manage their surroundings within consented restrictions. The protected area management by ICCs can be regarded as “fundamental group forestry” on ancestral land and domain, probably through “temporary group participation” and “community participation”.

In the same way, “tenured migrant” who has actually and continuously occupied an area for five years prior to its designation as part of a protected area shall be eligible to become a steward of a portion of the protected area. Their activities, however, shall be governed by the guidelines prescribed in the management plan as well as the prohibitions set out in the Act. The management by tenured migrant can be regarded as “public forestry” in cooperation with local people on public domain, probably through every form of participation.

3-3. Thailand

Since 1992, Royal Forest Department (RFD) has been implementing zoning within the

area of forest reserves designated by National Forest Reserve Act in 1964. The classification of national forest reserves are “conservation zones” which are covered with forest trees and are suitable for preservation, “economic zones” on which forests have been degraded and are suitable for the cultivation of tree crops, particularly forest tree plantation crops, and “agricultural zones” in which the land has been deforested and are occupied by permanent settlers and are going to be transferred to Agricultural Land Reform Office (ALRO) for land distribution. Under the current legal system, community forestry can not be permitted in the conservation zones but can be in the economic zone. Although land ownership is very complicated and a community forestry act has not been enacted, various de facto participatory forest management or community forestry systems exist on land of every legal status such as public land outside the permanent forest area and national forest reserve or state forest.

Community forestry on public land

According to the Land Code, the rights of collective land utilization by local people can be protected on public land under the control of the Land Department if registered properly. This case can be considered to be “functional group forestry” and “village forestry” on national land, probably through “fixed group participation” and “community participation”.

Community forestry on forest reserve

Many community forestry activities are found in forest reserves, based on an informal arrangement between local government officials and the villagers. It is not clear if the community forestry act will back these activities up on conservation zones as well as economic zones. It seems that this community forestry can be regarded as “functional group forestry” and “village forestry” on national land, probably through “fixed group participation” and “community participation”.

3-4. Vietnam

In 1994 the government started to allocate the land and the forests to individuals, households, villages, organizations such as forest management committee, seed station, enterprise, peoples army, schools, etc. The local people can hold the rights to use allocated land and forest (red book certificate) for 20 years in annual crop production or for 50 years in perennial crop production. The Vietnamese forests are classified into “production forests” for producing wood and non-wood forest products, “protection forests” for watershed protection, and “special-use forest” for biodiversity conservation and tourism. Participatory forest management systems are embedded in tree plantation and conservation programs in each forest category.

Management of ecological rehabilitation zone in special-use forest

The Special-use Forest Management Board (SFMB), having a red book certificate, concludes protection agreements with households, who acquire green book certificates, are prohibited to inter-crop, and are permitted to plant trees. As for tree planting, each household earns 1-2 million Vietnamese dong per hectare and has an obligation to protect the planted trees for three years on 2-4 hectares of the forests on average. As for natural regeneration, each household annually earns 40,000-50,000 Vietnamese dong per hectare for the protection of 10-20 hectares of the forests on average. The systems are regarded mainly as “peasant forestry” on national land for protecting the forests, probably through “individual participation”.

Management of buffer zone around special-use forests

In order to decrease the pressure on special-use forests, the government provides various

forms of assistance to the people who can obtain a red book certificate, such as extension of agricultural and forestry technology, assistance to plant fruit trees, etc. The systems are regarded mainly as “peasant forestry” on national land for protecting the forests, probably through “individual participation.”.

Management of critical protection forests

People can conclude a protection agreement the same as in ecological rehabilitation zones, with Management Board for Protection Forests (MBPF) having a red book certificate, and can acquire a green book certificate. They are permitted to introduce agroforestry systems and to collect non-wood forest products and fuelwood. The systems are regarded as “peasant forestry”, “functional group forestry”, and “village forestry” on national land for protecting the forests, probably through every form of participation.

Tree plantation on allocated land in production forests

Individuals, households, and organizations can be allocated land and get a red book certificate in production forests. The land area allocated to them varies from place to place. For example, each household gets 3-5 hectares of land on average in mountainous regions; there are households getting more than 50 hectares in other regions. These activities are regarded mainly as “peasant forestry” or “functional group forestry” on national land for the purpose of producing timber, probably through every forms of participation.

3-5. Laos

Laotian land is classified into eight categories, such as agricultural land, forest land, constructional land, etc. Forest are classified, based on the Forestry Law enacted in 1996, into the following five categories: 1) protection forest to conserve watersheds, guard against soil erosion and protect dense forests, etc.; 2) conservation forests to conserve wild animals and plants; 3) production forests to produce wood and non-wood forest products (NWFP); 4) regeneration forests, or the young fallow to be regenerated immediately; and 5) degraded forest land or barren land. Of these forest types, the forests for which the right of utilization can be granted to organizations or individuals are only degraded forest land.

Organizations and individuals have the rights of possession, use, profits, transfer and inheritance. Legally, the right to utilize land in Laos differs from the land ownership in capitalist countries in that buying and selling are prohibited. The lands, however, are virtually purchased and sold, and the period of time of the rights is not stated definitely. The right to utilize the land in Laos is, *de facto*, nearly equivalent to land ownership in capitalist countries. This is very important factor to consider the legal status of land, on which participatory forest management systems have been implemented since the early 1990s.

Joint Forest Management (JFM)

Under the program, local government manages forests in cooperation with local people. But the villagers are not involved in the decision-making process in planning, and play the role of subcontractor for implementation of plans made by the government or take part in the management just as laborers. It can be concluded that JFM can be regarded as "public forestry" mainly for the purpose of timber production on "governmental land" covered by rich natural forests, through the combination of "fixed group participation", "community participation" and "wage labor participation".

Village forestry

In the national village forestry strategy, village forestry is defined as a partnership between organized villagers and the state for the sustainable management of designated forests. Activities include conservation, protection, regeneration, and afforestation activities, all depend on the initiative of the village community or organized villagers. However, village forestry is not concerned with the land allocated to individuals and other juridical entities (Bonita 1997). Accordingly, one could conclude that village forestry can be regarded as "functional group forestry", "fundamental group forestry", and "village forestry" for all the purpose of forest related activities, on "organizational land", "village land", and "governmental land", through "fixed group participation", "community participation", and sometimes "wage labor participation".

NGO-supported Community Forestry

A community forest development project (CFDP) in Khammouane province is supported by JVC, a Japanese NGO, and is active in 18 villages. Of the 18 villages five prepared simple forest management plans after the village boundaries were delineated and land-uses were mapped through a participatory approach (Department of Forestry 1997). The villagers also developed rules to control forest management. The projects are regarded as "village forestry" on "village land" mainly for the purpose of conservation, through "community participation" where village forest volunteer groups play an important role.

Tree plantation by the villagers

People living in the villages can plant trees such as teak and fast-growing species on allocated land. This activity is considered to be "peasant forestry" on "individual land" mainly for the purpose of commercial timber production through "individual participation" and "temporary group participation".

4. Conclusion

The characteristics of participatory forest management in each country are shown in Table 1. In most of the participatory forest management systems, the land still belongs to the state and the right to use the land is granted to the local people. Protected areas are mainly controlled by the government.

In terms of transfer of responsibilities for forest management from government agencies to the local people, the systems in the Philippines appear to be advanced because Indigenous Cultural Communities (ICCs) and Indigenous peoples (IPs) are granted the land ownership and the local people are involved even in the management of protected areas. The systems in Laos is also noteworthy because *de facto* land ownership is granted to individuals, organizations, and villages.

This study found that most of the "collective management" by the local people is not implemented by fundamental groups, but by functional groups, except for the management by ICCs and IPs in the Philippines. Village forestry activities in Laos may also be managed by fundamental groups.

Notes

(1) This part is a revised version of an earlier paper (Inoue et al, 1998)

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Table 1: Participatory forest management systems in selected Southeast Asian countries

Countries	Programs/activities	main types of forest management	Legal possessors of land	Main purposes
Indonesia	Community forest program	functional group forestry	state	wood production
	Individual forest program (outside forest)	peasant forestry	individuals	production
	SHK supported by NGOs	fundamental group forestry	state	conservation
The Philippines	CBFM by ICCs/IPs	fundamental group forestry	ICCs/IPs	wood production
	CBFM by POs	functional group forestry	state	wood production
	Socialized Industrial Forest Management Program (through IFMA)	peasant forestry functional group forestry	state	wood production
	NIPAS (by ICCs)	fundamental group forestry	ICCs	conservation
	NIPAS (by tenured migrant)	public forestry	state	conservation
Thailand	CF on public land and forest reserve	functional group forestry village forestry	state	wood production, conservation
Vietnam	Ecological rehabilitation zone management	peasant forestry	state	protection
	Buffer zone management	peasant forestry	state	protection
	Critical protection forest management	peasant forestry functional group forestry village forestry	state	protection, wood production
	Tree plantation	peasant forestry functional group forestry	state	wood production
Laos	Joint Forest Management	public forestry	state	wood production
	Village Forestry	functional group forestry fundamental group forestry village forestry	organizations, villages, state	protection, conservation, wood production
	NGO-supported CF	village forestry	villages	conservation