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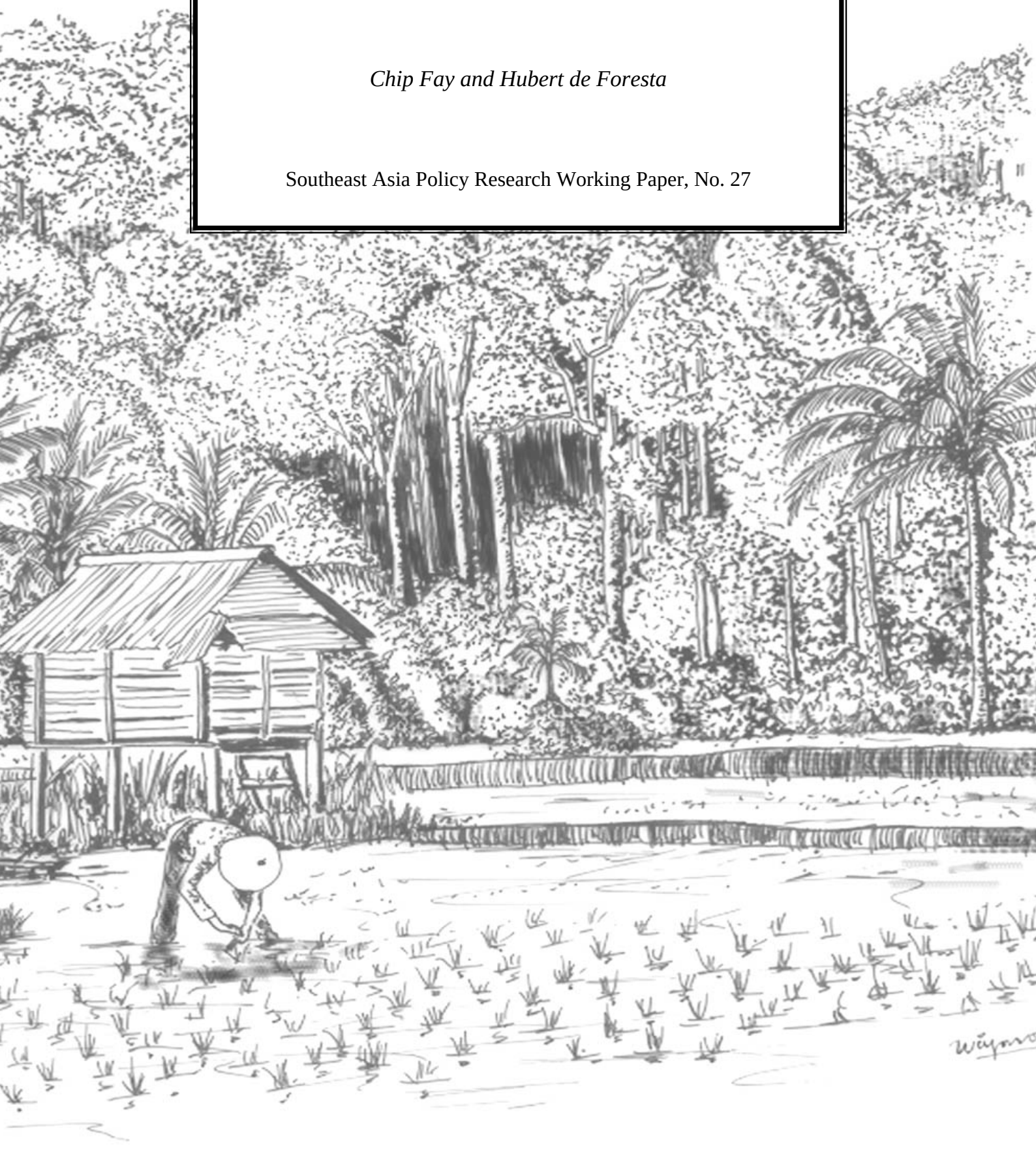

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Progress Towards Increasing the Role Local People Play in Forest Lands Management in Indonesia

Chip Fay and Hubert de Foresta[1]

I. Introduction

This paper reviews current governmental and non-governmental efforts in Indonesia to increase the role local people officially play in the management of natural resources inside the seventy percent of Indonesia defined by the government as State Forest Zone. It provides a broad brush description of the dichotomy between local natural resource management systems and the government regulatory framework that favors industrial forestry management. It then goes into greater depth on the characteristics of some of the many indigenous agroforestry systems found in Indonesia and describes a successful effort to gain formal government incorporation of one these systems into the state regulatory framework.

There are essentially two approaches in Indonesia to increasing the forest management role of local people. The first centers on "raising the participation of local communities in the management of forest lands". This is current government policy and programs to achieve this are being implemented by the Department of Forestry. The second, promoted by local communities, university researchers and NGOs, centers on policy change that shifts the emphasis to Department of Forestry recognition that existing community-based natural resource management systems are the most effective starting point and that land and resource access rights of local people must be secured if community-based forestry is to broadly develop in Indonesia.

The Government priority of increasing participation is based upon two important assumptions. The first is that local people are the primary cause of forest degradation or full forest conversion to agriculture. Therefore, any attempt to work with farmers must center on imposing a new land-use system. The second assumption is that these people have no rights to be on state land at all, whether or not their ancestors had been on the land long before the existence of the Indonesian state. As a result, in some areas of Indonesia, the government's approach to dealing with people living in the forest zone continues to be intimidation and eviction.

Yet, a subtle although still incomplete shift in the government's approach is taking place. The Department of Forestry policy no longer treats local people in the forest zone as liabilities alone. They are now seen as liabilities that must and can become assets in government efforts to increase timber production and rehabilitate degraded forest lands.[2] The result is increasing openness to involving local people in pre-defined Department of Forestry and forest industry activities. A more detailed description of the Indonesian setting for

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[1] Prepared for the Workshop on Participatory Natural Resource Management in Developing Countries, Mansfield College, Oxford April 6-7, 1998

[2] While shifts in government policy towards greater openness to community forestry often coincide with the near depletion of the natural production forest, it may be a simplification to claim, as some do, that communities receive only what is left over from large-scale commercial exploitation. The shift in the Philippines was, to large extent, due to an overall shift in government policies, in the post-Marcos period, towards local empowerment and poverty alleviation. In Indonesia, greater attention to the welfare of local people in the forest zone has come about, in part, from international pressure as well as from government policies to alleviate poverty in the poorest areas of Indonesia, most of which are found in the Forest Zone.

community-based natural resource management and specific Department of Forestry community-oriented programs are found in sections II and III of this paper.

The non-governmental approach, has been developed by a mixture of lands rights advocates, university and international social science and policy researchers, and community organizers.[3] It is based upon evidence that in many areas of the state-defined forest zone, local people have ecologically and economically sound natural resource management systems. These groups claim that if government hopes to promote sustainable community-based forest lands management, it must begin with and learn from what people are already doing in these areas. Legal analysis carried out by these groups also challenges the Department of Forestry's position that people living with the State Forest Zone are without rights to their lands and land-use systems. Section IV of this paper goes into more depth on this.

Bridging these two approaches is a growing group of government and non-government individuals and institutions that are working to develop solutions that meet the needs of local people for natural resource security and for the Department of Forestry to meet its objectives of forest resource development the protection of forest functions.

Section V provides important detail to what the non-governmental approach is based upon. It describes the variety indigenous agroforestry systems that can be found in Indonesia and then focuses on the Krui agroforest system found in Lampung province, Sumatra. Non-government efforts to gain official recognition of these agroforests recently succeeded in convincing the Minister of Forestry to move significantly beyond the Department's conservative approach to working with local people. In January 1998, the Minister created a special management classification that recognizes the ecological and economic benefits on these indigenous agroforests and secures the rights of the Krui agroforestry farmers to protect and develop these systems.

Section VI of this paper discusses the significance of the new classification and the final section provides some conclusions.

II. Community-Based Natural Resource Management: The Indonesian Setting

Numerous agroforestry studies have revealed that economically productive and ecologically sound community-based agroforestry systems are found in many areas of Indonesia that the government has classified as "state forest lands"[4]. According to the Indonesian government, these lands are under the sole jurisdiction of the Department of Forestry and access to natural resources found and developed there are heavily regulated. Over the past twenty years, Indonesian national development priorities have emphasized large-scale natural resource extraction from these areas, particularly timber from natural forests. The framework for distribution of concession rights to natural forests has been highly political. The hundreds of corporations who have received these rights have enjoyed windfall profits from the rapid mining of timber while government efforts to regulate extraction and promote sustainable levels of harvesting have largely failed.

While Indonesia had about 152 million hectares of healthy forest in 1950, today less than 95 million remains, making Indonesian deforestation rates among the highest in the world. Extraction levels estimated by the World Bank may exceed 40 million cubic meters per annum, leading to a level of deforestation that approaches one million hectares a year[5].

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[3] It is interesting to note that officially, many of the university researchers are government officials. But sharing many of the views and approaches of the non-governmental actors, they have been in a good position to play a bridging role between the government and non-government organizations .

[4] See section V for references

[5] Indonesia Production Forestry: Achieving Sustainability and Competitiveness, a 1993 unpublished working paper on the Indonesian Forestry Sector, pages 4-5

According to an internal 1995 Bank report, if current levels of extraction continue, Indonesian will become a net importer of timber by the year 2013.[6]

But major changes in forestry regulation in Indonesian are currently being discussed within the context of sweeping economic reforms proposed by the International Monetary Fund. Formal and informal forms of taxation and politicized regulatory and marketing systems are under attack.

One area where reform is particularly necessary is in the system of allocation of access to forest resources. One of Indonesia's greatest sources of social conflict originates from this system. Under current regulations, millions of rural people who live inside the 70% of Indonesia classified as State Forest Zone are considered illegal occupants on land they have farmed and lived upon for generations. Industrial concession maps continue to be drawn, logging licenses and tree plantations continue to be awarded, and the presence of local villages and their systems of natural resource management, located with the forest zone, continue to be conveniently ignored. On several occasions over the past three years, farming families planting within watershed forests have been forcibly evicted by the Department of Forestry[7].

But long-term communities living within the state-defined forest zone are not without rights recognized in Indonesian jurisprudence. These communities can argue that their forests and their lands are private and administrative procedures that classified them as state forest, violated their rights. The Agrarian Law of 1960 recognizes the right of local communities to continue to manage their forested lands under local resource management systems and customary law. According to this law, local communities are entitled to have their rights legally recognized, registered and honored by government. The spatial planning law of 1992 and law number 10 of 1992 on vulnerable communities both recognize community rights to participate in defining their territories and law number 10 goes as far as recognizing community rights to cultural autonomy including control over their natural resource management systems.

These laws also establish the rights of local communities to know what development activities are being planned and implemented in their areas and to participate fully in the social and environmental impact review of these activities. Yet, in a country where the integrity of the legal system is questionable, having these rights and actually securing them are quite different. The Department of Forestry cites the provision in the Basic Forestry Law that states, traditional (Adat) rights, particularly to land, will be recognized only when these rights do not conflict with "national interests". This law also clearly nullifies the existence of "community forests" (hutan marga), the assumption being that these forests are natural and therefore under the patrimony of the state. There are also numerous provincial level decrees that effectively nullify these rights.

The responses of local communities in the forest zone vary. Some villagers who feel they have exhausted their efforts at peaceful dialogue with local government have taken direct and aggressive action against companies that have entered their lands. On several occasions over the past three years, Dayak communities in Kalimantan, have burned base camps of timber plantations companies that have ignored local land rights. In other areas, local communities continue to negotiate with local and national government to gain recognition of their rights to their land and agroforestry systems.

Over the past several years, a network of Indonesian academics, human rights and environment activists, international researchers, and government officials who are committed to resolving social conflict in the forest zone has emerged and had measurable impact. Momentum towards increasing the role local people play in forest management and the development of community-oriented programs has increased and the balance toward greater commitment to local people is shifting. This change can be traced directly to Forestry Minister Djamaludin's commitment to promoting this change.

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[6] Paper is on file with the authors.

[7] In 1995, in one operation alone, 450 families in one village were forced from their farms in Lampung Province and elephants were used to uproot more than 4000 hectares of coffee trees.

The Department of Forestry currently has five programs that focus on meeting the needs of local people: Pembinaan Masyarakat Desa Hutan Terpadu (PMDH); Hutan Kemasyarakatan (HKM); Hutan Rakyat (HR); Pengalolaan Hutan Produksi oleh Masyarakat Tradisional (PHPMT). In addition, the Minister of Forestry recently signed a decree that secures the rights of several thousand agroforestry farmers inside the forest zone in Krui, Lampung. This "Zone with Distinct Purpose" is intended, by the Minister to be a model for securing local rights for indigenous agroforestry farmers who are managing their forests within state forests.

While each of these approaches has their weaknesses and Indonesia still remains behind its ASEAN neighbors in facilitating the flow of benefits to forest communities, it is fair to say that commitment within the Indonesian Department of Forestry towards working with local people has never been higher. But this commitment tends to be found at the higher levels of government, while appreciation for the need for greater community involvement at provincial and district levels remains limited.

In response, universities and NGOs in Indonesia are in the process of developing a two-stage approach to promoting secure land tenure for communities that hold traditional rights. The first entails work within the state regulatory framework and promotes the granting of limited use and management rights to local individuals or communities. This responds to the immediate need for halting the conversion of village lands to large-scale forest concessions and plantations while at the same time supports sound management of these areas based on community-based resource management. It provides tenure rights to the agroforestry system but the land, according to the government, continues to be controlled by the state. The second stage is a long-term legal and political struggle by local people to gain state recognition that their lands have been misclassified as state forest zone. Many non-governmental organizations have adopted the "short-term strategy" to securing local resource rights in preparation for the "long-term strategy" to gain full recognition of traditional land and natural resource rights of forest-based communities

III. Government Efforts to Increase the Role Local People Play in Forest Lands Management

The Department of Forestry has just entered the critical transition period that occurs every five years with the change of the Cabinet. This transition is even more complicated by Indonesia's current economic crisis and the profound changes being discussed with the International Monetary Fund and the international community. In return for a badly needed economic bailout package, President Suharto has agreed to dismantle monopolies on key products including timber and plywood and significantly reduce taxes on rattan and other forest products. It is too soon to know what opportunities these reforms might present to local resource managers but there is a potential for higher prices for producers and harvesters of forests products.

The following is a brief description with some analysis of current Department of Forestry programs. Included are some example interventions of non-governmental actors that are promoting the creation of new experience on the ground and improved policies that strengthen the political and economic position of local people.

- Pembinaan Masyarakat Desa Hutan Terpadu: Java (PMDHT)
  (Integrated Forest Village Development)

This program, also known as the Java Social Forestry Program, is the latest effort of the State Forestry Corporation, the para-statal forest corporation responsible for the management of state forest lands on Java, to increase the participation of local people in tree plantation development. It is designed to share responsibility of forest community development with local government. The social forestry management system is based on ally cropping. Farmer participants assist in the development of the timber plantation and are allowed to grow crops in between the tree until the time the tree canopy closes, generally a

period of between two to five years. This system, know in Indonesia as Tumpang Sari, originated during the Dutch occupation and has developed slowly to provide more benefits to local farmers, such as increased spacing of the main tree species.

The program is currently experimenting with new benefit sharing schemes by increasing the amount of land available to farmer participants for non-timber products. In each Java's three provinces, pilot areas have been developed where 20% of a timber plantation is handed over to farmers to plant trees of their choice. All benefits from these trees, with the exception of timber, go to the farmers

- The Hutan Kemasyarakatan Program (HKM): (Community Forestry Program)

In terms of actual implementation, this is the government's most advanced effort to increase the participation of local communities in the management of state forest lands. The program's 1995 Ministerial Decree created the first formal Department of Forestry effort at developing a social forestry program. Regrettably, the program's initial framework is far more restrictive than the community forestry program's of Indonesia's neighbors in South and Southeast Asia. To date, HKM participants have no rights to the timber from trees they themselves plant. Like the State Forestry Corporation social forestry program on Java, only non-timber products (mostly fruit), benefit local people.

Since 1995, numerous Indonesian and international non-governmental organizations have collaborated in an effort to broaden the scope of the HKM program. The position of these groups has been to increase participation of local people in decision making, particularly on the makeup of the agroforestry systems, and to assure that trees could be harvested by those farmers who planted them.

A Recent HKM program review carried out by the Department of Forestry and the International Center for Research in Agroforestry (ICRAF) found the need for better mechanisms of communication between those responsible for the program in Jakarta and those implementing it in the field. It was also clear at that time the program's coverage (in terms of hectares), was very small and growing slowly.

ICRAF recommendations on improving the HKM program centered on the need for the Department to address what was viewed as an imbalance between the program's rehabilitation objectives and the objectives to increase the welfare of program participants and reduce conflict between the government and forest dwellers. ICRAF staff questioned why wood production was not included in the program objectives given Indonesia's increasing need for timber. ICRAF also highlighted the need for the program to respond to the need of participants to have agroforestry products that could close the gap between the time the multi-purpose trees are planted and when farmers can harvest. Horticultural crops were discussed, as well as cacao and coffee that produce more quickly than most fruit species.

Plans are also being made for the development of a several pilot sites where farmers gain the right to harvest wood they plant. These areas will then be compared to HKM sites where only non-timber harvesting is allowed. Timber as an incentive can then be examined using criteria such as initial survival rates, level of efforts to protect trees from fire as well as projected economic rates of return.

- Pengelolaan Hutan Produksi oleh Masyarakat Tradisional (PHPMT) (Production Forest Managed by Traditional Communities)

Conceptually, this is Department's most advanced community-oriented forestry program, and its newest. Organized by those in the Department responsible for forest utilization, this program is intended to allow timber extraction from natural forests. Participants are to be traditional or isolated communities. Candidate sites are limited to less than 10,000 hectares. But guidelines for the development of proposals, released to selected NGOs in mid-1997, are vague. As a result, the quality of NGO proposals to assist the Department in the development and implementation of this program are mixed. The twelve proposals received to date range from being transparently opportunistic to conceptually

strong, (although actual implementation capacities of the groups with stronger proposals are still questionable). [8]

The management of this program has been delegated to mid-level Department officials and it's development has been very slow, calling into question the how much of a government priority this approach may be. But it does represent another example of movement within the Department of Forestry towards some devolution of forests management responsibilities to local people.

IV. Non-Governmental Efforts to Increase the Role Local People Play in Forest Lands Management

Indonesia has a full range of non-governmental organizations active in community development, human rights and forest policy advocacy. Some of these groups are attempting to assist the Department of Forestry implement and improve its community-oriented forestry programs while others choose to avoid collaboration with government and concentrate on working with local communities to demand that their land rights be recognized. Over the past three years, there has been a convergence of these two groups of NGOs. Some groups who work closely with government are becoming skeptical about government commitment while some of those who have not worked with government are coming to terms with the reality that in today's Indonesia, if local communities are to gain some protection against the conversion of their lands to large-scale agriculture or plantation forestry, it will have to be the government that recognizes and protects their rights. Orbiting around and at times collaborating with these groups are university and international social science and forestry researchers who, on the whole, tend to be sympathetic to the plight of local people living in the State Forest Zone. When these non-governmental institutions and individuals collaborate and focus on a specific issue and specific place, their impact can be measurable[9].

One initiative that began in 1994 is, Sistem Hutan Kerakyatan (SHK) a network of researchers and communities promoting the recognition of existing indigenous agroforestry systems. The SHK (forest management systems of the people) network now has an impressive amount of information on existing systems and policies that serve as supporting or constraining the development of these systems.

Members of this network also work closely with a growing number of NGOs who are training local people to map their ancestral lands and natural resource management systems. In several parts of Indonesia these community-generated maps have been used by local people to articulate the boundaries of their lands and territories as well as the sophistication of their land use systems. Some communities have been able to incorporate their maps into the offical spatial planning process of local government using the national law on spatial planning as their entry point. This law stipulates that local people must participate in land use planning at the district and village level.

Another important non-governmental initiative that goes beyond conflicts that emerge from the State Forest Zone is the Consortium for Agrarian Reform. This group recently published, in collaboration with the University of Indonesia, an impressive agenda for reform that includes changes in the status of the state forest lands.[10]

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[8] In several proposals it is apparent the NGO views itself as a business partner rather than a facilitator.

[9] The recognition of the Krui agroforestry systems in Lampung, Sumatra and negotiations between government and local communities over village lands in the State Forest Zone in Bentian East Kalimantan, Yamdema and Siberut are examples of this.

[10] Reformasi Agraria: Perubahan Politik, Sengketa, dan Agenda Pembaruan Agraria di Indonesia 1997

V. Indonesian Indigenous Agroforestry Systems

Until recently, only two "indigenous" agroforestry systems were officially recognized and referred to as national forms of sophisticated agroforestry developed by people and forestry services: "tumpangsari", an Indonesian version of the taungya system, and "pekarangan", the javanese homegarden, which is to be one of the most sophisticated homegarden systems in the world.

Apart from these, some systems are occasionally mentioned: the "talun/kebun" system of West Java which is formed of an alternation, on the same piece of land, of perennial crops (bamboos, fast-growing tree crops, fruit trees, which form the "talun" phase) and of a mixture of annual crops and seedlings of perennials (the "kebun" phase, which is a rejuvenating phase of the "talun"). In Java, almost every piece of land is planted with a mix of perennials and annuals: most dry fields include trees either as true components (coconut with maize) or as borders (teaks, mahogany, rosewood, in East and Central Java). Trees are also commonly associated with irrigated ricefields either on dikes or along roads, and these are useful trees which hold a real role in the agricultural system.

Most of these systems are clearly agroforestry combinations, meaning associations of trees and agricultural crops, but due to the relatively small number of components included, these types of agroforestry associations may be called "simple agroforestry systems". In these systems, the mature stage can never be assimilated to a diverse forest.

For common observers, forest vegetation bordering agricultural areas is often misunderstood as a mix of "virgin" and "degraded" forest. But for experienced agronomists or foresters with a minimum knowledge in botany, or for anyone who can just ask the farmers in these areas, it will soon appear that these are not patches of "natural", unmanaged vegetation, but in most cases diverse tree gardens. A whole facet of indonesian agriculture has evolved around traditional forest resourcessuch as fruits, spices, as well as forest material and other commercial resources. Integration of these resources in agricultural lands have gradually shaped original agroforestry systems in which common domesticated tree species of tropical gardening, such as fruit trees, rubber, cinnamon, and coffee, are associated to forest trees (Michon 1985).

The kind of agroforestry combination which is not obvious because it takes the form of a "forest" both in physiognomy and in function, can be called "complex agroforestry system" or more simply "agroforest" (Mary and Michon 1987; de Foresta and Michon 1997). These are successional agroforestry systems in which a high number of components (trees as well as treelets, lianas, herbs) are associated, and physiognomy and functioning of which are often close to those observed for natural ecosystems, either primary or secondary forests. Even though agroforests do not necessarily exhibit an association between agricultural crops and forest trees, they represent what can be considered the heart of agroforestry, where forests and agriculture meet, where forest structures and agricultural logics intersect.

Such agroforests are spread on all the major islands of the archipelago, sometimes for hundreds of years. The following list of agroforest types, named according to their main commercial production, is far from complete as no systematic survey has ever been done:

- rubber agroforest on Sumatra and Kalimantan (Colfer et al., 1988; Dove, 1993, Gouyon et al., 1993; Momberg, 1993; Sundawati, 1993)
- fruits/export crops agroforest on all islands (Michon et al., 1986; Sardjono, 1988; Salafsky, 1993)
- damar agroforest in Sumatra (Torquebiau, 1984; Mary et Michon, 1987; Michon et al., 1995)
- rattan agroforest in Kalimantan (Weinstock, 1983)
- Illipe nut (Tengkawang) agroforest in Kalimantan (Momberg, 1993; Sundawati, 1993; de Jong, 1994)

Indonesian agroforests are far from being anecdotic in terms of regional and national economy: they provide about 70 % of the total amount of rubber produced in the country, at least 80 % of the damar resin, roughly 80 to 90 % of the various marketed fruits, unestimated but rather

important quantities of the main export tree crops such as cinnamon, clove, nutmeg, coffee and candle nut (de Foresta and Michon, 1997). In Sumatra alone, about 4 million hectares have been converted by local people into various kinds of agroforests without any outside assistance (de Foresta et Michon, 1993). An estimated 7 million people in Sumatra and Kalimantan are living from rubber based agroforests that are spread on about 2.5 million hectares.

These agroforests have all been established by shifting cultivators through a successional process where tree seedlings are directly planted in the swiddens. The management of the establishment phase constitutes a complex process of forest reconstruction that can be illustrated by the example of damar gardens in Krui, Sumatra. (Torquebiau 1984; Michon et Bompard 1987; de Foresta et Michon 1993; Michon et al 1995).

These agroforests start as a classic "taungya system". Damar (*Shorea javanica*, a tropical hardwood) seedlings, usually raised in nurseries, are introduced in an already planted rice swidden or most often in a young coffee or pepper plantation established after rice production. This coffee-damar association is maintained up to 10-15 years. It allows seedlings to grow in the best possible conditions in terms of micro-environment and concurrence. However, the parallel with more conventional tree plantations does not go further, and the consecutive phases are more conceived in a logic of association with the forest ecosystem than of environmental confrontation. Once the crop phase is completed, damar trees freely develop with the natural pioneer vegetation that establishes spontaneously. During this period of relative abandonment, through natural processes of dispersion and niche colonization, the young agroforest gradually acquires a *facies* typical of any secondary forest. This successional forest-garden increases in complexity over years due to a combination between free functioning (development of natural silvigenetic processes) and integrated management (selective cutting and enrichment planting). This management pattern does not fundamentally change when the damar garden starts producing.

In the mature plantation, the balanced combination between natural dynamics and appropriate management of individual trees helps maintain a system which produces and reproduces without disruption in structural or functional patterns. It also allows further diversification through the establishment of more climactic forest species among the cultivated stand. Once established, damar gardens usually reproduce without any major disruption, as decaying trees are replaced whenever needed. Unlike plantations, that evolve through cycles of plantation/total harvest, damar gardens remain permanent, without reverting to a phase of massive regeneration.

After 40-50 years, the damar plantation reaches its full production period. From a socio-economic point of view, it is not fundamentally different from any specialized commercial plantation: it provides the majority of household income and constitutes an essential complement to ricefields in the farming system (Mary 1987; Levang 1992). However, from a biological point of view, the mature phase finally resembles more the forest it replaced than a conventional tree plantation. Like a natural forest, it is characterized by a high canopy, a dense undergrowth, relatively high levels of biodiversity, and perennial structures. Apart from damar trees that form the frame of the garden, the damar plantation shelters several dozen commonly managed tree species. It is also made up of several hundreds additional species of trees, treelets, liana and epiphytes, spontaneously established and often used. As natural lowland and hill dipterocarp forests in the area is severely depleted, the damar gardens constitute the major habitat for many forest plants and animals, among which are some of the highly endangered mammal species (Sibuea et Herdimansyah 1993; Michon et de Foresta 1995; Thiollay 1995) - among others: Sumatran rhinoceros, Sumatran goat, tigers, tapir, gibbons and siamangs-.

The "agroforestry nature" of the Krui damar gardens is more visible in the establishment phase, which constitutes an obvious taungya system associating tree seedlings and annual crops, than in the mature phase that can be analyzed as a forest. However, it is the mature phase that really stands where forest and agriculture intersect. Damar gardens have the ecological integrity of a forest, but rely on agricultural practices and are managed mainly as an agricultural enterprise in the middle of farmlands. They perfectly epitomize what

integration of forest into farming systems can look like. This addresses the very heart of "agroforestry".

Research on all major aspects of damar agroforests have been carried out by a large number of institutions over the last 15 years.[11] These researches have contributed to create an impressive body of solid scientific information that demonstrates the importance of the damar agroforest system as an environmentally sustainable and economically profitable model for the management of both agricultural and forest resources.

With little doubt, the process that led to the recent official recognition of the Krui Agroforests, benefited from that enormous research effort on damar agroforests, that played an essential role in driving, for the first time ever, the Department of Forestry towards granting legal recognition of farmers rights inside the state forest zone to implement and develop the management system they themselves develop.

VI. The Creation of a Special Use Zone (KdTI)

In 1994, local non-governmental organizations, universities and other international researchers that have been studying the ecology, economics, and socio-cultural aspects of the Krui agroforests decided to form a reseat consortium. The objective was to foster collaboration and respond better to the needs of Krui agroforestry farmers.[12] An important motivating factor for these groups was the concern of local farmers that approximately 29,000 hectares of the Krui agroforests are located within the State Forestry Zone. The most serious implication of this was that a forestry company held the government-awarded concession that covered these lands. This company therefore, held the right to manage this area, including the possible harvesting of an estimated 3 million commercially valuable trees planted by Krui farmers[13].

Compounding this threat was a number of oil palm companies that, with local government support, began in 1996 to encroach upon the Krui agroforests areas. In mid-1996, one company clear cut dozens of hectares of community-planted damar agroforests just south of the Krui area.

Responding to requests for assistance from local villagers, the research consortium began working with Krui farmers to literally place their agroforestry systems on the map and to articulate the environmental and economic benefits of their land-use systems. Research and community organizing efforts have produced numerous maps and detailed description and analysis of the Krui agroforests. In June 1997, the consortium initiated a dialogue with government concerning the status of their lands, organized field visits from key government officials and held a two-day conference where research results were presented and the status of the land was discussed. The results of these activities were reported to the Minister of Forestry, together with a request from many villages to have the border of the forest zone changed in order to remove the state forest zone from within Krui agroforests.

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[11] (in chronological order, the University of Montpellier, France; the National Agronomy Institute of Montpellier, France; SEAMEO-BIOTROP, Indonesia; ORSTOM, France; the University of Toulouse, France; CNRS, France; Himbio, Bandung, Indonesia; the University of Indonesia; the National Center for Agriculture Studies in the Tropics, CNEARC, France; CIRAD-Forêts, France; the Tropical Nature Foundation of Indonesia, LATIN; the Family of Nature and Environment Lovers, WATALA-Lampung, Indonesia; ICRAF; VOCA, USA; CIFOR; the Departement of Forestry of Indonesia, LITBANG Kehutanan; the Bogor University of Agriculture, IPB; the University of Paris Sorbonne, France; the University of Orleans, France).

[12] Members of this informal group include, the University of Indonesia, Latin (a Indonesian forestry and conservation NGO), Watala (a Lampung-based community development NGO), ORSTOM, (a French research institute) ICRAF, and the Center for International Forestry Research (CIFOR) Work of this consortium has been supported by a grant from the Ford Foundation

[13] This is a conservative figure based on an average of 200 trees planted in an 15,000 ha. area of mature damar agroforests with the State Forest Zone.

This request and the results of the workshop set into motion a process that led, several months later, to the signing of a Ministerial Decree that creates the special forest-use classification (KdTI). This decree, for the first time in Indonesia, recognizes the rights of community-based agroforesters to control, maintain and develop their forest management systems within the State Forest Zone. The KdTI was informed by the Ancestral Domain classification experience in the Philippines. At the Minister's request, ICRAF policy research staff working on land tenure issues in the Philippines, translated Philippine community forestry and Ancestral Domain regulations into Bahasa Indonesia for review by the Indonesian Department of Forestry legal staff.

The new classification is unprecedented in that:

1. it sanctions a community-based natural resource management system as the official management regime within the State Forest Zone;
2. the Department of Forestry allowed non-governmental organizations working with local people to be directly involved in the drafting of a forestry decree;
3. it allows the harvesting of timber from within the State Forest Zone by local people;
4. it allows the limited harvesting of timber from within a watershed, provided the watershed functions are still met;
5. it devolves the management responsibility of State Forest Lands to a traditional community governing structure (Masyarakat Hukum Adat).
6. is a right provided without a time limit.

The KdTI is based upon a right that will be provided by the Department of Forestry. It is a right that can be accepted or refused by local farmers. Currently, members of the research consortium and local government are organizing a process of consultation with village leaders to explain the opportunities and constraints the new classification provides the Krui farmers.

The Minister's action on the Krui agroforests is a breakthrough in efforts to promote, secure and develop community-based natural resource management systems in Indonesia. While designed strictly for the Krui agroforests and based upon a premise that the land is state forest land, the implications for the thousands of villages within the Indonesian State Forest Zone who also seek a tool to gain resource security could be profound. At the Minister's request, copies of this decree have been send to human rights and environmental groups concerned about resource insecurity of people living within the State Forest Zone. It is his hope that this approach will be replicated in other areas of Indonesia.

The process of drafting the Ministerial decree was long and complicated. ICRAF was specifically requested by the Minister to assist his staff to develop the concept. In turn, ICRAF, with the blessing of the entire research consortium, brought into the process staff from Latin, an Indonesian Forestry NGO and member of the consortium. A working group was formed within the Department with ICRAF and Latin as members. The actual drafting took place over a period of six weeks. During this time proponents on both sides of two approaches discussed earlier in this paper met head to head. Many mid-level Department staff held strongly to the position that any activity in the Krui area must fall within an existing Department program, most likely Hutan Kemasyarakatan. Some Department staff also insisted that the area in question was no more than 7000 ha., although satellite imagery shows approximately 29,000 of agroforests within the forest zone in Krui.

Over this period eight versions of the decree were drafted and four of these were reviewed by the Minister himself. In the end, with few exceptions the technical input provided by the research consortium through ICRAF and Latin and supported by key Department staff was accepted by the Minister. The management of the KdTI area can be based upon what farmers are already doing, the duration of the right is open ended making it inheritable, and limited harvesting of timber from both the production and watershed forests is permitted. The results far exceeded what consortium members expected when initial discussions began with Department staff concerning the shape of the Ministerial Decree.

VI. Conclusions

The creation of the Krui special use zone is a victory for those in Indonesia who are encouraging the Department of Forestry to use what is already being done by local farmers as the basis or starting pointing for community-oriented forest management. Challenges now center on assuring that Krui farmers have the information they need to decide whether this right meets their needs for resource security and doesn't encumber their efforts to gain full recognition of their land rights.

During initial discussions in two villages, many farmers are determine to stand by their position that the border of the State Forest Zone be moved so their agroforests no longer fall within the jurisdiction of the Department of Forestry. One way of achieving this is for farmers to work through the provincial land-use planning process that determines, in coordination with the Department of Forestry, which lands are classified as agriculture and which as forestry. Land classification is reviewed every five years. But as an interim strategy, the initial response from farmers in these villages is that since the right provided by the Department does secure their agroforestry systems from outside intervention and negates the right of the forestry company to harvest locally owned trees, the new classification is clearly an improvement.

References

Colfer C.J.P., Gill D.W. and A. Fahmuddin (1988). An indigenous agricultural model from West Sumatra: a Source of Scientific Insight. Agricultural systems, 26: 191-209.

Dove M. R. (1993). Smallholder Rubber and Swidden Agriculture in Borneo: A Sustainable Adaptation to the Ecology and Economy of the Tropical Forest. Economic Botany 47 (2): 136-147.

de Foresta H. and G. Michon (1993). Creation and management of rural agroforests in Indonesia: potential applications in Africa, in *Tropical Forests, People and Food: Biocultural Interactions and Applications to Development*, C.M. Hladik, *et al.*, Editors. 1993, Unesco & the Parthenon Publishing Group: Paris. p. 709-724.

de Foresta H. and G. Michon (1997). The agroforest alternative to *Imperata* grasslands: when smallholder agriculture and forestry reach sustainability. Agroforestry Systems, 36: 105-120.

Gouyon A., de Foresta H. and P. Levang (1993). Does "Jungle Rubber" deserves its name? An analysis of rubber agroforestry systems in southeast Sumatra. Agroforestry Systems, 22: 181-206.

de Jong W. (1994). Recreating the forest: successful examples of ethno-conservation among land-dayaks in central West Kalimantan. Communication to the "*International Symposium on Management of Tropical Forests in Southeast Asia"*, Oslo, Norway, March 1994.

Levang P. (1992). Pahmungan, Penengahan, Balai Kencana. Enquête agro-économique dans la région de Krui (Lampung) . research report, ORSTOM/BIOTROP.

Mary F. (1986). Agroforets et Sociétés. Etude comparée de trois systèmes agroforestiers indonésiens. PhD thesis, ENSA-Montpellier, France.

Mary F. and G. Michon (1987). "When agroforests drive back natural forests: a socio-economic analysis of a rice/agroforest system in South Sumatra." Agroforestry Systems 5: 27-55.

Michon G. (1985). De l'homme de la forêt au paysan de l'arbre: agroforesteries indonésiennes. PhD Thesis, U.S.T.L., Montpellier, France.

Michon G., Mary F. and J. M. Bompard (1986). Multistoried agroforestry garden system in West Sumatra, Indonesia. Agroforestry Systems, 4: 315-338.

Michon G. and J. M. Bompard (1987). “Agroforesteries indonésiennes: contributions paysannes à la conservation des forêts naturelles et de leurs ressources.” Rev. Ecol. (Terre Vie) 42: 3-37.

Michon G. and H. de Foresta (1990). Complex agroforestry systems and conservation of biological diversity 1/ Agroforestry in Indonesia, a link between two worlds. In *Harmony with Nature. An International Conference on the Conservation of Tropical Biodiversity*, Kuala Lumpur, Malaysia, The Malayan Nature Journal. Golden Jubilee issue. vol 45: 457-473.

Michon G. and H. de Foresta (1995) The Indonesian agro-forest model, in *Conserving biodiversity outside protected areas. The role of traditional ecosystems.*, P. Halladay and D.A. Gilmour, Editors. IUCN: Gland, Switzerland and Cambridge, UK. p. 90-106.

Michon G., de Foresta H. and P. Levang (1995). Stratégies agroforestières paysannes et développement durable: les agroforêts à *damar* de Sumatra. Nature-Sciences-Sociétés 3 (3): 207-221.

Momberg F. (1993). Indigenous Knowledge Systems. Potentials for social forestry development: resource management of Land-Dayaks in West Kalimantan. Masters Thesis, Berlin, Technische Universitat Berlin.

Salafsky N. (1993). The Forest Garden Project: An Ecological and Economic Study of a Locally Developed Land-Use System in West kalimantan, Indonesia. Ph. D. Thesis, Duke University, Durham, North Carolina, USA.

Sardjono M.A. (1988). *Lembo: a traditional land-use system in East kalimantan.* in Agroforestry untuk pengembangan daerah pedesaan di kalimantan Timur. A. M. Lahjie and B. Seibert (eds), Fakultas Kehutanan Universitas Mulawarman and GTZ. p. 253-266.

Sibuea T. T. H. and D. Herdimansyah (1993). The variety of mammal species in the agroforest areas of Krui (Lampung), Muara Bungo (Jambi), and Maninjau (West Sumatra). ORSTOM/HIMBIO (UNPAD) research report, Bandung, Indonesia.

Siebert S.F. (1989). - The dilemna of dwindling resource: rattan in Kerinci, Sumatra. Principes 32(2): 79-97.

Sundawati L. (1993). The Dayak garden systems in Sanggau district, West Kalimantan. An agroforestry model. MSc. thesis, Faculty of Forestry, Georg-August University, Göttingen.

Thiollay J. M. (1995). The role of traditional agroforests in the conservation of rain forest bird diversity in Sumatra. Conservation Biology 9(2): 335-353.

Torquebiau E. (1984). “Man-made Dipterocarp forest in Sumatra.” Agroforestry Systems 2(2): 103-128.

Weinstock J.A. (1983). - Rattan: Ecological Balance in a Borneo Rainforest Swidden. Economic Botany, 37 (1), p. 58-68.

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