The Emergence of Forest Land Redistribution in Indonesia

Martua T. Sirait



Southeast Asia

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² ICRAF-Phd student at Institute of Social Studies, Den Haag. Lecturer at Faculty of Social and Political Sciences at Christian University of Indonesia, Jakarta. sirait@iss.nl

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Abstract

In recent years (post 1998 reform), through a long struggle between the forest agency, land agency, private sectors, local government, and peasant movements there have been some cases where upland peasant communities being allocated individual land rights from the forest converted areas under the public land redistribution. This cases develop further to a National Program (PPAN) and for several reason Forestry Department gave a "green light" for the state (forest) land redistribute to the tillers. Through this paper the author elaborate further how the program developed in the current forestry debate in Indonesia to address the land conflict, forestry concessions allocations and conservation agenda.

Contents

Abstract	i
1. Introduction	.1
2. Market Liberalization in Forestry Sector	.4
2.1 Window of Opportunity for Policy Reform during the Reform Era	.6
2.2 Forest Reform; Progress or Regression?	.9
3. Forest Land Redistribution Discourse and Policies	12
3.1 Forest Land Redistribution Discourse	12
3.2 Forest Land Redistribution Policies	14
3.2.1 Forest Conversion: the process in the MoF	14
3.2.2. The Land Redistribution process in the National Land Bureau (BPN)7	16
3.2.3. The Response of Civil Society and Local Government	17
5. Concluding Remarks	19
References	20

List of Figures and Tables

Figure 1. The development of state forest claims in Indonesia	5
Figure 2. Forest land redistribution on private and public lands	.13
Table 1 Farred Classification in Indensis 1000 and 2004	,
Table 1. Forest Classification in Indonesia 1982 and 2004	6
Table 2. Tenure Arrangement under several Social Forestry Policy Options	8
Table 3. Total land redistributed 1966-2005	.14

1. Introduction

This chapter describes the shifts of forestry and land policy in Indonesia, especially with regard to the evolution of public forest land reform since the mid twentieth century. Forestry land reform has recently been accepted as strategy by the Ministry of Forestry to avoid further conflict with local peasants, whereby responsibility for redistributing disputed agriculture lands is devolved to another state agency (Land Agency/BPN) for individual land titling. There has been no radical change in Indonesian forestry policy, but the forest land redistribution process creates a window of opportunity for the emergence of local forestry land reform that potentially can address inequalities within agrarian structures and relations. This chapter aims to answer the question: How was the policy and institutional arrangement for forest land redistribution set up and to what purpose?

National forest management in Indonesia started with large scale forest exploitation during the VOC period in the 18th century. The export of timber products grew rapidly to replace non timber forest products as Indonesia's major export commodity at that time. This especially included teak (*Tectona Grandis*) from Java and other hardwoods such as iron wood (*Eusideroxylon Zwageri*) from Kalimantan. Teak was used for building ships and iron wood used for harbor construction. In the late 18th Century Java experienced considerable environmental impacts due to the unsustainable exploitation of teak forests. This resulted in great forest loss and floods in Java and forced the Dutch administration as the successor of the VOC to take serious action. In response, the wood harvest quota was cut by 50%, although belatedly.³

The Dutch administration transplanted 'Modern' German forestry to Java via an introduction to planting and harvesting teak by German forestry scholars as well as German trained Dutch scholars⁴. These foresters were sent to Indonesia to address the problem of floods and the decline in teak wood production in Java in 1849.⁵ Several policies were based on the principles of the German forestry school which had three key concepts:⁶

³ Soepardi 1956

⁴ Peluso 2006, pp65-69

⁵ The German foresters sent to Indonesia were; Bennich and Mollier, Balzar as geodetic expert in 1849, followed by Van Roessler from Germany in 1855 and followed German-trained Dutch foresters; Beijerinck, Noodt, Stuffken, and de Sturler in 1857. This occurred about 50 years after Van Hogendrop reminded the government that professional foresters should be employed in Indonesia, see Ministry of Forestry, 1986a p.71.

⁶ Rajan 1999, pp 324-333

- 1. **Minimum diversity** which aimed to harvest as much as possible of the same timber product from a limited land area. A consequence of this key concept was that other trees with less commercial value were cleared.
- 2. Balance sheet aimed to convert the standing stock of timber into a value and also calculate the optimum harvesting age for the trees.
- 3. **Sustained yield** aimed to maintain a logging cycle rotation over several decades, which required a system of forest cut blocks and an annual allowable cut (AAC).

The random exploitation of teak forests was restructured, forest districts were created, and more forest agency staffs were trained in "modern" forest management.⁷ This forestry system is mathematically predictive and prescriptive⁸ and has two main consequences: segregate forestry activities from agricultural activities and apply state domain to forest areas.

To be able to practice the German forestry system (mathematically predictable and prescribed) the forest was further segregated and allocated within the forestry domain for timber production, soil and water protection and biodiversity conservation. Forest blocks were created and forestry staffs assigned to utilize, manage and guard the forest area. To be able to freely allocate huge areas of land, this system depended on a strong state to declare and defend forest areas as a state domain.

This system replaced local agroforesty management practices and forced peasants to either fully engage in working in the forestry sector or become farmers, such as occurred with the lowland peasant society in Java, Michon and Foresta, (1998) note that:

Ignoring forest seems inappropriate, for in the real rural world of the tropics many forms of forest management directly interact with the management of farmlands. Hunting, gathering and extractives are essential complements to field culture in the forest margins. Farmers often manage more or less artificial forests, either evolved from natural vegetation or purposefully established within their farmlands, as central elements of their farming systems (p.382)

At the same time the German "modern" forestry system strengthened the monopoly of the state over forest lands and forest products and its dominance over peasants in areas surrounding the forest. This process happened also in other part of the worlds, known as state forest enclosure process (Sikor & Thanh, 2006, p 647). Tania Li (1999) calls

⁷ Ministry of Forestry 1986a. pp 72-73

⁸ Rajan 1999, p333

this the state territorialization and peasant disciplining process with the aim of being able to extract upland surpluses effectively.

Further consequences of this system were developments in state policy that segregated the peasantry from the forest and as well as from the state forest domain. During the Dutch colonial period, peasants had an obligation to work in timber forest exploitation (*Blandong Dienst*) in teak forests, and could use this as payment in lieu of the head tax. Peasants were only allowed to collect non-timber forest products from the forest. Teak and other economically valuable timbers were monopolised by the state. The practice of shifting cultivation (*Huma*) was completely forbidden in Java in the 1930s.⁹

2. Market Liberalization in Forestry Sector

Due to the influence of Prof. Van Vollenhoven of Leiden University, who pointed out that the peasantry in Java was becoming poorer and poorer,¹⁰ coupled with land conflicts over forest areas,¹¹ an Agrarian Commission (*Agrariche Comissie*) was established in 1928 to review the implementation and the concept of state lands domain in Indonesia. The Agrarian Commission examined the guestion of forestry agency claims over the forest area and advised the forestry agency to revise the forestry regulation *Boschordonentie* 1927. The Senior Foresters Staff Association (Vabinoi)¹² held a special meeting to address this issue in 1932, and rejected the commission's proposal, responding that (German "modern") forest management could only work in a state lands domain area. If the lands domain theory did not apply to forest areas, the Association claimed it would mean that forest land would be managed by the incapable hands of the local peasantry (petanl) and indigenous cultural institutions such as marga, huta, banjar, kampong, binua etc. The forestry agency backed up Prof. Nolst Trenity's position (the opponent of Prof. Van Vollenhoven) to keep the domain of the forest area in the hands of the forest agency, which meant that forest land should be expropriated from the possession of the owners.¹³ Peluso (1992) states that the foresters thought that they were acting on the basis of scientific neutrality, but actually they were acting on the basis of their own interests and the interest of the Ministry of Forestry (MoF) to liberalize the forestry sector to private logging companies.

The state's claim over forest areas grew rapidly once it defined planted teak forest and natural teak forest as state domain and later, that all natural forest more than 800 meters above sea level was forest domain, including shifting cultivation lands. According to the 1927 *Boschordonantie* for Java and Madura, the forest domain was all lands which were forested or were planned to be forested. (See Figure 1 - The development of state forest claims in Indonesia)

¹⁰ The poor condition of the peasantry in Java due to the previous Cultivation System policy and the implementation of the Lands Domain was presented in the *Mindervaart* Report

¹¹ Japing, 1929 asserted that land conflicts had increased since a great number of forests were designated as state forest land. Riots occurred in West Sumatra after the Forest Service collected levies on all wood cut from forests by local people. Previously, the local people had been free to cut and collect the wood for their daily use.

 ¹² Vabinoi (Vereniging van Ambtenaren bij het Boschwezen in Nedetlandsch Oost Indie) was established in 1907 and published Journal Tectona from 1908 to 1955. The association change their name several times; Vabinoi 1907-1927, Vhabinoi 1927-1945 (Vereniging van Hogere Amtenaren bij het Boschwezen in Nedetlandsch Oost Indie), Vhabi 1945-1957 (Vereniging van Hogere Abtenaren bij het Boschwezen in Indonesia) see Ministry of Forestry, 1986a, pp.118-120.

¹³ See Galudra and Sirait 2006

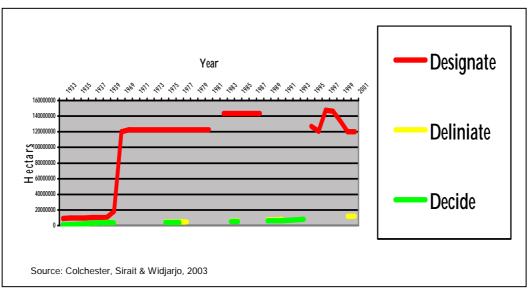


Figure 1. The development of state forest claims in Indonesia

Discourse on policy changes over the concept of state domain emerged at the time of the establishment of the Indonesian Basic Agrarian Law (BAL) in 1960 which rejected the concept of state land domain. The BAL declared that the state controls and administers the land and other agrarian wealth but does not own it. However, the forestry agency was to continue to act as if all forest areas were state domain. This situation continues until today despite the fact that Forestry Law No. 41/1999 explicitly states that the forests are not owned by the state, but rather are controlled and administered by it.¹⁴

Currently, the forestry agency claims 61% of Indonesia's land area fall inside the forest zone, where according to Lynch and Talbot (1995) around 40-60 million people who are members of forest communities live. Most of these are peasants who practice some kind of mixed farming system (agroforestry) inside and in the surrounding forest areas. These peasants access land and resources in all of the forest classifications: Production Forest (limited production forest and permanent production forest), Nature Reserve, Protected Forest and Conversion Production Forest. (See Table 1. Forest Classification in Indonesia 1982 and 2004)

No	Forest Function	Area (Ha), 1982	Area (Ha), 2004*	
1	Nature Reserve and Tourism Forest	19,152,885	24,000,000	
2	Protection Forest	29,649,231	30,000,000	
3	Limited Production Forest	29,570,656	30,000,000	
4	Permanent Production Forest	33,401,655	32,000,000	
5	Conversion Production Forest	30,000,000	5,000,000	
	TOTAL * tentative	141,774,427	121,000,000	

Table 1. Forest Classification in Indonesia 1982 and 2004

Source Ministry of Forestry Statistics 2005

2.1 Window of Opportunity for Policy Reform during the Reform Era

Several months before the fall of President Soeharto, under the direction of the Ministry of Forestry, a special decree recognizing indigenous agroforestry systems for the community which managed the *damar* agroforest in Krui, Sumatra was issued, via Ministerial Decree No 47/1998 regarding the Areas for Special Purposes (KDTI). Through a long negotiation process between the former logging concession holder and the Farmers' Association (PMPRD), facilitated by ICRAF and the Ministry of Forestry research division, the ministerial decree allowed the community to continue managing an agroforest area of 25,000 hectares and to extract timber and non-timber products without constraints.¹⁵ Several other policies also changed, including the regulation on Forest Gazettement Procedure (SK Dirjen Intag No. 82/Kpts/VII-1/1998) which requires local communities to be fully involved in the forest delineation process,¹⁶ and Government Regulation (PP 69/1998) regarding the decentralization of several forestry tasks to the District and Provincial forestry offices. These populist regulations were issued during the last year of the unpopular Soeharto regime to gain popular support leading up to the 1998 election.¹⁷

Following the May 1998 reforms, several policies were changed in a very short time, some of which involved days of intensive expert participation to formulate policies such as the revision of the Ministerial Decree No. 622/1995 regarding community forestry which was replaced by Ministerial Decree No. 677/1998 whereby communities became the main actors in managing forests and were able to access

¹⁵ See Fay, Hubert, Sirait and Tomich, 1999

¹⁶ See Sirait & Ruwindrijarto, 1999.

¹⁷ Similar steps were taken by Marcos regime, where at the end of his term, he issued a populist CBFM policy further, see Moniaga & Sirait, 2004

timber and non-timber products.¹⁸ Besides the policy reformulation at the government level, there were rallies and demonstrations almost every day outside the parliamentary offices directed at the Ministry of Forestry. One of the groups was named KUDETA (*Kualisi Untuk Demokratisasi Sumber Daya Alam*, Coalition for the Democratization of Natural Resources), a network of 82 Indonesian NGOs and student organizations. The coalition urged the transitional government to ensure that the management of natural resources and the benefits derived therein should be returned to local communities. There were three main demands:

- 1. Redefine the boundaries of state forests;
- 2. Restructure state institutions responsible for environment and natural resource management;
- 3. Redirect all development efforts towards community-based resource management.¹⁹

The legality of the state's claim on forest areas was guestioned by peasant's organisations, indigenous peoples, academics as well as NGOs²⁰. Civil society groups also organized their efforts through the FKKM (The Communication Forum on Community Forestry) which was established eight months before Soeharto's resignation. Founders included several Indonesian NGOs, university professors and students and reform-minded forestry officials. Over its first year the FKKM became an increasingly effective voice for local communities located within state forest areas and an important counterbalance to the "modern" forestry mindset within the Department of Forestry. The forum had a broader base than KUDETA and its work centered more on developing detailed critiques of forestry policy and advocating a new paradigm for natural resource management. Its strategies focus more on the use of media, meetings with high level forestry officials, including the Minster and lobbying in Parliament. FKKM takes the position that genuine reform can only happen after the government recognizes the failure of previous forest management practices. It called for a new paradigm which is politically, socially, economically and environmentally sustainable to replace the focus on timber management and adopt a strategy on forest ecosystem management, which counters the concept of the "modern" forest management system.²¹ At the provincial level, civil society groups amplified similar issues of returning the forest to the people and redefining the state forest area through community mapping.²²

¹⁸ Kusumanto & Sirait, 2002

¹⁹ See Fay & Sirait 2002.

²⁰ See KMAN 1999

²¹ See FKKM, 1999 "The Right Starting Points towards the New Era of Indonesian Forestry".

²² Tim Refromasi Kehutanan Lampung, 1999; Tim Reformasi Kehutanan Kaltim 1999

Pre *Reformasi* and the early *Reformasi* era were seen as windows of opportunity for policy change to bring the "populist" agenda to the table of policy makers. This supports the analysis that only political pressure could change the well established "modern" forest policy in Indonesia. Parallel with the policy reforms, forest concession holders and forest industries collapsed due to mismanagement and debt. Foresters started to look for alternatives for forest management to replaced the modern forestry. At this time, high-level decision makers were seeking ways to appear in a positive light in a situation of turmoil. Options for Community Forestry were explored through several pilot projects and a national program (see Table 2. Tenure Arrangement under several Social Forestry Policy Options).

No	Programme	Policy	Areas	Target group	Tenure Arrangement	Sharing benefit
1	CBFM (HKM)	Ministerial Decree no 677/1998 jo 31/2001	All forest areas exclude conservation areas	Farmer Cooperatives	5 year temporary permit & 25 year stewardship agreements	Open for negotiation with private sectors
2	Private Forest (HR)	Ministerial Decree 1997	Private Lands	Individual & Collective	Individual land ownership	Open for negotiation with private sectors
3	Area with Special Purposes (KDTI)	Ministerial Decree no 47/1998	All forest area	Collective	No time limit, evaluation every 5 years	Sharing Benefit among the group
4	Co- Management (PHBM)	PP Director Decree 2001	Production Forest in Java	Farmer Groups	unclear	25% farmer, 75% company

 Table 2. Tenure Arrangement under several Social Forestry Policy Options.

Source: Sirait and Fay, 2001

The slogan "Forests for the People" featured prominently in Forestry Minister Nasution's early speeches as he laid the groundwork for developing a populist image during the Reform Era. The center of his reformist approach was a strategy of redistribution of benefits derived from forest resources. Another important initiative Minister Nasution undertook in June 1998 was the creation of the Forestry and Estate Crops Reform Committee (FECRC), an independent body tasked to make recommendations on the continuing process of forestry reform.²³ One of the FECRC tasks was to prepare the revision of Forestry Law No. 5/1967. The process of preparing the forestry law was limited. The several interest groups in this process can be classified as groups who supported:²⁴

- Policy reform to initiate solutions to the issue of who actually owns the forest and accommodate local forest management. This group was supported by NGOs and academia.
- 2. Redistribution of assets through smaller lease sizes and involves new forest actors such as cooperatives, religious groups, local communities. This group was supported by the Forestry Minister and some Ministry of Forestry directors.
- 3. Policy reform for better and more efficient forest utilization and to regain control over the concessions. This group was supported by private concessions

In this situation FECRC put forward their recommendation to nationalize forest management through state-owned companies, but the Ministry Agency took a different direction redistribute the small lease permits and the FECRC was dissolved.²⁵

2.2 Forest Reform; Progress or Regression?

In January 1998 some months before President Soeharto stepped down, Indonesia signed a letter of intent (LoI) with the IMF which specified five main targets for forestry reform that had been developed without much consultation with the broader stakeholders:

- 1. increase forest taxes, establish a resource rent tax and introduce a performance bond
- 2. uphold policy barriers for forest business
- 3. allow foreign investment in the forestry sector, especially allowing entry to forestry and estate crops (oil palm)
- 4. create a performance bond for forest business
- 5. limit forest conversion

The next LoI included broader issues:

- 6. channel reforestation funds (DR) into the state budget
- 7. decrease the timber export tax

²⁴ Kartodiharjo and Jamthani, 2006

²⁵ Suarga, 2003

- 8. cancel the timber export quota
- 9. issue policy to allow long leases of forest concessions (100 years) through auctions, and also run the community forestry program

In 1999 World Bank PRSP (policy reform support loans) 1 and 2 were signed totaling US\$1.5 million loan with similar conditions to the IMF but with a clearer agenda to be implemented within 6 months, 18 months and over the long term. The IMF and World Bank prescriptions did not work well due to there being no sense of ownership from the Ministry of Forestry staff, the ambiguity of the liberalization of the oil palm estate sector and the lack of permission to further convert forest areas (point 3 and 5).²⁶ Further loans were released for the Sectoral Adjustment Loan (SAL) of US\$43 million.²⁷ At that time donor countries, all members of the CGI (Consultative Group on Indonesia), put forest policy reform as one of their agendas for loan restructuring, and formed the Inter-Departmental Committee on Forestry (IDCF). They also prepared a 12 point program which mentioned solving of the problem of land tenure insecurity in forest areas (point 12).

At the same time, the newly elected legislative council of 2001, with support from NGOs, academia, the indigenous people's alliance and peasant unions, issued the Legislative Act on Agrarian Reform and Natural Resource Management, (TAP MPR No. IX, 2001) which set the agenda and principles for agrarian reform and the future natural resource management. The legislative act mandated the government and the legislature to review and revise the law according to the principles of sustainable development, national integrity, human rights, legal supremacy, justice, democracy, participation and peoples' welfare, taking into consideration the social, economic and cultural conditions of the community and the ecological functions of natural resources.

The forest agency responded by creating five priorities to be followed up during the following five-year term:

- 1. Eradication of illegal logging from forest areas and illegal timber trade through forest patrols and forest operations
- 2. Revitalization of the forest sector, especially the forest industry through implementing sustainable forest management certification
- 3. Rehabilitation and conservation inside and outside the forest area, reforestation and establishment of new conservation areas

²⁶ Kartodiharjo & Jhamtani, 2006, pp33-35

²⁷ Gellert, forthcoming

- 4. People's economic empowerment inside and outside forest areas through Co-Management in Java, CBFM in the outer Islands
- 5. Determination of the forest area, making effort to finish the forest delineation and formal gazettment of state forest areas, with the consequence that it would reclassify villages and peasant farming areas as non forest areas²⁸.

At the global level the discourse questioning who owns the forest, especially the future of the peasant cultivated areas, was addressed by the World Bank in 2006 in its Forestry Report which recommend that in these areas there is a need to provide clear property rights such as ownership and convert them to high agriculture returns,²⁹ or transfer the forest area to the local communities and make landholders more secure in land without trees³⁰. Clear property rights are not only necessary for providing high agriculture returns but without secure property rights, the incentives to manage and maintain mixed farms are weak (White and Martin, 2002; Chomitz et al 2006; Right Resource Group 2007, Sunderlin et al, 2008). This argumentation is in line with De Soto, 2003 who points out that the poor in under-developed countries have assets but that their real property is often owned informally, and thus cannot be used to generate capital. As a result, the crucial role of real property is simply absent in under-developed countries³¹.

28 Ministry of Forestry 2006, Until 2009 the target are to finish the forest delineation up to 30% of the forest areas.

²⁹ See FAO study by Romano and Reeb (2006) also similar argumentation to provide clear land tenure security through private ownership in Southeast Asia forest,

³⁰ Chomitz et al, 2006, p7, define Forest-agriculture mosaic lands—where land ownership is usually better defined, population densities higher, and markets nearer, and natural forest management often cannot compete (from the landholder's perspective) with agriculture or plantation forestry. Although forest is sparse here, deforestation rates are high, and unique biodiversity is threatened (p7) and Frontier and disputed areas—where pressures for deforestation and degradation are high or increasing, and control is often insecure and in conflict (p8)

³¹ This argument use also by other groups such as the Resource Right Group by saying that "Without secure rights to own and use their assets, indigenous and other local community groups lack long-term financial incentives for sustainable use of their forest resources for their own development." Right Resource Group, 2007 p 11.,

3. Forest Land Redistribution Discourse and

Policies

The priorities set up by the forestry agency seemed to accommodate all interests of the private sector, IMF-WB, regional trade as well as the NGOs. Indonesia is famous for the politics of accommodation where the government attempts to accommodate all interests. (This is reflected today in the rainbow of parties that support the current president and the vice president³²). But the problem was that the private sector agenda i.e (priorities 1 to 3) was against the priorities 4 and 5 (the social agenda). This could be seen as Cannibalism Reform, where the reform agendas compete with each other and are negotiated based on power³³.

3.1 Forest Land Redistribution Discourse

Forest Land Redistribution was not a MoF priority. Its inclusion in the agenda can be seen as an indication of the strength of the groups pushing for resolution of tenure conflicts between MoF and local communities. More and more forest concessions, nature reserves and protected forests were reoccupied by peasants following the fall of Soeharto, reclaiming lands which they were forced from in previous decades. Community forestry could not address the massive issue of the land reoccupations; most of the peasants who had struggled for land reform had had bitter experiences with the community forestry program, the forestry agency and timber concessions in the past. The peasant movement towards land reform was gaining strength with the support of NGOs as well as the Land Agency and the Ministry of Agriculture. The forestry agency found it difficult to deal with this social agenda in an unprecedented policy setting while maintaining its overarching interest to gain revenue.

In September 2006 a special cabinet meeting was held and the government announced that a land reform program for state land redistribution would soon be launched. The Ministry of forestry followed this by announcing that it would allocate and distribute up to eight million hectares of forest areas to peasants³⁴. Its difficulty in implementing the community forestry program led the Ministry of Forestry to devolve the issue of

³³ Thanka Sunil, forthcoming. Describing Canibal Reform as a process that the reform agenda area contradicting each other .

³² Laksmono, forthcoming

³⁴ Ministry of Forestry 2006c.

land redistribution and land titling to the Land Agency, an approach which had been promoted by the Word Bank as well as some other research organizations³⁵.

Ending social conflicts in state forest areas was to be achieved by providing peasants with tenure security through individual land titling. Forestry concession areas as well as conservation areas were to be excluded from the land redistribution process. Through segregating off the conflicting areas, the Ministry of Forestry planned to continue "modern" forestry policy and practices.

		Forest Allocation	Agriculture Allocation
Private	Individual		
	Communal	Forestian realistic	uion
Public	Individual	redib.	
		"modern"forest	
	Communal	management	

Source: Colchester et al, 2006



The Ministry of Forestry reclassified almost 20 million hectares of forest area from state forest land and devolved it to the National Land Bureau (BPN) to be used by non-forestry sectors, but most of it goes to Palm Oil Plantation. During the ICARRD (International Conference on Agrarian Reform and Rural Development,2006) the Indonesian delegation reported its achievement on land redistribution of around 1.5 million hectares between 1965 and 2005. This data did not provide many details but proved that land redistribution happened not only during the Soekarno era (1945-1966), but that a similar amount of land was redistributed during Soeharto and post reform era (1966 up to now) without much attention of the scholars, media and NGOs activists. (see Table 3. Total land redistributed 1966-2005)

³⁵ See Gellert forthcoming on the engagement of Word Bank in Land Titling as well as Contreras and Fay 2005 on the subject of land reform.

No	Province	Area Redistributed (Ha)	Number of Households	Area Recieved per Household (Ha)
1.	Sumatra	255,392	<u>270,808</u>	0.943
2.	Jawa and Bali	546,849	<u>905,398</u>	0.604
3.	Kalimantan	104,031	<u>77,911</u>	1.335
4.	Sulawesi	172,562	<u>185,688</u>	0.929
	Nusa Tenggara and			
5.	Maluku	77,833	<u>68,840</u>	1.131
6.	Papua	2,860	<u>2,117</u>	1.351
	Total	1,159,527	<u>1,510,762</u>	0.768

Source, ICCARD 2006, Indonesia Country Report

Significant redistribution of areas of "public" forest land has taken place since 1998 when the forestry agency changed the status of almost 20 million hectares of forest areas for palm oil plantation and for other agricultural allocation.

3.2 Forest Land Redistribution Policies

The process for land redistribution was based on the forest area regulated in several policies. There are several procedures and requirements regulated by the Ministry and Forestry as well a procedure regulated by the National Land Bureau (BPN).

3.2.1 Forest Conversion: the process in the MoF.

To change the status of forest land, the MoF has three options. The first is under the regulation for the conversion of forest areas to non forest areas. Only forests classified as "conversion production forest" (HPK) are allowed to be converted to non forest areas. To change its forest classification (Protected Forest, Production Forest, Nature Reserve, etc), an area must be first reclassified as conversion production forest. After that, the Ministry of Forestry can decide if the area will be converted to non forest area, and placed under the jurisdiction of the BPN. MoF Decree no 74/ 2001 regarding the conversion of forest areas, requires a multidisciplinary study by scientific authorities to recommend a change of land status. It is almost impossible, however, to follow this procedure to reclassify a forest area so that it can become an object for land redistribution. This process was undertaken in 2003 by the district government of Lampung Barat to recommend that the village of Sukapura receive reclassified forest lands that have in practice been under its agroforestry management for decades. As of

late 2008, this process, which included district government and village officials, has not resulted in any land reclassification by the MoF.

The second procedure to convert a forest area to non forest status is through reappointment of the whole forest area in the province through a MoF decree. This process does not involve the forest land being reclassified as conversion production forest but follows MoF decree no 31/2001 for the gazettement of forest areas. This process of forest reclassification must be integrated in the relevant provincial spatial plan. Local communities in Bengkunat sub district received 6000 hectares of land through this process in 2001, when the whole forest area in Lampung province was reclassified and 141,000 hectares were excised from the national forest estate. Most of the negotiation process exclude the local communities as well as the district governments, but it was negotiated between Lampung province and the MoF.

Much of the forest area in Indonesia's outer islands was reclassified between 1999 and 2001through this process but this took place largely without the involvement of local communities. The reclassification of forest areas to conversion production forests has been driven by the rapid expansion of oil palm plantations in Sumatra and Kalimantan.

In the two processes the final decision and veto power rests with the ministry of forestry. The results of multidisciplinary research teams as well as provincial spatial plans become input for the ministry's decision.

The third procedure to convert the status of a forest area is through court ruling. Not many cases have happened where the legitimacy of a national forest area has been challenged through the courts. One such case is Sagara, where local communities were accused of encroachment on the state forest area. A legal maneuver by the community lawyers questioned the legitimacy of the national forest area as a strategy to protect the community from being labeled as forest encroachers. The expert witnesses from BPN presented data that the disputed area was not classified as a forest area³⁶. In the end, the decision of the court (No 20/PidS/1990/PN Grt) was that the local communities were guilty of encroaching on the land without the consent of the owner, but that the disputed land was a non state forest area. This court decision was followed up by a joint ministerial decree of BPN & MoF which emphasized the transition process of devolving the authority over non forest lands from MoF to BPN. The court ruling opened another window of opportunity for the local communities together with BPN to classify the land as the object of land redistribution avoiding the veto power of the MoF.

³⁶ See Legal Defense, by Dindin Maolani SH and Effendi Saman SH for the case of Sahrum bin Ahmadji reg no 20/Pid.S/1990/PN.Grt p11. Expert witnesses from BPN, Drs. H Djayusman, he present the 1930 maps that the area is not classified as forest area.

3.2.2. The Land Redistribution process in the National Land Bureau (BPN)

The BPN began to redistribute land and provide individual land titles when the land was classified as an object for land redistribution through the National Program of Agrarian Reform (PPAN) which regulates in a BPN Provincial office decree. These decrees regulate the object, subject and process of land reform. The object of land redistribution is state lands which will be divided into several blocks to be prioritized in several phases of distribution. The object of the land redistribution usually are a general guidance or criteria of landless and near landless peasants, who are sometimes classified as tillers of the land. The import issue is the process of land redistribution, either through **adjudication**³⁷ or **redistribution**³⁸. This guides the whole process and determines who will get land and how large an area they will get.

In an **land adjudication** process, an application by a local community for land redistribution is considered and decided on by an adjudication team. The adjudication team consists of the village leader and his/her staffs who are usually helped by prominent persons or elders of the village who know the history of the land claims and controls. The adjudication team verifies the land reform application from each beneficiary and considers the existing land claims and actual control of the beneficiaries over the land. This usually comes to the contradiction of socio-historical claims or factual control over the land. This process tends to legalize existing agrarian structures, without changing any inequality in agrarian structure over the land.

In land redistribution a minimum and maximum land area for each household is regulated in the Basic Agrarian Law (No 5/1960 article 7) as well as Government Regulation to replace Law (Perpu 56/1960 article 1.2, re maximum land ownership). A maximum of 5 to 20 hectares of agriculture land are allowed depending on the population density as well as the type of land management. Government Regulation no 224/1961 on Land Redistribution also regulates absentee land ownership which limits the beneficiaries to peasants who reside in the same sub-district, except for government officials (civil servants, police, military) who are serving outside the sub-district. This exception is also valid for religious leaders who served outside the sub district. The regulation on land redistribution is quite strong to prevent elite capture of the process and also regulates the maximum land threshold that could be classified as the object of land redistribution. This regulation aims to prevent land lords gaining back their land through the land redistribution process³⁹.

³⁷ For the adjudication process see Hermit 2004, pp 102-109

³⁸ For the land redistribution process see Hermit 2004, pp 183-205

³⁹ Nirwana, Fidro, Fauzi, Hendro 2002,pp70-93

Both process of land redistribution as well as land adjudication are coordinated by the district office of BPN and managed by the committee (*panitia land reform*) appointed by the provincial BPN office. The committee consists of staff of the BPN district office, village leaders and sub-district staff. Potential beneficiaries are excluded from this committee⁴⁰.

Most of the land reform and land redistribution policies were issued in the 1960s during the Soekarno era. This reflects how the next president (Soeharto) did not regard land reform as one of his priorities. After the 1998 reform, a legislative act (TAP MPR) no IX/2001 regarding Agrarian Reform and Natural Resource Management was issued, urging the government to reimplement agrarian reform and reform of natural resource management following several overarching principles.[the above sentence repeats earlier material about the TAP MPR] Since 2005 BPN has worked to revise the 1960's regulations on land reform to adjust it to the current situation, which may also give a significant role to peasant organizations in the process of land redistribution.

3.2.3. The Response of Civil Society and Local Government

The response of local government as well as civil society towards the window of opportunity to re-implement land reform in Indonesia has varied. Several peasant union and NGOs who based in the filed consider that land reform processes should start at the (local) village level. These groups promote village regulations (*peraturan desa*) that regulate the whole process of land redistribution from forming its own land reform committee, identification of object and subject of land reform, redistribution as well as range the production system⁴¹. The peasants see the land reform policy as the opportunity to gain the legal rights over the land that they have reoccupied⁴². But there are also peasant union that criticized the Land Reform Agenda as a way to engage peasant land to the market⁴³.

Some governments at the district and provincial level have worked together with local communities to negotiate land redistribution with the MoF and the BPN. Among these are West Lampung district governments that negotiated with the MoF to reclassify and legalize transmigration lands established in 1952.⁴⁴. The Local Government of Riau Province responded to the land conflict of the PT AA forest concession with the local communities.

⁴⁰ During the 1960-1965 land reform process the committee were add with active member of the peasant union representing the nationalist peasant union, communist peasant union as well as representing the religious peasant union. The

⁴¹ See Nirwana, Fidro, Fauzi, Hendro 2002, p 117

⁴² See Fauzi N, 2003 & Chrisantini, 2007

⁴³⁴³ See Pembaruan Tani, 2004. March 2008, p6

⁴⁴ See Fathullah et all, 2005

On the other side, private oil palm and mining companies are also seeking land that has been or could be excised from forest areas⁴⁵. Many local governments are supporting both the excision of forest areas to be redistributed to peasants and supporting excisions for mining and oil palm plantations.

⁴⁵ See AI Amin case on Mining (Kompas 20 September 2008) and the case on Palm Oil company in Colchester at al, 2007

5. Concluding Remarks

Forest land redistribution in Indonesia over the last decade does not yet follow a clear pattern (eg Market-led Land Reform or State-Society Driven land reform), such as was elaborated by Borras 2006. The forestry land reform are designed to address land conflict between forestry concessions and other forestry allocations with the local communities. The goal of addressing unequal agrarian structures within local communities is hardly ever discussed in the discourse and public statements of the relevant actors. There are a lot of loopholes in the negotiation process that can be used using the land and natural resource policy to hijack forestry land reform. It is important to bare in mind that natural resource management policy as well as the land policy has limitation to solve the problem which involving power relation (Li, 2001).

References

Atmadja S. Stibniati, 2005. Perhutani and Forest Farmers: Who gains from PHBM. Interim report to ICRAF-SEA

Arupa 2005, Keberpihakan yang Tersendat, AFN-ARUPA-Koling, Yogyakarta

- Barr, C.; Brown, D.; Casson, A.; Kaimowitz, D. 2002. Corporate debt and the Indonesian forestry sector.In: Colfer, C.J.P., Resosudarmo, I.A.P. (eds.). Which way forward?: people, forests, and policymaking in Indonesia. Resources for the Future, Center for International Forestry Research (CIFOR) and Institute of Southeast Asian Studies (ISEAS), Washington, DC. 277-292
- BPK 2006. Financial Audit of Perum Perhutani, Internal report.
- Bratamihardja M, Sunito Setyawan, Kartasubrata Yunus, 2000. Forest Management in Java 1975-1999. Towards Collaborative Management. ICRAF, Bogor
- Budhidarsono Suseno, Burgers Paul, 2005. Forestry and Local Communities on Java in Times of Turmoil, in Boomgaard, Henley, Osseweijer 2005. Muddied Waters: Historical and Contemporary Perspectives on Management of Forest and Fisheries in Island Southeast Asia. KITLV, Leiden.
- Colchester Marcus, Sirait Martua, Widjarjo Boedhi. 2003. The Application of FSC Principles 2&3 in Indonesia; Obstacles & Possibilities. Walhi Jakarta, 2003
- Colchester, Jiwan, Andiko, Sirait, Firdaus, Surambo and Pane,2006. Promised Land: Palm Oil and Land Acquisition in Indonesia, Implication for Local Communities and Indigenous Peoples. FPP-ICRAF-HuMa-Sawit Watch, London-Bogor
- Contreras Hermosilla Arnaldo, & Fay Chip . *Strengthening forest management in Indonesia through land tenure reform, issues and framework for action,* 2005, Forest Trends-ICRAF, Bogor
- Chrysantini Pinky, 2007. Berawal dari Tanah; Melihat ke Dalam Pendudukan Tanah, Akatiga, Bandung
- Chomitz et al. 2006. At Loggerheads? Agricultural Expansion, Poverty Reduction and Environmenta in the Tropical Forest, World Bank, New York.
- Fathullah , Lisken Situmorang, Nurka Cahyaningsih, Ichwanto Nuch & Martua Sirait. 2005 Perubahan Status Kawasan Hutan, Guna Menjawab Permasalahan Kemiskinan dan Ketahanan Pangan; Studi Kasus dari Marga Bengkunat & Pekon Sukapura, Kabupaten Lampung Barat. Paper dipresentasikan dalam International Tenure Conference; Questioning the Answer. Jakarta 11-13 Oktober 2005

- Fauzi, N. (2003). <u>Bersaksi untuk Pembaruan Agraria: Dari Tuntutan Lokal Hingga</u> <u>Kecendrungan Global</u>. Yokyakarta, Insist Press.
- Fay Chip, Hubert de Foresta, Sirait Martua and Tomich Thomas, 1999. A Policy Breakthrough for Indonesia farmers in Krui Damar Agroforest. Agroforestry Today, 1999. Nairobi
- Fay Chip and Sirait Martua, 2002 Reforming the Reformist, in Colfer & Resudarmo eds. Which Way Forward? People, Forest and Policy Making in Indonesia. Resource For the Future Press, Washington
- Fay Chip and Sirait Martua 2004. *Kerangka Hukum Agraria dan Kehutanan Indonesia; Mempertanyakan Sistem Ganda Kewenangan atas Penguasaan Tanah*. (Legal Framework of the Forestry and Agrarian Issue in Indonesia; Challenging the Dual system of the tenure issue) Paper presented at the *International Tenure Conference*; *Questioning the Answer*. Jakarta 11-13 Oktober 2004
- FKKM, 1999 *Dengan Langkah yang Benar Menuju Era Baru Pengelolaan Hutan Indonesia* (The Right Starting Points towards the New Era of Indonesian Forestry). Jakarta
- FSPI, 2006. *Reforma Agrarian Butuh Dukungan Militer*, (Agrarian Reform need Military Support) Medan 15 November 2006; (www. detik.com.\Reforma agraria perlu dukungan militer.htm)
- Galudra Gamma, Sirait Martua, 2006 The Unfinished Debate: Socio-Legal and Science Discourses on Forest Land-Use and Tenure Policy in 20th Century Indonesia. Paper presented at the IASCP Conference, 19-23 June 2006 Bali
- Gellert Paul, forthcoming. The Politics of Governance of Indonesia's Forest Industries: Progress and Regress in a Neo-Liberal Age. Paper presented at the Governance and the Politics of Development (Garnet) Conference. 16-17 November 2006. ISS, Den Haag
- Hermit Herman, 2004. *Cara Memperoleh Sertifikat Tanah Hak Milik, Tanah Negara dan Tanah Pemda.; Teori dan Praktek Pendaftaran Tanah di Indonesia*. Mandar Maju, Bandung
- ICARRD, 2006. Indonesia Country Report: Agrarian Reform and Rural Development in Indonesia, Porto Alegre, Brazil, on March 6-10, 2006
- Japing, C.H. 1929. De Wenschelijkheid van het in Beheer Geven van Bosschen aan Inlandsche Rechtgemeenschappen. *Tectona* 22: 599-631
- Kartodiharjo Hariadi, Jhamtani Hira eds. 2006. Politik Lingkungan dan Kekuasaan di Indonesia. (Environmental Politics and Power In Indonesia) Equinox Publishing, Jakarta-Singapore

- KMAN, 1999. Conference of the Indigenous Adat Community of Nusantara. Proceedings, AMAN, Jakarta
- Kools, J.F. 1935 .Hoema's, Hoemablokken en Boschreserves in de Residentie Bantam. Wageningen: H. Veenman & Zonen
- Kompas 2001, Buruk Pengelolaan Hutan Jati di Jawa, Kompas Daily news 6 April 2001, Jakarta
- Kusumanto Yanti & Sirait Martua , 2002 Community Participation in Forest Resource Management in Indonesia: Policies, Practices, Constraints and Opportunities. A Synthesis. ICRAF-SEA Policy Working Paper no 28, Bogor.
- Laksmono Bambang Shergi, fortcomming. The Indonesian Political Transition and the Future of Social Development Agenda. Paper presented at the Governance and the Politics of Development (Garnet) Conference. 16-17 November 2006. ISS, Den Haag
- Li M. Tania, 2001. Agrarian Differentiation and the Limit of Natural Resource Management in Upland Southeast Asia. IDS Bulletin vol 34, no 2, 2001. pp Sussex
- Lynch Owen, Talbott Kirk, 1995. Balancing Acts: Community-Based Forest Management and National Law in Asia and the Pacific. WRI, Washington.
- Michon Jenevieve, De Foresta Hubert, 1998. Agro-Forest: Incorporating Forest Vision in Agroforestry. In Eds.Back , Lassoie, Fernandes. Agroforestry in the Sustainable Agriculture Systems. CRC Press-Lewis Publisher, Washington.
- Moniaga Sandra. 1993. Toward Community-based Forestry and Recognition of Adat Property Rights in the Outer Islands of Indonesia, in Jefferson Fox, ed. Legal Frameworks for Forest Management in Asia; Case Studies of Community/State Relations, Occasional Paper No. 16, East-West Center, Honolulu.
- Ministry of Forestry, 1996a *Sejarah kehutanan Indonesia I : periode tahun -1942* Departemen Kehutanan, Jakarta
- Ministry of Forestry, 1996b *Sejarah kehutanan Indonesia II-III : periode tahun 1942-1986* Departemen Kehutanan, Jakarta
- Ministry of Forestry, *2005 Rencana Srategis Kementerian Negara/Lembaga (Renstra-KL)* Departemen Kehutanan 2005-2009, (Stratgical Plan of the State Forestry Ministry 2005-2009) Jakarta
- Ministry of Forestry 2006a, Peraturan Menteri Kehutanan Nomor: P.58/Menhut-II/2006 Tentang Rencanan Strategis Kementerian/Lembaga (RENSTRA-KL) Departemen Kehutanan Tahun 2005-2009, Jakarta
- Ministry of Forestry 2006c, Siaran Pers No. S. 525/II/PIK-1/2006 Dephut Memberikan Akses Terhadap Masyarakat untuk Memanfaatkan Kawasan Hutan, Jakarta

- Nirwana, Fidro, Fauzi, Hendro 2002, Land Reform Di Desa. Seri Panduan Pendidikan dan Pengorganisasin. Read Book, Yogyakarta
- Noordwijk Meine, Tomich Thomas, de Foresta, Michon Genevieve, 1997. To Segregate or Integrate; The Question of Balance Between Production and Biodiversity Conservation in Complex Agroforestry System. Agroforestry Today, 9 (1), ICRAF, Nairobi
- Peluso Nancy 1992, Rich Forest Poor People; Resource Control and Resistance in Java. University of California Press.
- Peluso Nancy 2006, Hutan Kaya Rakyat Melarat: Peguasaan Sumberdaya dan perlawanan di Jawa. Konphalindo, Jakarta
- Pembaruan Tani, 2008. Proyek UU Pertanahan di tengah Janji Manis PPAN, Mimbar Komunikasi Petani, No 49, March 2008, SPI, Jakarta
- Rajan Ravi, 1998. Imperial Environmentalism or Environmental Imperialism? European Forestry, Colonial Foresters and the Agendas for Forest Management in British India 1800-1900. in Grove, Damodaran & Sangwan eds. Nature and the Orient: the Environmental History of South and Southeast Asia. Ed.s Grove, Danodaram & Sangwan. Oxford University Press, Delhi
- RightResource Group, 2007. Transition in Forest Tenure and Governance: Divers, Projected Patterns and implication: An Issue Paper Presented for Chatham House (Royal Institute of International Affairs) Meeting on Illegal Logging and Associated Trade: Exloring Options 24 January 2007, New York.
- Robison Richard & Hadiz Vedi, 2005. Reorganizing Power in Indonesia: The Politics of Oligarchy in an Age of Markets. Rouledge Curzon, New York
- Safitri Myrna, 2006. Change without Reform? Community Forestry in Decetralizing Indonesia. Paper presented at the IASCP Conference, 19-23 June 2006 Bali
- Sandy I Made, 1981. Regional Planning and Land Policies, Paper presented during the Policy Workshop on Agrarian Reform in Comparative Paerspective. Sukabumi 17-30 May 1981, Agro-Economic Survey, Bogor & ISS, Den Haag.
- Soepardi Poerwokoesoemo 1956. Rd. Jati Jawa. Djawatan Kehutanan, Djakarta
- Sikor Thomas, Tranh Ngoc Tran, 2007. Exclusive versus Inclusive devolution in Forest Management: Insights from Forest Land Allocation in Vietnam's Central Highlands. Land Use Policy Journal, no 24 (2007), p 644-653. Elsevier
- Sirait Martua 1990, Simplifying Nature Resources: Community mapping in West Kalimantan, Indonesia Masters Thesis presented to the Department of Sociology and Anthropology, Ateneo de Manila University, Manila

- Sirait Martua & Ruwindrijarto Amrosius, 1999. Prosedur Pengukuhan dan Penataan Batas Kawasan Hutan (The Procedure for Forest Gazettement and Deliniation). Sirkular Telapak no 1/1999. Telapak. Bogor
- Sirait Martua , Fay Chip & Kusworo Ahmad, 2001 Bagaimana Hak-hak Masyarakat Hukum Adat dalam Mengelola Sumber Daya Alam Diatur, Southeast Asia Policy Research Working Paper, No. 24, Bogor
- Sirait Martua, Fay Chip 2000, Pengelolaan Hutan Bertumpu pada Masyarakat di Indonesia (Community Based Forest Management in Indonesia) paper presented to the National Community Forestry Working Group FKKM meeting , May 2000, Madiun
- Sirait Martua, Moniaga Sandra , Sejarah Pemetaan Masyarakat dan Partisipasi Politik (the history of Community Mapping and the Political Participation), Kabar JKPP, No I, 1997, Bogor.
- Simon Hasanu, Wiersum K 1999 Taungya Cultivation in Java, Indonesia: Agrisilvicultural and Socioeconomic Aspects, Hasanu Simon and K.F. Wiersum in Taungya: Forest Plantations with Agriculture in Southeast Asia Interplanting crops can reduce land use conflicts and increase ustainability of forestry in less developed countries Edited by Carl F. Jordan, Jiragorn Gajaseni, Oxford University Press
- Suarga Riza, Hidayat , Partodikromo Sumato, 2003. Mencari Supremasi Hukum: Rangkuman Perjalanan Bidang Kehutanan Indonesia 1998-2003 (Seeking Supremacy of Law; Synthesis of the Forestry Sector Path between 1998 to 2003). Avric Press,-APHI, Jakarta.
- Suharjito D, Khan A, Djatmiko WA, Sirait MT and Evelyna S. 1999. Karakteristik Pengelolaan Hutan Berbasiskan Masyarakat (Characteristics of the Community Based Forest Management). Forum Komunikasi Kehutanan Masyarakat (FKKM). Jakarta
- Sunderlin William, Hatcher Jeffrey, Liddle Megan, 2008 From Exclusion to Ownership? Challenge and Opportunities in Advancing Forest Tenure Reform, Right Resource Initiatives, Washington DC.
- TNC-SGS 2004. draft Criteria and Indicator for Wood Legality, (www. tnc.org)
- Tankha Sunil, forthcoming. Electric Power Reform in Brazil. Paper Presented at the Governance ant the Politics of Development (Garnet) Conference. 16-17 November 2006. ISS, Den Haag
- White Benjamin, 1986. Rural Development: Rhetoric and Reality. Dies Natalis Address, 1986. ISS, Den Haag
- World Bank 2006b, Sustaining Indonesia's Forests: Strategy for the World Bank 2006-2009, Jakarta
- World Bank 2006a. Sustaining Economic Growth, Rural Livelihoods, and Environmental Benefits: Strategic Options for Forest Sector Assistance in Indonesia DRAFT 5 April 2006, World Bank, Jakarta

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United Nations Avenue, Gigiri - PO Box 30677 - 00100 Nairobi, Kenya Tel: +254 20 7224000 or via USA +1 650 833 6645 Fax: +254 20 7224001 or via USA +1 650 833 6646 Southeast Asia Regional Programme - Sindang Barang, Bogor 16680 PO Box161 Bogor 16001, Indonesia Tel: +62 251 625 415 - Fax: +62 251 625 416 www.worldagroforestry.org