

Article

Local Forest Management in Indonesia: A Contradiction Between National Forest Policy and Reality

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Local Forest Management (LFM) is an important alternative strategy for conserving the forest, and for allowing both forest dwellers and larger stakeholders to benefit from the forest. However, in many cases national policies do not favor LFM. This article critically reviews Indonesia's national forest policies and indicates how they contradict the principles and practices of Local Forest Management. For this purpose, an excerpt from a research report on forest management by a local community in East Kalimantan is provided. This includes natural resource tenure, land classification and utilization, forest product utilization and the negative impact of industrial tree plantations. A review of LFM policies, land and forestry laws and the prospect of forestry reform in the future is provided after a discussion of the local situation. This article argues that local people are able to manage the forest in a sustainable way based on their traditions. Accordingly, it is important to have a fair evaluation of customary laws, to avoid uniform application of forest development and to recognize the reality of land use and the socioeconomic conditions as criteria for forest land classification. The involvement of local people and NGOs should be clearly defined in the form of decrees or laws.

Keywords: Local forest management, Forest policy, Forest utilization, Natural resource tenure, Participation.

1. Introduction

In many Southeast Asian countries, most of the forests belong to the state, and forest management is extremely centralized. This centralization is based on the assumption that the state is the best forest manager, developer and protector, because it applies scientific management systems. Executive agents of the centralized forest management are professional foresters and are either government officers or experts from private companies.

However, since the late 1970s social forestry projects have been carried out in the tropics because professional foresters realized that they could not sustainably manage the forest under the principles of

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conventional and industrial forestry. Social forestry, as a principle of forest policy, can be defined comprehensively as "participatory forest-related activities for the purpose of sustaining and improving the economic and social welfare of the people living in and around the forests." Under this principle, appropriate policy means such as community forestry or community/group-based forest management systems and farm forestry or individual or household-based forest management systems can be chosen to manage forests.

In line with this evolution of forest policy in the tropics, this article develops strategies to promote local participation in forest management, or participatory forest management. Most of the local people have their own systems and practices for managing the forest. They have abundant knowledge of the forest environment and a strong commitment and responsibility to maintain the forest because their lives depend on it. Unfortunately, in many cases the local systems and practices cannot be fully applied due to constraints and pressures from outside these communities. Such constraints are called external constraints. This article focuses its discussion on external constraints, especially the national forest policy, even though it recognizes that internal constraints, or constraints that are inherent in the local communities, must also be taken into consideration.

The purpose of this article is to identify the problems in the national forest policy from the perspective of local participation. The following procedure is used to achieve this:

(1) This article will describe the land/forest utilization and customary forest management of the Bahau Sa' people in East Kalimantan, whose customary land was expropriated for industrial tree plantations. This is used as a case study to illustrate the conflict between the Timber Company authorized by the government and the local people.

(2) Next, in order to develop a feasible strategy to overcome the conflict, programs to promote participation in forestry activities are discussed. Then the article will examine and evaluate the participatory forest management programs promoted by the government and NGO-supported community-based forest management. Such programs are in accordance with the national policy, rather than local policy.

(3) Finally, this article will identify the limitations of participatory forest management under the national policy in terms of the rights of local people.

2. Forest management by the Bahau Sa' people of East Kalimantan

2.1. Outline of the research site

This study was conducted in Matalibaq village, Kutai District (under the administration of West Kutai District since October 1999), East Kalimantan, about 30 hours by boat along the Mahakam River from the provincial capital Samarinda (see Figure 1 and Figure 2). With a total area of 775,000 hectares, the village includes 180 hectares of transmigration land called Satuan Pemukiman (SP) or a settlement unit. This land is composed of SP 1 (later named Tri Pari' Makmur) and SP 2 (named Wana Pari'). The only way to reach the area is by boat. Almost every household owns motor boats of different capacities, which it uses to travel and to transport products.

The total population in 1997 was 668 people in 158 households. It was almost homogenous in terms of ethnicity (Bahau Sa'), but diverse in terms of religious affiliation, with a significant majority of Catholics. The people of Matalibaq were originally the Kayan-Kenyah ethnic group from Apo Kayan in the central plateau of Borneo Island. This is one of the Borneo Island indigenous communities generally known as Dayak. Since first coming to the area at the onset of the 19th century, the Bahau Sa' people have frequently changed their residence (*luvung*). In each luvung they planted tree-crops such as rambutan, jackfruit, durian and coconut. Later, those luvungs became known as *tana lepu'un uma* (fruit gardens in the village or ex-village), which are considered important evidence of their rights, ownership of the land and claim over the territory.

The current leadership system is composed of both formal and informal leaders. The first refers to village headman (*kepala desa*), who are elected by the villagers, but need to be formally appointed by the government. "Informal leader" refers to the traditional adat leader (*kepala adat*), and the chair of the Adat Council (*ketua lembaga adat*). The implementation of the Village Government Law of 1979 separates the formal village leader from the traditional leader. The informal leader is responsible for non-governmental matters.

The separation between formal and informal leaders diminishes the role of the traditional leader. In the past, the role of the traditional village leadership (*hipui*) encompassed all community matters. Under the hipui system, adat was effectively enforced. The hipui system was applicable because most of the population was homogeneous in ethnicity. This homogeneity was the key to its compliance with adat.

2.2. Land and forest utilization

Swidden agriculture, or shifting cultivation, is the main pillar of the villagers' livelihood. All village residents are swiddeners, including teachers and those who run small variety stores. A rice field is not only cultivated with rice, but also with *palawija* or non-perennial crops such as cassava, banana, chili and cucumber. The rice is used only for subsistence and is not sold for cash. Orchards (*lepu'un*) have been traditionally utilized by the community. Durian, jackfruit and rambutan have recently contributed more and more significantly to the people's economy. However, lepu'un still plays a minor role in the community's economy in the sense that it is complementary to swidden cultivation in the community's procurement system.

By the end of the 1980s, people started to grow pepper, cacao and sengon (*Paraserianthes falcataria*), a fast growing tree species. They call such plantations *lidaa*. During the off-season, people usually choose *belahan* or *berusaha*, which means to make money by collecting wild forest products such as rattan and wood. When possible (for instance, during droughts), people run small-scale community mines outside the village area.

Recently some households (e.g., that of the village headman) have begun to grow annual crops such as beans, mung beans, string beans, peanuts and chili. Thus, each household has "multiple livelihoods"; one is the main livelihood and the others are complementary to the main livelihood.



Figure 1. The research site.

a. Swidden Agriculture

Everyone in the village practices swidden cultivation and shares the same preference in selecting areas for swiddening. Their selection is based on the age of vegetation. The following are the categories of land based on the age of vegetation:

- *Tana' Tu'an*: primary forest land. Very old rejuvenated swidden areas and primary-forest-like vegetation are also called tana' tu'an.
- Be'e: land in its first year after swiddening; the dominant vegetation is grass and scrub.
- Sepitang: This includes sepitang uk and sepitang aya'. Sepitang uk refers to land in its second or third year after swiddening. The dominant vegetation is small trees (scrubs) with many grasses. In infertile soil, the vegetation is usually small, even though it has been left to grow for years, and thus is also called sepitang uk (uk means small). If after 5 to 7 years the vegetation grows well, the trees become bigger, and most of the grass has gone, it is called sepitang aya' (aya' means big).



Source: LBB Puti Jaji.



• *Kaharah*: vegetation dominated by big trees. Smaller trees are called *kaharah uk* and the bigger ones *kaharah aya'*.

Villagers prefer sepitang aya' and kaharah uk. This means they leave the swiddened area to fallow for 5 to 10 years. They believe that after such a long time the soil fertility will recover. Further, clearing this kind of land results in fewer grasses and weeds. However, villagers generally cultivate a piece of land twice consecutively, meaning that after the first cultivation they will cultivate it again the next year and after that leave the land fallow until it is suitable for re-cultivation.

Villagers also prefer areas for swiddening near major rivers (to facilitate transportation of the produce) and near fields where they have previously planted fruit trees (*lepu'un*) to facilitate care for the trees. In addition, they prefer hilly areas to restrict access by wild boar.

b. Land Classification

Although not professionally produced, some maps of land classifications have been created by the community. No part of the territory is unused or unimportant to the community. Figure 3 displays the traditional land classifications for the entire village territory. This includes the graveyard (*tana patai*), old growth forest/primary forest (*tana tu'an/tanah mawa*), sacred land (*tana to'*), utilization areas for personal consumption and making money (*tana belahan*), recreational land (*tana paru'*), forest land with a special history (*bato' hagong*), swiddening area (*tana luma'*), reserved forestland (*tana mawa*) and orchard (*tana lepu'un*). Some allocations overlap, such as tana belahan, which is also tana tu'an/tana kaso, and tana mawa, which is partly tana tu'an/tana kaso and partly secondary forest.

2.3. Natural resource tenure

a. Land rights

Village rights, household rights and individual rights are distinct categories in the property rights system of the Bahau Sa' people. According to the adat, primary forest (*tana tu'an*) comes under village rights. No individual person has private claim over primary forestland. However, private claims over trees are allowed.

In terms of function, people have *tana' mawa* or *tana peraa'* (literally, beloved land), which is considered village property. This land is well preserved because of its richness; it provides abundant resources needed by the community. This may also include tana tu'an. The area of the Meriti' River was originally allocated as tana' mawa. It functions as a resource for the community. Community members collect products from the tana' mawa whenever needed for public interest (such as for village rituals or construction of a village hall) or for private interest, particularly in emergencies such as drought, starvation or harvest failure. Outsiders are allowed to extract products from the tana' mawa, provided they have a permit from village leaders (hipui in the past, kepala desa and kepala adat at present). Furthermore, they must give about one percent of the products they collect to the community.

Lepu'un uma' fruit gardens belong to the whole community and hence fall within the village property rights category. In Matalibaq there are nine major lepu'un umas. However, traditional residents have priority to them over newcomers.

Private ownership is not allowed within the lepu'un uma. However, several people have recently claimed certain trees based on their relationship to their ancestors. Such claims are referred to as claims to "descent property rights". Aside from the two village property rights, the community recognizes another type of property over which the community has common rights, called *luma' hap*. This refers to a piece of land that is allocated for community interest and cultivated with the cooperation of the whole community.

Village rights also include rights to a distinct, bounded territory. Hence, it consists of the ability to prohibit anyone from outside from farming land or collecting products within that territory.

In order to understand household rights, "actively cultivated land" is distinguished from "fallow land" (Dove 1983). At any given point in time the community has only a small portion of actively cultivated



Source: group interview.

Figure 3. Land classification and allocation recognized by the Matalibaq community.

land. The Bahau Sa' people leave their land fallow after each cropping and allow it to revert back to forest until it is suitable for the next cultivation. Hence, the village territory is covered by a large tract of secondary forest.

However, the fallow land is not unworked and ownerless. Rights over the land are acquired through opening up the primary forest (*tana tu'an*) that is on that land. The right extends to the secondary reforestation that follows each subsequent cropping there. This is called "labor-investment-based property rights" (*naa luma'*). Such rights are also recognized if one has planted crops. Perennial crops are very important as a proof of ownership of the land. Labor-investment-based land ownership applies to both individuals and households. Household ownership is based on the fact that it is the household (as a unit) that invests labor by opening a primary forest on the land. The amount of primary forest that households. Thus, the amount of secondary forests to which households hold rights varies as well.

Household and individual rights to land and natural resources can be acquired also on the basis of inheritance (*tana bo haya*'), prior claim over trees or swallows' nests, donation (*keline*), sale (*pebele*) and customary fines (*uvaat denda*).

b. Rights over trees and swallow nests

Rights over trees have two bases. The first is ownership of land. Individuals or households who own a piece of land are also the owners of the trees or crops that grow on the land. This is why trees or crops provide proof ("living certificates") of land ownership in the community.

The second is a prior claim, called a finder's right. This is applied particularly to the ownership of honey trees (usually *benggeris* or *koompassia exelsa*). To show a claim over a tree, the finder clears and fells small trees around the trunk, and if it is a honey tree, the finder nails wooden nail-like tools (*pantak*) used to climb up the tree onto the trunk. In the past, people have claimed temporary ownership over trees in virgin forests, making recognized signals around the tree by felling small trees. Rights based on prior claims are also applied to the ownership of swallows' nests. The first finder of a bird's cave has rights over the cave and the nest. Because the price of the nest is very high, and hence subject to theft, owners tend to keep the information hidden from others.

2.4. Utilization of forest products

a. Method

We examined the utilization of forest products by socioeconomic status groups by applying a simple "wealth ranking method." We interviewed key informants and discussed the important criteria they used to recognize the wealth in the village. Then, based on the combined and integrated criteria, we asked them to divide all the households into three socioeconomic status (SES) groups: high (rich), medium and low (poor). This was done using cards on which the names of the head of each household were written. Rich households are characterized as having at least three of the following: a semi-permanent wooden house; a high capacity motorboat; a large tract of land, garden or plantation (albizia tree, cocoa, rattan or rubber); a small variety store; a permanent salary and children with high school or university education. Medium SES groups include households with one or two of the following: a house of moderate quality, enough land, a plantation, a medium-to-high capacity motorboat and children with higher education. Poor households rely mainly on swidden agriculture, have an old or partly constructed house, a small capacity motorboat or none at all and children without high school education.

As it was impossible for the households to provide precise data of the forest products they have collected, used, or sold, the "corn quantification technique" was used to help them estimate their relative levels of procurement within a one year-period before the forest fires. Twenty-one households (7 low, 9 medium and 5 high) were asked to draw a products-use matrix. Various products were listed along the vertical axis, and three columns were drawn for product collection, use and sale. Then they marked the columns with corn seeds to estimate the products they collected, used and sold within a one-year period (1996 to 1997). The maximum markers on a box were limited to 10 seeds representing the highest rank, and 1 seed representing the lowest. After completing the collection column, the informants were asked to

Forest products	SES Categories					
	Low (%)	Medium (%)	High (%)			
Resin	22	33	45			
Coffee	34	37	29			
Rattan	40	29	31			
Timber	42	32	26			
Honey	53	18	29			
Fruits	38	24	38			
Game animals	29	39	32			
Fish	45	32	23			
Medicinal plants	33	36	31			
Durian	36	25	39			
Jackfruit	34	23	43			
Sprouts	38	36	26			
Bamboo	33	22	45			
Bird nests	0	0	100			
Sugar palm	0	0	100			
Pandan	42	33	25			

Table 1.Matrix of forest products utilization showing relative
importance of each SES category in Matalibaq within one
year (1996 to 1997).

Source: Interview.

estimate the use and sale out of the collections. To compare the three categories, we converted the average estimate of each SES category into percentages by dividing the number of products collected by a certain SES group with the total number of products collected by all three SES groups (Table 1 and Table 2). For instance, if the low SES group collected 20 units of a product, and the total collection by the low, medium and high SES groups was 100 units, then the percentage would be 20 / 100 = 20%.

b. Results

The product list indicates that both wood and non-wood forest products (NWFP) are very important for the community's economy, either for cash or consumption. Fifteen of the products listed are NWFP. The ranking of collection for each SES category follows similar trends: when collection in one category is low it tends to be as low in the other categories. The level of collection by the three categories is high for rattan, woods, fruits, game animals, fish, durian, jackfruit, sprouts, bamboo and pandan, and low for other products. Table 1 indicates that all products besides bird nest, sugar palms, honey, resin and bamboo have relatively equal importance for each SES category.

Table 2 shows that poor people seem more dependent on a variety of forest products for cash. Poor people sell every product they can (13 out of 16). Only products that have no market (resin) are not sold. Even when products have a good market, the people do not sell all of them but instead retain some for their own use. This is true in the case of rattan, woods, honey, fish, game animals, durian and jackfruits. People of medium SES sell 11 varieties and people of high SES sell only 9 varieties of products.

Table 2 also reveals that richer people collect forest products more for their own use than for selling them. The reason for this is because they have other sources of income, such as salaries from teaching or running small variety stores.

Forest Products	Sold / total			Used / total			
	Low SES (%)	Medium SES (%)	High SES (%)	Low SES (%)	Medium SES (%)	High SES (%)	
Resin	0	0	0	100	100	100	
Coffee	10	21	8	90	79	92	
Rattan	58	72	64	42	28	36	
Timber	53	51	30	47	49	70	
Honey	44	14	4	56	86	96	
Fruits	36	67	41	64	23	59	
Game animals	53	43	0	47	57	100	
Fish	53	41	0	47	59	100	
Medicinal plants	17	0	0	83	100	100	
Durian	44	54	58	56	46	42	
Jackfruit	43	28	44	57	72	56	
Sprouts	3	17	0	97	83	100	
Bamboo	17	7	0	83	93	100	
Bird nests	0	0	100	0	0	0	
Sugar palm	0	0	0	0	0	100	
Pandan	33	28	6	67	72	94	

Table 2.Matrix of relative forest products sold and used by each SES category of
the Matalibaq community during one year (1996 to 1997).

Source: Interview.

Dependence on forest products is high. The forest provides sufficient products if well preserved. The large scale forest fires of 1997 and 1998 destroyed a great deal of these products, and thus some house-holds, particularly poor ones, left the village to find alternative income from activities such as small scale mining.

2.5. National forest policy as an external constraint

a. Industrial tree plantations

The territory of Matalibaq covers a very large area including a large tract of virgin forest, and fallow land as well as cultivated land. Within such a large area and very low population density (0.8 people/km²), internal conflict over land is less likely to occur unless there is an encroachment from external forces. Such encroachment began long ago with the advent of timber concessions. However, timber concessions created few problems for the community, and tenure security was relatively stable until the arrival of the industrial tree plantation (HTI, or *hutan tanaman industri*) and HTI transmigration in 1992.

HTI/HTI transmigration was allocated over 14,000 hectares of the customary land (*tanah adat*) of Matalibaq, including reserved forestland (*tana mawa*). This resulted in what the people call "land plundering" because the land was taken from them without prior consultation. The decision was made by the government.

HTI transmigration is an associated program to provide workers for the HTI plantation. Two residential areas (Wana Pari' and Tri Pari' Makmur) of transmigration have seized 2,608 hectares of customary land in total. The majority of people strongly opposed the HTI/HTI transmigration because of its negative impacts on their livelihood. The opposition intensified after devastating forest fires raged in the area in 1998. The people believed these were intentionally set by the HTI workers. Although the HTI—under obligation from the government—has a Forest Village Community Development Program (*Pembinaan Masyarakat Desa Hutan*, PMDH) that helped restore the village hall and provided seeds during the seed crises following the drought, the community was not appeased by the HTI's attempt at dispute settlement.

It is clear that the territory in the Matalibaq village allocated to HTI and HTI transmigration was officially classified as production forest and convertible production forest.

b. The community's response and dispute settlement

The opposition has led to seven years of disputes and negotiations (1992 to 1999) between the community and the HTI corporation. Endeavors have been made by the community on the issue of land tenure security, and village mapping activities were taken up as a means to gain government recognition of their land. Three maps have been made: a territory map, a residence map (map of the village proper) and a map of the would-be land-use allocation. The sub-district head of Long Hubung has authorized the territory map. The community considers this authorization a degree of security and a preliminary step toward recognition of its right over the lands.

Traditionally, under the hipui system, conflicts over land and natural resources were settled based on the adat. The mechanism was this: first, the disputants attempted to settle the conflict themselves on the basis of familial relationships. If unsettled, the issue was brought to the village elders. This was called *pegawa*. The highest level of dispute settlement was hipui, which is nowadays called *kepala adat* (adat leader). Those who are found guilty are fined. This is called *ga'adat*, or customary fine.

The traditional manner of settling disputes could not be applied to disputes between the community and the HTI; the people needed alternate means to settle disputes. Therefore, with support from NGOs, the community has tried to negotiate with the HTI and the government. Information received a month after this research was concluded indicated that the solution as of June 1999 seems to be beneficial to the community: the HTI will leave the territory, pay some amount of compensation to the community, and return to the community the 5,000 m³ on which it has illegally cut logs. But the details are still unknown.

3. Local forest management (LFM)

3.1. Broad spectrum of participation

The term participation is "highly context-specific and in practice it ranges from coercion to full local control" (Hobley 1996, 8). According to this approach, there are seven types of participation:

- 1. *Manipulative participation*: the people's representatives on the official board are not elected and have no power.
- Passive participation: people are simply told what has been decided in a unilateral announcement made by administrators.
- 3. *Participation by consultation*: people are consulted, and analysis and decisions are made by external agents.

- 4. *Participation for material incentives*: people contribute resources (e.g., field and labor), and receive cash, food and other material incentives. They have no ability to prolong participation incentives when the incentives end.
- 5. *Functional participation*: participation by the people is an answer to predetermined objectives made by external agents. They may be involved in the decision-making, but only after major decisions have been made. They may be co-opted.
- 6. *Interactive participation*: people participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is a right, not a means to achieve a goal. A group takes control over local decisions and resources. They have a stake in maintaining structures or practices.
- Self-mobilization: independent initiatives by the people take place. Contact with external institutions is based on the needs of the people. They retain control over decision and resource use. Facilitation comes from the outside. The structure and distribution of wealth and power may or may not be challenged from within.

In comparison, Inoue (1998) categorizes three levels of participation in terms of the relationships between local people and external agents in the decision-making process as follows.

- 1. *Participatory top-down approach*: this is the blueprint approach where residents are considered to be wage laborers, volunteers, fund providers, etc.
- 2. *Professional-guided participatory approach*: this is a relatively flexible blueprint approach where drafts of plans made by professionals are examined by the residents and citizens, and are modified through discussion, workshops, etc.
- 3. *Endogenous bottom-up approach*: this is the learning process approach where professionals act as facilitators.

These three categories of participation simplify the seven types of participation mentioned above. The participatory top-down approach contains manipulative participation, passive participation, participation by consultation and participation for material incentives; the professional-guided participatory approach is equivalent to functional participation and the endogenous bottom-up approach contains interactive participation and self-mobilization.

3.2. Participatory local forest management

In this article, "local" means any groups and localities that are characterized by proximity to the forest, preexisting rights, dependency, indigenous knowledge about forest management, culture-forest integration and power deficit vis-a-vis other stakeholders. Thus, local forest management is referred to as the action of the people living in or near the forest to maintain or enhance the forest ecosystems and to improve their well being. Based on the characteristics of participation mentioned above, participatory local forest management (LFM) refers to the following characteristics (cf. Wallenberg 1998):

- 1. Access and control over the land and forest resources by local people;
- 2. Control over local decisions, independent initiatives and self-mobilization;
- 3. Solutions to competing demands over resources that minimize conflicts;
- 4. Complementary or synergistic relationships among different forest uses and users and
- 5. Equitable shares of the forest benefits.

Accordingly, participatory top-down approaches are not consistent with LFM and should not be regarded as local participation because they consist of manipulative participation, passive participation, participation by consultation and participation for material incentives.

3.3. Local forest management in Indonesia

In Indonesia, "social forestry" is an umbrella terminology from government participatory forest management programs. According to Inoue (2000), even though there are several governmental social forestry programs, only two of them—the community forest program and individual forest programs—can be regarded as participatory forest management systems. They are summarized as follows.

Community forest (Hutan Kemasyarakatan) *program*: this program was launched in 1995 and revised in 1998 (Decree of the Minister of Forestry and Plantation No. 677/Kpts-II/1998). Community forestry under the program is practiced by people—specifically cooperatives of the people living within and near the forests—who obtain "community forestry concessions" (*Hak Pengusahaan Hutan Kemasyarakatan*). These concessions, which last for periods of 35 years, are granted only for production forests (*hutan lindung*) and conservation areas (*kawasan pelestarian alam*), such as national parks in the national forest, which are free of other rights. They are not granted for concession areas already allocated for private commercial logging companies.

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. While this provides an opportunity for taking a "professional-guided participatory approach" and even an "endogenous bottom-up approach," the concessions granted to local communities are different from those given to private companies because participatory forest management is not allowed on concession areas of forestry and industrial tree plantations.

Individual forest (Hutan Rakyat) program on non-forest land: this program is practiced on privately owned land outside national forests. The main activity of the individual forestry is regreening, and *Paraserianthes falcataria* is planted by many people subsidized by the reforestation fund. In order to introduce the program, land registration is necessary. While there is some possibility of taking a "professional-guided participatory approach" and even an "endogenous bottom-up approach," it is difficult to implement in outer Indonesia areas such as East Kalimantan because most of this land is uncertified.

Community-based forest management (Sistem Hutan Kerakyatan, *or SHK*): besides the governmental programs, NGOs support community-based forest management, defined as customary forest management systems by the local people, especially the indigenous peoples. The people depending on the for-

ests take the initiative to form organizations and develop customary regulations to manage forests. Continuation of the SHK, however, is threatened by development activities such as estate plantations, forest exploitation, tree plantations, mining and high transmigration rates.

4. Limitations of LFM within the national policy

One of the indicators of local participation in forest management is the degree of access and control of forest resources, including the land. Local people in Indonesia usually utilize and manage forests through custom or tradition, widely called *adat*. Experiences reveal that when there is a conflict between the adat and government policy, the adat is likely to be victimized, because the government firmly intends to control the profitable forest resources.

4.1. Basic agrarian law

The status of adat is regulated in the Constitution of 1945 and some laws. The Constitution (Article 18) asserts that the division of the Indonesian territory is based on the traditional rights of special regions. This recognition is open-ended and subject to diverse interpretations. For instance, the Basic Agrarian Law (BAL) of 1960 asserts that the land, water and space are controlled by the government. However, the rights to control them can be given to a community that still practices customary laws, that is, the *masyarakat hukum adat*, insofar as it is required and does not contradict the national interests (Article 2 and Article 3).

In the official elucidation of the BAL, the traditional right to control the land is called *hak ulayat*. The government consistently uses this term, while advocates of customary rights (mostly NGOs) use the term *hak adat* for the traditional right. Hak ulayat is different from hak adat. Both hak ulayat and hak adat refer to traditional right and can be simply called hak adat. Yet the hak ulayat, which derives from the Minangkabau land ownership system in West Sumatra, refers only to communal ownership, while hak adat refers to every kind of land ownership based on the adat (Nanang 1998).

4.2. Basic forestry law

The Basic Forestry Law (BFL) of 1967 further regulates the status of local rights to manage resources such as forests. According to the BFL, forests are divided into two ownership categories: state forests for the greater part and private forests for the lesser part. State forests can be managed either on the basis of formal law or controlled by the *masyarakat hukum adat* (locals based on the *adat*). While the management of state forests can be devolved to local people, the ownership of the forest cannot be given to the people. Like the BAL, the BFL specifies that such control over the forest by *masyarakat hukum adat* may not contradict national interests. According to Nasution (1999), a former Minister of Forestry and Plantation, *hukum adat* (customary law) are decisions made by legal functionaries who are fully obeyed by the people.

Based on the BFL, the government classifies the forestland into five functional categories. The categories and their area, along with their ratio to total land area in 1994, were: protection forest (30.7 million hectares, 16%), park and conservation area (18.8 million hectares, 10%), limited production forest (31.3

million hectares, 16%), normal production forest (33.0 million hectares, 17%) and convertible production forest (26.6 million hectares, 14%). Convertible production forest will be released from forest land to be converted into land for oil palm plantation, transmigration, rice fields, housing lots, etc. The area of permanent forest is 113.8 million hectares, which covers 59 % of the total land area.

The criteria for forest land classification includes the degree of slope, sensitivity to soil erosion and strength of rainfall. The forest land classification, except for the parks and conservation area, is decided based on the sum of the indices of these three criteria. It is noteworthy that the real state of land utilization and socioeconomic factors are totally neglected. One of the most important reasons for disagreement in the Matalibaq village is this neglect. Although it is desirable that the government issues a decree by the Director General of Reforestation and Land Rehabilitation (041/Kpts/V/1998), in which socioeconomic and cultural conditions are included as the data to be collected in making field technical plans for land rehabilitation and soil conservation, such policies should be applied to the whole process of demarcating forests.

4.3. Future possibility of LFM under the policy reform

In May 1999, the Local Government Law (Law No. 22 in 1999) was promulgated, decreeing autonomy for villages (*desa*) based on customary law. Further bases were established by the People's Consultative Assembly (MPR). Such bases include a guideline for economic democratization (TAP MPR No. XVI/MPR/1998), which asserts that cooperatives and small-scale entrepreneurs should be given more opportunities to develop. This will include the rights of local people to develop their forest-based livelihoods. Article 7 of the decree makes a special declaration about land use. It states that land use and other natural resource use should avoid all kinds of power centralization and ownership centralization, in order to give more opportunity to small and medium entrepreneurs, cooperatives and the public to develop their economy. It further states that the land should be prioritized for use by the public, small entrepreneurs and cooperatives.

A decree (TAP MPR No. XVII/MPR/1998), recognizes seven basic human rights, including the right of indigenous people to their cultural identities. Here, traditional rights to land (*hak adat* and *hak ulayat*) have a strong basis. This is the first official document addressing Indonesia's view of human rights in her history (Abdurrahman 1998).

Meanwhile, the new forestry law was enacted on 30 September 1999. The important point in terms of LFM is that the law defines the "customary forest (*Hutan Adat*)" as inside the state forests in Article 1 and defines "the community which practices customary law (*Masyarakat Hukum Adat*)" in Article 67. The community shall have the rights to: (1) collect forest products for daily needs, (2) undertake forest management in accordance with prevailing customary laws and (3) be empowered for improving their welfare. These rights, however, can be recognized subject to the condition that the customary laws do not contradict national law and local regulations. It is clear that the development of LFM depends on how the customary laws will be evaluated, and who will do the evaluation.

Here, the integration of SHK into national forest policy can be a realistic agenda. At one point, the government hesitated to permit SHK, because it did not want to devolve the right of controlling forests to

the local communities. Even in the latest community forest program, the government gives priority to rights other than community forestry concession, such as forestry concession, industrial tree plantation concession and tree felling rights (*Ijin Pemungutan Kayu*) to develop oil palm plantations and transmigration areas. However, it has been demonstrated that large-scale forest development projects such as logging, industrial tree plantation and conversion to agricultural land are not very sustainable and, if anything, can often be causes of deforestation.

Most of the people practicing SHK must live in areas covered with relatively rich forests, which are designated as conservation areas and production forests. In the production forests, SHK can be permitted under the new forestry law of 1999, even though it depends on implementation laws and decrees. On the other hand, in the conservation areas, the community forestry concession can be approved only in the utilization zone (*zona pemanfaatan*), and its main activities are confined to recreation. This is because the government does not evaluate SHK correctly. Therefore, it is recommended that the government issues a decree to designate the areas where the local people practice SHK as traditional use zones (*zona pemanfaatan tradisional*) or socio-cultural zones (*zona sosio-budaya*) subject to the condition that SHK is sustainable (Inoue 2000). This recommendation should be easy for the government to accept because it is in accordance with the new forestry law, and the cost of switching the policy is very low.

5. Conclusions and remaining problems

People living in and near the forest are dependent on the forests for their livelihood. Some of the local communities, like the community of Bahau Sa', are able to manage the forests sustainably. The policymakers should recognize the reality of local conditions where the people make their living by utilizing the forest and should select a way of forest management reflecting these conditions.

We expect that the new forestry law will be able to avoid the uniform application of forest development led by outside enterprises. In order to make the new forestry law support LFM, however, customary law should be evaluated fairly and modified in case of need to develop appropriate technology for sustainable forest management. This is because LFM relies on customary land tenure systems based on the traditional norms called adat or hukum adat (customary law). In order to ensure the process of fair evaluation of local customary law and existing forest management systems, involvement of local people and NGOs should clearly be defined in the form of decree or law.

At the same time, the system of forest land classification should be reconsidered. The present state of land use and the socioeconomic conditions should be included as criteria for forest land classification. However, it is not easy for the government to comprehend actual local-level conditions. Therefore, it is recommended that the government should cooperate with the local people and NGOs to understand the real condition through participatory rural appraisal (PRA).

Additional studies will identify the internal constraints on LFM in terms of economic, social and cultural conditions, which are immanent to the local community. At the same time, the possible main actors for sustainable forest management will also be discussed. By clarifying the external constraints, internal constraints and the possible main actors, a strategy for participatory forest management in Indonesia can be developed.

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